Yahoo Group Archive: SkyWires

Yahoo Group summary: SkyWire Loop Antennas

These Yahoo Groups messages were archived in WARC format by ArchiveTeam in 2017. This PDF was generated by Digital Library of Amateur Radio & Communications from the WARC files in 2026.

Date span: 2001-08-13 through 2017-04-26

Source WARC: skywires.KD6CuIS.warc.gz

Source item: https://archive.org/details/yahoo-groups-2017-05-08T11-34-36Z-74391b

Messages included in this PDF: 4714

Message records with no body available in the source archive: 3

Messages omitted as spam from this PDF: 118

Yahoo replaced the domain portions of email addresses with @... in the archived messages. Characters lost in Yahoo's archived text appear as ?.

Messages are presented in ascending Yahoo message-ID order. Gaps indicate records absent from the source WARC or messages omitted from this PDF as spam.

1. Hello World!

Yahoo group: SkyWires
Date: 2003-09-04 19:39:11 UTC
From: exemptfromlife
Topic: 1 Message: 1

I will be posting some links about sky wire antennas.

If you have any info or links about skywires, please feel free to post them.

Thanks.

2. Sky-Wire Links

Yahoo group: SkyWires
Date: 2003-09-05 01:55:09 UTC
From: exemptfromlife
Topic: 2 Message: 2

Here are a few links I have found.

please post feel free to add any you know about.

thanks.

http://www.eng.mu.edu/~usi/loveloop.html

http://www.geocities.com/n4zou/files/skywire.pdf

http://www.qsl.net/kc8opv/antennas/skywireloop/

http://www.ccrane.com/220_loop.asp

3. The original SKY-WIRE Loop article

Yahoo group: SkyWires
Date: 2003-09-05 21:41:34 UTC
From: exemptfromlife
Topic: 3 Message: 3

Hi,

I believe this is a copy of the original Sky-wire article.

http://www.gordonsweb.net/loop%20skywire.pdf

thanks.

4. my sky wire

Yahoo group: SkyWires
Date: 2003-09-06 01:32:14 UTC
From: ron trotto
Topic: 4 Message: 4

i am still expieramenting with it but does it matter how high it is.mine is presently six foot high and about 500 ft looped around the the trees with insulated hooks it is not terminated.reception has been excellent.i am using right now for temporary purposes realthin aluminum wire so the neighbors dont cry about lightning.thanks for letting me in the group ron trotto swl35years@...

5. Re: my sky wire

Yahoo group: SkyWires
Date: 2003-09-06 03:16:09 UTC
From: exemptfromlife
Topic: 4 Message: 5

Ron,

thanks for joining. I don't have much experiance with Antennas in general, but I'm trying to learn, like you. I'm sure someone here will be able to field your question.

From what I have read, that higher is always better, but a skywire loop is much more forgiving than most when it comes to height.

As far as lightning, Any conductive object will attract lightning. If you are only six foot off the ground, I don't think you have much to worry about, unless lightning happens to hit one of the trees its anchored to, then its anybodys guess as to what will happen.

also, I think you live only about 40 miles from me. (alton, illinois).

keep in touch and let us know how it does.

PS, have you been able to pick up any of the international beacons with your skywire?
http://www.ncdxf.org/beacon/beaconSchedule.html

these are all on CW band, and not AM.

please let us know how they come in. I can generally pick up two or three at any given time, but I don't have my skywire up yet..

thanks.

--- In SkyWires@yahoogroups.com, "ron trotto" <swl35years@y...> wrote:
> i am still expieramenting with it but does it matter how high it
> is.mine is presently six foot high and about 500 ft looped around
the
> the trees with insulated hooks it is not terminated.reception has
> been excellent.i am using right now for temporary purposes realthin
> aluminum wire so the neighbors dont cry about lightning.thanks for
> letting me in the group ron trotto swl35years@y...

6. Re: [SkyWires] Re: my sky wire

Yahoo group: SkyWires
Date: 2003-09-06 03:26:34 UTC
From: RON TROTTO
Topic: 4 Message: 6

yes your right we are just a stones throw away no havent tried the beacons yet.and the trees there anchored to are 20ft one oak is 65 ft tower is 35 ft and a pine is 45 ft which i have climbed them all ron trotto waggoner,il

---

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7. Re: my sky wire

Yahoo group: SkyWires
Date: 2003-09-06 03:46:26 UTC
From: exemptfromlife
Topic: 4 Message: 7

I have my current antenna (a dipole) run by the slingshot method. are you familiar with it?

It brought my dipole up to about 35 feet, without me having to leave the ground, and only costs a few cents per line.

thanks.

--- In SkyWires@yahoogroups.com, RON TROTTO <swl35years@y...> wrote:
> yes your right we are just a stones throw away no havent tried the beacons yet.and the trees there anchored to are 20ft one oak is 65 ft tower is 35 ft and a pine is 45 ft which i have climbed them all ron trotto waggoner,il
>
>
> ---------------------------------
> Do you Yahoo!?
> Yahoo! SiteBuilder - Free, easy-to-use web site design software

8. Re: [SkyWires] Re: my sky wire

Yahoo group: SkyWires
Date: 2003-09-06 08:52:15 UTC
From: RON TROTTO
Topic: 4 Message: 8

havent tried that yet but you see what the lightning woul hit first but static discharge is what i do have to worry about 73 ron trotto

---

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9. Art Bell's SkyWire Loop Antenna

Yahoo group: SkyWires
Date: 2003-09-06 18:45:26 UTC
From: exemptfromlife
Topic: 9 Message: 9

It seems Art Bell has erected a SkyWire Loop.

http://www.coasttocoastam.com/gen/page159.html

thanks.

10. Re: Art Bell's SkyWire Loop Antenna Generating electricity?

Yahoo group: SkyWires
Date: 2003-09-06 19:07:52 UTC
From: exemptfromlife
Topic: 9 Message: 10

This is a odd statement in this article about Art Bell's Skywire Loop Antenna.

He claims it generating 350 volts, and shocks him. I would assume in that dry desert that its a due to blowing sand particles, but I have no idea. I'm sure its not Little green men or some cosmic force, does anybody want to take a guess?

thanks.

http://www.ccrane.com/news/whatsinthenews11.19.02.htm

11. Re: [SkyWires] Re: Art Bell's SkyWire Loop Antenna Generating electricity?

Yahoo group: SkyWires
Date: 2003-09-06 19:14:15 UTC
From: RON TROTTO
Topic: 9 Message: 11

maybe thats what hes trying to contact hi,i cut my skywire down to 280 ft and added a 50 ft length of insulated wire from the top of the 35 ft tower sloping down to the 6 ft sky wire and we will see tonight 73 ron trotto waggoner illinois

---

Do you Yahoo!?
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12. Re: Art Bell's SkyWire Loop Antenna Generating electricity?

Yahoo group: SkyWires
Date: 2003-09-06 19:22:18 UTC
From: exemptfromlife
Topic: 9 Message: 12

I have heard of people being prosecuted for theft, by laying metal conductors across their property right under high power transmission lines that run across their property. The metal conductors drain some power off of the high voltage lines even though they never touch them. (I've been told this, but don't know if its just an urban legend or not)..

If so, and Art has his SkyWire built in a 360 around his house, perhaps he is siphoning off some of his own electricity from his house.

My first bet would be its because of the dry nature of where he is, and even if the wind isn't blowing, there is enough dust particles in the air to cause some sort of static build up when they hit the wire.

I keep reading about people having wire antennas who during a snow storm see sparks arcing off of their coax wire..

Just wondering

Thanks.

13. A 171-meter loop skywire antenna for PSK-31

Yahoo group: SkyWires
Date: 2003-09-07 03:34:35 UTC
From: exemptfromlife
Topic: 13 Message: 13

Here is an article about a 171 meter loop skywire antenna.

thanks..

http://www.eham.net/articles/5995

14. Hello All Sky Loop Friends

Yahoo group: SkyWires
Date: 2003-09-07 19:24:32 UTC
From: Scott Gordon
Topic: 14 Message: 14

Just joined the group here, always like talking to people who have Loop antennas. I have used one now for a couple months and between that and a vertical I think that is all a person really needs.

My website is http://www.kq8rp.com if you would like to post you site there or anyone else's link there feel free to do so. We have a few links and pdf's on Loop Antennas.

73's
Scott
KQ8RP

15. Re: Hello All Sky Loop Friends

Yahoo group: SkyWires
Date: 2003-09-07 19:32:13 UTC
From: exemptfromlife
Topic: 14 Message: 15

Welcome aboard, scott.

glad you joined. I'm sure you insights into antenna design will help us a lot.

thanks.

16. Re: Hook up wire VS RU8 coaxial cable

Yahoo group: SkyWires
Date: 2003-09-08 03:58:25 UTC
From: Bill Krause
Topic: 14 Message: 16

This may sound like a pretty silly basic question but I am quiteserious about it. Just hooked up an ICOM PCR1000 and plan on setting up a Ten-tec R320-D in the next couple of days. For the short term I am going to use 40-50 feet of bare copper wire strung accoss the top of the room in a rough square as a temporary antenna , to be followed by a slinky, to be followed by a dipole with traps. The question is how much of a difference in reception will it make if I use insulated hookup wire as my feed from the antenna to the radio comparred to if I use shielded coaxial cable like RU58. This refers only to the temporary indoor long wire and the mobile slinky. Using shielded coax with the dipole is a given.Will I really be able to hear a lot more shortwave stations by using the the RU58??

Bill Krause

17. Re: Hook up wire VS RU8 coaxial cable

Yahoo group: SkyWires
Date: 2003-09-08 05:24:06 UTC
From: exemptfromlife
Topic: 14 Message: 17

Bill,

thanks for posting. I am just starting out in radios/shortwave, etc. I have PCR100 (like a PCR1000). I was using my wire dipole I have outside as its antenna.

I would assume, and maybe some others can comment on this, but I would think that most of the difference is going to come from the interference you would get from electrical wiring, and appliances inside your house.

--- In SkyWires@yahoogroups.com, Bill Krause <bkrause@s...> wrote:
> This may sound like a pretty silly basic question but I am quiteserious
> about it. Just hooked up an ICOM PCR1000 and plan on setting up a
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> given.Will I really be able to hear a lot more shortwave stations by
> using the the RU58??
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> Bill Krause

18. Re: Hook up wire VS RU8 coaxial cable

Yahoo group: SkyWires
Date: 2003-09-08 06:38:29 UTC
From: R H F
Topic: 14 Message: 18

Re: Hook up wire VS RU8 coaxial cable

BK,

Well basically you have a square flat Horizontal 40-50 Foot Indoor Loop Antenna with a short 8 foot vertical lead-in wire.

An your "Question" is Hook-Up Wire -vice- RG8 Coax Cable ?

1. Simple and Cheap: Hook-Up Wire could be used as the vertical downlead-in wire by starting at the Ceiling Level and 'twisting' the Hook-up Wire together as a pair for the 8 Feet from the Loop Antenna to the Radio. [A Twisted Pair of Lead-in Wires Aids in the 'reducetion' of Noise Pick-Up.) The Ends of the Twisted Pair of wires would connect to the HI-Z Terminals of he radio.
- - - A single roll of RadioShack 20-24 AWG Stranded Wire can be used to make the conplete Loop Antenna and Twisted Pair Lead-in Wire all in one piece. Use 4-5 Plastic Coated Cup-Hooks to hold the Hook-Up Wire Up in Place. (One in Each Corner and One for the Down Lead Position.)

2. Complex and More Costly: An 8 Foot piece of RG8 Coax Cable with a PL-259 Plug on one end; could be used as the vertical down lead-in wire by using a Balun between the Loop Antenna and the Coax Cable. Then routing the Coax Cable to the radio's LO-Z SO-239 Jack.
- - - Requires Roll of Hook-Up Wire; Balun and RG8 Cable with PL-259 Plug.

3. Something Else To Consider (Third Option)
An 8 Foot piece of TV 75 Ohm Coax Cable with "F" Connectors on both ends as the vertical down lead-in wire. Use a TV 300>75 Ohm Matching Transformer as a 'balun' between the Loop Antenna and the Coax Cable.
* Option A: Then routing the Coax Cable to the radio's LO-Z SO-239 Jack and use a "F" Connector to PL-259 Plug Adapter to make the 'connection'.
* Option B: Then routing the Coax Cable to the radio's HI-Z Terminals and 'use' a TV 75>300 Ohm Matching Transformer with the Coax Calbes "F" Connector to connect to the HI-Z Terminals.
- - - Sort of between #1 and #2 in ease and complexity.

NOTE: Even with Indoor Antennas a 'good' Ground may 'improve' reception.

CAUTION: A 'good' Ground Wire Connection to the Radio/Antenna System is Always Required for 'proper' Personal and Electrical Safety.

iane ~ RHF
.
.
= = = In SkyWires@yahoogroups.com,
= = = Bill Krause <bkrause@s...> wrote:
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> given.Will I really be able to hear a lot more shortwave stations
by
> using the the RU58??
>
> Bill Krause

19. Love a loop

Yahoo group: SkyWires
Date: 2003-09-08 14:49:31 UTC
From: ldrajs1
Topic: 19 Message: 19

Howdy,
I have an 80 m loop...100 ft x 3 sided triangle...Top at 80 ft and the base is at 20 ft. Could not find enough points to get it all horizontal. Anyway, I love it and am planing some more big wires in the future.
Just wanted to say howdy and thanks for the invite.
Terry Smith w4rot

20. Re: Love a loop

Yahoo group: SkyWires
Date: 2003-09-08 14:57:08 UTC
From: exemptfromlife
Topic: 19 Message: 20

Terry,

Welcome aboard!!

21. Low noise matching xformer for skywire loop

Yahoo group: SkyWires
Date: 2003-09-08 19:46:07 UTC
From: lowalacrity
Topic: 21 Message: 21

Greetings all, Glad to see this group is also taking off well. I posted this message on SWL-AM-FM before i noticed this group. Been building small loops for a couple of years now but decided to try a biggin. I live on a 1/3 acre lot and have tolerant neighbors. I strung about 400ft of 16 around my back yard and house with the start and end winding up where my beverage transformer is mounted. hem... Idea! disconnected the long wire from the primary (35 turns) wound on an Amidon FT-50-42 toroid core. I connected the loop instead. Wonder if a variable resistor from one side to ground would help? The secondary is wound with 11 turns of RG-58/U using a Faraday shielding technique. The center conductor from the end of the winding is soldered to the shield at the start of the winding. A ground wire is also soldered to that joint. Ran the RG-58 straight into my shop. Preliminary results have been positive, low freqs especially. I'm using a DX-394 and have noticed a gain of no less than 2 "S" units improvement on most bands, (compared to an 85 ft longwire). The noise reduction is substantial also! P.S. I gleened the info for my beverage from J. Carr's article in Pop Electronics Jan. 98. I will post a pic of the xformer, (along with legit pics of my home builts that start with trueloop). I'll call this one loopmatcher... http://photos.groups.yahoo.com/group/loopantennas/lst

22. Re: Low noise matching xformer for skywire loop

Yahoo group: SkyWires
Date: 2003-09-08 19:59:19 UTC
From: exemptfromlife
Topic: 21 Message: 22

welcome aboard.

if you have any skywire loop photos, please post them. We would love to seem them.

thanks.

23. new to the group

Yahoo group: SkyWires
Date: 2003-09-08 19:59:38 UTC
From: Richard KC8WFF
Topic: 23 Message: 23

I am new to this group, i find these sky wires and info quite interesting, also i am anew ham but have not been on the air as of now. The biggest antenna i saw when i wa stationed in Thailand with the air force during the vietnam war, was at NOON SOON Thailand a place called Ramsun station 7rrs radio relay station, this antenna was like astadium round and covered up many acres, i really dont no what went on at this sight most of it was top secret, i figured they monitered the air waves and messages coming out of N Vietnam , China, and any place else in South East Asia, i have apicture of the antenna if i can find it i will post it in the photo alblum.--------Richard in North West Ohio

24. Re: new to the group

Yahoo group: SkyWires
Date: 2003-09-08 20:23:25 UTC
From: exemptfromlife
Topic: 23 Message: 24

Rich,

Welcome to the group. The USAF Thai antenna sounds pretty cool.

The biggest I ever saw was when I was a kid, I visited my aunt's farm in Ohio, and the property next door housed the VOA antenna. It looked like three large High power lines towers with a mess of wire between each. Pretty cool to look at when you were 12 years old.

thanks.

25. Re: Low noise matching xformer for skywire loop

Yahoo group: SkyWires
Date: 2003-09-08 22:28:24 UTC
From: lowalacrity
Topic: 21 Message: 25

--- In SkyWires@yahoogroups.com, "exemptfromlife" <junkmail@a...>
wrote:
> welcome aboard.
>
> if you have any skywire loop photos, please post them. We would
love
> to seem them.
>
> thanks.

I would post one but, because of its size, it would have to be
an "aerial" shot... (pun intended) Maybe i could climb on the roof to
grab one. The shingles are getting pretty shakey though...
A lot of traipsing around in the last 18 years. My whole spread is
one big farm. 3 long wires, multiple loops. (mostly portables). Oh,
and one understanding wife!

26. Re: Low noise matching xformer for skywire loop

Yahoo group: SkyWires
Date: 2003-09-08 22:54:11 UTC
From: exemptfromlife
Topic: 21 Message: 26

--- In SkyWires@yahoogroups.com, "lowalacrity" <jcstumm@s...> wrote:
> --- In SkyWires@yahoogroups.com, "exemptfromlife" <junkmail@a...>
> wrote:
> > welcome aboard.
> >
> > if you have any skywire loop photos, please post them. We would
> love
> > to seem them.
> >
> > thanks.
>
> I would post one but, because of its size, it would have to be
> an "aerial" shot... (pun intended) Maybe i could climb on the roof
to
> grab one. The shingles are getting pretty shakey though...
> A lot of traipsing around in the last 18 years. My whole spread is
> one big farm. 3 long wires, multiple loops. (mostly portables). Oh,
> and one understanding wife!

The understanding wife is the most valuable thing...

I would just settle for an understandable one.. :-)

27. skywire

Yahoo group: SkyWires
Date: 2003-09-09 00:16:53 UTC
From: ron trotto
Topic: 27 Message: 27

today i tweaked and cut was having a few problems,first of i measered wrong it was over 1000 feet i tined to a local and cut and mved it its down to 400 ft in circuling the backyard at a height of 6 ft,conected to a sloping wire from a 35 ft pine tree to the 6 ft high section i came to this measerment my local was 20 over the longer i went the lower the signal .so i shortened it it went to 40 over shortend it to 300 it went down to 25 over put it back to 400 and 40 over.and 60 and 41 meters are two times better than yeterday. so i will leave it plus chicago is 125 miles away or alittle more and wgn is15 over and wsm in nashville 650 is 7 over in daytime.73 ron trotto waggoner,il

28. Re: skywire

Yahoo group: SkyWires
Date: 2003-09-09 01:33:22 UTC
From: exemptfromlife
Topic: 27 Message: 28

Ron,

Try these two..

700 AM WLW Cincinati,

1200 AM WOAI San Antonio, Texas..

--- In SkyWires@yahoogroups.com, "ron trotto" <swl35years@y...> wrote:
> today i tweaked and cut was having a few problems,first of i
measered
> wrong it was over 1000 feet i tined to a local and cut and mved it
> its down to 400 ft in circuling the backyard at a height of 6
> ft,conected to a sloping wire from a 35 ft pine tree to the 6 ft
high
> section i came to this measerment my local was 20 over the longer i
> went the lower the signal .so i shortened it it went to 40 over
> shortend it to 300 it went down to 25 over put it back to 400 and
40
> over.and 60 and 41 meters are two times better than yeterday. so i
> will leave it plus chicago is 125 miles away or alittle more and
wgn
> is15 over and wsm in nashville 650 is 7 over in daytime.73 ron
trotto
> waggoner,il

29. Re: [SkyWires] Re: skywire

Yahoo group: SkyWires
Date: 2003-09-09 01:38:13 UTC
From: RON TROTTO
Topic: 27 Message: 29

700 wlw is all day here also 7 on the meter will check woai ron

---

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30. Re: skywire

Yahoo group: SkyWires
Date: 2003-09-09 03:12:59 UTC
From: Bill Krause
Topic: 27 Message: 30

You guys are getting me to think about doing things I shouldn't be
thinking about doing after all these yaers.

Bill Krause

ron trotto wrote:

> today i tweaked and cut was having a few problems,first of i measered
> wrong it was over 1000 feet i tined to a local and cut and mved it
> its down to 400 ft in circuling the backyard at a height of 6
> ft,conected to a sloping wire from a 35 ft pine tree to the 6 ft high
> section i came to this measerment my local was 20 over the longer i
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>
>
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>
>
>
> To unsubscribe from this group, send an email to:
> SkyWires-unsubscribe@yahoogroups.com
>
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> Your use of Yahoo! Groups is subject to the Yahoo! Terms of Service
> <http://docs.yahoo.com/info/terms/>.

31. Re: [SkyWires] Re: Hook up wire VS RU8 coaxial cable

Yahoo group: SkyWires
Date: 2003-09-09 06:29:44 UTC
From: Bill Krause
Topic: 14 Message: 31

I am concerned about that. The antenna is in a room with four computers, two monitors, and a laptop.

Bill

exemptfromlife wrote:

> Bill,
>
> thanks for posting. I am just starting out in radios/shortwave, etc.
> I have PCR100 (like a PCR1000). I was using my wire dipole I have
> outside as its antenna.
>
> I would assume, and maybe some others can comment on this, but I
> would think that most of the difference is going to come from the
> interference you would get from electrical wiring, and appliances
> inside your house.
>
>
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> > This may sound like a pretty silly basic question but I am
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> > given.Will I really be able to hear a lot more shortwave stations
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> >
> > Bill Krause

>
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>
>
>
> To unsubscribe from this group, send an email to:
> SkyWires-unsubscribe@yahoogroups.com
>
>
>
> Your use of Yahoo! Groups is subject to the Yahoo! Terms of Service
> <http://docs.yahoo.com/info/terms/>.

32. Re: [SkyWires] Re: skywire

Yahoo group: SkyWires
Date: 2003-09-09 09:29:13 UTC
From: RON TROTTO
Topic: 27 Message: 32

i needed that warning before i started this project bill hi at 45 climbing a 35 ft pine i feel for two days after let alone that and the tower you add two more days of soreness but the enjoyment is what i go for. now if the severe storms are over. my worries are over till spring.73 ron trotto waggoner,illinois

---
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33. Re: [SkyWires] Re: Hook up wire VS RU8 coaxial cable

Yahoo group: SkyWires
Date: 2003-09-09 11:37:45 UTC
From: Jim Dunstan
Topic: 14 Message: 33

At 11:29 PM 9/8/03 -0700, you wrote:

I am concerned about that. The antenna is in a room with four computers, two monitors, and a laptop.

Bill

exemptfromlife wrote:

Bill,

thanks for posting. I am just starting out in radios/shortwave, etc.
I have PCR100 (like a PCR1000). I was using my wire dipole I have
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> about it. Just hooked up an ICOM PCR1000 and plan on setting up a
> Ten-tec R320-D in the next couple of days. For the short term I am
going
> to use 40-50 feet of bare copper wire strung accoss the top of the
room
> in a rough square as a temporary antenna , to be followed by a
slinky,
> to be followed by a dipole with traps. The question is how much of
a
> difference in reception will it make if I use insulated hookup wire
as
> my feed from the antenna to the radio comparred to if I use
shielded
> coaxial cable like RU58. This refers only to the temporary indoor
.

I believe the question is: "will a piece of coax cable 8' to 10' long connecting a wire antenna located in the same room with your computer etal. improve reception". The answer is no doubt NO. In the business of receiving weak signals it is the signal to noise ratio that is important (for really strong stations it doesn't matter anyway). In this scenario the short piece of coax will in effect simply be 8' to 10' more of wire antenna.

You may change the overall signal strength (by chance) but not the S/N ratio. Now if you were talking about a magnetic loop antenna the story is more complicated and the S/N ratio

can indeed be improved (even though the overall signal strength is decreased substantially). The improvement comes from the reduction of noise.

Jim Dunstan
Thunder Bay, ON

34. RON TROTTOS SKYWIRE

Yahoo group: SkyWires
Date: 2003-09-10 01:18:16 UTC
From: ron trotto
Topic: 34 Message: 34

just to let you know it was working excellent,but tis evening i had to carefully and i do mean carefully remove th 75 ft long 35 ft high portion the tower and the 35 ft pine had a tug of war and the tree won out i now have to take the tower down the legs are busted and the brace to it on the side of the house is all thats holding it i tied it down.after climbing it for the last time coming down two out of the four big bolts are long gone so i will be taking it down tomorrow ron trotto

35. Re: [SkyWires] Re: Hook up wire VS RU8 coaxial cable

Yahoo group: SkyWires
Date: 2003-09-10 02:32:28 UTC
From: Bill Krause
Topic: 14 Message: 35

Jim,
Thanks, following this thread along how far away does the copper wire have to be from these sorces of noise for there to be an appreciable improvement in the signal to noise ratio??, would ten or fifteen feet in another room make an appreciable difference?? Would you gain more in moveing the ten or fifteen feet away then you would loose as a result of the longer feed in line?? Thanks for all the help folks.

Bill

Jim Dunstan wrote:

> At 11:29 PM 9/8/03 -0700, you wrote:
>
>> I am concerned about that. The antenna is in a room with four
>> computers, two monitors, and a laptop.
>>
>> Bill
>>
>> exemptfromlife wrote:
>>
>>> Bill,
>>>
>>> thanks for posting. I am just starting out in radios/shortwave, etc.
>>> I have PCR100 (like a PCR1000). I was using my wire dipole I have
>>> outside as its antenna.
>>>
>>> I would assume, and maybe some others can comment on this, but I
>>> would think that most of the difference is going to come from the
>>> interference you would get from electrical wiring, and appliances
>>> inside your house.
>>>
>>>
>>>
>>>
>>> --- In SkyWires@yahoogroups.com <mailto:SkyWires@yahoogroups.com>,
>>> Bill Krause <bkrause@s...> <mailto:bkrause@s...> wrote:
>>> > This may sound like a pretty silly basic question but I am
>>> quiteserious
>>> > about it. Just hooked up an ICOM PCR1000 and plan on setting up a
>>> > Ten-tec R320-D in the next couple of days. For the short term I am
>>> going
>>> > to use 40-50 feet of bare copper wire strung accoss the top of the
>>> room
>>> > in a rough square as a temporary antenna , to be followed by a
>>> slinky,

>>> > to be followed by a dipole with traps. The question is how much of
>>> a
>>> > difference in reception will it make if I use insulated hookup wire
>>> as
>>> > my feed from the antenna to the radio comparred to if I use
>>> shielded
>>> > coaxial cable like RU58. This refers only to the temporary indoor
>>> .
>>
>
> I believe the question is: "will a piece of coax cable 8' to 10' long
> connecting a wire antenna located in the same room with your computer
> etal. improve reception". The answer is no doubt NO. In the business
> of receiving weak signals it is the signal to noise ratio that is
> important (for really strong stations it doesn't matter anyway). In
> this scenario the short piece of coax will in effect simply be 8' to
> 10' more of wire antenna.
>
> You may change the overall signal strength (by chance) but not the S/N
> ratio. Now if you were talking about a magnetic loop antenna the
> story is more complicated and the S/N ratio can indeed be improved
> (even though the overall signal strength is decreased substantially).
> The improvement comes from the reduction of noise.
>
>
>
> Jim Dunstan
> Thunder Bay, ON
> Yahoo! Groups Sponsor
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>
>
>
> To unsubscribe from this group, send an email to:
> SkyWires-unsubscribe@yahoogroups.com
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>
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> Your use of Yahoo! Groups is subject to the Yahoo! Terms of Service
> <http://docs.yahoo.com/info/terms/>.
>

36. Re: [SkyWires] RON TROTTOS SKYWIRE

Yahoo group: SkyWires
Date: 2003-09-10 03:22:04 UTC
From: Bill Krause
Topic: 34 Message: 36

Does not sound like fun. Fortunately I have a son and a couple of
son-in-laws for such projects.

Bill

ron trotto wrote:

> just to let you know it was working excellent,but tis evening i had
> to carefully and i do mean carefully remove th 75 ft long 35 ft high
> portion the tower and the 35 ft pine had a tug of war and the tree
> won out i now have to take the tower down the legs are busted and the
> brace to it on the side of the house is all thats holding it i tied
> it down.after climbing it for the last time coming down two out of
> the four big bolts are long gone so i will be taking it down
> tomorrow ron trotto
>
>
> Yahoo! Groups Sponsor
> <http://rd.yahoo.com/M=259395.3614674.4902533.1261774/D=egroupweb/S=1705063108:HM/A=1524
963/R=0/SIG=12o885gmo/*http://hits.411web.com/cgi-bin/autoredir?camp=556&lineid=3614674&pr
op=egroupweb&pos=HM>
>
>
>
> To unsubscribe from this group, send an email to:
> SkyWires-unsubscribe@yahoogroups.com
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> Your use of Yahoo! Groups is subject to the Yahoo! Terms of Service
> <http://docs.yahoo.com/info/terms/>.

37. Slingshot method for hanging SkyWires.

Yahoo group: SkyWires
Date: 2003-09-10 05:54:11 UTC
From: exemptfromlife
Topic: 37 Message: 37

Slingshot method for hanging SkyWires.

Guys,

In my youth (19 years old), fresh out of Marine Corps Boot Camp, I would climb to the tops of trees like a monkey, while friends on the ground would yell "that's high enough!!" to put up Owl Nesting boxes, etc.. What they didn't know was it was much easier that most of the stuff the Corps had me doing.

That was then and this is now. Now Walter no longer leaves the ground unless I have a boarding pass, and a coach ticket.

After reading a few articles I decided to try the slingshot method of hanging a wire antenna.

Its Pretty easy.

You need the following items.

A fishing pole, a dozen 1 oz. Lead egg sinkers, a good Crossman or Wrist-Rocket slingshot, a large spool of Trout Line, Large Nails, a hammer, and a Fishing pole holder, if you can't find someone to help.

I've seen ads in radio magazines for a slingshot-fishing reel combo, for $100. If you have $100 to blow, take you wife out to a fancy restaurant. I believe it's a much better investment that this. The slingshot, and a fishing rod and reel will set you back about $30..

I use trout line because it is very strong, and given its to be used in water, its waterproof, and seems to hold up very well, and is cheap. But if someone knows of another rope that works better, please let me know.

You can find all of this at your local bait and tackle store. I pay about 20 cents for each egg sinker, I use egg sinkers because they are about as aerodynamic as fishing weights get, and because the shape doesn't allow them to get hung up in the tree branches as much as others do, but it still happens.

I have heard of people using a Bow and Arrow. I can see some advantage to this, but I think the risks outweigh the benefits. With a 1 oz. Egg sinker, you have to be careful it doesn't come down on a parked car's windshield, or dent the hood. With an Arrow, it could put a hole in someone's roof, or worse, if you neighbor or his kids are outside, they could end up impaled and looking like Gregory Peck in the last scene of the movie "The Omen". We don't want that

When shooting the egg sinker, you want to be on the "Antenna side" of the tree.

Take the pole holder, and place it in the ground at an angle, facing the target tree. Put the fishing pole in the holder.

I have read that if you paint the egg sinkers blaze orange, you can see them better when they come down. I haven't tried this, but it makes sense. Having a florescent fishing line in your fishing reel helps in locating the downed egg sinker, but is not necessary.

If you are right handed, taking the slingshot in the left hand, and stand with the fishing pole to the right of you. If left handed, do the opposite. Place the egg sinker in the sling with the fishing line coming out of the top, and clear from the rubber bands.

Make sure not to stand too close to the tree, you want the egg sinker to clear the tree, and fall on the far side, if you are too close, you will be shooting at too high an angle and the egg sinker won't fall on the far side, but on the shooting side.

Shoot the egg sinker and pay attention to the direction of where you shoot, and see if you can judge where it should have landed before you walk over to the far side of the tree.

Then go find it. You may find that you need to take the fishing pole and "play" with the line a bit to get the egg sinker to fall down to ground level from the higher branches.

If it gets hung up, you will just have to reel it back and start over. I have about a 50/50 success rate.

Once I find the egg sinker, I cut it off, then tie the trout line to it and go back to the fishing pole and reel the trout line back over the top of the tree.

When the trout line reaches the pole, cut the line, and tie your dog bone insulator on to it.

Go back and cut the trout line from the trout line spool, and take two large nails and hammer each of them about half way into the trunk of the tree. The nails should be about a foot or so apart and angled away from each other forming a cleat.

I like to hammer the nails high enough that some kids don't come along and decide to undo my work. If this is a real concern, you may consider using a ladder and nail them higher up on the trunk of the tree. Plus, the higher up, generally the less visible it is too.

Tie the trout line around one nail.

Repeat these steps on all the trees in your SkyWire system.

Once you run your antenna wire through the dog bone insulator you can then begin to raise the antenna by taking the slack out of the trout line. Just begin wrapping the trout line around the both nails in a loop until the antenna reaches the desired height.

That's about it.

I am currently working on a fuse system that uses a bungee cord, and counter-weight, so that when bad weather hits, and high winds put too much pressure on the SkyWire, that the "fuse" will break
causing
about 20 feet of extra trout line to be unleashed, and letting the SkyWire fall limp, but not letting it break. This would allow you to easily recover the extra trout line, and put a new "fuse"
back into
the system after the storm passes.

Once I have the dynamics of this worked out, I will post it.
(sometime this fall, I hope)..

Thanks,

Walter
http://groups.yahoo.com/group/SkyWires/

38. Re: Slingshot method for hanging SkyWires.

Yahoo group: SkyWires
Date: 2003-09-10 06:37:44 UTC
From: rickfrazier96720
Topic: 37 Message: 38

I've used the slingshot method with the cord placed neatly on the ground so it will feed.... Needless to say, you'll find out just how rough the ground is where you are if you do this. It's even worse if you're off the lawn and in "the rough".. Using a fishing pole and reel to feed the line is a good way to improve the method, but I figured, why not go all the way and dispense with the slingshot altogether? Besides, I had more than a few "misfires" with the slingshot from not placing the weight in just the right place in the pocket...

Having remembered the early days of fishing as a youth, and visualizing the many casts that seemed to go nearly straight up, only to come down a paltry twenty or thirty feet in front of me with a very loud plop, I figured a decent weight and a salt-water fishing pole with spinning reel would be the ticket.

Well, using a one or two ounce weight, it is definitely possible to get the weight over most trees, and with fewer tries than the typical slingshot (which tends to be very picky about where you put the weight in the pouch, among other things...) Just cast over the tree, attach a stronger pull line or wire to the fishing line in place of the weight, and reel away. Continue to the next tree and repeat until you are ready to put tension on the wire antenna. With this method, if you are putting up a skywire, you need to go past the tree and cast towards the last tree/support, working your way out. It seems a bit backwards at first, but works quite well once you get used to it.

Good Luck!
-_Rick

--- In SkyWires@yahoogroups.com, "exemptfromlife" <junkmail@a...>
wrote:
> Slingshot method for hanging SkyWires.
>
>
> Guys,
>
> In my youth (19 years old), fresh out of Marine Corps Boot Camp, I
> would climb to the tops of trees like a monkey, while friends on the
> ground would yell "that's high enough!!" to put up Owl
> Nesting
> boxes, etc.. What they didn't know was it was much easier that
> most
> of the stuff the Corps had me doing.
>
> That was then and this is now. Now Walter no longer leaves the

ground
> unless I have a boarding pass, and a coach ticket.
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> After reading a few articles I decided to try the slingshot method
of
> hanging a wire antenna.
>
> Its Pretty easy.
>
> You need the following items.
>
> A fishing pole, a dozen 1 oz. Lead egg sinkers, a good Crossman or
> Wrist-Rocket slingshot, a large spool of Trout Line, Large Nails,
> a hammer, and a Fishing pole holder, if you can't find someone
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> I've seen ads in radio magazines for a slingshot-fishing reel
> combo,
> for $100. If you have $100 to blow, take you wife out to a fancy
> restaurant. I believe it's a much better investment that this.
> The
> slingshot, and a fishing rod and reel will set you back about $30..
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> I use trout line because it is very strong, and given its to be used
> in water, its waterproof, and seems to hold up very well, and is
> cheap. But if someone knows of another rope that works better,
please
> let me know.
>
> You can find all of this at your local bait and tackle store. I pay
> about 20 cents for each egg sinker, I use egg sinkers because they
> are about as aerodynamic as fishing weights get, and because the
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> as others do, but it still happens.
>
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> a 1 oz. Egg sinker, you have to be careful it doesn't come down
> on a
> parked car's windshield, or dent the hood. With an Arrow, it
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> put a hole in someone's roof, or worse, if you neighbor or his
> kids
> are outside, they could end up impaled and looking like Gregory Peck
> in the last scene of the movie "The Omen". We don't want
> that
>

> When shooting the egg sinker, you want to be on the "Antenna
> side"
> of the tree.
>
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>
> If you are right handed, taking the slingshot in the left hand, and
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line
> coming out of the top, and clear from the rubber bands.
>
> Make sure not to stand too close to the tree, you want the egg
sinker
> to clear the tree, and fall on the far side, if you are too close,
> you will be shooting at too high an angle and the egg sinker
> won't
> fall on the far side, but on the shooting side.
>
> Shoot the egg sinker and pay attention to the direction of where you
> shoot, and see if you can judge where it should have landed before
> you walk over to the far side of the tree.
>
> Then go find it. You may find that you need to take the fishing pole
> and "play" with the line a bit to get the egg sinker to fall
> down to
> ground level from the higher branches.
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> If it gets hung up, you will just have to reel it back and start
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>
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> it and go back to the fishing pole and reel the trout line back over
> the top of the tree.
>
> When the trout line reaches the pole, cut the line, and tie your dog
> bone insulator on to it.
>
> Go back and cut the trout line from the trout line spool, and take
> two large nails and hammer each of them about half way into the
trunk
> of the tree. The nails should be about a foot or so apart and angled
> away from each other forming a cleat.

>
> I like to hammer the nails high enough that some kids don't come
> along and decide to undo my work. If this is a real concern, you may
> consider using a ladder and nail them higher up on the trunk of the
> tree. Plus, the higher up, generally the less visible it is too.
>
> Tie the trout line around one nail.
>
> Repeat these steps on all the trees in your SkyWire system.
>
>
> Once you run your antenna wire through the dog bone insulator you
can
> then begin to raise the antenna by taking the slack out of the trout
> line. Just begin wrapping the trout line around the both nails in a
> loop until the antenna reaches the desired height.
>
> That's about it.
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> I am currently working on a fuse system that uses a bungee cord, and
> counter-weight, so that when bad weather hits, and high winds put
too
> much pressure on the SkyWire, that the "fuse" will break
> causing
> about 20 feet of extra trout line to be unleashed, and letting the
> SkyWire fall limp, but not letting it break. This would allow you
to
> easily recover the extra trout line, and put a new "fuse"
> back into
> the system after the storm passes.
>
> Once I have the dynamics of this worked out, I will post it.
> (sometime this fall, I hope)..
>
> Thanks,
>
> Walter
> http://groups.yahoo.com/group/SkyWires/

39. Re: [SkyWires] Re: Hook up wire VS RU8 coaxial cable

Yahoo group: SkyWires
Date: 2003-09-10 07:19:11 UTC
From: Bill Krause
Topic: 14 Message: 39

I am going to hook an outdoor sloping dipole to it. Plan to order one
from Universial in the next few days. Down the road maybe a fan dipole
of my own creation, but I still would like a good indoor antenna for it.
Is this realisticly possible??

Bill

exemptfromlife wrote:

> Bill,
>
> thanks for posting. I am just starting out in radios/shortwave, etc.
> I have PCR100 (like a PCR1000). I was using my wire dipole I have
> outside as its antenna.
>
> I would assume, and maybe some others can comment on this, but I
> would think that most of the difference is going to come from the
> interference you would get from electrical wiring, and appliances
> inside your house.
>
>
>
>
> --- In SkyWires@yahoogroups.com, Bill Krause <bkrause@s...> wrote:
> > This may sound like a pretty silly basic question but I am
> quiteserious
> > about it. Just hooked up an ICOM PCR1000 and plan on setting up a
> > Ten-tec R320-D in the next couple of days. For the short term I am
> going
> > to use 40-50 feet of bare copper wire strung accoss the top of the
> room
> > in a rough square as a temporary antenna , to be followed by a
> slinky,
> > to be followed by a dipole with traps. The question is how much of
> a
> > difference in reception will it make if I use insulated hookup wire
> as
> > my feed from the antenna to the radio comparred to if I use
> shielded
> > coaxial cable like RU58. This refers only to the temporary indoor
> long
> > wire and the mobile slinky. Using shielded coax with the dipole is
> a
> > given.Will I really be able to hear a lot more shortwave stations
> by
> > using the the RU58??

> >
> > Bill Krause
>
>
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> To unsubscribe from this group, send an email to:
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40. Re: [SkyWires] Re: Slingshot method for hanging SkyWires.

Yahoo group: SkyWires
Date: 2003-09-10 12:15:35 UTC
From: Clinton
Topic: 37 Message: 40

A crossbow works great. I know an OM who built a crossbow out of a kids bow and arrow set and mounted a fishing reel on it.

Clinton Peebles VE7KNL
Salmo, B.C. Canada
E-Mail: clinton@...

41. Re: [SkyWires] Re: Hook up wire VS RU8 coaxial cable

Yahoo group: SkyWires
Date: 2003-09-10 21:10:17 UTC
From: Jim Dunstan
Topic: 14 Message: 41

At 07:32 PM 9/9/03 -0700, you wrote:
>Jim,
> Thanks, following this thread along how far away does the copper
> wire have to be from these sorces of noise for there to be an appreciable
> improvement in the signal to noise ratio??, would ten or fifteen feet in
> another room make an appreciable difference?? Would you gain more in
> moveing the ten or fifteen feet away then you would loose as a result of
> the longer feed in line?? Thanks for all the help folks.
>
> Bill

Hi Bill:

First question about how far from noise sources to make an improvement: well within the house the various areas where the noise is loudest and where it is the quietest is really a matter of trial and error. You can go around and check the noise sources within your house and try to deal with them in one way or another. However, the sources may not be within your house but your house wiring etc may be involved with carrying the noise. I heard one person on Yahoo describe how he used an external type active antenna to place it in different locations until he found the best spot. It is one of those active antennas that contain the amplifier and whip in a small box which connects back to the control box with a length of coax cable. They were originally designed to be mounted outside and the cable to be routed in to the listening location. However he didn't mount his outside just walked it around inside his house to find the best spot and apparently experienced good improvement in reception.

You asked about signal loss due to the length of the coax. Not a major consideration in reception, certainly not at HF frequencies. Most receivers have more than enough gain to overcome losses. In reception on LF, MW, and HF the key is the signal to noise ratio. This ratio is almost always improved by noise reduction techniques rather than signal gain.

Most people think they cannot put an antenna outside the house because it is too large and will violate some zoning law etc.... I believe it is more important that the antenna be outside the house to avoid the noise that permeates the house rather than to make a large antenna. If you have any kind of yard outside the house you have the making of a good receiving antenna.

For example: you may have a small back yard with some wood fencing. You can staple some thin unobtrusive wire along the wood fence (any length will do) and bring it down to ground level (stapled to a fence pole). Run some thin coax from your house (eg from a basement window) like tv coax or RG 174 etc.. to the fence post (make a simple slit in the grass and push the

coax in. Connect the wire to the coax with a small simple RF transformer (you can make your own for a few dollars). No one will see such an antenna and I guarantee it will do a better job than anything you can provide inside the house. If the wire on the fence is only 8' - 10' long you may need a pre-amplifier near the receiver to amplify the signal. However the S/N ratio will be much better and reception far superior to any kind of wire inside the house.

The example I gave above is primarily for reception on HF .... eg 1.8-30 MHTZ. For MW reception you can greatly improve your reception using tuned loop antennas in the house as a tool to reduce noise and other interference and improve reception.

Jim Dunstan
Thunder Bay, ON

42. Re: [SkyWires] Re: Hook up wire VS RU8 coaxial cable

Yahoo group: SkyWires
Date: 2003-09-11 11:20:20 UTC
From: Jay
Topic: 14 Message: 42

Each situation is different. The best way to get a sense of how far away from your building the interference radiates is with a portable radio. Tune to a frequency where the noise is obvious and walk around with the radio. In my situation about 10 feet begins to help a lot. Even the far side of the deck brings an appreciable improvement on some frequencies.

Jay

Jim Dunstan <jdunstan@...> wrote:
At 07:32 PM 9/9/03 -0700, you wrote:
>Jim,
> Thanks, following this thread along how far away does the copper
> wire have to be from these sorces of noise for there to be an appreciable
> improvement in the signal to noise ratio??, would ten or fifteen feet in
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> moveing the ten or fifteen feet away then you would loose as a result of
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kind of yard outside the house you have the making of a good receiving antenna.

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Jim Dunstan
Thunder Bay, ON

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43. Re: Hook up wire VS RU8 coaxial cable

Yahoo group: SkyWires
Date: 2003-09-11 22:32:13 UTC
From: R H F
Topic: 14 Message: 43

Jay,

The small portable radio "Sniffer" trick works well for finding the good RF 'Quiet Shots' and those bad RFI/EMF "Hot Spots" inside the house/building too. The 'right' location of your radio inside house can solve many man made noise problems.

Hold a small portable radio next to a Dimmer Switch, Touch-Lite or old Computer Monitor: Tell the Better-Half that this is generating more Cancer 'causing' RFI/EMF then her Celphone and she will drive you Home Depot/Lowes/CompUSA to get the things fixed :o)

wmcis ~ RHF
.
.
= = = In SkyWires@yahoogroups.com,
= = = Jay <japolicow@s...> wrote:
> Each situation is different. The best way to get a sense of how far away from your building the interference radiates is with a portable radio. Tune to a frequency where the noise is obvious and walk around with the radio. In my situation about 10 feet begins to help a lot. Even the far side of the deck brings an appreciable improvement on some frequencies.
>
> Jay
>
> Jim Dunstan <jdunstan@t...> wrote:
> At 07:32 PM 9/9/03 -0700, you wrote:
> >Jim,
> > Thanks, following this thread along how far away does the copper
> > wire have to be from these sorces of noise for there to be an appreciable
> > improvement in the signal to noise ratio??, would ten or fifteen feet in
> > another room make an appreciable difference?? Would you gain more in
> > moveing the ten or fifteen feet away then you would loose as a result of
> > the longer feed in line?? Thanks for all the help folks.
> >
> > Bill
>
>
> Hi Bill:
>

> First question about how far from noise sources to make an
> improvement: well within the house the various areas where the
noise is
> loudest and where it is the quietest is really a matter of trial
and
> error. You can go around and check the noise sources within your
house and
> try to deal with them in one way or another. However, the sources
may not
> be within your house but your house wiring etc may be involved
with
> carrying the noise. I heard one person on Yahoo describe how he
used an
> external type active antenna to place it in different locations
until he
> found the best spot. It is one of those active antennas that
contain the
> amplifier and whip in a small box which connects back to the
control box
> with a length of coax cable. They were originally designed to be
mounted
> outside and the cable to be routed in to the listening location.
However
> he didn't mount his outside just walked it around inside his house
to find
> the best spot and apparently experienced good improvement in
reception.
>
> You asked about signal loss due to the length of the coax. Not a
major
> consideration in reception, certainly not at HF frequencies. Most
> receivers have more than enough gain to overcome losses. In
reception on
> LF, MW, and HF the key is the signal to noise ratio. This ratio
is almost
> always improved by noise reduction techniques rather than signal
gain.
>
> Most people think they cannot put an antenna outside the house
because it
> is too large and will violate some zoning law etc.... I believe
it is more
> important that the antenna be outside the house to avoid the noise
that
> permeates the house rather than to make a large antenna. If you
have any
> kind of yard outside the house you have the making of a good
receiving
> antenna.
>

> For example: you may have a small back yard with some wood
fencing. You
> can staple some thin unobtrusive wire along the wood fence (any
length will
> do) and bring it down to ground level (stapled to a fence pole).
Run some
> thin coax from your house (eg from a basement window) like tv coax
or RG
> 174 etc.. to the fence post (make a simple slit in the grass and
push the
> coax in. Connect the wire to the coax with a small simple RF
transformer
> (you can make your own for a few dollars). No one will see such
an antenna
> and I guarantee it will do a better job than anything you can
provide
> inside the house. If the wire on the fence is only 8' - 10' long
you may
> need a pre-amplifier near the receiver to amplify the signal.
However the
> S/N ratio will be much better and reception far superior to any
kind of
> wire inside the house.
>
> The example I gave above is primarily for reception on HF .... eg
1.8-30
> MHTZ. For MW reception you can greatly improve your reception
using tuned
> loop antennas in the house as a tool to reduce noise and other
interference
> and improve reception.
>
>
> Jim Dunstan
> Thunder Bay, ON
>
>
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44. 80 meter loop for all hf bands

Yahoo group: SkyWires
Date: 2003-09-12 01:40:38 UTC
From: w_r_adams1
Topic: 44 Message: 44

L. B. Cebik's antenna site has a great discussion of the "Loop SkyWire" for each of the HF ham bands. The URL is http://www.cebik.com/hl.html
As I believe someone has mentioned, the QST article that intoduced the name is available to ARRL members at http://www.arrl.org/members-only/tis/info/pdf/8511020.pdf

While browsing the ARRL site, I noticed an 80 meter dx version of the loop at http://www.arrl.org/members-only/tis/info/pdf/0208030.pdf

Bill

45. Re: 80 meter loop for all hf bands

Yahoo group: SkyWires
Date: 2003-09-12 01:53:09 UTC
From: exemptfromlife
Topic: 44 Message: 45

Thanks for posting this.

He said that this is a "model" does he mean that this is what an antenna software prediction program said would happen, or did I mis-understand?

thanks.

46. Re: 80 meter loop for all hf bands

Yahoo group: SkyWires
Date: 2003-09-12 06:49:56 UTC
From: R H F
Topic: 44 Message: 46

Bill,

Message #3 on this eGroup has a Link to a PDF File of the original'
QST Article for those who are not ARRL Members.
- - - http://groups.yahoo.com/group/SkyWires/message/3

"The Loop SkyWire" by Dave Fischer (W0MHS)
GoTo=> http://www.gordonsweb.net/loop%20skywire.pdf
Circa: "QST" November 1985

NOTE: Its now a LINK in the Links Section of this eGroup.

~ RHF
.
.
= = = In SkyWires@yahoogroups.com,
= = = "w_r_adams1" <w_r_adams1@y...> wrote:
> L. B. Cebik's antenna site has a great discussion of the "Loop
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> As I believe someone has mentioned, the QST article that intoduced
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>
> While browsing the ARRL site, I noticed an 80 meter dx version of
the
> loop at http://www.arrl.org/members-only/tis/info/pdf/0208030.pdf
>
> Bill

47. Re: 80 meter loop for all hf bands

Yahoo group: SkyWires
Date: 2003-09-12 19:59:20 UTC
From: w_r_adams1
Topic: 44 Message: 47

--- In SkyWires@yahoogroups.com, "exemptfromlife" <junkmail@a...>
wrote:
> Thanks for posting this.
>
> He said that this is a "model" does he mean that this is what an
> antenna software prediction program said would happen, or did I mis-
> understand?
>
> thanks.

Yes the analysis is based on computer modeling of the antenna. For the assumed antenna size, configuration, height and ground condition, the model presents calculated vertical and horizontal patterns at various HF frequencies.

One of the results is that there is a lobe on the side of the loop away from the feed. I wish I had the room and trees to actually build a version with an ability to switch feeds from corner to corner.

Bill

48. Re: [SkyWires] Re: Hook up wire VS RU8 coaxial cable

Yahoo group: SkyWires
Date: 2003-09-13 06:12:11 UTC
From: Bill Krause
Topic: 14 Message: 48

This seems like something a non-technical person like me can handle.

Bill Krause

R H F wrote:

> Jay,
>
> The small portable radio "Sniffer" trick works well for finding the
> good RF 'Quiet Shots' and those bad RFI/EMF "Hot Spots" inside the
> house/building too. The 'right' location of your radio inside
> house can solve many man made noise problems.
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> Hold a small portable radio next to a Dimmer Switch, Touch-Lite or
> old Computer Monitor: Tell the Better-Half that this is generating
> more Cancer 'causing' RFI/EMF then her Celphone and she will drive
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> = = = Jay <japolicow@s...> wrote:
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> portable radio. Tune to a frequency where the noise is obvious and
> walk around with the radio. In my situation about 10 feet begins to
> help a lot. Even the far side of the deck brings an appreciable
> improvement on some frequencies.
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> > Jay
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> > Jim Dunstan <jdunstan@t...> wrote:
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> > > Bill
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> > Hi Bill:
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> > Most people think they cannot put an antenna outside the house
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> > is too large and will violate some zoning law etc.... I believe
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> > MHTZ. For MW reception you can greatly improve your reception
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> >
> > Jim Dunstan
> > Thunder Bay, ON
> >
> >
> >
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49. Re: Hook up wire VS RU8 coaxial cable

Yahoo group: SkyWires
Date: 2003-09-13 13:53:34 UTC
From: Bill Krause
Topic: 14 Message: 49

Jim and others thanks very much for all the help. You have given me a lot of ideas and information to work with and try some things out. I have outdoor antenna on the way and it should be up and running within a week. I also plan on at least one or possibly two more outdoor antennas. I also plan on continuing to work on indoor rigs. I am particularly interested in developing something I can take with me when I travel to setup either in a motel room or outdoors at a camp site.

Bill Krause

Jim Dunstan wrote:

> At 07:32 PM 9/9/03 -0700, you wrote:
> >Jim,
> > Thanks, following this thread along how far away does the copper
> > wire have to be from these sorces of noise for there to be an
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> > improvement in the signal to noise ratio??, would ten or fifteen
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> >
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> Hi Bill:
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> thin coax from your house (eg from a basement window) like tv coax or RG
> 174 etc.. to the fence post (make a simple slit in the grass and push the
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> MHTZ. For MW reception you can greatly improve your reception using
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> Jim Dunstan
> Thunder Bay, ON
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>
>
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> <http://rd.yahoo.com/M=259395.3614674.4902533.1261774/D=egroupweb/S=1705063108:HM/A=1524

963/R=0/SIG=12o885gmo/*http://hits.411web.com/cgi-bin/autoredir?camp=556&lineid=3614674&prop=egroupweb&pos=HM>
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50. Slopper Dipole

Yahoo group: SkyWires
Date: 2003-09-14 14:54:55 UTC
From: Bill Krause
Topic: 50 Message: 50

A crazy question What makes a slopper a slopper other than how it is installed??. It is really any different than any other dipole with tuned traps?? What would happen if I installed it with only a very shallow angle??

Bill

51. Re: [SkyWires] Slopper Dipole

Yahoo group: SkyWires
Date: 2003-09-14 15:01:17 UTC
From: Lloyd M. Mitchell
Topic: 50 Message: 51

Bill,

I hope you mean sloper antenna...

Thanks for the laugh..

Mitch KD4HTW

Bill Krause <bkrause@...> wrote:
A crazy question What makes a slopper a slopper other than how it is
installed??. It is really any different than any other dipole with tuned
traps?? What would happen if I installed it with only a very shallow angle??

Bill

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52. Re: [SkyWires] Slopper Dipole

Yahoo group: SkyWires
Date: 2003-09-14 15:41:02 UTC
From: Bill Krause
Topic: 50 Message: 52

Lloyd,
Yes, sorry for the faux pass.

Bill

Lloyd M. Mitchell wrote:

> Bill,
>
> I hope you mean sloper antenna...
>
> Thanks for the laugh..
>
> Mitch KD4HTW
>
> Bill Krause <bkrause@...> wrote:
>
> A crazy question What makes a slopper a slopper other than how it is
> installed??. It is really any different than any other dipole with
> tuned
> traps?? What would happen if I installed it with only a very
> shallow angle??
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> Bill
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>
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53. Re: Slopper Dipole Antenna

Yahoo group: SkyWires
Date: 2003-09-15 00:58:44 UTC
From: R H F
Topic: 50 Message: 53

BK,

FLAT - First lets consider the Normal "Flat" Dipole.
= = = Plain Wire Antenna Elements (No-Traps).
* That is 'mounted' Flat-Horizontal.
* Cut for a specific frequency band
* Directional (Figure Eight)
* Optimum 'mounting' Height Half-Wave Length to a Wave Length above the ground surface or more for a true free air antenna.
* NOTE: A 'good' ground is not required for a properly "Elevated" Dipole Antenna.
* * A Dipole Antenna at the 'right' Height, that is only 'off' horizontal by 15 Degrees or less is still basically a Flat Dipole.

TILTED - Next what type of so called "SLOPPER" Dipole are you talking about ?
= = = Plain Wire Antenna Elements (No-Traps).
* A Tip-to-Tip (Top to Bottom) Slopper that is simply "Tilted" in One Direction. [The "T2FD" is he more common Slopper Dipole.]
* A Tip-Center-Tip (Bottom-Top-Bottom) (Dual Slopper) which is commonly called an Inverted "V" Dipole Antenna.
* NOTE: Both of these antennas make use of the ground proximity to add loading capacitance and to some degree achieve both a broader frequency band useage and redued directivity.
* These two antennas require a good ground for their best performance.
* * A "Tilted" Dipole or Inverted "V" Dipole who's elements are Slanted by 30 degrees or more; with an 'average height of about a quarter wave from the ground are installed to make use of the ground as a reflector.

FWIW: Lack of Traps do not make a Dipole -and- Traps do not make a Slopper.

TRAPS: Are bassically used to Shorten the Length of the Antenna and/or Add Greater Band Width (Multi-Band Capability) to an Antenna.

IMHO: For "Receive" ONLY Antennas that are intended for a Broad-Band BCL & SWL Antenna Applications: 500kHz to 30 MHz. The Windom Antenna is the Better Choice over the Dipole. Like the Dipole the Windom can be installed Flat, Tilted, and Inverted "V".

iane ~ RHF
.
.
= = = In SkyWires@yahoogroups.com,

= = = Bill Krause <bkrause@s...> wrote:
> A crazy question What makes a slopper a slopper other than how it
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> installed??. It is really any different than any other dipole with
tuned
> traps?? What would happen if I installed it with only a very
shallow angle??
>
> Bill

54. Uniden Bearcat BC796DGV - Due out in December 2003

Yahoo group: SkyWires
Date: 2003-09-18 23:08:07 UTC
From: exemptfromlife
Topic: 54 Message: 54

Does anybody know anything about this new scanner?

thanks.

55. Re: Uniden Bearcat BC796DGV - Due out in December 2003

Yahoo group: SkyWires
Date: 2003-09-18 23:18:11 UTC
From: exemptfromlife
Topic: 54 Message: 55

I Found it..

http://www.usascan.com/files/bc796d.cfm

FEATURES:

Digital Capable - APCO Project 25 Digital Capable. Now compatible with 9,600 baud APCO digital control channel with digital voice. Not compatible with AGEIS, ASTRO or ESAS systems. With your purchase of a BC796DGV scanner from Communications Electronics, the P-25 APCO Project 25 Digital Card is included, free. When the P-25 card is installed, you can monitor public safety organizations who currently use conventional, trunked at 3,600 and 9,600 baud analog control channel and digital voice and mixed mode APCO Project 25 systems.
TrunkTracker III - Search for and monitor all the groups within a specific trunked system. Lockout unwanted groups during the search and save other groups to scan lists. (EDACS□, Motorola, E.F. Johnson). Follow VHF High Band, UHF 800/900 MHz trunked public safety and public service systems just as if conventional two-way communications were used.
Multi-Track - Track more than one trunking system at a time. Scan conventional and trunked systems at the same time.
1,000 Channels - Program one frequency into each channel. You must have at least one channel programmed to use the scan mode.
27 Bands - Includes 27 bands, with aircraft and 800 MHz frequency coverage.
Continuous Band Coverage (25 MHz TO 1.3 GHz) - Allows coverage from virtually every frequency from 25 MHz to 1.3 GHz excluding the cellular bands and UHF TV band, so you can tune into police, fire, weather, ambulance, aircraft, military, "Ham" radio and much more.
10 Banks - 10 banks with 100 channels each are useful for storing similar frequencies to maintain faster scanning cycles or for storing all the frequencies of a trunked system.
10 Priority Channels - You can assign one priority channel in each bank. Assigning a priority channel allows you to keep track of activity on your most important channel(s) while monitoring other channels for transmissions. You can also assign trunking priority talk groups. When Priority Scan is turned On, your scanner checks the priority channel in the banks you selected every 2 seconds for activity. If a signal is present on the priority channel, your scanner monitors the channel until the transmission ends, then resumes normal scanning. You can designate one channel in each bank as a Priority Channel. By default, the first channel in each bank is the Priority Channel, but you can change this setting.
Priority Plus Scan - Allows you to scan only priority channels.

Preprogrammed Service Searches (10) - This feature allows you to toggle through preprogrammed public safety, news media TV broadcast audio, Amateur (ham) radio, CB radio, Family Radio Service, special low power, railroad, aircraft, marine, racing and weather frequencies.
Unique Data Skip - Allows your scanner to skip unwanted data transmissions and reduces birdies.
Memory Backup - If power is disconnected, the frequencies programmed in your scanner are retained in memory.
Direct Channel Access - Jump directly to any channel without stepping through other channels or entering menu mode.
RF Attenuator - The BC796D comes with an RF Attenuation feature. If you are near an unusually strong signal source, the signal may overload the scanner. The RF Attenuation features works in all modes and attenuates (reduces) the incoming signal strength to prevent stronger signals from overloading the scanner.
PC Programmable - This feature allows the user to remotely program and control the scanner using third party software (available from www.usascan.com). Optional baud rates include 2400, 4800, 9600 (default) and 19200 operating through the scanner's DB-9 RS-232C port.
Turbo Search - Increases the search speed to 300 steps per second when searching transmission bands with 5 KHz steps.
Turbo Scan - This lightning fast technology allows you to scan and search nearly 100 channels or steps per second.
Auto Store - The BC796D can automatically store any found active frequencies into an assigned bank.
CTCSS/DCS - This feature allows the user to assign analog and digital subaudible tone codes to a specific frequency in memory. The scanner will also search for unknown CTCSS and DCS tones.
National Weather Radio - Can be programmed to receive special localized weather warnings broadcast by NOAA. The scanner is compatible with warning siren and message transmissions.
Specific Area Message Encoding (S.A.M.E.) weather alert - S.A.M.E. is NOAA's coded emergency weather signals that identify a specific geographic area affected by an emergency. In weather alert with S.A.M.E. mode, your scanner functions as a county specific severe weather warning radio. To obtain further information about S.A.M.E. and FIPS code, visit http://www.nws.noaa.gov/nwr/index.html.
FIPS Code - This feature allows you to input a six-digit code Federal Information Processing System (FIPS) code that will designate a localized severe weather warning. The BC796D can decode the 6-digit FIPS code established by the National Weather Service (NWS). This FIPS code identifies geographic areas anywhere in the United States, US territories and US possessions. Programming the FIPS code is necessary to receive S.A.M.E. alerts about weather occurring in a particular area. To obtain a FIPS code for your area, call the National Weather Service toll free at 1-888-697-7263 or visit http://205.156.54.206/nwr/nwrsame.htm.
Dimmer - Allows you to change the brightness of the display.

Enter Lock - Allows you to lockout the keypad to prevent reprogramming of channels, talkgroups and tones.
Key Beep Option - Allows you to turn the key beep on or off.
Screen Mask - Screen Mask allows you to limit what appears on the display to the alpha tags that you have set for a channel along with a few function icons. Screen Mask removes the frequency, receiving mode tone data and signal strength bars. This mode is particularly useful in public safety vehicles where "information overload" is already a problem. Screen Mask does not work in Search mode.
Reverse Mode - This key will allow you to observe the reverse frequency of the repeater. While pressing "RVRS", the standard repeater pair frequency will be displayed.
Channel Step Selection - You can set channel steps, 5 kHz to 100 kHz or Auto, in conventional mode or chain search mode. The default receive mode should be the proper mode setting in almost all cases. You may wish to set some VHF channels for NFM mode, depending on any adjacent channel interference problems. WFM is typically used for broadcast frequencies such as TV audio or FM radio.
Mute On/Off - Allows you to manually turn the mute function on or off.
Receiving Mode Selection - You can set the receiving mode, AM or FM in conventional mode or chain search mode.
Duplicate Frequency Alert - If you enter a frequency which has been stored in another channel, you will hear a beep and the channel stored displays a duplicate warning message.
2 Line Alpha Display - You can customize your scanner by storing text tags for easy identification of banks, channel transmission, trunking talk group ID and more. Allows for alpha tagging display of channel, bank or search range.
Control Channel Only Mode - Allows the user to automatically trunk certain systems by simply programming the control channel.
Backlit Full-Frequency Display - Shows the channels being scanned and the frequency entered into each channel with an easy-to-read backlit display for enhanced night visibility.
Clone Feature - Allows for cloning of another scanner's programmed frequencies. (The two scanner's must be connected by a cloning cable for the cloning process to take place.)
Alpha Tagging - Allows the user to assign an alpha description to each channel, trunking talk group and bank.
Beep Alert - You can set a Beep Alert on a per-channel basis to alert you when specific frequencies are active. For example, you may wish to be alerted anytime a mutual aid fire frequency is active. With beep alert, you will hear three
beeps at the start of each transmission that you have flagged as such. You will also notice that as you scroll pass the flagged channel (s), you will hear three beeps.
Record Function - Allows the user to designate a channel to be recorded by an external device. The user will be able to select between ON and OFF. The default setting is OFF. An icon will appear in the LCD when a channel has been assigned the record feature

(requires an external recording device.)
VFO Control - Allows the user to tune through frequencies, channels, alpha characters and more with the handy VFO tuning knob.
Menu-Driven Design - This function allows advanced programming and control operation through the easy-to-use menu system.
Frequency Delay Selection - A default delay of 2 seconds is automatically set for each frequency or talk group A different delay can be set for each programmed channel so that when scan or search stops on a channel there is a brief pause before the scanning cycle resumes. To set the delay feature, enter into the menu mode.
Negative Delay Selection - Setting negative delay periods are useful if you are only interested in small segments of conversations. For example: If you set a -5 second delay, you will only hear 5 seconds of the conversation and then the scanner will resume scanning, whether or not the conversation is finished.
Total Channel Control - Allows the user to program delay, step, mode (adjustable) priority, attenuation and more on a per-channel basis.
Chain search mode - When the scanner finds an active frequency, the trunk tracking system will be active. Four frequency plans apply to the Control Channel Only feature
Trunk Search - Search for and monitor all the groups within a trunked system. Lockout unwanted groups during the search and save other groups to scan lists.
Trunk Lockout - Lockout groups you don't wish to monitor, (including data groups) from the trunked system.
Trunk Delay - Apply a five second delay to trunking groups so that both sides of a conversation can be heard, even if the trunking frequencies change between replies.
One Touch Weather - Automatically scans all national weather channels with a single touch.

Turbo Scan - This lightning fast technology allows you to scan and search nearly 100 channels or steps per second.
Memory Backup - Retains frequencies entered for more than 3 days without batteries or during a power failure.
Programmable Search - Allows you to find new frequencies in any of the bands.
Manual Channel Access - Go directly to any channels without stepping through other channels.
SPECIFICATIONS:

CHANNELS
1,000 Channels (100 channels x 10 Banks)

BANDS 27 Bands
PREPROGRAMMED SERVICES
Service Search menus are preprogrammed services used across the United States. Select services from the following: Weather, Public Safety, news, TV broadcast, Amateur (ham) radio, Marine, Railroad, Aircraft, CB radio, Family Radio Service.

FREQUENCY RANGE
25.0000 - 26.9600 MHz (Petroleum Products & Broadcast Pickup)
26.9650 - 27.4050 MHz (CB Radio)
27.4100 - 27.9950 MHz (Business & Forest Products)
28.0000 - 29.6900 MHz (10 Meter Amateur Band)
29.7000 - 49.9900 MHz (VHF Low Band)
50.0000 - 53.9900 MHz (6 Meter Amateur Band)
54.0000 - 71.9500 MHz (VHF TV)
72.0000 - 75.9950 MHz (Intersystem & Astronomy)
76.0000 - 87.9500 MHz (VHF TV)
88.0000 - 107.9000 MHz (FM Broadcast)
108.0000 - 136.9750 MHz (Aircraft Band)
137.0000 - 143.9950 MHz (Military Land Mobile)
144.0000 - 147.9950 MHz (2 Meter Amateur Band)
148.0000 - 161.9950 (VHF High Band - 5 KHz spacing)
162.000-173.9875 MHz (VHF High Band - 12.5 KHz spacing)
174.0000 - 215.9500 MHz (VHF TV)
216.0000 - 224.9950 MHz (1.25 Meter Amateur)
225.0000 - 399.9500 MHz (UHF Aircraft Band)
400.0000 - 405.9875 MHz (UHF Aircraft Band)
406.0000 - 419.9875 MHz (Federal Government Land Mobile)
420.0000 - 449.9875 MHz (70 cm Amateur Band)
450.0000 - 469.9875 MHz (UHF Standard Band)
470.0000 - 512.0000 MHz (Public Service & TV Band)
806.0000 - 823.9875 MHz (Public Service Band)
849.0125 - 868.9875 MHz (Public Service Band)
894.0125 - 956.0000 MHz (Public Service Band)
1240.0000 - 1300.0000 MHz (25 cm Amateur Band)

WEATHER FREQUENCY
162.4000 - 165.5500 MHz (25 kHz Step)

DISPLAY
Full LCD (with back light)
(BANK, LIST, SCAN, SEARCH, HOLD, P RI, DLY, L/O, LINE, FREQ, CHAN,
ALPHA, RMT, AUTO, ATT, ALT)

CONTROLS/SWITCHES
Volume/Squelch Control with power ON/OFF switch
VFO Rotary Encoder with Pulse Switch

POWER REQUIREMENTS
DC 13.8V (External Power Jack)

EXTERNAL JACKS
Antenna Jack: BNC Type
Phone Jack: 3.5 Ø
Record Jack: 3.5 Ø
DC Power Jack: 5.5 Ø
Remote Interface Jack: D-Sub 9-pin

INTERNAL SPEAKER
8 ohm, 2 watts (56 Ø)

SCAN RATE
Up to 100 channels per second

MODES
AM/FM/WFM (adjustable per channel)

STEP SIZES (kHz)
5, 7.5, 10, 12.5, 25, 50, 100

SCAN DELAY
none, 1, 2, 4, infinite (stay on until Resume is pressed), -2, -5, -10 seconds

AUDIO OUTPUT
8 Resistance Load

ANTENNA
50 ohms

OPERATING TEMPERATURE
-4° F - 140° F
-20° C - 60° C

STORAGE TEMPERATURE
-22° F - 140° F
-30° C - 60° C

SIZE
7-5/8" Wide x 6-15/16" Deep x 2-13/16" High
195.0 mm Wide x 177.0 mm Deep x 72.0 mm High

WEIGHT
2.93 pounds
1.33 kg

UPC CODE
0-45799-66666-0

MASTER CARTON QUANTITY
6

SINGLE UNIT CARTON DIMENSIONS
12-3/4" Wide x 8-1/2" Deep x 4" High

INCLUDED ACCESSORIES
P-25 digital card, Telescopic Antenna, AC Adapter (AD580U), Cigarette Lighter Cord, DC Cord, Mounting Bracket with Screws, Owner's Manual, Trunking Frequency Guide Book, E-Scanner programming Software CD-ROM, Screwdriver

56. Re: Uniden Bearcat BC796DGV - Due out in December 2003

Yahoo group: SkyWires
Date: 2003-09-19 00:20:13 UTC
From: R H F
Topic: 54 Message: 56

EfL,

One Question ? PRICE ?

jftfoi RHF
.
.
= = = In SkyWires@yahoogroups.com,
= = = "exemptfromlife" <junkmail@a...> wrote:
> I Found it..
>
> http://www.usascan.com/files/bc796d.cfm
>
> FEATURES:
>
> Digital Capable - APCO Project 25 Digital Capable. Now compatible
> with 9,600 baud APCO digital control channel with digital voice.
Not
> compatible with AGEIS, ASTRO or ESAS systems. With your purchase
of a
> BC796DGV scanner from Communications Electronics, the P-25 APCO
> Project 25 Digital Card is included, free. When the P-25 card is
> installed, you can monitor public safety organizations who
currently
> use conventional, trunked at 3,600 and 9,600 baud analog control
> channel and digital voice and mixed mode APCO Project 25 systems.
> TrunkTracker III - Search for and monitor all the groups within a
> specific trunked system. Lockout unwanted groups during the search
> and save other groups to scan lists. (EDACS□, Motorola, E.F.
> Johnson). Follow VHF High Band, UHF 800/900 MHz trunked public
safety
> and public service systems just as if conventional two-way
> communications were used.
> Multi-Track - Track more than one trunking system at a time. Scan
> conventional and trunked systems at the same time.
> 1,000 Channels - Program one frequency into each channel. You must
> have at least one channel programmed to use the scan mode.
> 27 Bands - Includes 27 bands, with aircraft and 800 MHz frequency
> coverage.
> Continuous Band Coverage (25 MHz TO 1.3 GHz) - Allows coverage
from
> virtually every frequency from 25 MHz to 1.3 GHz excluding the
> cellular bands and UHF TV band, so you can tune into police, fire,
> weather, ambulance, aircraft, military, "Ham" radio and much more.

> 10 Banks - 10 banks with 100 channels each are useful for storing
> similar frequencies to maintain faster scanning cycles or for
storing
> all the frequencies of a trunked system.
> 10 Priority Channels - You can assign one priority channel in each
> bank. Assigning a priority channel allows you to keep track of
> activity on your most important channel(s) while monitoring other
> channels for transmissions. You can also assign trunking priority
> talk groups. When Priority Scan is turned On, your scanner checks
the
> priority channel in the banks you selected every 2 seconds for
> activity. If a signal is present on the priority channel, your
> scanner monitors the channel until the transmission ends, then
> resumes normal scanning. You can designate one channel in each
bank
> as a Priority Channel. By default, the first channel in each bank
is
> the Priority Channel, but you can change this setting.
> Priority Plus Scan - Allows you to scan only priority channels.
> Preprogrammed Service Searches (10) - This feature allows you to
> toggle through preprogrammed public safety, news media TV
broadcast
> audio, Amateur (ham) radio, CB radio, Family Radio Service,
special
> low power, railroad, aircraft, marine, racing and weather
frequencies.
> Unique Data Skip - Allows your scanner to skip unwanted data
> transmissions and reduces birdies.
> Memory Backup - If power is disconnected, the frequencies
programmed
> in your scanner are retained in memory.
> Direct Channel Access - Jump directly to any channel without
stepping
> through other channels or entering menu mode.
> RF Attenuator - The BC796D comes with an RF Attenuation feature.
If
> you are near an unusually strong signal source, the signal may
> overload the scanner. The RF Attenuation features works in all
modes
> and attenuates (reduces) the incoming signal strength to prevent
> stronger signals from overloading the scanner.
> PC Programmable - This feature allows the user to remotely program
> and control the scanner using third party software (available from
> www.usascan.com). Optional baud rates include 2400, 4800, 9600
> (default) and 19200 operating through the scanner's DB-9 RS-232C
> port.
> Turbo Search - Increases the search speed to 300 steps per second
> when searching transmission bands with 5 KHz steps.
> Turbo Scan - This lightning fast technology allows you to scan and

> search nearly 100 channels or steps per second.
> Auto Store - The BC796D can automatically store any found active
> frequencies into an assigned bank.
> CTCSS/DCS - This feature allows the user to assign analog and
digital
> subaudible tone codes to a specific frequency in memory. The
scanner
> will also search for unknown CTCSS and DCS tones.
> National Weather Radio - Can be programmed to receive special
> localized weather warnings broadcast by NOAA. The scanner is
> compatible with warning siren and message transmissions.
> Specific Area Message Encoding (S.A.M.E.) weather alert - S.A.M.E.
is
> NOAA's coded emergency weather signals that identify a specific
> geographic area affected by an emergency. In weather alert with
> S.A.M.E. mode, your scanner functions as a county specific severe
> weather warning radio. To obtain further information about
S.A.M.E.
> and FIPS code, visit http://www.nws.noaa.gov/nwr/index.html.
> FIPS Code - This feature allows you to input a six-digit code
Federal
> Information Processing System (FIPS) code that will designate a
> localized severe weather warning. The BC796D can decode the 6-
digit
> FIPS code established by the National Weather Service (NWS). This
> FIPS code identifies geographic areas anywhere in the United
States,
> US territories and US possessions. Programming the FIPS code is
> necessary to receive S.A.M.E. alerts about weather occurring in a
> particular area. To obtain a FIPS code for your area, call the
> National Weather Service toll free at 1-888-697-7263 or visit
> http://205.156.54.206/nwr/nwrsame.htm.
> Dimmer - Allows you to change the brightness of the display.
> Enter Lock - Allows you to lockout the keypad to prevent
> reprogramming of channels, talkgroups and tones.
> Key Beep Option - Allows you to turn the key beep on or off.
> Screen Mask - Screen Mask allows you to limit what appears on the
> display to the alpha tags that you have set for a channel along
with
> a few function icons. Screen Mask removes the frequency, receiving
> mode tone data and signal strength bars. This mode is particularly
> useful in public safety vehicles where "information overload" is
> already a problem. Screen Mask does not work in Search mode.
> Reverse Mode - This key will allow you to observe the reverse
> frequency of the repeater. While pressing "RVRS", the standard
> repeater pair frequency will be displayed.
> Channel Step Selection - You can set channel steps, 5 kHz to 100
kHz
> or Auto, in conventional mode or chain search mode. The default

> receive mode should be the proper mode setting in almost all
cases.
> You may wish to set some VHF channels for NFM mode, depending on
any
> adjacent channel interference problems. WFM is typically used for
> broadcast frequencies such as TV audio or FM radio.
> Mute On/Off - Allows you to manually turn the mute function on or
off.
> Receiving Mode Selection - You can set the receiving mode, AM or
FM
> in conventional mode or chain search mode.
> Duplicate Frequency Alert - If you enter a frequency which has
been
> stored in another channel, you will hear a beep and the channel
> stored displays a duplicate warning message.
> 2 Line Alpha Display - You can customize your scanner by storing
text
> tags for easy identification of banks, channel transmission,
trunking
> talk group ID and more. Allows for alpha tagging display of
channel,
> bank or search range.
> Control Channel Only Mode - Allows the user to automatically trunk
> certain systems by simply programming the control channel.
> Backlit Full-Frequency Display - Shows the channels being scanned
and
> the frequency entered into each channel with an easy-to-read
backlit
> display for enhanced night visibility.
> Clone Feature - Allows for cloning of another scanner's programmed
> frequencies. (The two scanner's must be connected by a cloning
cable
> for the cloning process to take place.)
> Alpha Tagging - Allows the user to assign an alpha description to
> each channel, trunking talk group and bank.
> Beep Alert - You can set a Beep Alert on a per-channel basis to
alert
> you when specific frequencies are active. For example, you may
wish
> to be alerted anytime a mutual aid fire frequency is active. With
> beep alert, you will hear three
> beeps at the start of each transmission that you have flagged as
> such. You will also notice that as you scroll pass the flagged
channel
> (s), you will hear three beeps.
> Record Function - Allows the user to designate a channel to be
> recorded by an external device. The user will be able to select
> between ON and OFF. The default setting is OFF. An icon will
appear

> in the LCD when a channel has been assigned the record feature
> (requires an external recording device.)
> VFO Control - Allows the user to tune through frequencies,
channels,
> alpha characters and more with the handy VFO tuning knob.
> Menu-Driven Design - This function allows advanced programming and
> control operation through the easy-to-use menu system.
> Frequency Delay Selection - A default delay of 2 seconds is
> automatically set for each frequency or talk group A different
delay
> can be set for each programmed channel so that when scan or search
> stops on a channel there is a brief pause before the scanning
cycle
> resumes. To set the delay feature, enter into the menu mode.
> Negative Delay Selection - Setting negative delay periods are
useful
> if you are only interested in small segments of conversations. For
> example: If you set a -5 second delay, you will only hear 5
seconds
> of the conversation and then the scanner will resume scanning,
> whether or not the conversation is finished.
> Total Channel Control - Allows the user to program delay, step,
mode
> (adjustable) priority, attenuation and more on a per-channel basis.
> Chain search mode - When the scanner finds an active frequency,
the
> trunk tracking system will be active. Four frequency
> plans apply to the Control Channel Only feature
> Trunk Search - Search for and monitor all the groups within a
trunked
> system. Lockout unwanted groups during the search and save other
> groups to scan lists.
> Trunk Lockout - Lockout groups you don't wish to monitor,
(including
> data groups) from the trunked system.
> Trunk Delay - Apply a five second delay to trunking groups so that
> both sides of a conversation can be heard, even if the trunking
> frequencies change between replies.
> One Touch Weather - Automatically scans all national weather
channels
> with a single touch.
>
> Turbo Scan - This lightning fast technology allows you to scan and
> search nearly 100 channels or steps per second.
> Memory Backup - Retains frequencies entered for more than 3 days
> without batteries or during a power failure.
> Programmable Search - Allows you to find new frequencies in any of
> the bands.
> Manual Channel Access - Go directly to any channels without

stepping
> through other channels.
> SPECIFICATIONS:
>
>
> CHANNELS
> 1,000 Channels (100 channels x 10 Banks)
>
> BANDS 27 Bands
> PREPROGRAMMED SERVICES
> Service Search menus are preprogrammed services used across the
> United States. Select services from the following: Weather, Public
> Safety, news, TV broadcast, Amateur (ham) radio, Marine, Railroad,
> Aircraft, CB radio, Family Radio Service.
>
> FREQUENCY RANGE
> 25.0000 - 26.9600 MHz (Petroleum Products & Broadcast Pickup)
> 26.9650 - 27.4050 MHz (CB Radio)
> 27.4100 - 27.9950 MHz (Business & Forest Products)
> 28.0000 - 29.6900 MHz (10 Meter Amateur Band)
> 29.7000 - 49.9900 MHz (VHF Low Band)
> 50.0000 - 53.9900 MHz (6 Meter Amateur Band)
> 54.0000 - 71.9500 MHz (VHF TV)
> 72.0000 - 75.9950 MHz (Intersystem & Astronomy)
> 76.0000 - 87.9500 MHz (VHF TV)
> 88.0000 - 107.9000 MHz (FM Broadcast)
> 108.0000 - 136.9750 MHz (Aircraft Band)
> 137.0000 - 143.9950 MHz (Military Land Mobile)
> 144.0000 - 147.9950 MHz (2 Meter Amateur Band)
> 148.0000 - 161.9950 (VHF High Band - 5 KHz spacing)
> 162.000-173.9875 MHz (VHF High Band - 12.5 KHz spacing)
> 174.0000 - 215.9500 MHz (VHF TV)
> 216.0000 - 224.9950 MHz (1.25 Meter Amateur)
> 225.0000 - 399.9500 MHz (UHF Aircraft Band)
> 400.0000 - 405.9875 MHz (UHF Aircraft Band)
> 406.0000 - 419.9875 MHz (Federal Government Land Mobile)
> 420.0000 - 449.9875 MHz (70 cm Amateur Band)
> 450.0000 - 469.9875 MHz (UHF Standard Band)
> 470.0000 - 512.0000 MHz (Public Service & TV Band)
> 806.0000 - 823.9875 MHz (Public Service Band)
> 849.0125 - 868.9875 MHz (Public Service Band)
> 894.0125 - 956.0000 MHz (Public Service Band)
> 1240.0000 - 1300.0000 MHz (25 cm Amateur Band)
>
> WEATHER FREQUENCY
> 162.4000 - 165.5500 MHz (25 kHz Step)
>
> DISPLAY
> Full LCD (with back light)

> (BANK, LIST, SCAN, SEARCH, HOLD, P RI, DLY, L/O, LINE, FREQ, CHAN,
> ALPHA, RMT, AUTO, ATT, ALT)
>
> CONTROLS/SWITCHES
> Volume/Squelch Control with power ON/OFF switch
> VFO Rotary Encoder with Pulse Switch
>
> POWER REQUIREMENTS
> DC 13.8V (External Power Jack)
>
> EXTERNAL JACKS
> Antenna Jack: BNC Type
> Phone Jack: 3.5 Ø
> Record Jack: 3.5 Ø
> DC Power Jack: 5.5 Ø
> Remote Interface Jack: D-Sub 9-pin
>
> INTERNAL SPEAKER
> 8 ohm, 2 watts (56 Ø)
>
> SCAN RATE
> Up to 100 channels per second
>
> MODES
> AM/FM/WFM (adjustable per channel)
>
> STEP SIZES (kHz)
> 5, 7.5, 10, 12.5, 25, 50, 100
>
> SCAN DELAY
> none, 1, 2, 4, infinite (stay on until Resume is pressed), -2, -
5, -
> 10 seconds
>
> AUDIO OUTPUT
> 8 Resistance Load
>
> ANTENNA
> 50 ohms
>
> OPERATING TEMPERATURE
> -4° F - 140° F
> -20° C - 60° C
>
> STORAGE TEMPERATURE
> -22° F - 140° F
> -30° C - 60° C
>
> SIZE

> 7-5/8" Wide x 6-15/16" Deep x 2-13/16" High
> 195.0 mm Wide x 177.0 mm Deep x 72.0 mm High
>
> WEIGHT
> 2.93 pounds
> 1.33 kg
>
> UPC CODE
> 0-45799-66666-0
>
> MASTER CARTON QUANTITY
> 6
>
> SINGLE UNIT CARTON DIMENSIONS
> 12-3/4" Wide x 8-1/2" Deep x 4" High
>
> INCLUDED ACCESSORIES
> P-25 digital card, Telescopic Antenna, AC Adapter (AD580U),
> Cigarette Lighter Cord, DC Cord, Mounting Bracket with Screws,
> Owner's Manual, Trunking Frequency Guide Book, E-Scanner
programming
> Software CD-ROM, Screwdriver

57. Re: [SkyWires] Re: Uniden Bearcat BC796DGV - Due out in December 2003

Yahoo group: SkyWires
Date: 2003-09-19 02:43:26 UTC
From: RON TROTTO
Topic: 54 Message: 57

in other words the same things the 780 has which i have except 500 more channlles and apco25 witch we dont need in illinois :) ron trotto

---

Do you Yahoo!?
Yahoo! SiteBuilder - Free, easy-to-use web site design software

58. Re: Uniden Bearcat BC796DGV - Due out in December 2003

Yahoo group: SkyWires
Date: 2003-09-19 03:04:43 UTC
From: exemptfromlife
Topic: 54 Message: 58

good question.

I have no idea, It wasn't in the link because www.usascan.com doesn't know yet. (at least I'm assuming that).

If I were going to buy another scanner, I think I would get a BC780XLT. It has plenty of stuff, and the price has to be cheaper than the newer models that are out.

I was just wondering if anybody saw anthing in the specs of this new one, that would make it worth the extra money. (again, I'm assuming it will be about $100 more than the current model.)

thanks.

--- In SkyWires@yahoogroups.com, "R H F" <rhf-mail@u...> wrote:
> EfL,
>
> One Question ? PRICE ?
>
> jftfoi RHF
> .
> .

59. Re: [SkyWires] Re: Uniden Bearcat BC796DGV - Due out in December 2003

Yahoo group: SkyWires
Date: 2003-09-19 04:21:18 UTC
From: RON TROTTO
Topic: 54 Message: 59

it is exactly the same as the bearcat 780 and the price was said and dont quote me now :) around 600.00 .the only thing diffrent as i said is more channles,and the ability to pick up the apco 25.which illinois and mo do not use .but it is the same exact scanner.i have the bearcat 780 xlt and its great with adiscone and or the wip i pick up everything including the tropo on the vhf low band .and wants you learn it its easy i only had it a month and talked my brother into it on the phone in nj on putting in his police freq on 900 mhz and setting it up and i surprised myself that we got it right the first time:) but you cant go wrong 73 ron trotto,waggoner,illinois

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Do you Yahoo!?
Yahoo! SiteBuilder - Free, easy-to-use web site design software

60. Email Address

Yahoo group: SkyWires
Date: 2003-09-19 19:25:28 UTC
From: Burr Patterson, Jr.
Topic: 60 Message: 60

Greetings,
I have had to block all email one time to stop spamming.

You will receive you email back onetime to be added to my list. Please just hit the URL and everything will be OK after that.

Sorry for any in convince

Burr

61. Re: Email Address

Yahoo group: SkyWires
Date: 2003-09-19 20:30:27 UTC
From: exemptfromlife
Topic: 60 Message: 61

Is this because of this new internet worm that looks like it came from Microsoft? I have gotten over 100 emails in the past 24 hours from people who are infected by this. all using my junkmail email account.

has anyone else had this same problem?

thanks.

--- In SkyWires@yahoogroups.com, "Burr Patterson, Jr." <pitzradio@e...> wrote:
> Greetings,
> I have had to block all email one time to stop spamming.
>
> You will receive you email back onetime to be added to my list. Please
> just hit the URL and everything will be OK after that.
>
> Sorry for any in convince
>
> Burr

62. Re: [SkyWires] Re: Email Address

Yahoo group: SkyWires
Date: 2003-09-19 21:16:58 UTC
From: Burr
Topic: 60 Message: 62

Sh--t, Covered up

exemptfromlife wrote:

> Is this because of this new internet worm that looks like it came
> from Microsoft? I have gotten over 100 emails in the past 24 hours
> from people who are infected by this. all using my junkmail email
> account.
>
> has anyone else had this same problem?
>
> thanks.
>
> --- In SkyWires@yahoogroups.com, "Burr Patterson, Jr."
> <pitzradio@e...> wrote:
> > Greetings,
> > I have had to block all email one time to stop spamming.
> >
> > You will receive you email back onetime to be added to my
> list. Please
> > just hit the URL and everything will be OK after that.
> >
> > Sorry for any in convince
> >
> > Burr
>
>
> Yahoo! Groups Sponsor
> ADVERTISEMENT
> [click here]
> <http://rd.yahoo.com/M=194081.3897168.5135684.1261774/D=egroupweb/S=1705063108:HM/A=1706
996/R=0/SIG=11p5b9ris/*http://www.ediets.com/start.cfm?code=30509&media=atkins>
>
>
>
> To unsubscribe from this group, send an email to:
> SkyWires-unsubscribe@yahoogroups.com
>
>
>
> Your use of Yahoo! Groups is subject to the Yahoo! Terms of Service
> <http://docs.yahoo.com/info/terms/> .

63. Re: [SkyWires] Re: Email Address

Yahoo group: SkyWires
Date: 2003-09-19 23:23:50 UTC
From: RON TROTTO
Topic: 60 Message: 63

yes odxa people,wun list people,qth mailman subscribers.ron trotto

---

Do you Yahoo!?
Yahoo! SiteBuilder - Free, easy-to-use web site design software

64. SkyWire Balun

Yahoo group: SkyWires
Date: 2003-09-21 19:58:13 UTC
From: exemptfromlife
Topic: 64 Message: 64

Does anybody have any opinions about using a balun for a SkyWire Loop Antenna?

If you use one, is it only to aid in transmission?

Is it for 50 ohm coax?

Is it a 4:1 or 1:1 or something else?

Thanks.

65. Re: SkyWire Balun

Yahoo group: SkyWires
Date: 2003-09-21 23:50:22 UTC
From: R H F
Topic: 64 Message: 65

EfL,

1. I would say that depends on what your use of the SkyWire Loop Antenna was going to be:

? For use as a "SWL" Receiving Loop Antenna ONLY ?
- - - Try a 9:1 or 16:1 Balun

? For use as a Transmitting and Receiving Antenna ?
- - - Try a 1:1 or 4:1 Balun

2. Is this a true Full Wave SkyWire Loop Antenna:

? Cut to 530 Feet at 40 Ft for the 160 Metre Band ?
- - - Single band use 1:1 & Multi-Band use 4:1

? Mid-Size Loop of 272 Feet Long at 30-40 Ft for 80 Metre Band ?
- - - Single band use 1:1 & Multi-Band use 4:1

? Smaller 40 Metre Band 140 Foot size at 30 Ft ?
- - - Single band use 1:1 & Multi-Band use 4:1

3. Are you going to use a Ladder Line Matching Section between the Loop and Coax Cable or connect directly between the Loop and the Coax Cable?

? Loop > Ladder Line > Coax Cable ? (Transmitting at 40 Ft)
- - - Single band use 1:1 & Multi-Band use 4:1

? Loop > Coax Cable ? (Receiving "SWL" ONLY at 20 Ft)
- - - Multi-Band use 9:1 or 16:1

IMHO: Using a 9:1 or 16:1 Balun (Matching Transformer) with a SkyWire Loop Antenna makes the Loop more 'broad banded' and improves its reception on all bands above and below the design frequency it was Cut-To-Length for (Or Not!).

* Radio Amateurs will indeed cut their SkyWire Loop Antennas to a specific length and mount them at the required height to get the maximum power radiated from their antenna into the air.
- - - They will use a 1:1 or 4:1 Balun

* Shortwave Listeners "SWLs" will (most of the time) make their 'so called' SkyWire Loop Antennas to fit the available space at a reasonable height (a de-facto Random Wire Loop Antenna).
- - - They should use a 9:1 or 16:1 Balun

BALUNS: To Transmit, or To Receive... That Is The Question !

iane ~ RHF
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= = = In SkyWires@yahoogroups.com,
= = = "exemptfromlife" <junkmail@a...> wrote:
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Loop
> Antenna?
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> If you use one, is it only to aid in transmission?
>
> Is it for 50 ohm coax?
>
> Is it a 4:1 or 1:1 or something else?
>
> Thanks.

66. Re: SkyWire Balun

Yahoo group: SkyWires
Date: 2003-09-22 00:37:47 UTC
From: exemptfromlife
Topic: 64 Message: 66

I had planned on using coax instead of ladder line, but I have heard some great things about using a ladder line.

I've never seen a 9:1 or 16: 1 balun, but then again, I didn't know they existed.

do you know anyplace that sells a resonably priced one? or a certain brand, that would be better than others?

I was going to string up about 400 feet of skywire. I figured for reception, the length didn't have to be exact. The height will be about 35 feet on average.

I currently have a a dipole, and I will be taking it down and replacing it with the skywire.

I just finished grounding the dipole for lightining using an 8 foot copper clad grounding rod, and 1/0 gauge copper wire to a metal panel, and then using a pollyphaser lightining arrestor bolted to the panel, and the 1/0 wire bolted to the panel.

This actually seemed to improve my reception a small bit.

I wanted the lightining protection in place before I ran the skywire.

So, that is the current plan, if you can add anything to it, I would really appreciate it.

thanks.

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> 2. Is this a true Full Wave SkyWire Loop Antenna:
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> > Thanks.

67. Re: SkyWire Balun (Baluns in General)

Yahoo group: SkyWires
Date: 2003-09-22 05:48:39 UTC
From: R H F
Topic: 64 Message: 67

EfL,

Do-It-Yourself: The simple Nine-to-One (9:1) Balun
http://www.hard-core-dx.com/nordicdx/antenna/feed/9_1balun.html

The "Balun" Defined
http://searchnetworking.techtarget.com/sDefinition/0,,sid7_gci342213,
00.html

NOTE: With (Matching) Transformers it is the "Ratio" of the Squares
of the Number of Turns that 'defines' the "Ratio" of the Matching
Transformer. Here are some straight math common examples:

* One to One "1:1" = (1X1) : (1X1) = 1 Turn to 1 Turn

* Four to One "4:1" = (2X2) : (1X1) = 2 Turns to 1 Turn

* Nine to One "9:1" = (3X3) : (1X1) = 3 Turns to 1 Turn

* Sixteen to One "16:1" = (4X4) : (1X1) = 4 Turns to 1 Turn

* Twenty-Five to One "25:1" = (5X5) : (1X1) = 5 Turns to 1 Turn

* Thirty-Six "36:1" = (6X6) : (1X1) = 6 Turns to 1 Turn

Here is a good read from Hard-Core-DX {DOT} Com
http://www2.hard-core-dx.com/nordicdx/antenna/feed/
Amateurs are almost religious about balancing their antennas - in
order to get the most power into, and out off, the antenna. But
receiving antennas, do they really have to be balanced? Well, yes
and no. It all depends... Read, and learn, more about this
subject:
* The purpose of a balun
* "Matching less important for reception"
* "Matching is important - it gives better reception"
* "Not necessary to balance longwires"
* "You must use a balun to balance your dipole..."
* Balun or Antenna Tuner? It all depends...

Balanced Self Matching Feed Line System
http://members.tripod.com/~KE4UYP/Feed_Line.html
Matching a One Wavelength Loop to 450 Ohm Ladder Line

Transmission Line Transformers
- - - by Dr. Jerry Sevick, (W2FMI)
Designs with Ratios Other Than 1:1 and 4:1

Baluns manufactured by Amidon Associates Inc.
http://www.amidon-inductive.com/associates_prod_baluns.htm

Baluns manufactured by CWS ByteMark
http://www.cwsbytemark.com/prices/baluns.php

The Universal Magnetic Balun (UMB) manufactured by Wellbrook.
http://www.wellbrook.uk.com/UMB.html
The UMB is a receiving antenna Balun with a 9:1 impedance ratio.
Also, Wellbrook offers a One-to-One (1:1) Antenna Feeder Isolator

Baluns manufactured by Baker and Williamson
http://www.wb0w.com/bwantennas/balun.htm

iane ~ RHF
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.
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= = = "exemptfromlife" <junkmail@a...> wrote:
> I had planned on using coax instead of ladder line, but I have
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> > > Thanks.
>

68. Re: SkyWire Balun (Baluns in General)

Yahoo group: SkyWires
Date: 2003-09-22 06:12:03 UTC
From: exemptfromlife
Topic: 64 Message: 68

Ok, thanks. I'll give it all a read.

thanks for the help!

--- In SkyWires@yahoogroups.com, "R H F" <rhf-mail@u...> wrote:
> EfL,
>
>
> Do-It-Yourself: The simple Nine-to-One (9:1) Balun
> http://www.hard-core-dx.com/nordicdx/antenna/feed/9_1balun.html
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> Matching a One Wavelength Loop to 450 Ohm Ladder Line
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> Designs with Ratios Other Than 1:1 and 4:1
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>
> Baluns manufactured by Amidon Associates Inc.
> http://www.amidon-inductive.com/associates_prod_baluns.htm
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> The UMB is a receiving antenna Balun with a 9:1 impedance ratio.
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69. Re: SkyWire Balun (Baluns in General)

Yahoo group: SkyWires
Date: 2003-09-22 21:45:25 UTC
From: R H F
Topic: 64 Message: 69

EfL,

Here is a simple "KIT" to make a Toroidal Core Balun and Antenna to
FeedLine Matching Transformer that is offered on eBay.

http://cgi.ebay.com/ws/eBayISAPI.dll?ViewItem&item=3048336377

The Balun Kit is for 1:1 and 4:1 Balun, but can easily wound for:

Nine-to-One (9:1) Balun.
Primary (Antenna) Turns to Secondary (FeedLine) Turns.
21 Turns to 7 Turns
30 Turns to 10 Turns
42 Turns to 14 Turns

Sixteen-to-One (16:1) Balun.
Primary (Antenna) Turns to Secondary (FeedLine) Turns.
28 Turns to 7 Turns
36 Turns to 9 Turns
44 Turns to 11 Turns

First: Use large enough wire for the Primary (Antenna) Windings to
cover 85%-99% of the Toroid's Area. Or, "Space Evenly" the Primary
(Antenna) Windings 'far enough apart' to cover 85%-99% of the
Toroid's Area.

Second: Wind the Secondary (FeedLine) Windings over the Primary
(Antenna) Windings. Use the same size wire "Spaced Evenly" to wrap
the Secondary (FeedLine) Windings to cover 85%-99% of the Toroid's
Area.

iane ~ RHF
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> > http://www.amidon-inductive.com/associates_prod_baluns.htm
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> > Baluns manufactured by CWS ByteMark
> > http://www.cwsbytemark.com/prices/baluns.php
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> > The Universal Magnetic Balun (UMB) manufactured by Wellbrook.
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> > The UMB is a receiving antenna Balun with a 9:1 impedance ratio.
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> > >
> > >
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> > skywire.
> > >
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> > > really appreciate it.
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> > >
> > >
> > >
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> > > > EfL,
> > > >
> > > > 1. I would say that depends on what your use of the SkyWire
> > Loop
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> > > >
> > > > ? For use as a "SWL" Receiving Loop Antenna ONLY ?
> > > > - - - Try a 9:1 or 16:1 Balun
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> > > > ? For use as a Transmitting and Receiving Antenna ?
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> > > > ? Mid-Size Loop of 272 Feet Long at 30-40 Ft for 80 Metre
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> > > > ? Smaller 40 Metre Band 140 Foot size at 30 Ft ?
> > > > - - - Single band use 1:1 & Multi-Band use 4:1
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> > > > 3. Are you going to use a Ladder Line Matching Section
between
> > the
> > > > > Loop and Coax Cable or connect directly between the Loop and
> the
> > > > > Coax Cable?
> > > > >
> > > > > ? Loop > Ladder Line > Coax Cable ? (Transmitting at 40 Ft)
> > > > > - - - Single band use 1:1 & Multi-Band use 4:1
> > > > >
> > > > > ? Loop > Coax Cable ? (Receiving "SWL" ONLY at 20 Ft)
> > > > > - - - Multi-Band use 9:1 or 16:1
> > > > >
> > > > > IMHO: Using a 9:1 or 16:1 Balun (Matching Transformer) with
a
> > > > > SkyWire Loop Antenna makes the Loop more 'broad banded' and
> > > improves
> > > > > its reception on all bands above and below the design
frequency
> > it
> > > > > was Cut-To-Length for (Or Not!).
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Antennas
> to
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> > > > > specific length and mount them at the required height to get
> the
> > > > > maximum power radiated from their antenna into the air.
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> > > > > BALUNS: To Transmit, or To Receive... That Is The
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> > > > > Loop
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> > > > > >
> > > > > > If you use one, is it only to aid in transmission?
> > > > > >
> > > > > > Is it for 50 ohm coax?
> > > > > >
> > > > > > Is it a 4:1 or 1:1 or something else?
> > > > > >
> > > > > > Thanks.
> > > >

70. equinox reminder

Yahoo group: SkyWires
Date: 2003-09-23 04:24:50 UTC
From: ron trotto
Topic: 70 Message: 70

just a reminder that fall begins at 1026 utc 73 ron trotto wdx4kwi

71. Re: SkyWire Balun (Baluns in General)

Yahoo group: SkyWires
Date: 2003-09-23 19:20:10 UTC
From: exemptfromlife
Topic: 64 Message: 71

Ok, thanks I'll check it out.

--- In SkyWires@yahoogroups.com, "R H F" <rhf-mail@u...> wrote:
> EfL,
>
> Here is a simple "KIT" to make a Toroidal Core Balun and Antenna to
> FeedLine Matching Transformer that is offered on eBay.
>
> http://cgi.ebay.com/ws/eBayISAPI.dll?ViewItem&item=3048336377
>
> The Balun Kit is for 1:1 and 4:1 Balun, but can easily wound for:
>
> Nine-to-One (9:1) Balun.
> Primary (Antenna) Turns to Secondary (FeedLine) Turns.
> 21 Turns to 7 Turns
> 30 Turns to 10 Turns
> 42 Turns to 14 Turns
>
> Sixteen-to-One (16:1) Balun.
> Primary (Antenna) Turns to Secondary (FeedLine) Turns.
> 28 Turns to 7 Turns
> 36 Turns to 9 Turns
> 44 Turns to 11 Turns
>
> First: Use large enough wire for the Primary (Antenna) Windings to
> cover 85%-99% of the Toroid's Area. Or, "Space Evenly" the Primary
> (Antenna) Windings 'far enough apart' to cover 85%-99% of the
> Toroid's Area.
>
> Second: Wind the Secondary (FeedLine) Windings over the Primary
> (Antenna) Windings. Use the same size wire "Spaced Evenly" to wrap
> the Secondary (FeedLine) Windings to cover 85%-99% of the Toroid's
> Area.
>
>
> iane ~ RHF
> .
> .
> = = = In SkyWires@yahoogroups.com,
> = = = "exemptfromlife" <junkmail@a...> wrote:
> > Ok, thanks. I'll give it all a read.
> >
> > thanks for the help!
> >
> >

> > --- In SkyWires@yahoogroups.com, "R H F" <rhf-mail@u...> wrote:
> > > EfL,
> > >
> > >
> > > Do-It-Yourself: The simple Nine-to-One (9:1) Balun
> > > http://www.hard-core-dx.com/nordicdx/antenna/feed/9_1balun.html
> > >
> > >
> > > The "Balun" Defined
> > >
> >
>
http://searchnetworking.techtarget.com/sDefinition/0,,sid7_gci342213,
> > > 00.html
> > >
> > >
> > > NOTE: With (Matching) Transformers it is the "Ratio" of the
> > Squares
> > > of the Number of Turns that 'defines' the "Ratio" of the
> Matching
> > > Transformer. Here are some straight math common examples:
> > >
> > > * One to One "1:1" = (1X1) : (1X1) = 1 Turn to 1 Turn
> > >
> > > * Four to One "4:1" = (2X2) : (1X1) = 2 Turns to 1 Turn
> > >
> > > * Nine to One "9:1" = (3X3) : (1X1) = 3 Turns to 1 Turn
> > >
> > > * Sixteen to One "16:1" = (4X4) : (1X1) = 4 Turns to 1 Turn
> > >
> > > * Twenty-Five to One "25:1" = (5X5) : (1X1) = 5 Turns to 1
> Turn
> > >
> > > * Thirty-Six "36:1" = (6X6) : (1X1) = 6 Turns to 1 Turn
> > >
> > >
> > > Here is a good read from Hard-Core-DX {DOT} Com
> > > http://www2.hard-core-dx.com/nordicdx/antenna/feed/
> > > Amateurs are almost religious about balancing their antennas -
> in
> > > order to get the most power into, and out off, the antenna.
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> > > http://www.cwsbytemark.com/prices/baluns.php
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> > > > > > Is it for 50 ohm coax?
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> > > > > > Is it a 4:1 or 1:1 or something else?
> > > > > >
> > > > > > Thanks.
> > > >

72. Scantenna and TV satellite dish on same antenna tower.

Yahoo group: SkyWires
Date: 2003-09-24 03:12:42 UTC
From: exemptfromlife
Topic: 72 Message: 72

Does anybody have any experience with putting a scanner antenna and their TV satellite dish on the same antenna?

I want to know if there will be any interference issues.

Thanks.

73. ROHN Files for Chapter 11 Protection

Yahoo group: SkyWires
Date: 2003-09-26 06:31:10 UTC
From: exemptfromlife
Topic: 73 Message: 73

This is on their corportate website if anybody is interested..

http://www.rohnnet.com

thanks.

74. My New SkyWire Loop Antenna

Yahoo group: SkyWires
Date: 2003-10-03 13:22:14 UTC
From: exemptfromlife
Topic: 74 Message: 74

I just finished taking down my old dipole yesterday, and putting up my new 500 foot SkyWire in my back yard.

At first I thought that 500 foot of wire was a lot, but actually when I finished it was just the right size to cover the back yard. I have it up at about 30 feet, I realize that most articles claim it should be at a minimum of 40' but the trees I strung it from aren't that tall.

It consists of 12 gauge stranded wire that is insulated, and fed with coax.

I plan on spending the weekend testing the reception on it to see how it does. So far I'm noticing signals that I know I have not been able to get before, and others that were weak, and now are worth listening to.

I'll let everybody know how it does.

Thanks.

75. Re: My New SkyWire Loop Antenna

Yahoo group: SkyWires
Date: 2003-10-03 21:44:31 UTC
From: Don
Topic: 74 Message: 75

Just out of curiosity, how are you feeding the wire? Definitely let
us know how it works.

--- In SkyWires@yahoogroups.com, "exemptfromlife" <junkmail@a...>
wrote:
> I just finished taking down my old dipole yesterday, and putting up
> my new 500 foot SkyWire in my back yard.
>
> At first I thought that 500 foot of wire was a lot, but actually
when
> I finished it was just the right size to cover the back yard. I
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> it does. So far I'm noticing signals that I know I have not been
able
> to get before, and others that were weak, and now are worth
listening
> to.
>
> I'll let everybody know how it does.
>
> Thanks.

76. Insulated or bare wire?

Yahoo group: SkyWires
Date: 2003-10-03 22:52:19 UTC
From: professormobesser
Topic: 76 Message: 76

Are most folks using insulated wire or bare wire for their skywire loops?
Are there any differences in performance?
Is there any arcing to tree branches from bare wire when using 100 watts or less?

77. Re: Insulated or bare wire?

Yahoo group: SkyWires
Date: 2003-10-03 23:26:29 UTC
From: exemptfromlife
Topic: 76 Message: 77

I have read that people use both. I've heard arguments on both sides.
I chose insulated for a few reasons.

(1) My SkyWire is held up by trees and the wire has to run through some of the branches. I didn't want it to short out on the
branches.

(2) It was somewhat hard for me to find a heavy gauge like #12 that wasn't insulated.

(3) The insulation helps in the strength of wire, and makes it slide through the insulators easier. Since I wanted a heavy gauge to survive in high winds because of the tree support factor, I considered the insulation as a plus.

(4) If radio waves can go through tree branches, leaves, wooden houses, etc, then one millimeter of plastic insulation shouldn't be
much of a degradation in signal strength.

(5) I'm just guessing at this last point, but I have heard that during snow storms the charged particles hitting a wire will build up a static charge. I assume the people who wrote this were talking about a bare wire, because I can't see how snow hitting an insulated
wire would cause the same degree of static build-up.

If I had an open field to run my SkyWire and were going to plant eight or so tower masts in an octagon shape to support a wire, I would probably go the extra distance and mail order some 12 gauge bare stranded wire. I'm sure that given enough space (ie. Open field), you could run the wires with tree supports and rig it in a manner than the bare wire would never touch the trees and short out.

My lot is only 90 feet wide, and with trees planted on both sides this leaves only about 30 feet of open space in some areas.

Thanks.

78. Re: Insulated or bare wire?

Yahoo group: SkyWires
Date: 2003-10-03 23:27:42 UTC
From: exemptfromlife
Topic: 76 Message: 78

Sorry, one last point. My SkyWire is only for reception and not transmission. I don't know anything about broadcasting, but a lot of people on this site do.

thanks.

79. Re: [SkyWires] Re: My New SkyWire Loop Antenna

Yahoo group: SkyWires
Date: 2003-10-04 01:25:28 UTC
From: Scott Erwin
Topic: 74 Message: 79

i am running a full size 160 meter loop skywire with 530 feet of wire at 60 feet above ground. I feed my loop with 200 feet of 450 ladder line. In the shack I use an old AIR-DUX 4 to 1 BALUN which is the old air wound coil type. The BALUN is then connected to the internal autotuner in my ICOM IC-756 PRO II. The autotuner has no problem with the loop antenna system and tunes fine on all HF bands. I have scrounged up 1,590 feet of insulated wire which I plan on installing when all the leaves are off the trees this late fall. This will be a 3 times 160 meter loop. It should be fun this winter testing the new larger loop skywire!

--- Don <kj7gs@...> wrote:

> Just out of curiosity, how are you feeding the wire?
> Definitely let
> us know how it works.
>
> --- In SkyWires@yahoogroups.com, "exemptfromlife"
> <junkmail@a...>
> wrote:
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> > I'll let everybody know how it does.
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> > Thanks.
>
>

Do you Yahoo!?
The New Yahoo! Shopping - with improved product search
http://shopping.yahoo.com

80. Re: My New SkyWire Loop Antenna

Yahoo group: SkyWires
Date: 2003-10-04 02:55:05 UTC
From: exemptfromlife
Topic: 74 Message: 80

That sounds pretty cool.

I feed mine with coax, but at some point will change to either a
better grade of coax, or maybe a ladder line.

If I only want to receive is there an advantage to using a ladder
line, balun, and tuner?

thanks.

81. Re: [SkyWires] Re: My New SkyWire Loop Antenna

Yahoo group: SkyWires
Date: 2003-10-04 14:58:50 UTC
From: Scott Erwin
Topic: 74 Message: 81

Ladder line is very low loss, light in weight, and
costs less than coax. It will also not burn up under
high power at high SWR conditions along the ladder
line. If your only going to receive you do not need
the BALUN or tuner at all.
--- exemptfromlife <junkmail@...> wrote:
> That sounds pretty cool.
>
> I feed mine with coax, but at some point will change
> to either a
> better grade of coax, or maybe a ladder line.
>
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> line, balun, and tuner?
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>
>

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82. Sloping Property

Yahoo group: SkyWires
Date: 2003-10-04 18:29:13 UTC
From: Iden
Topic: 82 Message: 82

I live on five acres of sloping property with lots of pine trees.

I look out my kitchen window and I'm looking over the top of my tall garage roof less than 80 feet away.

Should I forget about a SkyWire for receiving since I'd prefer omnidirectional capability?

Iden - Northern CA

83. Re: Sloping Property

Yahoo group: SkyWires
Date: 2003-10-04 20:31:14 UTC
From: exemptfromlife
Topic: 82 Message: 83

If the skywire is built correctly it should be omni directional. Much more than a dipole.

You should try and get it to form a circle. Impossible given you can only hang so many lines to so many trees. I pentagon shape would be better than a square, a square would be better than a rectangle, etc.

Mine is a Rectangle, because that I have to live with the cards I'm delt in terms of the trees that already exist on my property.

A lot of skywires encircle existing buildings/houses ,etc.

I don't know about the sloping landscape issue. I've been told to keep it as parallel to the ground as possible.

84. Re: My New SkyWire Loop Antenna

Yahoo group: SkyWires
Date: 2003-10-04 20:32:41 UTC
From: exemptfromlife
Topic: 74 Message: 84

so for recieving I should use a ladder line instead of coax?

at what point do I change over to coax? do I bring the ladder line
all the way into the house to the reciever?

what about electrical interference since the ladder line isn't
shielded?

thanks.

85. Re: [SkyWires] Re: My New SkyWire Loop Antenna

Yahoo group: SkyWires
Date: 2003-10-05 16:04:25 UTC
From: Scott Erwin
Topic: 74 Message: 85

--- exemptfromlife <junkmail@...> wrote:
> so for recieving I should use a ladder line instead
> of coax?
Use what you like, ladder line or coax. If your
already using coax stick with it. If you want to
switch to ladder line, just do it!
> at what point do I change over to coax? do I bring
> the ladder line
> all the way into the house to the reciever?
If you can bring the ladder line all the way in to the
back of the radio that would be best. Ladder line must
be used with standoff insulators so nothing is closer
than it's own width from stuff like wood and metal
which would cause problems. If it's a problem to do
that just switch over to coax anywhere you want.
> what about electrical interference since the ladder
> line isn't
> shielded?
Ladder line is shielded but not in the way coax is.
The parallel wires cancel out the interference. This
is the reason you need standoff insulators when your
close to wood or metal objects as they would upset the
balance in the parallel wires.
> thanks.
Your very Welcome!
>

_____
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http://shopping.yahoo.com

86. Re: My New SkyWire Loop Antenna

Yahoo group: SkyWires
Date: 2003-10-05 19:26:18 UTC
From: exemptfromlife
Topic: 74 Message: 86

Ok, thanks.

it sounds like ladder line makes a difference when transmitting more than receiving?

I might upgrade to a better grade of coax I have the cheapest stuff radio shack sells now, I thinks R59 or or something.

thanks again.

87. coax

Yahoo group: SkyWires
Date: 2003-10-05 20:12:36 UTC
From: Iden
Topic: 87 Message: 87

From: "exemptfromlife" <junkmail@...>

> I might upgrade to a better grade of coax
> I have the cheapest stuff radio shack sells now, I thinks
> R59 or something.

Look at the coax attenuation table:
http://www.therfc.com/attenrat.htm

If your RG-59 lead-in is 100 feet long, then at 10 MHz
you will have a 1.1 dB loss. That's not much.

If you replace it with RG-8 coax, the loss will drop to
.55 dB.

That's a difference of .55 dB for a 100 feet at 10 MHz.
I doubt that you could hear the difference or see
it on an S-meter. It is my understanding that one unit
on a calibrated S-meter represents 6 dB.

Even at 50 MHz, the difference would only be 1.1 dB,
not much.

Iden - Northern CA

88. Re: Insulated or bare wire?

Yahoo group: SkyWires
Date: 2003-10-06 23:07:23 UTC
From: R H F
Topic: 76 Message: 88

--- In SkyWires@yahoogroups.com, "exemptfromlife" <junkmail@a...>
wrote:
>
> I have read that people use both. I've heard arguments on both
> sides.
> I chose insulated for a few reasons.
>
> (1) My SkyWire is held up by trees and the wire has to run
> through some of the branches. I didn't want it to short out on
> the
> branches.
>
> (2) It was somewhat hard for me to find a heavy gauge like #12
> that wasn't insulated.
>
> (3) The insulation helps in the strength of wire, and makes it
> slide through the insulators easier. Since I wanted a heavy gauge
to
> survive in high winds because of the tree support factor, I
> considered the insulation as a plus.
>
> (4) If radio waves can go through tree branches, leaves, wooden
> houses, etc, then one millimeter of plastic insulation shouldn't
> be
> much of a degradation in signal strength.
>
> (5) I'm just guessing at this last point, but I have heard that
> during snow storms the charged particles hitting a wire will build
up
> a static charge. I assume the people who wrote this were talking
> about a bare wire, because I can't see how snow hitting an
> insulated
> wire would cause the same degree of static build-up.
>

EfL,

IIRC: Insulated or Bare Wire it does not matter.
- - - Try running a hard rubber/plastic comb through your hair
several times and you will have a static charge build up.

~ RHF

>
> If I had an open field to run my SkyWire and were going to plant
> eight or so tower masts in an octagon shape to support a wire, I

> would probably go the extra distance and mail order some 12 gauge
> bare stranded wire. I'm sure that given enough space (ie. Open
> field), you could run the wires with tree supports and rig it in a
> manner than the bare wire would never touch the trees and short out.
>
> My lot is only 90 feet wide, and with trees planted on both
> sides this leaves only about 30 feet of open space in some areas.
>
> Thanks.

89. Re: My New SkyWire Loop Antenna

Yahoo group: SkyWires
Date: 2003-10-06 23:31:11 UTC
From: R H F
Topic: 74 Message: 89

EfL,

Two Reasons to 'use' a Balun (Matching Transformer) with a Receive Only Antenna.

1. Using a Balun (Matching Transformer) between the SkyWire's Loop Antenna and a Coax Feedline can reduce Static Build-Up and help to prevent ESD down the feed line to the radio.

2. Plus for a "Receive Only" Antenna the use of the Balun helps to improve the antenna's broadband potential for better multi-band coverage and a lower noise factor.

Check-Out the Graphs in this ANARC Posting by John Doty.
http://www.anarc.org/naswa/badx/antennas/SWL_longwire.html
"Actually, a fixed matching transformer can dramatically reduce the wild swings in antenna efficiency that a coax fed wire antenna exhibits. " John Doty

~ RHF
.
.
= = = In SkyWires@yahoogroups.com,
= = = "exemptfromlife" <junkmail@a...> wrote:
> That sounds pretty cool.
>
> I feed mine with coax, but at some point will change to either a
> better grade of coax, or maybe a ladder line.
>
> If I only want to receive is there an advantage to using a ladder
> line, balun, and tuner?
>
> thanks.

90. Re: My New SkyWire Loop Antenna

Yahoo group: SkyWires
Date: 2003-10-07 00:05:10 UTC
From: exemptfromlife
Topic: 74 Message: 90

RHF,

I think I have asked you this before, but I couldnt' find any. Do you know of any sources for a 16:1 balun or I think you suggested an 8:1 balun.

I'm looking for something already manufactured and something I don't have to do any winding of wire, or anything like that.

I tried to locate one, but didn't have any luck. Is there such a product?

thanks.

91. Re: Sloping Property

Yahoo group: SkyWires
Date: 2003-10-07 01:28:40 UTC
From: R H F
Topic: 82 Message: 91

Iden,

The "SkyWire" Horizintal Loop Antenna is 'by design' an All "Omni"
Directional Antenna.

The basic and simple SkyWire Loop Antenna is built relatively large
(one wavelength); but close (low) to the ground (less than a quarter
wavelength): with regard to the lowest operating frequency.
* 160 Metre Band = 529 Feet (1 WL) at 40 Feet (0.08 WL) High
* 80 Metre Band = 268 Feet (1 WL) at 40 Feet (0.15 WL) High
* 40 Metre Band = 141 Feet (1 WL) at 30 Feet (0.21 WL) High
* 20 Metre Band = 71 Feet (1 WL) at 20 Feet (0.28 WL) High

ABOUT HEIGHT: For a "Receive Only" SkyWire Loop Antenna keeping
the 'average' height above ground in the range of 30-40 is a
reasonable goal in its design and construction for the Lower 160 and
80 Metre Bands. For the "Middle" SW Bands 25-35 Feet and for "Upper"
SW Bands 20-30 Feet.

Frequency vs. Wavelength (Ham and SW Meter Bands)
http://www.dxing.com/frequenc.htm

To some degree a SkyWire Loop Antenna is a form of NVIS "Near
Vertical Incident Skywave" Antenna.
http://www.qsl.net/k5eph/nvis.htm

FWIW: If a "Receive Only" SkyWire Loop Antenna is 'not' going to be
used for AM/MW/BCB and Tropic Bands. Then it can be made smaller
and 'designed' to be 'used' on one of the lower Shortwave Broadcast
Bands "60" or "49" Meters.

* SW "60" Meter Band (4.75-5.0 MHz) and cut to 206 Feet (52 Feet per
side) and mounted as low as 20 feet high.

* SW "49" Meter Band (5.95-6.25 MHz) and cut to 165 Feet (41 Feet per
side) and mounted as low as 15 feet high.

NOTE: For a "Receive Only" SkyWire Loop Antenna the only caution is
not to by accident construct a "Rhombic Antenna"
http://www.mindspring.com/~cummings7/rhombic.html
- - - Basically a 'Diamond' Shaped Antenna (twice as long as it is
wide) and fed at one of the narrow corners.
http://www.mindspring.com/~cummings7/qstrhom.jpg
http://www.tpub.com/neets/book10/NTX4-37.GIF

iane ~ RHF
.

.
= = = In SkyWires@yahoogroups.com,
= = = "Iden" <iden@n...> wrote:
>
> I live on five acres of sloping property with
> lots of pine trees.
>
> I look out my kitchen window and I'm looking
> over the top of my tall garage roof less than
> 80 feet away.
>
> Should I forget about a SkyWire for receiving
> since I'd prefer omnidirectional capability?
>
> Iden - Northern CA
>

.

92. Re: My New SkyWire Loop Antenna

Yahoo group: SkyWires
Date: 2003-10-07 02:29:28 UTC
From: R H F
Topic: 74 Message: 92

EfL,

K9AY 16:1 Pennant Transformer and 9:1 Beverage Transformer
http://www.arraysolutions.com/pricelist.htm
Price @ $49.00

Mini-Circuits
http://www.minicircuits.com/
"T16-6T-KK81"
http://www.minicircuits.com/cgi-bin/tranfrmr?model=T16-6T-KK81&pix=kk81.%20gif&bv=4
http://www.hard-core-dx.com/nordicdx/antenna/loop/flag/transformer.html

You may wish to contact W4COX about having one made specifically for your "Receive Only" SkyWire Loop Antenna.
http://w4cox.hypermart.net/page1.html
http://w4cox.hypermart.net/page4.html

iane ~ RHF
.
.
= = = In SkyWires@yahoogroups.com,
= = = "exemptfromlife" <junkmail@a...> wrote:
> RHF,
>
> I think I have asked you this before, but I couldnt' find any. Do you
> know of any sources for a 16:1 balun or I think you suggested an 8:1
> balun.
>
> I'm looking for something already manufactured and something I don't
> have to do any winding of wire, or anything like that.
>
> I tried to locate one, but didn't have any luck. Is there such a
> product?
>
> thanks.

93. Re: My New SkyWire Loop Antenna

Yahoo group: SkyWires
Date: 2003-10-07 02:36:42 UTC
From: exemptfromlife
Topic: 74 Message: 93

good deal. thanks.

--- In SkyWires@yahoogroups.com, "R H F" <rhf-mail@u...> wrote:
> EfL,
>
> K9AY 16:1 Pennant Transformer and 9:1 Beverage Transformer
> http://www.arraysolutions.com/pricelist.htm
> Price @ $49.00
>
> Mini-Circuits
> http://www.minicircuits.com/
> "T16-6T-KK81"
> http://www.minicircuits.com/cgi-bin/tranfrmr?model=T16-6T-
> KK81&pix=kk81.%20gif&bv=4
> http://www.hard-core-
> dx.com/nordicdx/antenna/loop/flag/transformer.html
>
> You may wish to contact W4COX about having one made specifically
for
> your "Receive Only" SkyWire Loop Antenna.
> http://w4cox.hypermart.net/page1.html
> http://w4cox.hypermart.net/page4.html
>
>
> iane ~ RHF
> .
> .
> = = = In SkyWires@yahoogroups.com,
> = = = "exemptfromlife" <junkmail@a...> wrote:
> > RHF,
> > >
> > I think I have asked you this before, but I couldnt' find any. Do
> you
> > know of any sources for a 16:1 balun or I think you suggested an
> 8:1
> > balun.
> > >
> > I'm looking for something already manufactured and something I
> don't
> > have to do any winding of wire, or anything like that.
> > >
> > I tried to locate one, but didn't have any luck. Is there such a
> > product?
> > >
> > thanks.

94. Re: My New SkyWire Loop Antenna

Yahoo group: SkyWires
Date: 2003-10-07 03:34:05 UTC
From: exemptfromlife
Topic: 74 Message: 94

for the X-9 Receive Antenna Transformer would you recommend a ladder line down to the transformer, then coax to the receiver, or would you involve an antenna tuner?

thanks.

95. Re: [SkyWires] Re: Sloping Property

Yahoo group: SkyWires
Date: 2003-10-08 01:34:58 UTC
From: Iden
Topic: 82 Message: 95

> The "SkyWire" Horizontal Loop Antenna is 'by design'
> an All "Omni" Directional Antenna.

Ok, that would be my preference.

On sloping property, my guess is that could change.

> The basic and simple SkyWire Loop Antenna is built
> relatively large (one wavelength); but close (low) to the
> ground (less than a quarter wavelength): with regard to
> the lowest operating frequency.

On the average, the HF freqs I listen to are above
5 MHz.

The heights you mention seem reasonable for my
property and trees.

> To some degree a SkyWire Loop Antenna is a form
> of NVIS "Near Vertical Incident Skywave" Antenna.
> http://www.qsl.net/k5eph/nvis.htm

Looks good for ham "local" nets.

> FWIW: If a "Receive Only" SkyWire Loop Antenna
> is 'not' going to be used for AM/MW/BCB and Tropic
> Bands. Then it can be made smaller and 'designed'
> to be 'used' on one of the lower Shortwave Broadcast
> Bands "60" or "49" Meters.

I do enjoy beacon and BCB DXing some but have
other antennas that seem ok there.

Thanks for the info.

Iden - Northern CA

96. Re: My New SkyWire Loop Antenna

Yahoo group: SkyWires
Date: 2003-10-08 22:44:39 UTC
From: R H F
Topic: 74 Message: 96

EfL,

AY Technologies Products
MODEL TRX-9
9:1 Receive Antenna Transformer
http://www.aytechnologies.com/Products/products.htm

Since you are using this SkyWire Horizontal Loop Antenna for "Receive Only" and plan on using a Balun. IMHO - The 'better' method is to use the Balun at the Antenna Loop Element (Head) with a co-located ground point/wire/rod. Simply use Coax Cable directly from the Antenna to the radio/receiver. This should result in a 'lower noise factor' for the Antenna, Ground and FeedLine System.

However, If you were a HAM trying to 'match' an Antenna to a transmitter for a specific frequency band. Then using a section of Ladder Line to 'match' the Antenna to the Coax Cable Feedline would be one method of acomplishing this with or without a Balun.

iane ~ RHF
.
.
= = = In SkyWires@yahoogroups.com,
= = = "exemptfromlife" <junkmail@a...> wrote:
> for the X-9 Receive Antenna Transformer would you recommend a ladder
> line down to the transformer, then coax to the receiver, or would you
> involve an antenna tuner?
>
> thanks.

97. Re: Sloping Property

Yahoo group: SkyWires
Date: 2003-10-08 23:03:15 UTC
From: R H F
Topic: 82 Message: 97

Iden,

? "On sloping property, my guess is that could change." ?

If the Antenna is elevated specifically 1/4 or a 1/2 Wavelength above the Ground Plane Surface: The antenna's directivity may be affected by the lay of the ground as the ground itself acts as a tuned (phased) reflector. At 'Resonance' the Antenna would appear to be "Tilted".

However, since in general the SkyWire Horizontal Loop Antenna is usually placed around 1/12 to 1/6 Wavelength over the ground: The antenna acts more like a NVIS type antenna and should exhibit Omni-Directional Characteristics.

iane ~ RHF
.
.
= = = In SkyWires@yahoogroups.com,
= = = "Iden" <iden@n...> wrote:
>
> > The "SkyWire" Horizontal Loop Antenna is 'by design'
> > an All "Omni" Directional Antenna.
>
> Ok, that would be my preference.
>
> On sloping property, my guess is that could change.
>
> > The basic and simple SkyWire Loop Antenna is built
> > relatively large (one wavelength); but close (low) to the
> > ground (less than a quarter wavelength): with regard to
> > the lowest operating frequency.
>
> On the average, the HF freqs I listen to are above
> 5 MHz.
>
> The heights you mention seem reasonable for my
> property and trees.
>
> > To some degree a SkyWire Loop Antenna is a form
> > of NVIS "Near Vertical Incident Skywave" Antenna.
> > http://www.qsl.net/k5eph/nvis.htm
>
> Looks good for ham "local" nets.
>
> > FWIW: If a "Receive Only" SkyWire Loop Antenna

> > is 'not' going to be used for AM/MW/BCB and Tropic
> > Bands. Then it can be made smaller and 'designed'
> > to be 'used' on one of the lower Shortwave Broadcast
> > Bands "60" or "49" Meters.
>
> I do enjoy beacon and BCB DXing some but have
> other antennas that seem ok there.
>
> Thanks for the info.
>
> Iden - Northern CA

98. Re: My New SkyWire Loop Antenna

Yahoo group: SkyWires
Date: 2003-10-10 01:05:27 UTC
From: exemptfromlife
Topic: 74 Message: 98

RHF,

Currently the setup is like this.

500 foot of #12 stranded wire in sort of a rectangle loop.

connected one side to R59 coax center connector, and the other side to the copper braid.

50 foot of R59 coax down to a metal box housed pollyphaser lightning arrestor. about 6 foot of 4/0 (200 amp service panel size)gauge copper wire attached to the metal box and the other end to an 8 foot copper clad grounding rod, hammered about 7/8 of the way into the ground directly under the metal box.

Then another run of 50 foot R59 coax from the pollyphaser to the reciever.

a #14 ground wire from the GND screw on the back of the reciever to another grounding rod (4ft) copper pipe hammered into the ground. near the lighting grounding rod.

I had thought that perhaps mounting this 9:1 balun on the outside of the metal box (no room inside) and then 50 foot of ladder line down from the skywire (replacing the first coax run) to the balun, then a short patch cable piece of coax to the pollyphaser.

I don't know if it would be worth the expense or not considering this ia receiving antenna and not a transmitting one.

thanks.

I noticed that when I put the pollyphaser/metal box into the system, the noise dropped off quite a bit.

101. My Skywire current setup (diagram)

Yahoo group: SkyWires
Date: 2003-10-10 01:28:34 UTC
From: exemptfromlife
Topic: 101 Message: 101

Go to the FILES section of this skywires group and you will see a
crude diagram of how I have things currently setup.

thanks.

http://f6.grp.yahoofs.com/v1/kASGP6Vmo5lnT_FffvbubeDvyBuETd4G_FdvHwSLf
pXyFilddqrZrLTCvp8MZH97youDM3tzbTHe8zfq4ARegloYc9Y/diagram.txt

102. Re: My New SkyWire Loop Antenna

Yahoo group: SkyWires
Date: 2003-10-11 19:07:46 UTC
From: R H F
Topic: 74 Message: 102

EfL,

TIP: Change one 'item' in an Antenna System at a time and record
the "Reception" Performance Characteristics "Before-&-After".
- - - Make incremental improvements and learn from each one as you go
to build your personal knowledge base.

Big Plus: Get a Note Book [My Antenna Note Book #1] and "Document"
what you do and the 'results' that you get.
+ Read/Talk/Question
+ + Then Try Out Your Ideas (Just Do It!)
+ + + Learn for Yourself !

iane ~ RHF
.
.
= = = In SkyWires@yahoogroups.com,
= = = "exemptfromlife" <junkmail@a...> wrote:
> RHF,
>
> Currently the setup is like this.
>
> 500 foot of #12 stranded wire in sort of a rectangle loop.
>
> connected one side to R59 coax center connector, and the other side
> to the copper braid.

* * * INSERT - BALUN HERE !
- Why ?
- - Improved Isolation and Noise Reduction.
- - - Expanded Frequency Range and Performance for SWL.
NOTE: No 'other' change is required.

>
> 50 foot of R59 coax down to a metal box housed pollyphaser
lightning
> arrestor. about 6 foot of 4/0 (200 amp service panel size)gauge
> copper wire attached to the metal box and the other end to an 8
foot
> copper clad grounding rod, hammered about 7/8 of the way into the
> ground directly under the metal box.
>
> Then another run of 50 foot R59 coax from the pollyphaser to the
> reciever.
>
> a #14 ground wire from the GND screw on the back of the reciever to

> another grounding rod (4ft) copper pipe hammered into the ground.
> near the lighting grounding rod.
>
> I had thought that perhaps mounting this 9:1 balun on the outside
of
> the metal box (no room inside) and then 50 foot of ladder line down
> from the skywire (replacing the first coax run) to the balun, then
a
> short patch cable piece of coax to the pollyphaser.
>
> I don't know if it would be worth the expense or not considering
this
> ia receiving antenna and not a transmitting one.
>
> thanks.
>
> I noticed that when I put the pollyphaser/metal box into the
system,
> the noise dropped off quite a bit.

103. Re: Insulated or bare wire?

Yahoo group: SkyWires
Date: 2003-10-12 18:45:25 UTC
From: professormobesser
Topic: 76 Message: 103

Are you suggesting that insulated wire would build up more of a
static charge than bare wire?

> IIRC: Insulated or Bare Wire it does not matter.
> - - - Try running a hard rubber/plastic comb through your hair
> several times and you will have a static charge build up.
>
> ~ RHF

104. I was thinking of making a skywire loop.

Yahoo group: SkyWires
Date: 2003-10-13 01:07:12 UTC
From: beavista
Topic: 104 Message: 104

I currently have WindomHSQ from antennas and more. In my ARRL Antenna book, it kind of has the features of both. Anyways, I want to try a homebrew loop. Right now, my Arrl Antenna book is loaned out. It does mention the skywire loop and that's where I learned about it. Anyways, it had the general impedances at the resonate frequencies, how to feed it, etc. Anyways, I no longer have the calculations or anything to go by, so here's what I want to do. I'm hoping someone can fill in the blanks for me?
I want to build a 75 meter loop with a balun and coax. Right now I only have the radio's tuner. So here's what I had in mind. Antenna to balun using ladder line, then balun to coax to come through the house.

105. Re: Insulated or Bare Wire ?

Yahoo group: SkyWires
Date: 2003-10-13 22:42:13 UTC
From: R H F
Topic: 76 Message: 105

ProfessorMobesser,

I think what I am suggesting is that using Insulated Wire will 'not' necessarily protect an Antenna from having a "Static Charge" build-up on the Antenna Element.

Given the 'right' weather conditions a long piece of Nylon Fishing Line place up in the air like an antenna; will build-up a "Static Charge". Hey, this could be connected to the lead of a NE-2 with the other lead grounded as a "Static Discharge Conditions Build-Up Warning Indicator" :o)

~ RHF
.
.
= = = In SkyWires@yahoogroups.com,
= = = "professormobesser" <professormobesser@y...> wrote:
> Are you suggesting that insulated wire would build up more of a
> static charge than bare wire?
>
> > IIRC: Insulated or Bare Wire it does not matter.
> > - - - Try running a hard rubber/plastic comb through your hair
> > several times and you will have a static charge build up.
> >
> > ~ RHF
> >

106. Re: [SkyWires] I was thinking of making a skywire loop.

Yahoo group: SkyWires
Date: 2003-10-14 15:35:05 UTC
From: Scott Erwin
Topic: 104 Message: 106

272 feet of wire and any length of coax or ladder line
or both may be used. My 160 meter loop has 530 feet of
wire and 200 feet of 450 ohm ladder line running to an
old AIR-DUX 4 to 1 BALUN mounted just under a window
where two ceramic insulators are mounted to a wood
board in the window casing allowing the ladder line to
feed into the house and to the BALUN. You could place
a modern BALUN on the outside of the house and run
coax through the house with no problem. I use the
AIR-DUX BALUN and a short run of coax about 4 feet
long to connect directly to my ICOM IC-756 PRO II and
use the internal antenna tuner which tunes the antenna
anywhere on all the HF bands with no problem. When I
run my Heathkit SB-1000 amplifier and SA-2060A tuner
the AIR-DUX BALUN is bypassed by a shout run of 450
ohm ladder line from the SA-2060A tuner to the point
where the AIR-DUX BALUN would normally connect to the
ceramic insulators. I only operate the Amplifier on
160 meters when the noise levels are high on that
band. Late this Fall when all the leaves have fallen
from the trees I will be putting up a 3 times 160
meter loop. That is 1,590 feet of wire in a large loop
running through the forest behind the house up about
30 feet using nail on electric fence insulators on the
trees.
--- beavista <no_reply@yahoogroups.com> wrote:
> I currently have WindomHSQ from antennas and more.
> In my ARRL
> Antenna book, it kind of has the features of both.
> Anyways, I want
> to try a homebrew loop. Right now, my Arrl Antenna
> book is loaned
> out. It does mention the skywire loop and that's
> where I learned
> about it. Anyways, it had the general impedances at
> the resonate
> frequencies, how to feed it, etc. Anyways, I no
> longer have the
> calculations or anything to go by, so here's what I
> want to do. I'm
> hoping someone can fill in the blanks for me?
> I want to build a 75 meter loop with a balun and
> coax. Right now I
> only have the radio's tuner. So here's what I had in
> mind. Antenna

> to balun using ladder line, then balun to coax to
> come through the
> house.
>
>
>

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http://shopping.yahoo.com

107. H Loop> 1 WL

Yahoo group: SkyWires
Date: 2003-10-17 00:19:37 UTC
From: cpa2000
Topic: 107 Message: 107

I am going to put up a horizontal loop @ about 60' in hopes of having
a
decent 160-10 antenna. Is there any adavntage to increasing the the
total
length from 1 wavelength at the lowest freq. (about 530') to 2
wavelengths(1,060'). I have the space & the wire & I'm wondering if
it's
worth the extra effort.

Also, am I better off with a 3/8 WL inverted L on 160.

108. Re: H Loop> 1 WL

Yahoo group: SkyWires
Date: 2003-10-17 05:42:22 UTC
From: exemptfromlife
Topic: 107 Message: 108

Size does matter. ;-)

Yes from everything I have read, you want it as large and as high as you can get away with.

The three keys to a good skywire are these.

(1) Get it as high as reasonable possible.

(2) Make it as close to a true circle as possible.

(3) Keep it as parallel to the earth as possible.

Follow these three rules and you are well on your way to having a really cool antenna.

keep us posted on your progress.

109. Re: H Loop> 1 WL

Yahoo group: SkyWires
Date: 2003-10-18 22:02:58 UTC
From: R H F
Topic: 107 Message: 109

CPA2000,

For a Full WaveLength SkyWire Horizontal Loop Antenna at 160 Meters.
The 530 Feet One WaveLength would be about right for 160 Meters.
- - - And work well thru 10 Meters.

* A Height of about 66 Feet would be 1/8 WL for 160 Meters.

* * Ideally a Height of about 132 Feet would be 1/4 WL for 160 Meters
and naturally would be better.

I will repeat myself that most SkyWire Horizontal Loop Antennas that
are mounted at a 'height' of 30-40 Feet are acting more like NVIS
Type Antennas = IMHO.

iane ~ RHF
.
.
= = = In SkyWires@yahoogroups.com,
= = = "cpa2000" <cpa2000@y...> wrote:
> I am going to put up a horizontal loop @ about 60' in hopes of
having
> a
> decent 160-10 antenna. Is there any adavntage to increasing the
the
> total
> length from 1 wavelength at the lowest freq. (about 530') to 2
> wavelengths(1,060'). I have the space & the wire & I'm wondering if
> it's
> worth the extra effort.
>
> Also, am I better off with a 3/8 WL inverted L on 160.
>

110. Re:RF Systems indoor antennas

Yahoo group: SkyWires
Date: 2003-10-19 04:33:19 UTC
From: Bill Krause
Topic: 107 Message: 110

Is anyone familiar with RF Systems antennas?? Do they have a web site??
I am looking in the Universal catalog and am trying to decide betwen
their EMF and Mini-Windom antennas for use as an indoor antenna. I am
looking for anyone who might have actual experience with either antenna
or who knows RF Systems website. Thanks.

Bill Krause

111. Re: H Loop> 1 WL

Yahoo group: SkyWires
Date: 2003-10-19 18:43:16 UTC
From: cpa2000
Topic: 107 Message: 111

I understand that the Horz. Loop is essentially a cloud warmer. My question is this, does increasing the length to 1060 feet (i.e. 2 wl on 160) will I get better performance on 160 than if it was 1 wl.

Has anyone had a 1 wl 160 loop & increased it to 2 wl & noticed an improvement on that band.

I'm trying to determine whether it's worth the extra wire & effort.

TNX

Terry, W8EJO

--- In SkyWires@yahoogroups.com, "R H F" <rhf-mail@u...> wrote:
> CPA2000,
>
> For a Full WaveLength SkyWire Horizontal Loop Antenna at 160 Meters.
> The 530 Feet One WaveLength would be about right for 160 Meters.
> - - - And work well thru 10 Meters.
>
> * A Height of about 66 Feet would be 1/8 WL for 160 Meters.
>
> * * Ideally a Height of about 132 Feet would be 1/4 WL for 160 Meters
> and naturally would be better.
>
> I will repeat myself that most SkyWire Horizontal Loop Antennas that
> are mounted at a 'height' of 30-40 Feet are acting more like NVIS
> Type Antennas = IMHO.
>
>
> iane ~ RHF
> .
> .
> = = = In SkyWires@yahoogroups.com,
> = = = "cpa2000" <cpa2000@y...> wrote:
> > I am going to put up a horizontal loop @ about 60' in hopes of having
> > a
> > decent 160-10 antenna. Is there any adavntage to increasing the the
> > total
> > length from 1 wavelength at the lowest freq. (about 530') to 2
> > wavelengths(1,060'). I have the space & the wire & I'm wondering

if
> > it's
> > worth the extra effort.
> >
> > Also, am I better off with a 3/8 WL inverted L on 160.
> >

112. Re: H Loop> 1 WL

Yahoo group: SkyWires
Date: 2003-10-22 20:54:33 UTC
From: R H F
Topic: 107 Message: 112

Terry [W8EJO],

First let me say, I am not a Radio Amateur "HAM" and do NOT use
Antennas to 'transmit'.

But, for specific use on the 160 Metre Band for both Transmission
and Reception. I would say the 530 Foot "One WaveLength" Size
SkyWire Antenna would be better with a 'direct' Coax-to-Antenna Wire
Element connection. Or, you could use 450 Ladder-Line for the
FeedLine.

However, for a "Receive Only" Antenna the 1060 Foot SkyWire Antenna
using a Balun between the Coax and the Antenna's Wire Element would
give better broad band results from the AM/MW Broadcast Band to the
10 Metre Band and beyond.

~ RHF
.
.
= = = In SkyWires@yahoogroups.com,
= = = "cpa2000" <cpa2000@y...> wrote:
> I understand that the Horz. Loop is essentially a cloud warmer. My
> question is this, does increasing the length to 1060 feet (i.e. 2
wl
> on 160) will I get better performance on 160 than if it was 1 wl.
>
> Has anyone had a 1 wl 160 loop & increased it to 2 wl & noticed an
> improvement on that band.
>
> I'm trying to determine whether it's worth the extra wire & effort.
>
> TNX
>
> Terry, W8EJO
>
>
>
> --- In SkyWires@yahoogroups.com, "R H F" <rhf-mail@u...> wrote:
> > CPA2000,
> >
> > For a Full WaveLength SkyWire Horizontal Loop Antenna at 160
> Meters.
> > The 530 Feet One WaveLength would be about right for 160
Meters.
> > - - - And work well thru 10 Meters.
> >

> > * A Height of about 66 Feet would be 1/8 WL for 160 Meters.
> >
> > * * Ideally a Height of about 132 Feet would be 1/4 WL for 160
> Meters
> > and naturally would be better.
> >
> > I will repeat myself that most SkyWire Horizontal Loop Antennas
> that
> > are mounted at a 'height' of 30-40 Feet are acting more like
NVIS
> > Type Antennas = IMHO.
> >
> >
> > iane ~ RHF
> > .
> > .
> > = = = In SkyWires@yahoogroups.com,
> > = = = "cpa2000" <cpa2000@y...> wrote:
> > > I am going to put up a horizontal loop @ about 60' in hopes of
> > having
> > > a
> > > decent 160-10 antenna. Is there any adavntage to increasing
the
> > the
> > > total
> > > length from 1 wavelength at the lowest freq. (about 530') to 2
> > > wavelengths(1,060'). I have the space & the wire & I'm
wondering
> if
> > > it's
> > > worth the extra effort.
> > >
> > > Also, am I better off with a 3/8 WL inverted L on 160.
> > >

113. Re: H Loop> 1 WL

Yahoo group: SkyWires
Date: 2003-10-26 22:59:45 UTC
From: kl7r
Topic: 107 Message: 113

Warning: I am a bit fanatical here...

There are many hams in Alaska who run skywires.
Most are 270" (mine is) some are 540" a few are 1180".
Our conditions up are sometimes so poor that the guys
have tried all kinds of antennas. The loop comes out
on top most of the time. Some big gun DXers run full
sized verticals or half squares or 4 element vertical
phased arrays for DX but for net work, most of the strong
signal regulars are running an 80 meter or larger loop.

One fellow with an 1180" loop has the loudest signal on our
80 meter nets. He also opens the band on 20 to the states and
europe.

He is the most active person up here on 160 meters.

I believe he had a 540 loop and was happy when he increased
the size to 1180.

If you do make your loop 1180 and you use the loop on 160
you will see a clover leaf pattern with some fair nulls
be careful to point your nulls to strategic locations.

The loop is only a cloud warmer on its lowest frequency.
eg. a 270 80 meter skywire is an NVIS antenna (points
straight up) This is a good thing... Usually on the
lowest frequencies you want to work out to about 800 miles.
and a Near Vertical Incidence Skywave?? antennea is the ticket
for that situation.

We have done tests here and the 80 meter loop on 80 works
really up to 20 db better than a dipole to about 600 miles on 80.

This does not mean that the antenna does not work on long haul
on 80. I have talked to the east coast as the grey line passes
over them from here on my 80 meter loop.

What most people dont get is that these loops are not "cloud
warmers" on the higher bands. They act like omnidirectional
beams on the higher frequencies. Think of them like unterminated
rhombics.

The same fellow above with the 1180 loop also has a tribander
up 60 feet. He said that "In no direction on no band does his
tribander beat his loop in performance". IE. an omnidirectional
beam.

I have used my 270 loop in contests running qrp and often
get "gud sig" when talking to big guns in the contests.

The antenna hears very well. It beats my 88 foot 20 meter extended
double zepp and my full size half wave vertical for 20 on all bands
in all directions except for long haul TX on the new 60 meter band.
With the rules on the 60 meter band I can run about 95 watts into
the vert and still have 50 watts erp but have to drop to 24 watts
on the loop to maintain 50 watts erp. The vertical is way to noisy
to copy any sigs on 60 m so I sometimes transmit on 60 m and
then switch to the loop on RX.

I just reread the last paragraph. I wasnt clear enough.
When I said my loop beats my vert and dipoles what I really
should have said is "My loop KILLS any other antenna I have put
up in my lot as defined by A/B and A/B/C tests with coax switches.
Sometimes my loop is 3 to 5 S units better than my other antennas
that is 60 DB. It doesnt sound possible but I see it all the time.
The Signal to noise ratio is much better on the loop.
Listening to CQWW in horrible conditions this weekend, The loop
was 6 S-units above the noise at S7 to a particular canadian station.
The half wave vert could just detect the station and he was right
at the noise floor at about S4. The ExtDoubleZepp was S2 and about
1 Sunit above the noise. Other stations had different results but
every time I have checked my loop has beat all my other antennas
(with the exception of one time my full sized quarter wave vertical
on 40 beat my loop for a 5 minute period to New Zeland - 5 minutes
later the loop was winning again (The vertical was MUCH noiser
during that time). I think the reason the vert beat the loop
to NZ that time is that I believe I have a null directed to NZ
and for that 5 minute window the low angle perf of the vert beat
my loop in the direction of the loop null.

So long winded answer...

The answer to your question is "YES" put up the huge loop.
It will KILL. And you will have SERIOUS bragging rights.

--- In SkyWires@yahoogroups.com, "cpa2000" <cpa2000@y...> wrote:
> I understand that the Horz. Loop is essentially a cloud warmer. My
> question is this, does increasing the length to 1060 feet (i.e. 2
wl
> on 160) will I get better performance on 160 than if it was 1 wl.
>
> Has anyone had a 1 wl 160 loop & increased it to 2 wl & noticed an
> improvement on that band.
>
> I'm trying to determine whether it's worth the extra wire & effort.
>
> TNX
>
> Terry, W8EJO

>

114. Re: H Loop> 1 WL

Yahoo group: SkyWires
Date: 2003-10-26 23:33:43 UTC
From: kl7r
Topic: 107 Message: 114

BTW: Mine is triangular. One corner is supported by 32 feet of steel chain link fence top rail insulated by a coke bottle (That is my full sized vert for 40) at one end of my house the other two corners are in trees at the opposite corners of my little lot.

I feed it with the black Radio Shack twinlead (I believe 58 feet) and an mfj-934 tuner.

115. Re: H Loop> 1 WL

Yahoo group: SkyWires
Date: 2003-10-27 23:21:14 UTC
From: cpa2000
Topic: 107 Message: 115

Tnx to Mike, KL7R & all others who posted on this question. Mike's passionate post, extolling the virtues of the big loop put me over the top & convinced me to put one up. I also checked out the QRP-L list serve & was impressed by the remarks of Seabury Lyon - AA1MY. Seab has (or had) a 1,400' loop @ 60'+ &, like Mike KL7R, raves about it's performance. One neat trick he employed was to suspend the corners of the loop from pulleys so that he could move the feed line along the loop & change his pattern nulls & lobes. Result was a rotatable (pattern) loop. Maybe two (switchable) feedlines accomplishes the same thing. I don't know, I'd have to model it on eznec.

Terry
W8EJO

--- In SkyWires@yahoogroups.com, "

" <kl7r@y...> wrote:
> BTW: Mine is triangular. One corner is supported by 32 feet of
> steel chain link fence top rail insulated by a coke bottle (That
> is my full sized vert for 40) at one end of my house the other two
> corners are in trees at the opposite corners of my little lot.
>
> I feed it with the black Radio Shack twinlead (I believe 58 feet)
> and an mfj-934 tuner.

116. Re: H Loop> 1 WL

Yahoo group: SkyWires
Date: 2003-10-28 01:32:59 UTC
From: R H F
Topic: 107 Message: 116

KL7R,

"One corner is supported by 32 feet of steel chain link fence
top rail insulated by a coke bottle"

? Can you describe this Vertical Antenna and 'how' and 'where' you
used the Coke Bottle as an Insulator ?

iwtk ~ RHF
.
.
= = = In SkyWires@yahoogroups.com,
= = = "kl7r" <kl7r@y...> wrote:
> BTW: Mine is triangular. One corner is supported by 32 feet of
> steel chain link fence top rail insulated by a coke bottle (That
> is my full sized vert for 40) at one end of my house the other two
> corners are in trees at the opposite corners of my little lot.
>
> I feed it with the black Radio Shack twinlead (I believe 58 feet)
> and an mfj-934 tuner.

117. Re: RF Systems indoor antennas

Yahoo group: SkyWires
Date: 2003-10-28 03:45:57 UTC
From: Bill Krause
Topic: 117 Message: 117

I am going to use the Mini Windom primarily when I traval. For instance in two weeks I am going to spend 4 days on the Oregon Coast. You bring up an interesting point about creative antennas. What would the effect be if I hooked some coax to my large metal roof??

Bill Krause

Duane Fischer, W8DBF wrote:

>Bill,
>
>Remember: any indoor antenna is just that, indoors. That in itself restricts its
>ability to receive and increases its potential for electrical interference.
>Outside is superior.
>
> Having stated the obvious, which is generally overlooked (grin), space
>restrictions and other considerations sometimes make an indoor antenna the only
>available choice. Or does it?
>
>There are many simplistic antennas that you can do for yourself, provided you do
>not have some physical handicap that makes it risky or not possible. If that is
>the case, a local Ham club should be able to solve that for you. If they can not
>or will not, time to find a new group to affiliate with.
>
>Some simple things you can do:
>
>1. If you have rain gutters, they can make a really good antenna. Some Hams have
>even manage to load them to use for transmit purposes!
>
>2. If you have eves or an overhang on your house, or dwelling, you can string a
>wire under those areas to keep it pretty much out of sight from objectionable
>neighbors who 'imagine' interference as soon as anything goes up on a neighbors
>dwelling. You can use multiple or single strand wire, insulated or not.
>
>3. If you have an attic, and the electrical wiring does not use it for its main
>path throughout the dwelling, you can put a nice multiple band dipole up there.
>I know many Hams with property restrictions who have done this and had excellent
>results.
>
>4. Borrow or buy a copy of the ARRL antenna handbook. There is a wealth of
>information in it and many antenna ideas and plans. Worth checking out.
>
>Always try to make your antenna favor the frequencies you prefer to listen to.
>There is no such thing as the perfect antenna, the old 'one size fits all'
>concept. Not true! Everything is a compromise, unless you use a mono band
>antenna. However, not all of us have the real estate to do that.

>
>Duane W8DBF
>
>
>----------
>From: Bill Krause <bkrause@...>
>To: Bill Krause <bkrause@...>
>Cc: swl@...
>Subject: [SWL] RF Systems indoor antennas
>Date: Monday, October 27, 2003 1:22 AM
>
>Well I ordered the Mini Windom from Universal and it should be here
>soon. I'll report on its opperation. I plan to use it exclusively
>indoors with my ICOM PCR1000 and possibly the Ten-tec 320D depending on
>what happens with the Ten-tec. I am still interested in learning more
>about RF system and all their SWL orientated products, particularly
>their antennas.
>
> Bill Krause
>
>katekebo wrote:
>
>
>
>>I have used both. Both are decent quality compact antennas. They can be
>>
>>
>installed indoors, but they work better if placed outdoors.On shortwave above
>2-3MHz they are about the same in terms of performance. The advantage of the EMF
>is in lower frequencies. The MiniWindom delivers significantly less signal than
>the EMF between 500 and 2000 kHz, and is completely deaf below 500 kHz. The EMF
>is much better for MW and LW.The EMF seemed to pick-up less noise than the
>MiniWindom, but this maybe purely subjective (I sold the EMF before I got the
>MiniWindom). Before the EMF was my only antenna. Now I use a 12m MLB and the
>MiniWindom for travel it is more compact and lighter than the EMF. None of the
>two can match a decent outdoor antenna such as the MLB.
>
>
>
>
>
>>-- In ShortWaveRadio@yahoogroups.com, Bill Krause <bkrause@s...>
>>
>>
>>
>
>
>
>>wrote: Is anyone familiar with RF Systems antennas?? Do they have a web site?
>>

>>
>I am looking in the Universal catalog and am trying to decide between their EMF
>and Mini-Windom antennas for use as an indoor antenna. I am looking for anyone
>who might have actual experience with either antenna or who knows RF Systems
>website. Thanks.
>
>
>
> Bill Krause
>
>
>
>>>
>>>
>>>
>>>
>
>
>--- StripMime Report -- processed MIME parts ---
>multipart/alternative
> text/plain (text body -- kept)
> text/html
>The reason this message is shown is because the post was in HTML
>or had an attachment. Attachments are not allowed. To learn how
>to post in Plain-Text go to: http://www.expita.com/nomime.html ---
>_____
>List Administrator: Duane Fischer, W8DBF (WPE8CXO)
>**For Assistance: dfischer@... **
>HCI Web Site For SWL Information - http://www.w9wze.org/SWL
>http://mailman.qth.net/mailman/listinfo/swl
>Help: http://mailman.qth.net/faq.htm
>_____
>List Administrator: Duane Fischer, W8DBF (WPE8CXO)
>**For Assistance: dfischer@... **
>HCI Web Site For SWL Information - http://www.w9wze.org/SWL
>http://mailman.qth.net/mailman/listinfo/swl
>Help: http://mailman.qth.net/faq.htm
>
>
>

118. Re: [SkyWires] Re: H Loop> 1 WL

Yahoo group: SkyWires
Date: 2003-10-29 01:53:14 UTC
From: John H. Carver Jr.
Topic: 107 Message: 118

RHF,
I'm not KL7R, but if the rail is being used as a vertical antenna,
which it is as I read the message, the coke bottle would be at the bottom of
the rail, between the end of the rail and the ground. Same principle as
those honking big insulators you see on the bottom of the antenna masts of
the commercial MW stations.
John

John H. Carver Jr.
Mid-North Indiana
----- Original Message -----
From: "R H F" <rhf-mail@...>
To: <SkyWires@yahoogroups.com>
Sent: Monday, October 27, 2003 8:32 PM
Subject: [SkyWires] Re: H Loop> 1 WL

> KL7R,
>
> "One corner is supported by 32 feet of steel chain link fence
> top rail insulated by a coke bottle"
>

119. Re: H Loop> 1 WL

Yahoo group: SkyWires
Date: 2003-10-29 08:05:30 UTC
From: kl7r
Topic: 107 Message: 119

Yeah, Thats it.

I use the chain link fence top rail for the mast.
It is pretty strong and it is cheap. It comes in 21 foot
sections so I used a section and a half for the mast.

I stuck the neck of a coke bottle into the mast at the base
and buried the bottom of the coke bottle in the ground so that
the mast was insulated from ground.

I used a hose clamp to attach my feedline to the mast
I attached the other side to my feedline to a ground.
(my chain link fence posts bonded togeather with the shield
of some rt8 and hose clamps.)

The mast is attached to a 1 foot square piece of plywood using "U"
bolts and the plywood is screwed into the eve of my house.

The top of the mast has a couple of pullys and 3 guy ropes
to steady the top of the mast in winds. I use one pully to
hoist the loop and the other for "experiments".

I actually feed the mast with twinlead too so I can load it
up on 40-10 just like I load up the loop on 160 thru 6.

The 80 meterloop really doesnt like to take power on 160 meters
So I usually wind up shorting the feedline so the loop acts like
a toploaded vertical on 160 working against my fence ground.

It is really quiet on 160 but it is super narrow if loaded as
a loop rather than as a top loaded vert.

The mast is just a support for the loop but serves a dual purpose
in that I can use it as another vertical antenna for testing.

--- In SkyWires@yahoogroups.com, "John H. Carver Jr." <jcarver@n...>
wrote:
> RHF,
> I'm not KL7R, but if the rail is being used as a vertical
antenna,
> which it is as I read the message, the coke bottle would be at the
bottom of
> the rail, between the end of the rail and the ground. Same
principle as
> those honking big insulators you see on the bottom of the antenna
masts of
> the commercial MW stations.

> John
>
> John H. Carver Jr.
> Mid-North Indiana
> ----- Original Message -----
> From: "R H F" <rhf-mail@u...>
> To: <SkyWires@yahoogroups.com>
> Sent: Monday, October 27, 2003 8:32 PM
> Subject: [SkyWires] Re: H Loop> 1 WL
>
>
> > KL7R,
> >
> > "One corner is supported by 32 feet of steel chain link fence
> > top rail insulated by a coke bottle"
> >

120. Re: H Loop> 1 WL

Yahoo group: SkyWires
Date: 2003-10-29 10:56:52 UTC
From: R H F
Topic: 107 Message: 120

KL7R and JHCj,

Thank You Both for your replies - Now I understand better.

~ RHF
.
.
= = = In SkyWires@yahoogroups.com,
= = = "kl7r" <kl7r@y...> wrote:
> Yeah, Thats it.
>
> I use the chain link fence top rail for the mast.
> It is pretty strong and it is cheap. It comes in 21 foot
> sections so I used a section and a half for the mast.
>
> I stuck the neck of a coke bottle into the mast at the base
> and buried the bottom of the coke bottle in the ground so that
> the mast was insulated from ground.
>
> I used a hose clamp to attach my feedline to the mast
> I attached the other side to my feedline to a ground.
> (my chain link fence posts bonded togeather with the shield
> of some rt8 and hose clamps.)
>
> The mast is attached to a 1 foot square piece of plywood using "U"
> bolts and the plywood is screwed into the eve of my house.
>
> The top of the mast has a couple of pullys and 3 guy ropes
> to steady the top of the mast in winds. I use one pully to
> hoist the loop and the other for "experiments".
>
> I actually feed the mast with twinlead too so I can load it
> up on 40-10 just like I load up the loop on 160 thru 6.
>
> The 80 meterloop really doesnt like to take power on 160 meters
> So I usually wind up shorting the feedline so the loop acts like
> a toploaded vertical on 160 working against my fence ground.
>
> It is really quiet on 160 but it is super narrow if loaded as
> a loop rather than as a top loaded vert.
>
>
> The mast is just a support for the loop but serves a dual purpose
> in that I can use it as another vertical antenna for testing.
>

> --- In SkyWires@yahoogroups.com, "John H. Carver Jr."
<jcarver@n...>
> wrote:
> > RHF,
> > I'm not KL7R, but if the rail is being used as a vertical
> antenna,
> > which it is as I read the message, the coke bottle would be at
the
> bottom of
> > the rail, between the end of the rail and the ground. Same
> principle as
> > those honking big insulators you see on the bottom of the
antenna
> masts of
> > the commercial MW stations.
> > John
> >
> > John H. Carver Jr.
> > Mid-North Indiana
> > ----- Original Message -----
> > From: "R H F" <rhf-mail@u...>
> > To: <SkyWires@yahoogroups.com>
> > Sent: Monday, October 27, 2003 8:32 PM
> > Subject: [SkyWires] Re: H Loop> 1 WL
> >
> >
> > > KL7R,
> > >
> > > "One corner is supported by 32 feet of steel chain link fence
> > > top rail insulated by a coke bottle"
> > >

121. Solar Storms, Propagation, and the Northern Lights

Yahoo group: SkyWires
Date: 2003-10-30 07:39:13 UTC
From: exemptfromlife
Topic: 121 Message: 121

I haven't be able to listen to shortwave lately do to the solar activity. Its just not worth fighting the static on some channels.

However, tonight, I was riding my bike after dark and got to see the North Lights better than I have ever seen them this far south. (St. Louis Missouri area).

I hope this clears up in the next few weeks/ months.

Thanks.

122. newbie

Yahoo group: SkyWires
Date: 2003-10-31 20:16:33 UTC
From: desmoface
Topic: 122 Message: 122

Hey you crazy kids, you - I'm new here, my name is Steve (kb8viv)and I'm here in Northeast Ohio..In my search for a new antenna (my old butternut verticle is lookin pretty ragged) I've stumbled upon the horizontal loop..I have to tell you - I really want to erect one of these bad boys...I have a back yard full of woods, but what I originally thought was going to be easy is turning out to be more of a challenge..lots of trees but also lots of branches in the way, foliage, Poison Ivy, etc..

I haven't given up yet, actually tried out my new slingshot/fishing reel contraption..They want close to $100 for that ezhang deal, I made my own for about $20..hihi..anyway, I think I'll have to wait till the leaves are gone from the trees before I get serious...

My goal is to erect an 80 meter loop so that I can (hopefully) work 10-80 meters cw and ssb, appears that this is the antenna to get the job done...If I get it up, not sure how close to a circle or square its gonna but it'll hopefully be good enough..I plan to just feed it with coax..

Do these antenna's actually show low swr on all the bands or does a tuner need to be used on the bands..I read something that appeared to say it had a good match on most of the bands?? Ok, thanks again for any advice..

Steve
kb8viv

123. Re: [SkyWires] newbie

Yahoo group: SkyWires
Date: 2003-10-31 20:39:30 UTC
From: Scott Gordon
Topic: 122 Message: 123

Steve,

Once some of the leaves fall I am sure it will be easier and worthwhile. I have mine cut for 80 meters feeding it wil ladderline to the ground then a 4:1 balun and coax on into the shack. If you just feed with coax you will need a tuner on 10-40 meters most likely. You can see more on loops on my website http://www.kq8rp.com

73's
Scott

----- Original Message -----
From: desmoface
To: SkyWires@yahoogroups.com
Sent: Friday, October 31, 2003 3:16 PM
Subject: [SkyWires] newbie

Hey you crazy kids, you - I'm new here, my name is Steve (kb8viv)and I'm here in Northeast Ohio..In my search for a new antenna (my old butternut verticle is lookin pretty ragged) I've stumbled upon the horizontal loop..I have to tell you - I really want to erect one of these bad boys...I have a back yard full of woods, but what I originally thought was going to be easy is turning out to be more of a challenge..lots of trees but also lots of branches in the way, foliage, Poison Ivy, etc..

I haven't given up yet, actually tried out my new slingshot/fishing reel contraption..They want close to $100 for that ezhang deal, I made my own for about $20..hihi..anyway, I think I'll have to wait till the leaves are gone from the trees before I get serious...

My goal is to erect an 80 meter loop so that I can (hopefully) work 10-80 meters cw and ssb, appears that this is the antenna to get the job done...If I get it up, not sure how close to a circle or square its gonna but it'll hopefully be good enough..I plan to just feed it with coax..

Do these antenna's actually show low swr on all the bands or does a tuner need to be used on the bands..I read something that appeared to say it had a good match on most of the bands?? Ok, thanks again for any advice..

Steve
kb8viv

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To unsubscribe from this group, send an email to:
SkyWires-unsubscribe@yahoogroups.com

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124. (no subject)

Yahoo group: SkyWires
Date: 2003-10-31 21:33:26 UTC
From: desmoface
Topic: 124 Message: 124

Hi Gordon, thanks for the reply..I'm definitely gonna be giving it a heck of a shot (putting up the loop)..As far as feeding, I've read all kinds of different methods..I know that coax will have a little more loss..but I also read that you shouldnt use baluns with tuners as they will heat up...since I plan on using it on 10-80 I'll definitely be using the tuner. Of course, I'll probably experiment a bit with it before it's all said and done..

Ok Gordon, thanks es 73's..

de kb8viv
Steve

125. radials/ground with a skyloop

Yahoo group: SkyWires
Date: 2003-11-01 12:05:27 UTC
From: desmoface
Topic: 125 Message: 125

Hey kids...Just contemplating my skyloop installation...Has anyone grounded their skyloop? Here's my thought; at the termination of the wire, near the feedpoint, running a wire from the shielded part of the coax to a grounding rod.. Any thoughts on how this would affect operation?? How bout if I added some full or 1/2 wave radials to help minimize ground losses as my setup is going to be fairly low to the ground, especially near the feedpoint of the antenna??

Thanks in advance for any advice?

Steve
kb8viv

126. Re: [SkyWires] radials/ground with a skyloop

Yahoo group: SkyWires
Date: 2003-11-01 19:51:48 UTC
From: Scott Erwin
Topic: 125 Message: 126

A loop does not require a ground. If you want to
ground it for safety you would use ladder line from
the loop to a 4 to 1 BALUN close to your ground rod
and ground the BALUN on the unbalanced side. Radials
will cause problems under the loop, dont add them. I
have seen buried loops run just under the soil used by
troops to keep in contact with the command shack miles
away, dipoles also work buried just under the soil. As
there detuned you just make the loop or dipole as
large as you can but you don't want if found...
Several are buried spaced miles apart so the troops
can check in every now and then without transmitting
from the same area every time, and getting captured. A
low to the ground LOOP will still work fine but not as
good as one placed high up in the tall trees or
between towers.
--- desmoface <desmoface@...> wrote:
> Hey kids...Just contemplating my skyloop
> installation...Has anyone
> grounded their skyloop? Here's my thought; at the
> termination of the
> wire, near the feedpoint, running a wire from the
> shielded part of
> the coax to a grounding rod.. Any thoughts on how
> this would affect
> operation?? How bout if I added some full or 1/2
> wave radials to help
> minimize ground losses as my setup is going to be
> fairly low to the
> ground, especially near the feedpoint of the
> antenna??
>
> Thanks in advance for any advice?
>
> Steve
> kb8viv
>
>

_____
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127. Re: [SkyWires] radials/ground with a skyloop

Yahoo group: SkyWires
Date: 2003-11-01 23:30:02 UTC
From: desmoface@aol.com
Topic: 125 Message: 127

In a message dated 11/1/2003 2:54:26 PM Eastern Standard Time,
n4zou@... writes:

> . A
> low to the ground LOOP will still work fine but not as
> good as one placed high up in the tall trees or
> between towers.
>

Hi Scott, thanks for the info...I won't bother with grounding the loop then.
When my antenna's aren't being used they are attached to a grounding point
which is in turn attached to an 8 ft ground rod..

I have to order wire and support lines as I just got done setting everything
up for the loop; trimmed a bunch of trees (I could have used a chain saw today
hihi), ran the leaders for the support lines/wire, everything looks good..I'm
a little short on my length, coming in at around 230 ft...although I'm not
accounting for the droop in the wire, which should add a few more feet. I'll
have to improvise if I come up short when I start running wire..

I'm thinking very seriously about getting this for the wire
http://www.davisrf.com/ham1/flexweve.htm and this for the coax
http://www.davisrf.com/ham1/coax.htm, the bury flex looks like the ticket..What did you
guys use for wire??

Fortunately the coax will have a short run of about 25-30 ft into the house
so loss shouldn't be too much of a problem..

Im probably not going to run a balun as they arent supposed to be used with
hi swr's..and I'll be using the loop for 10-80 cw/ssb...I will probably just
put 8 or so loops of coax at the feedpoint just in case and run the coax into my
mfj tuner..I may spring for a better tuner with the money I saved homebrewing
my antenna..

Ok, sorry this was longwinded..I'm psyched to get this loop on the air...I'm
hoping for better performance over my old beat up butternut vertical,
especially on 40 and 80..tnx again..

Steve
kb8viv

128. Re: radials/ground with a skyloop

Yahoo group: SkyWires
Date: 2003-11-02 00:08:48 UTC
From: R H F
Topic: 125 Message: 128

Steve/KB8VIV,

? How about if I added some full or 1/2 wave radials to help ?

The full wave length "Counterpoise" placed on the ground directly under the Antenna Element might help; depending on your Antenna Height and non-uniform ground/soil conditions.
- - - A 'passive' Counterpoise that is not physically connected to the actual antenna element or feedline.

However, the Half Wave Length "radial" may affect the omni-directional properties of the SKyWire Antennas and SKEW the Antenna's "Propagation" Pattern "?"

Somethings-to-Think-About:

1. Placing a Ground Rod at the Center Point of the SkyWire Loop Antenna. Connecting a 'set' of Six(6)=[60*] or Eight(8)=[45*] "One-Eigth" (1/8th) Wave Length Radials all connected to the Ground Rod and uniformily "Radiating" outward from the Center Point: This may improve the Omni-Directional characteristics of a 'less than perfect' SkyWire Antenna.

2. Maybe a 1/4, 1/2, 5/8 and/or 3/4 Wave Length Loop Counterpoise (s) that is/are uniformily centered on the ground within the larger SkyWire Antenna up in the air.

Note: These mite be worth modeling - For a Look See!

iane ~ RHF
.
.
= = = In SkyWires@yahoogroups.com,
= = = "desmoface" <desmoface@a...> wrote:
> Hey kids...Just contemplating my skyloop installation...Has anyone
> grounded their skyloop? Here's my thought; at the termination of
the
> wire, near the feedpoint, running a wire from the shielded part of
> the coax to a grounding rod.. Any thoughts on how this would
affect
> operation?? How bout if I added some full or 1/2 wave radials to
help
> minimize ground losses as my setup is going to be fairly low to
the
> ground, especially near the feedpoint of the antenna??
>
> Thanks in advance for any advice?

>
> Steve
> kb8viv
>

129. Re: [SkyWires] radials/ground with a skyloop

Yahoo group: SkyWires
Date: 2003-11-02 01:13:52 UTC
From: Scott Erwin
Topic: 125 Message: 129

On my 160 meter loop I used 16 guage
insulated/stranded wire with a plastic coat. The stuff
you can find at a building supply store for running
wire inside conduit. Feed line is 200 feet of 450 ohm
twin lead. I use an old AUR-DUX BALUN between the twin
lead and my ICOM IC-756 PRO II and have no problem
using the internal automatic antenna tuner on all the
HF bands. When QRO with the SB-1000 amplifier I use
the 4 to 1 BALUN in the Heathkit SA-2060A tuner with
no problems even at the 1000 watts max power level.
Even running RTTY mode at 400 watts still causes no
problems with the BALUN in the tuner. The AIR-DUX
BALUN is air would coils so there is nothing to heat
up. It's just very large in size!
--- desmoface@... wrote:
> In a message dated 11/1/2003 2:54:26 PM Eastern
> Standard Time,
> n4zou@... writes:
>
>
> > . A
> > low to the ground LOOP will still work fine but
> not as
> > good as one placed high up in the tall trees or
> > between towers.
> >
>
> Hi Scott, thanks for the info...I won't bother with
> grounding the loop then.
> When my antenna's aren't being used they are
> attached to a grounding point
> which is in turn attached to an 8 ft ground rod..
>
> I have to order wire and support lines as I just got
> done setting everything
> up for the loop; trimmed a bunch of trees (I could
> have used a chain saw today
> hihi), ran the leaders for the support lines/wire,
> everything looks good..I'm
> a little short on my length, coming in at around 230
> ft...although I'm not
> accounting for the droop in the wire, which should
> add a few more feet. I'll
> have to improvise if I come up short when I start
> running wire..

>
> I'm thinking very seriously about getting this for
> the wire
> http://www.davisrf.com/ham1/flexweve.htm and this
> for the coax
> http://www.davisrf.com/ham1/coax.htm, the bury flex
> looks like the ticket..What did you guys use for
> wire??
>
> Fortunately the coax will have a short run of about
> 25-30 ft into the house
> so loss shouldn't be too much of a problem..
>
> Im probably not going to run a balun as they arent
> supposed to be used with
> hi swr's..and I'll be using the loop for 10-80
> cw/ssb...I will probably just
> put 8 or so loops of coax at the feedpoint just in
> case and run the coax into my
> mfj tuner..I may spring for a better tuner with the
> money I saved homebrewing
> my antenna..
>
> Ok, sorry this was longwinded..I'm psyched to get
> this loop on the air...I'm
> hoping for better performance over my old beat up
> butternut vertical,
> especially on 40 and 80..tnx again..
>
> Steve
> kb8viv
>
>

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130. Re: [SkyWires] Re: radials/ground with a skyloop

Yahoo group: SkyWires
Date: 2003-11-02 04:11:30 UTC
From: desmoface@aol.com
Topic: 125 Message: 130

In a message dated 11/1/2003 7:10:11 PM Eastern Standard Time,
rhf-mail@... writes:

> The full wave length "Counterpoise" placed on the ground directly
> under the Antenna Element might help; depending on your Antenna
> Height and non-uniform ground/soil conditions.
> - - - A 'passive' Counterpoise that is not physically connected to
> the actual antenna element or feedline.
>

Hi iane-rhf, thanks for the reply. I think I'm just going to try her out with no ground or radials. I may experiment after its all up and running and I establish some base performance criteria/something to compare to..I'll be ordering up the wire and support rope on Monday...Hopefully next weekend I'll be able to get her up in the air. Thanks again..

Steve
kb8viv

131. Re: [SkyWires] radials/ground with a skyloop

Yahoo group: SkyWires
Date: 2003-11-02 04:16:59 UTC
From: desmoface@aol.com
Topic: 125 Message: 131

In a message dated 11/1/2003 8:14:28 PM Eastern Standard Time,
n4zou@... writes:

> Feed line is 200 feet of 450 ohm
>

Hi Scott. I was going to try twin lead but my house is aluminum sided and it would have to pass through it into the shack..Hence coax...Do you think it'll tune up ok with coax and just running her into the rig?

How long have you had your loop up?? Have you noticed any stretch using regular electrical wire??

Is twinlead as finicky as they say?? I've heard it can't be run near such as trees and has to be kept away from the ground??

steve
kb8viv

132. Re: radials/ground with a skyloop

Yahoo group: SkyWires
Date: 2003-11-02 06:49:51 UTC
From: exemptfromlife
Topic: 125 Message: 132

Yes,

I grounded mine for lighting protection, and I did notice a
difference in reception /clarity for the better.

I have a 500 foot loop made from 12 gauge stranded wire that is
insulated, that is about 30 feet off the ground. Fed by coax. The
coax center connector soldered to one end of the skywire, and the
shielding braid to the other

Down at the other end of the coax I have a polyphaser lightning
arrestor attached to a metal service box. The coax connects to the
antenna side of the polyphaser, and then a new section of coax to the
equipment side and on into the house.

I have a 0/4 gauge copper wire (thickness is about the diameter of a
dime) running from the metal box, to an 8 foot grounding rod. If
lightning hits it should follow the 0/4 gauge wire to the ground.

Once the coax connects to the SW radio inside, I have a 14 gauge
stranded wire running from the GND (ground) on the back of my radio
back outside and to a different grounded rod made from some old
copper pipe I pounded a few feet into the ground.

I only use my loop for reception and not for transmitting. Right now
the atmosphere is terrible for reception because of the solar
activity, so now is a good time to spend some time planning and not
get in a hurry to get something up, and cut corners.

Good luck..

--- In SkyWires@yahoogroups.com, "desmoface" <desmoface@a...> wrote:
> Hey kids...Just contemplating my skyloop installation...Has anyone
> grounded their skyloop? Here's my thought; at the termination of
the
> wire, near the feedpoint, running a wire from the shielded part of
> the coax to a grounding rod.. Any thoughts on how this would affect
> operation?? How bout if I added some full or 1/2 wave radials to
help
> minimize ground losses as my setup is going to be fairly low to the
> ground, especially near the feedpoint of the antenna??
>
> Thanks in advance for any advice?
>
> Steve
> kb8viv

133. Re: [SkyWires] radials/ground with a skyloop

Yahoo group: SkyWires
Date: 2003-11-02 18:23:36 UTC
From: Scott Erwin
Topic: 125 Message: 133

Coax will work fine, don't worry-be happy!
My loop has been up/down for several years. The only
stretching was from a tree falling across it! I just
soldered the break and put it back up. Twin lead needs
to be at least it's own width away from any objects
to keep the balance between the parallel wires. other
than that I have never had any problems running it.
--- desmoface@... wrote:
> In a message dated 11/1/2003 8:14:28 PM Eastern
> Standard Time,
> n4zou@... writes:
>
>
> > Feed line is 200 feet of 450 ohm
> >
>
> Hi Scott. I was going to try twin lead but my house
> is aluminum sided and it
> would have to pass through it into the shack..Hence
> coax...Do you think it'll
> tune up ok with coax and just running her into the
> rig?
>
> How long have you had your loop up?? Have you
> noticed any stretch using
> regular electrical wire??
>
> Is twinlead as finicky as they say?? I've heard it
> can't be run near such as
> trees and has to be kept away from the ground??
>
> steve
> kb8viv
>

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134. Re: radials/ground with a skyloop

Yahoo group: SkyWires
Date: 2003-11-02 18:46:33 UTC
From: R H F
Topic: 125 Message: 134

EfL,

"Down at the other end of the coax I have a polyphaser lightning
arrestor attached to a metal service box."

Please Clarify something for me.

? Is this "Metal Service Box" part of the Household Electrical
Wiring ?

~ RHF
.
.
= = = In SkyWires@yahoogroups.com,
= = = "exemptfromlife" <junkmail@a...> wrote:
> Yes,
>
> I grounded mine for lighting protection, and I did notice a
> difference in reception /clarity for the better.
>
> I have a 500 foot loop made from 12 gauge stranded wire that is
> insulated, that is about 30 feet off the ground. Fed by coax. The
> coax center connector soldered to one end of the skywire, and the
> shielding braid to the other
>
> Down at the other end of the coax I have a polyphaser lightning
> arrestor attached to a metal service box. The coax connects to the
> antenna side of the polyphaser, and then a new section of coax to
the
> equipment side and on into the house.
>
> I have a 0/4 gauge copper wire (thickness is about the diameter of
a
> dime) running from the metal box, to an 8 foot grounding rod. If
> lightning hits it should follow the 0/4 gauge wire to the ground.
>
> Once the coax connects to the SW radio inside, I have a 14 gauge
> stranded wire running from the GND (ground) on the back of my
radio
> back outside and to a different grounded rod made from some old
> copper pipe I pounded a few feet into the ground.
>
> I only use my loop for reception and not for transmitting. Right
now
> the atmosphere is terrible for reception because of the solar
> activity, so now is a good time to spend some time planning and

not
> get in a hurry to get something up, and cut corners.
>
> Good luck..
>
>
>
> --- In SkyWires@yahoogroups.com, "desmoface" <desmoface@a...>
wrote:
> > Hey kids...Just contemplating my skyloop installation...Has
anyone
> > grounded their skyloop? Here's my thought; at the termination
of
> the
> > wire, near the feedpoint, running a wire from the shielded part
of
> > the coax to a grounding rod.. Any thoughts on how this would
affect
> > operation?? How bout if I added some full or 1/2 wave radials to
> help
> > minimize ground losses as my setup is going to be fairly low to
the
> > ground, especially near the feedpoint of the antenna??
> >
> > Thanks in advance for any advice?
> >
> > Steve
> > kb8viv

135. Re: [SkyWires] radials/ground with a skyloop

Yahoo group: SkyWires
Date: 2003-11-02 18:54:46 UTC
From: Jim Dunstan
Topic: 125 Message: 135

At 12:05 PM 11/1/03 +0000, you wrote:
>Hey kids...Just contemplating my skyloop installation...Has anyone
>grounded their skyloop? Here's my thought; at the termination of the
>wire, near the feedpoint, running a wire from the shielded part of
>the coax to a grounding rod.. Any thoughts on how this would affect
>operation?? How bout if I added some full or 1/2 wave radials to help
>minimize ground losses as my setup is going to be fairly low to the
>ground, especially near the feedpoint of the antenna??
>
>Thanks in advance for any advice?
>
>Steve
>kb8viv

Hmmmm ..... One way of looking at all antennae are to divide them into those in which antenna currents work against earth, such as various long wires and verticals and those in which antenna currents are balanced within the antenna and not to earth, such as dipoles and loops. The skyloop is a large loop antenna eg 1 wavelength or greater in relation to the frequency transmitted/received.

The challenges in coupling the feedline from the xmitter/receiver to the balanced antenna is to maintain the balance of the antenna, to match antenna impedance to feedline impedance, and to minimize interaction between the antenna and the feedline. If the feedline is coaxial cable some form of RF transformer or balun is used for purposes of maintaining balance and impedance matching while juidical placement of the coax in relation to the antenna is undertaken to mimimize interaction between the antenna and the coax. (after all you usually don't want the feedline to be part of the antenna unless that is part of the design).

Now, given the specifics of your situational question; is it a loop or is it a vertical ??? First, the loop will certainly not be balanced since one side of the feedpoint will be connected to earth with an element (piece of wire of unspecified length). There certainly will be interaction between the ground element and the coax feedline all of which will depend on resonance of these introduced elements.

My guess is that with enough experimentation, tuning of the introduced element, judicial placement of the coax, and connecting the coax to the xmitter/receiver with an antenna tuner you should be able to radiate RF. However as soon as you shift frequency an appreciable amount you will have to go through the operation once again. It is anyone's guess what the radiation characteristics will be hi.

Now there is an antenna used by MW and SW DX listeners that is something like what you describe (It is known as the K9AY loop). It is a vertical wire loop with the feed point located close to ground. One side of this large wire loop works against ground and is feed by coax via an RF transformer. The other end of the long loop comes back close to the start point and is also grounded, but via a termination resistor. The K9AY is in fact a longwire (according to my first categorization), but a special kind which works against a termination resistor (travelling wave antenna like a Beverage or rhombic) but oriented like a loop. The K9AY provides excellent directional properties. Do a search on K9AY on the internet and you will find a lot of information. If you apply some of the K9AY theory to xmitting I for one will be very interested in hearing the results.

>

Jim Dunstan
Thunder Bay, ON

136. pics

Yahoo group: SkyWires
Date: 2003-11-02 19:22:56 UTC
From: Dave
Topic: 136 Message: 136

does any one have any pics of there setups

137. Re: pics

Yahoo group: SkyWires
Date: 2003-11-03 08:21:59 UTC
From: R H F
Topic: 136 Message: 137

= = = In SkyWires@yahoogroups.com,
= = = "Dave" <teamcourage@b...> wrote:
> does any one have any pics of there setups

Dave,

You may see Photos of specific 'details' of a SkyWire Loop Antenna.

You may see Diagrams and Drawings of SkyWire Loop Antennas.

But it is not likely that you will see a 'detailed' Photo of an
actual SkyWire Loop Antenna in total.

WHY ?

If you are using #14AWG Insulated Wire that is about 1/8" to 3/16"
Diameter and a SkyWire Loop Antenna that has a perimeter of 270 Feet
to 530 Feet. These photos have to be shot at some distance to get
the entire SkyWire Loop Antenna into the picture. The actual wires
simply will not show up in the Photos.
- - - This is a wire to loop image size ratio of 1:25,000 or more.

This is problem faced by many manufactures of large scale antennas.
- - - Some resort to using 'enhanced' photos that have the wires
drawn in (thickened) to allow them to be visiable to the eye.
NOTE: These types of Photos are usually labeled as 'representative'
pictures of the product.

wmcis ~ RHF

.

.

138. Re: radials/ground with a skyloop

Yahoo group: SkyWires
Date: 2003-11-03 14:09:58 UTC
From: exemptfromlife
Topic: 125 Message: 138

Hi,

no, just a 12x12 inch gray box, similar to a household electrical system, but it has no connection to the house wiring or anything. Its completely seperate. It only holds the polyphaser and the 0/4 gauge wire connector. Its mounted on a 4x4 post for the back porch directly under the the coax feed for the antenna. The 0/4 guage wire goes to ground directly under the 4x4 post.

--- In SkyWires@yahoogroups.com, "R H F" <rhf-mail@u...> wrote:
> EfL,
>
> "Down at the other end of the coax I have a polyphaser lightning
> arrestor attached to a metal service box."
>
> Please Clarify something for me.
>
> ? Is this "Metal Service Box" part of the Household Electrical
> Wiring ?
>
> ~ RHF
> .
> .
> = = = In SkyWires@yahoogroups.com,
> = = = "exemptfromlife" <junkmail@a...> wrote:
> > Yes,
> > >
> > I grounded mine for lighting protection, and I did notice a
> > difference in reception /clarity for the better.
> > >
> > I have a 500 foot loop made from 12 gauge stranded wire that is
> > insulated, that is about 30 feet off the ground. Fed by coax.
The
> > coax center connector soldered to one end of the skywire, and the
> > shielding braid to the other
> > >
> > Down at the other end of the coax I have a polyphaser lightning
> > arrestor attached to a metal service box. The coax connects to
the
> > antenna side of the polyphaser, and then a new section of coax to
> the
> > equipment side and on into the house.
> > >
> > I have a 0/4 gauge copper wire (thickness is about the diameter
of

> a
> > dime) running from the metal box, to an 8 foot grounding rod. If
> > lightning hits it should follow the 0/4 gauge wire to the ground.
> >
> > Once the coax connects to the SW radio inside, I have a 14 gauge
> > stranded wire running from the GND (ground) on the back of my
> radio
> > back outside and to a different grounded rod made from some old
> > copper pipe I pounded a few feet into the ground.
> >
> > I only use my loop for reception and not for transmitting. Right
> now
> > the atmosphere is terrible for reception because of the solar
> > activity, so now is a good time to spend some time planning and
> not
> > get in a hurry to get something up, and cut corners.
> >
> > Good luck..
> >
> >
> >
> > --- In SkyWires@yahoogroups.com, "desmoface" <desmoface@a...>
> wrote:
> > > Hey kids...Just contemplating my skyloop installation...Has
> anyone
> > > grounded their skyloop? Here's my thought; at the termination
> of
> > the
> > > wire, near the feedpoint, running a wire from the shielded part
> of
> > > the coax to a grounding rod.. Any thoughts on how this would
> affect
> > > operation?? How bout if I added some full or 1/2 wave radials
to
> > help
> > > minimize ground losses as my setup is going to be fairly low to
> the
> > > ground, especially near the feedpoint of the antenna??
> > >
> > > Thanks in advance for any advice?
> > >
> > > Steve
> > > kb8viv

139. Re: RF Systems indoor antennas

Yahoo group: SkyWires
Date: 2003-11-03 21:19:18 UTC
From: kl7r
Topic: 117 Message: 139

I did that - It worked. Pretty noisy though.
I should compare it to my loop... Project for tonight.

I Attached a piece of #12 stranded to a couple of
the sheet metal screws on the roof and then ran
another length of wire to the furnace cold water pipe
to work the roof against...

Try it! who knows.

Some guys wrap their house in a loop of wire and feed it with
twinlead and a tuner.- I dont think that would work with a metal
roof though.

--- In SkyWires@yahoogroups.com, Bill Krause <bkrause@s...> wrote:
> I am going to use the Mini Windom primarily when I traval. For
instance
> in two weeks I am going to spend 4 days on the Oregon Coast. You
bring
> up an interesting point about creative antennas. What would the
effect
> be if I hooked some coax to my large metal roof??
>
> Bill Krause

140. matching the loop to 50 ohm coax

Yahoo group: SkyWires
Date: 2003-11-05 21:41:41 UTC
From: desmoface
Topic: 140 Message: 140

Hey kids, so the impedance of the loop at its resonant frequency is around 100 ohms, right? If I'm just feeding it with 50 ohm coax, should I use a 1/4 wavelength section of 75 ohm coax between my 50 ohm coax and the feedpoint of the loop? I'll be using a tuner so that I can use the loop on all the bands between 10 and 80 meters so will it really matter?? Thanks in advance..

Steve
kb8viv

141. Re: Matching the Loop to 50 Ohm Coax

Yahoo group: SkyWires
Date: 2003-11-06 02:12:20 UTC
From: R H F
Topic: 140 Message: 141

Steve,

This SkYwire Loop Antenna is going to be used for Transmission and Receiving both - Right ?

Isn't it possible to make a direct connection of the 50 Ohms Coax and then a making a several 3-4 Foot Coils of the Coax to act as an impedance match.

~ RHF
.
.
= = = In SkyWires@yahoogroups.com,
= = = "desmoface" <desmoface@a...> wrote:
> Hey kids, so the impedance of the loop at its resonant frequency is
> around 100 ohms, right? If I'm just feeding it with 50 ohm coax,
> should I use a 1/4 wavelength section of 75 ohm coax between my 50
> ohm coax and the feedpoint of the loop? I'll be using a tuner so
> that I can use the loop on all the bands between 10 and 80 meters so
> will it really matter?? Thanks in advance..
>
> Steve
> kb8viv

142. Re: [SkyWires] Re: Matching the Loop to 50 Ohm Coax

Yahoo group: SkyWires
Date: 2003-11-06 03:56:36 UTC
From: desmoface@aol.com
Topic: 142 Message: 142

In a message dated 11/5/2003 9:19:15 PM Eastern Standard Time,
rhf-mail@... writes:

> Steve,
>
> This SkYwire Loop Antenna is going to be used for Transmission and
> Receiving both - Right ?
>
> Isn't it possible to make a direct connection of the 50 Ohms Coax
> and then a making a several 3-4 Foot Coils of the Coax to act as an
> impedance match.
>
>
> ~ RHF
>

Hi RHF. It's going to be used for transmitting and receiving on the amateur bands. Well, I think the looped coax will kind of act like a 1:1 balun choking off any stray rf, at least thats what I'm thinking. This worked very well with a triband yagi I had up a few years ago.

I think I'm just going to feed it with 50 ohm coax..My rig is capable of tuning up to a 3:1 match. I'm thinking at the resonant frequency that the antenna was designed for (aprox 3750) I should see between a 2:1 and 3:1 match (approx 100 ohms)..should be no problem for my rig..if it is I can always tweak it with me outboard antenna tuner..I'd need the tuner anyway (probably) for the other bands I plan to work.

Oh well, should be able to complete the project this weekend, gonna be fun trying to measure out 300 ft of 13 gauge 19 strand copper clad steel wire (I'm a one man show) in 30 degree weather LOL..this stuff is tuff to work with - I can't imagine using solid copperweld for something like this.

Oh well...Maybe after I get it on up we can schedule a group meeting on the air?? Would be interesting and I'd be able to get some signal reports and compare the loop to my butternut verticle..Thanks again, RHF..

Steve
kb8viv

143. Re: [SkyWires] matching the loop to 50 ohm coax

Yahoo group: SkyWires
Date: 2003-11-06 14:33:05 UTC
From: Scott Erwin
Topic: 140 Message: 143

You can do it if you like. It will not effect
operation on the other bands and you will have an
almost perfect match on 80 meters at the frequency the
loop was cut for. It wont improve the performance that
you will be able to tell it's installed.
--- desmoface <desmoface@...> wrote:
> Hey kids, so the impedance of the loop at its
> resonant frequency is
> around 100 ohms, right? If I'm just feeding it with
> 50 ohm coax,
> should I use a 1/4 wavelength section of 75 ohm coax
> between my 50
> ohm coax and the feedpoint of the loop? I'll be
> using a tuner so
> that I can use the loop on all the bands between 10
> and 80 meters so
> will it really matter?? Thanks in advance..
>
> Steve
> kb8viv
>
>

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144. Re: [SkyWires] Re: Matching the Loop to 50 Ohm Coax

Yahoo group: SkyWires
Date: 2003-11-06 14:35:24 UTC
From: Scott Erwin
Topic: 140 Message: 144

NO all the coils will do is choke off RF running down
the outside of the shield of the coax.
--- R H F <rhf-mail@...> wrote:
> Steve,
>
> This SkYwire Loop Antenna is going to be used for
> Transmission and
> Receiving both - Right ?
>
> Isn't it possible to make a direct connection of the
> 50 Ohms Coax
> and then a making a several 3-4 Foot Coils of the
> Coax to act as an
> impedance match.
>
>
> ~ RHF
> .
> .
> = = = In SkyWires@yahoogroups.com,
> = = = "desmoface" <desmoface@a...> wrote:
> > Hey kids, so the impedance of the loop at its
> resonant frequency
> is
> > around 100 ohms, right? If I'm just feeding it
> with 50 ohm coax,
> > should I use a 1/4 wavelength section of 75 ohm
> coax between my 50
> > ohm coax and the feedpoint of the loop? I'll be
> using a tuner so
> > that I can use the loop on all the bands between
> 10 and 80 meters
> so
> > will it really matter?? Thanks in advance..
> >
> > Steve
> > kb8viv
>
>

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145. Re: matching the loop to 50 ohm coax

Yahoo group: SkyWires
Date: 2003-11-06 23:00:29 UTC
From: kl7r
Topic: 140 Message: 145

Go to Radio Shack and get the black TV twinlead.
(Any 300 ohm twinlead will work at 100 watts out. The
black stuff has held up pretty well for me and has fairly
large conductors as compared to the cheaper stuff)

Twinlead or ladderline will have MUCH less resistive
losses under high SWR conditions than 50 or 75 ohm coax.
IE. More of your power will reach the antenna instead
of being burned up as heat in the coax.

This assumes you are using an antenna tuner.

It is cheap too. In Alaska it costs about $12 for 100 feet.

To answer your question though:

The ARRL Antenna book used to have an antenna called the
"Novi Loop" which used a quarter wave section of 75 ohm
coax to impedance match the 50 ohm coax from your rig to
the 100 impedance of the loop. This was a 40 meter antenna.
You would have to change the length of the matching section if you
were to operate on other bands.

Since you will be operating the skywire on its fundamental
and on higher frequencies, the matching section makes less sense.

Since you might be operating the skywire on non harmonic frequencies,
you may likely see high swr conditions which the tuner will fix as
seen by your transmitter but which will still exist on the feedline.

If you look at http://www.arrl.org/tis/info/pdf/9706057.pdf it has
a write up on transmission lines. Pay attention to the part where
at 28 mhz using rg58 coax and a 6:1 SWR ratio you are loosing 66% of
your transmit power as heat in the coax where using 450 ohm ladderline
you would be loosing only 9% of your power.

Depending on how long your feedline is, and your SWR you could loose
a half to a full S-Unit transmit power as heat in the feedline.

--- In SkyWires@yahoogroups.com, "desmoface" <desmoface@a...> wrote:
> Hey kids, so the impedance of the loop at its resonant frequency is
> around 100 ohms, right? If I'm just feeding it with 50 ohm coax,
> should I use a 1/4 wavelength section of 75 ohm coax between my 50
> ohm coax and the feedpoint of the loop? I'll be using a tuner so
> that I can use the loop on all the bands between 10 and 80 meters
so
> will it really matter?? Thanks in advance..

>
> Steve
> kb8viv

146. Re: Matching the Loop to 50 Ohm Coax

Yahoo group: SkyWires
Date: 2003-11-09 01:07:03 UTC
From: R H F
Topic: 140 Message: 146

KL7R,

Could using 1/4WL 'section' of 300 Ohm Twin Lead or 450 Ohm Ladder Line allow the use of a 1/4WL 'section' of 50 Ohm Coax Cable to the Transceiver; and provide a 'better' "Match" over ALL the Bands from 80M to 10M ? ? ?

(Coil up the extra Coax if to long.)

80 Meters = 262.5 Feet Full Wave Length

Quarter Wave Length = 65.6 Feet

-OR- Would a Balun be require between the Twin Lead/Ladder Line and the Coax Cable ?

iwtk ~ RHF
.
.
= = = In SkyWires@yahoogroups.com,
= = = "kl7r" <kl7r@y...> wrote:
> Go to Radio Shack and get the black TV twinlead.
> (Any 300 ohm twinlead will work at 100 watts out. The
> black stuff has held up pretty well for me and has fairly
> large conductors as compared to the cheaper stuff)
>
> Twinlead or ladderline will have MUCH less resistive
> losses under high SWR conditions than 50 or 75 ohm coax.
> IE. More of your power will reach the antenna instead
> of being burned up as heat in the coax.
>
> This assumes you are using an antenna tuner.
>
> It is cheap too. In Alaska it costs about $12 for 100 feet.
>
>
>
> To answer your question though:
>
> The ARRL Antenna book used to have an antenna called the
> "Novi Loop" which used a quarter wave section of 75 ohm
> coax to impedance match the 50 ohm coax from your rig to
> the 100 impedance of the loop. This was a 40 meter antenna.
> You would have to change the length of the matching section if you
> were to operate on other bands.
>

> Since you will be operating the skywire on its fundamental
> and on higher frequencies, the matching section makes less sense.
>
> Since you might be operating the skywire on non harmonic
frequencies,
> you may likely see high swr conditions which the tuner will fix as
> seen by your transmitter but which will still exist on the
feedline.
>
> If you look at http://www.arrl.org/tis/info/pdf/9706057.pdf it has
> a write up on transmission lines. Pay attention to the part where
> at 28 mhz using rg58 coax and a 6:1 SWR ratio you are loosing 66%
of
> your transmit power as heat in the coax where using 450 ohm
ladderline
> you would be loosing only 9% of your power.
>
> Depending on how long your feedline is, and your SWR you could
loose
> a half to a full S-Unit transmit power as heat in the feedline.
>
>
>
> --- In SkyWires@yahoogroups.com, "desmoface" <desmoface@a...>
wrote:
> > Hey kids, so the impedance of the loop at its resonant frequency
is
> > around 100 ohms, right? If I'm just feeding it with 50 ohm
coax,
> > should I use a 1/4 wavelength section of 75 ohm coax between my
50
> > ohm coax and the feedpoint of the loop? I'll be using a tuner
so
> > that I can use the loop on all the bands between 10 and 80
meters
> so
> > will it really matter?? Thanks in advance..
> >
> > Steve
> > kb8viv

147. Re: Matching the Loop to 50 Ohm Coax

Yahoo group: SkyWires
Date: 2003-11-10 23:04:55 UTC
From: kl7r
Topic: 140 Message: 147

--- In SkyWires@yahoogroups.com, "R H F" <rhf-mail@u...> wrote:
> KL7R,
>
> Could using 1/4WL 'section' of 300 Ohm Twin Lead or 450 Ohm Ladder
> Line allow the use of a 1/4WL 'section' of 50 Ohm Coax Cable to the
> Transceiver; and provide a 'better' "Match" over ALL the Bands from
> 80M to 10M ? ? ?
>
> (Coil up the extra Coax if to long.)
>
> 80 Meters = 262.5 Feet Full Wave Length
>
> Quarter Wave Length = 65.6 Feet
>
> -OR- Would a Balun be require between the Twin Lead/Ladder Line and
> the Coax Cable ?
>

The problem is that a 1/4 WL section is different lengths
on different bands... If it is 65 feet on 80 meters
it would be only 32.5 feet on 40 and so on.

If you have a tuner, It should have a 4 to 1 balun on the
back of it. This should make it easier for the tuner
to load up the higher impedance balanced loop.

If your tuner doesnt have a 4:1 balun on it then it
might be a good idea to get a 4:1 balun to stick on
the output of your tuner to drive the twinlead.
(you could run enough coax to get outside of your
house to the balun then run twinlead from there.)

I just remembered an important detail... In general,
If you are building a multiband antenna you dont want to
have a feedline that is a multiple of a quarterwave long.
This is because a quarterwavelength or half wavelength
of feedline will invert (quarter wave) or repeat (half wave)
the impedance seen at the antenna.

If you take this to the limit, imagine the antenna is acting
like a very low impedance load (a short) then a quarter wave
length feedline will make it act like an open circuit at the
tuner. Likewise for a high impedance antenna will act like
a short at the end of the quarterwave matching section. Shorts
and opens are hard to tune up... Something inbetween is relatively
easy to load up. That is why the rule of thumb. If you

are going build a multiband antenna, you try to aim for non-resonant feedline lengths.

The Arrl Antenna book has a chart in it which gives non-resonant lengths. I chose 55 feet. Others choose other lengths.

Try it. If you have a band which is really hard to tune up, try adding or removing a few feet of the ladder line.

148. We have Loopage

Yahoo group: SkyWires
Date: 2003-11-12 05:02:39 UTC
From: desmoface
Topic: 148 Message: 148

Hey kids, it's finally on the air..My electrician ran my coax and the loop is up and running..She's cut for 75/80 and I originally came up with about 260 ft of wire but I must have measured wrong cause she show's the lowest swr of ~1.7 to 1 at around 3650..my calculations showed it should have been around 3850...Oh well, maybe its because it's not really as high as it should be??..

Anyway, I'm just running straight coax with no balun (except for several loops of coax at the feed point) so I'm pleased so far with the swr readings..As a plus, my old kenwood ts450sat tunes her up on most of the bands without the use of my outboard tuner..although I will use the outboard tuner to get it close...

Anyway, she plays nice on 80..signals that were barely readable on my butternut vertical were 20 over on the loop..but that was to be expected I guess? Suprisingly, the vertical seems to work a little better on 40..I say "seems" because the static noise was a little higher on the vertical and the qso I had with a friend about 10 miles away confirmed that the vertical was a few s units stronger..he was running a dipole so I would have thought that the loop would have been stronger as its also horizonitaly polarized..

Anyway, same with the upper hf bands(10-20)..seems to be a little more noise in the recieve with the vertical..but the bands were in pretty bad shape so It could be that the loop is just that much quieter than the vertical..time will tell..

We should all have a schedule on 80 and hook up for some ragchewing sometime...Im up for it if anyone else is..?? I'd like to thank the group again for all the advice during the construction phase of me bloody loop..YEEHAW & 73's to all..

Steve
kb8viv

149. SkyWires turns 100!!!

Yahoo group: SkyWires
Date: 2003-11-13 03:49:20 UTC
From: exemptfromlife
Topic: 149 Message: 149

Hi,

I'm happy to see that we now have over 100 members in the Skywires group.

I'd like to thank everyone who has joined and hope the great posts and questions as well as answers keep this site a fun place to be.

150. Re: We have Loopage

Yahoo group: SkyWires
Date: 2003-11-19 18:23:57 UTC
From: kl7r
Topic: 148 Message: 150

I saw the same thing that you did about resonant frequency
with the loop being close to the ground. If I recall right
my loop had resonances at something like:

3.3, 6.9, 14.1, 22, 29 mhz.

I tuned my loop to be resonant in the CW section of 20 meters
and use my tuner to tune it on the other bands.

Have Fun with your new antenna. Lets hope the bands get better
soon.

--- In SkyWires@yahoogroups.com, "desmoface" <desmoface@a...> wrote:
> Hey kids, it's finally on the air..My electrician ran my coax and
the
> loop is up and running..She's cut for 75/80 and I originally came
up
> with about 260 ft of wire but I must have measured wrong cause she
> show's the lowest swr of ~1.7 to 1 at around 3650..my calculations
> showed it should have been around 3850...Oh well, maybe its because
> it's not really as high as it should be??..
>
> Anyway, I'm just running straight coax with no balun (except for
> several loops of coax at the feed point) so I'm pleased so far with
> the swr readings..As a plus, my old kenwood ts450sat tunes her up
on
> most of the bands without the use of my outboard tuner..although I
> will use the outboard tuner to get it close...
>
> Anyway, she plays nice on 80..signals that were barely readable on
my
> butternut vertical were 20 over on the loop..but that was to be
> expected I guess? Suprisingly, the vertical seems to work a little
> better on 40..I say "seems" because the static noise was a little
> higher on the vertical and the qso I had with a friend about 10
miles
> away confirmed that the vertical was a few s units stronger..he was
> running a dipole so I would have thought that the loop would have
> been stronger as its also horizonitaly polarized..
>
> Anyway, same with the upper hf bands(10-20)..seems to be a little
> more noise in the recieve with the vertical..but the bands were in
> pretty bad shape so It could be that the loop is just that much
> quieter than the vertical..time will tell..
>
> We should all have a schedule on 80 and hook up for some ragchewing

> sometime...Im up for it if anyone else is..?? I'd like to thank
the
> group again for all the advice during the construction phase of me
> bloody loop..YEEHAW & 73's to all..
>
> Steve
> kb8viv

151. Loop Skywire- 3 sided vs. 4

Yahoo group: SkyWires
Date: 2003-11-20 20:43:22 UTC
From: yak458
Topic: 151 Message: 151

What are the real world differences between making a horizontal loop in a 3 sided configuration vs. a 4? On my house lot a delta (3) will be very easy, a 4 sided loop very difficult. 2 story house, very large trees ~ 120 feet away across the back boundry of the lot. I have no problems with the construction, I'm just wondering how a horizontal delta will perform.

Do the feedline requirements change? I have an unbalanced tuner, will feed with 50 or 75 ohm coax, transmitter is one-hundred watts.

Thanks much in advance.

AB9HS

152. Re: [SkyWires] Loop Skywire- 3 sided vs. 4

Yahoo group: SkyWires
Date: 2003-11-20 22:57:54 UTC
From: desmoface@aol.com
Topic: 151 Message: 152

In a message dated 11/20/2003 3:46:10 PM Eastern Standard Time,
m.j.r@... writes:

> What are the real world differences between making a horizontal loop
> in a 3 sided configuration vs. a 4? On my house lot a delta (3) will
> be very easy, a 4 sided loop very difficult. 2 story house, very
> large trees ~ 120 feet away across the back boundry of the lot. I
> have no problems with the construction, I'm just wondering how a
> horizontal delta will perform.
>
> Do the feedline requirements change? I have an unbalanced tuner, will
> feed with 50 or 75 ohm coax, transmitter is one-hundred watts.
>
> Thanks much in advance.
>

Should work great, they say the its best to get the most area inside of the
antenna so a circle is best, followed by an octagon followed by a square..but a
delta loop should work great...you can feed it with pretty much anything you
want, but ladder line would have less loss...depending on which band you want
to use, you could feed it with a 1/4 wl 75ohm length of coax (x velocity
factor of the coax) for the frequency your loop is tuned for...but if your using it
for multiband operation it wont matter much...Good luck..

Oh yeah, if you use insulated wire for your loop you have to make it about 5%
shorter. Good luck...

Steve
kb8viv

153. Re: Loop Skywire- 3 sided vs. 4

Yahoo group: SkyWires
Date: 2003-11-21 05:38:52 UTC
From: R H F
Topic: 151 Message: 153

YAK 458,

DELTA SkyWire Configurations: If you feed the "Delta" (3 Sided)
from one of the corners: I would suspect that you would get some
directivity on certain frequencies.

SQUARE SkyWire Configurations: If your feed the "Square" (4 Sided)
from the middle of one of the sides: I would believe that you would
have a general Omni-Directional Antenna on most frequencies.

You would have to use some Antenna Modeling Software to have a
better idea of how these two Configurations would perforn on the
various HAM Bands.

~ RHF
.
.
= = = In SkyWires@yahoogroups.com,
= = = "yak458" <m.j.r@i...> wrote:
> What are the real world differences between making a horizontal
loop
> in a 3 sided configuration vs. a 4? On my house lot a delta (3)
will
> be very easy, a 4 sided loop very difficult. 2 story house, very
> large trees ~ 120 feet away across the back boundry of the lot. I
> have no problems with the construction, I'm just wondering how a
> horizontal delta will perform.
>
> Do the feedline requirements change? I have an unbalanced tuner,
will
> feed with 50 or 75 ohm coax, transmitter is one-hundred watts.
>
> Thanks much in advance.
>
>
> AB9HS

154. Re: [SkyWires] Loop Skywire- 3 sided vs. 4

Yahoo group: SkyWires
Date: 2003-11-21 13:57:48 UTC
From: Scott Erwin
Topic: 151 Message: 154

My 160 meter loop is a delta loop and works fine. It's
got more gain in some directions and less in others. A
quad would not produce the larger gain lobes and so is
more omni directional. If you could use towers to
support the loop and plastic pulleys at the three
corners you could move the wire around and change the
gain lobe direction. A motor drive would allow
"turning" the loop from inside the shack.
--- yak458 <m.j.r@...> wrote:
> What are the real world differences between making a
> horizontal loop
> in a 3 sided configuration vs. a 4? On my house lot
> a delta (3) will
> be very easy, a 4 sided loop very difficult. 2
> story house, very
> large trees ~ 120 feet away across the back boundry
> of the lot. I
> have no problems with the construction, I'm just
> wondering how a
> horizontal delta will perform.
>
> Do the feedline requirements change? I have an
> unbalanced tuner, will
> feed with 50 or 75 ohm coax, transmitter is
> one-hundred watts.
>
> Thanks much in advance.
>
>
> AB9HS
>
>

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155. SkyWire Drawings Add to Photo Section

Yahoo group: SkyWires
Date: 2003-11-21 18:36:16 UTC
From: R H F
Topic: 155 Message: 155

FO&A,

Some SkyWire Loop Antenna "Drawings" have been Add to Photo Section
of this eGroup. [SkyWire Loop Antennas]
GoTo=> http://photos.groups.yahoo.com/group/SkyWires/lst

* Classic CIRCLE Shaped = SkyWire Loop Antenna = Fed with Coax Cable
FeedLine using a Matching Transformer.
= = = 160M = 529Ft -&- 80M = 272Ft -&- 40M = 142Ft

* DIAMOND Shaped = SkyWire Loop Antenna with Corner Fed Coax Cable
FeedLine using a Matching Transformer.

* SQUARE Shaped = SkyWire Loop Antenna with Corner Fed Coax Cable
FeedLine using a Matching Transformer.

* DELTA Shaped = SkyWire Loop Antenna with Corner Fed Coax Cable
FeedLine using a Matching Transformer..

* "SWL" Attic CONICAL Loop Antenna [Receive ONLY]
+ Folded SkyWire for installation in the Attic.
+ Attached to the Under Side of the Roof.
+ Using a 9:1 Matching Transformer
+ Plus Coax Cable FeedLine.
= Approximately 410 Ft = 120 Meter Band
= (40Ft-Long x 25Ft-Wide x 6Ft-High = 410Ft-Loop)

iane ~ RHF

.

.

156. 2 meter

Yahoo group: SkyWires
Date: 2003-11-22 05:35:57 UTC
From: Donnie Barlow
Topic: 156 Message: 156

can anyone tell me how to make a 2 meter antenna out of wire that
will hold up to 6o watts

157. Re: [SkyWires] 2 meter

Yahoo group: SkyWires
Date: 2003-11-22 20:59:30 UTC
From: John Thomas
Topic: 156 Message: 157

Donnie, if your looking for a ground plane it's real simple. You need a SO-239, 1 piece of coat hanger roughly 19-20" in length, according to where you want to center on the band.
4 pieces of coat hanger approx 5% shorter, for radials.
P.S. if you can find some copper clad for the driven, It soilders better.
I hope that helps.
73'
John C.
KC5JSR

Donnie Barlow <sky_walker_975@...> wrote:
can anyone tell me how to make a 2 meter antenna out of wire that
will hold up to 6o watts

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SkyWires-unsubscribe@yahoogroups.com

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158. Newbie!

Yahoo group: SkyWires
Date: 2003-11-24 03:32:46 UTC
From: Hal
Topic: 158 Message: 158

Hello to all on the list. I'm new to this list have been reading alot of the posts trying to learn all I can about loops. I'm thinking about building one for 80 meters. and I have a question about feeding it with coax or 450 ohm ladder line. which is better if I want to use it on all bands? At my last QTH I had a dipole fed with 450 ohm line and a tuner and I could use it on all bands but I can't really find any info on loops on which is better.

Hal

159. Re: [SkyWires] Newbie!

Yahoo group: SkyWires
Date: 2003-11-24 04:30:38 UTC
From: desmoface@aol.com
Topic: 158 Message: 159

In a message dated 11/23/2003 10:33:17 PM Eastern Standard Time,
kc0bdw@... writes:

> Hello to all on the list. I'm new to this list have been reading
> alot of the posts trying to learn all I can about loops. I'm
> thinking about building one for 80 meters. and I have a question
> about feeding it with coax or 450 ohm ladder line. which is better
> if I want to use it on all bands? At my last QTH I had a dipole fed
> with 450 ohm line and a tuner and I could use it on all bands but I
> can't really find any info on loops on which is better.
>
> Hal
>

No Question, you'd have lower loss with ladder line vs coax..and if you use
it on other bands (10-80) you will have greater losses as the swr
increases...that said, the arrl antenna compendium says to just run it with coax
(horizontal full wave loop) without a balun or an rf choke..

I'm running straight coax into my recently completed full wave 80 meter
horizontal loop - but I did put a small rf loop at the feedpoint (4-5 loops of
coax) just for the heck of it..it works great but I'm only running a kenwood ts
450 barefoot with about 100 watts out...If I were to put a kilowat through it -
it would probably heat the coax up a bit because of the higher swr's I'm
seeing on 10-80 meters..

It works great..I was working a guy in the (vp2ebr) in the West Indies
yesterday on 17 meters and he gave me a 5-9 sig report and he, strangely enough, was
also running a full wave horizontal 80 meter loop fed with ladder line..and
he said when he runs the linear , before he switched to ladder line, the coax
would get pretty warm..

Anyway, ladder line is better but coax works fine..good luck.

Steve
kb8viv

P.S. I also worked Italy earlier today on 10 meters on the loop..The loop is
outperforming my butternut vertical on virtually every band..

160. Re: Newbie!

Yahoo group: SkyWires
Date: 2003-11-24 05:14:09 UTC
From: exemptfromlife
Topic: 158 Message: 160

Welcome aboard. There are plenty of people on this site who will tell you that a skywire is much better than a dipole. This is generally true, as long as you have the room to run one. Space is the limiting factor with a Skywire.

--- In SkyWires@yahoogroups.com, "Hal" <kc0bdw@h...> wrote:
> Hello to all on the list. I'm new to this list have been reading
> alot of the posts trying to learn all I can about loops. I'm
> thinking about building one for 80 meters. and I have a question
> about feeding it with coax or 450 ohm ladder line. which is better
> if I want to use it on all bands? At my last QTH I had a dipole fed
> with 450 ohm line and a tuner and I could use it on all bands but I
> can't really find any info on loops on which is better.
>
> Hal

161. Re: [SkyWires] Newbie!

Yahoo group: SkyWires
Date: 2003-11-25 03:31:09 UTC
From: Scott Erwin
Topic: 158 Message: 161

Both ways are fine. RG-58 is light and cheap and on HF
there is not much loss. If you have tuning problems
just cut a little off and try again. Ladder line is no
loss and does not weight very much. Good for extra
long runs and tunes easy anywhere with a good tuner
and 4 to 1 balun.
--- Hal <kc0bdw@...> wrote:
> Hello to all on the list. I'm new to this list have
> been reading
> alot of the posts trying to learn all I can about
> loops. I'm
> thinking about building one for 80 meters. and I
> have a question
> about feeding it with coax or 450 ohm ladder line.
> which is better
> if I want to use it on all bands? At my last QTH I
> had a dipole fed
> with 450 ohm line and a tuner and I could use it on
> all bands but I
> can't really find any info on loops on which is
> better.
>
> Hal
>
>

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162. Re: 2 meter

Yahoo group: SkyWires
Date: 2003-11-25 15:51:31 UTC
From: R H F
Topic: 156 Message: 162

DB,

While it is not wire; you may wish to consider buying a
Refrigerator "Ice Maker" Plumbing Kit available a Home Depot,
Lowes, ACE, etc. In side this Kit is Fifteen 15 Feet of Copper
Tubing that is Flexible but Ridged when formed. This Cooper Tubing
should easily handle 60 Watts of Power in a properly designed and
constructed 2-Meter Antenna.

Here is a Page-O-Links for Two(2) Meter Antennas:
http://members.fortunecity.com/xe1bef/2meters-antenna.htm

Horizontal Loop
http://hamgate1.sunyerie.edu/races/antenna/2m_halo.gif

iane ~ RHF
.
.
= = = In SkyWires@yahoogroups.com,
= = = "Donnie Barlow" <sky_walker_975@y...> wrote:
>
> can anyone tell me how to make a 2 meter antenna
> out of wire that will hold up to 6o watts
>

.

163. Re: [SkyWires] Re: 2 meter

Yahoo group: SkyWires
Date: 2003-11-25 17:42:22 UTC
From: Dr.Ace Ratliff
Topic: 156 Message: 163

>= = = In SkyWires@yahoogroups.com,
>= = = "Donnie Barlow" <sky_walker_975@y...> wrote:
>>
>>can anyone tell me how to make a 2 meter antenna
>>out of wire that will hold up to 6o watts
>>
>
>..

Check out one of my antenna pages at

http://www.bloomington.in.us/~wh2t/Jpole.htm

73, Ace - WH2T.com

164. Re: 2 meter

Yahoo group: SkyWires
Date: 2003-11-26 04:08:52 UTC
From: exemptfromlife
Topic: 156 Message: 164

Cool website!

BTW, do you know Mr. Mellencamp?

--- In SkyWires@yahoogroups.com, "Dr.Ace Ratliff" <wh2t@b...> wrote:
>
> >= = = In SkyWires@yahoogroups.com,
> >= = = "Donnie Barlow" <sky_walker_975@y...> wrote:
> >>
> >>can anyone tell me how to make a 2 meter antenna
> >>out of wire that will hold up to 6o watts
> >>
> >
> >..
>
> Check out one of my antenna pages at
>
> http://www.bloomington.in.us/~wh2t/Jpole.htm
>
> 73, Ace - WH2T.com

165. Re: [SkyWires] Re: 2 meter

Yahoo group: SkyWires
Date: 2003-11-26 07:23:59 UTC
From: Dr.Ace Ratliff
Topic: 156 Message: 165

On Wed, 26 Nov 2003 04:08:52 -0000, exemptfromlife wrote:
>Cool website!
>
>BTW, do you know Mr. Mellencamp?
>
>--- In SkyWires@yahoogroups.com, "Dr.Ace Ratliff" <wh2t@b...> wrote:
>>
>>>= = In SkyWires@...m,
>>>= = "Donnie Barlow" <sky_walker_975@y...> wrote:
>>>>
>>>>can anyone tell me how to make a 2 meter antenna
>>>>out of wire that will hold up to 6o watts
>>>>
>>>
>>>..
>>
>>Check out one of my antenna pages at
>>
>>http://www.bloomington.in.us/~wh2t/Jpole.htm
>>
>>73, Ace - WH2T.com
>
>
No ,
I don't personally know him .
Ace - www.WH2T.com

166. Re: 2 meter

Yahoo group: SkyWires
Date: 2003-11-27 17:07:32 UTC
From: exemptfromlife
Topic: 156 Message: 166

I drove through bloomington this past summer on my way to do some
gold prospecting on Ganes Creek. (another one of my hobbies.)

--- In SkyWires@yahoogroups.com, "Dr.Ace Ratliff" <wh2t@b...> wrote:
> On Wed, 26 Nov 2003 04:08:52 -0000, exemptfromlife wrote:
> >Cool website!
> >
> >BTW, do you know Mr. Mellencamp?
> >
> >--- In SkyWires@yahoogroups.com, "Dr.Ace Ratliff" <wh2t@b...>
wrote:
> >>
> >>>= = In SkyWires@yahoogroups.com,
> >>>= = "Donnie Barlow" <sky_walker_975@y...> wrote:
> >>>>
> >>>>can anyone tell me how to make a 2 meter antenna
> >>>>out of wire that will hold up to 6o watts
> >>>>
> >>>
> >>..
> >>
> >>Check out one of my antenna pages at
> >>
> >>http://www.bloomington.in.us/~wh2t/Jpole.htm
> >>
> >>73, Ace - WH2T.com
> >
> >
> No ,
> I don't personally know him .
> Ace - www.WH2T.com

167. Re: [SkyWires] Re: 2 meter

Yahoo group: SkyWires
Date: 2003-11-27 17:45:28 UTC
From: Dr.Ace Ratliff
Topic: 156 Message: 167

On Thu, 27 Nov 2003 17:07:32 -0000, exemptfromlife wrote:
>I drove through bloomington this past summer on my way to do some
>gold prospecting on Ganes Creek. (another one of my hobbies.)
>
>
>
>--- In SkyWires@...m, "Dr.Ace Ratliff" <wh2t@b...> wrote:
>>On Wed, 26 Nov 2003 04:08:52 -0000, exemptfromlife wrote:
>>>Cool website!
>>>
>>>BTW, do you know Mr. Mellencamp?
>>>
>>>--- In SkyWires@yahoogroups.com, "Dr.Ace Ratliff" <wh2t@b...>
>wrote:
>>>>
>>>>= = In SkyWires@yahoogroups.com,
>>>>= = "Donnie Barlow" <sky_walker_975@y...> wrote:
>>>>>
>>>>>can anyone tell me how to make a 2 meter antenna
>>>>>out of wire that will hold up to 6o watts
>>>>>
>>>>
>>>>..
>>>>
>>>>Check out one of my antenna pages at
>>>>
>>>>http://www.bloomington.in.us/~wh2t/Jpole.htm
>>>>
>>>>73, Ace - WH2T.com
>>>
>>>
>>No ,
>>I don't personally know him .
>>Ace - www.WH2T.com
>
>
>
How much gold did you find ? And where is Ganes Creek ?
Ace - www.WH2T.com

168. Re: 2 meter

Yahoo group: SkyWires
Date: 2003-11-27 19:29:33 UTC
From: exemptfromlife
Topic: 156 Message: 168

Hi,

I'm sorry it was Salt creek near Gatesville Indiana.

here is a map.

http://www.mapquest.com/maps/map.adp?
country=US&address=&city=gatesville&state=in&zipcode=&homesubmit.x=16&
homesubmit.y=8

here is the indiana gold prospectors website.

http://www.geocities.com/indianagold/

I only found a few flecks of gold. no real value, but its a lot of
fun. You can prospect for gold during the day and star gaze at night.

Sorry to be way off topic guys...

--- In SkyWires@yahoogroups.com, "Dr.Ace Ratliff" <wh2t@b...> wrote:
> On Thu, 27 Nov 2003 17:07:32 -0000, exemptfromlife wrote:
> >I drove through bloomington this past summer on my way to do some
> >gold prospecting on Ganes Creek. (another one of my hobbies.)
> >
> >
> >
> >--- In SkyWires@yahoogroups.com, "Dr.Ace Ratliff" <wh2t@b...>
wrote:
> >>On Wed, 26 Nov 2003 04:08:52 -0000, exemptfromlife wrote:
> >>>Cool website!
> >>>
> >>>BTW, do you know Mr. Mellencamp?
> >>>
> >>>--- In SkyWires@yahoogroups.com, "Dr.Ace Ratliff" <wh2t@b...>
> >wrote:
> >>>>
> >>>>= = In SkyWires@yahoogroups.com,
> >>>>= = "Donnie Barlow" <sky_walker_975@y...> wrote:
> >>>>>
> >>>>>can anyone tell me how to make a 2 meter antenna
> >>>>>out of wire that will hold up to 6o watts
> >>>>>
> >>>>>
> >>>>..
> >>>>
> >>>>Check out one of my antenna pages at
> >>>>

> >>>>http://www.bloomington.in.us/~wh2t/Jpole.htm
> >>>>
> >>>>73, Ace - WH2T.com
> >>>
> >>>
> >>No ,
> >>I don't personally know him .
> >>Ace - www.WH2T.com
> >
> >
> >
> How much gold did you find ? And where is Ganes Creek ?
> Ace - www.WH2T.com

169. I just installed SETI@home on my computer.

Yahoo group: SkyWires
Date: 2003-11-29 19:43:48 UTC
From: exemptfromlife
Topic: 169 Message: 169

In a nutshell, I've installed a piece of software on my computer
that
acts like a screensaver, and only activates when the computer is not
in use. It grabs data from a radio telescope and chews on it looking
for radio signals from outer space. The results of the data analysis
are then sent back to UC Berkley for further analysis if necessary.

If my computer helps find ET, then I will be named as one of the co-
discoverers, if not, then I have a much more interesting screensaver
running than a bunch of warp-speed stars flying by.

Here is the link to a more detailed explanation if anybody is
interested.

http://setiathome.ssl.berkeley.edu/about_seti/about_seti_at_home_1.htm
l

thanks.

170. Xtra long loop

Yahoo group: SkyWires
Date: 2003-11-30 02:20:10 UTC
From: Hulen Smith
Topic: 170 Message: 170
Attachments: 1 described; binary payloads are missing from this source WARC

Hello to the group,
Been reading the mail here with some interest for a few weeks now. I've decided to throw out to the group my property dimensions. What I have available is about 800' by 200', obviously not square. In the interest of putting up as much wire as I can in order to have mulitple wavelengths, I would need to use all the footage. What is the consensus of what the signal would look like. Seems to me it would favor the long sides as would a dipole but I'm not sure due to the numerous wavelengths. I'm operating a skywire now using a fullwave loop at 7.150 mhz. I want to operate 160m. Would the extra length be worth the effort ? If I can get a couple more db as opposed to a single wavelength then my answer would be yes. But then I'm not sure what I'll get, however it's fun to read about and worth experimenting with. That's the part that makes ham radio a hobby for me. It isn't so much the PTT circuit. :))
Any opinons ?
Thanks for any input
Hulen Smith
WB5UOI

171. Re: 2 meter

Yahoo group: SkyWires
Date: 2003-11-30 03:09:29 UTC
From: kl7r
Topic: 156 Message: 171

> >>http://www.bloomington.in.us/~wh2t/Jpole.htm
> >>
> >>73, Ace - WH2T.com

Do you know how to make a dual band 2m/440 twinlead jpole?
Seems like it could be done. Arrow antennas makes a dual
band jpole type antenna using arrow shafts. I bet with a
third wire 6 inches long you could make a 144/440 dualband
jpole.

172. Re: Xtra long loop

Yahoo group: SkyWires
Date: 2003-11-30 03:17:08 UTC
From: kl7r
Topic: 170 Message: 172

Wanna have some fun?

Download an an antenna analysis program and try it out:

I use MMANA http://www.qsl.net/mmhamsoft/mmana/index.htm

There are examples in there for big delta loops for 160 meters

You could experiment with the shape of the loop on your lot
it could be a rectangle with corners at each corner of your lot
or it could be in the shape of a diamond (rhombic) with corners
in the center of the sides of your lot or maybe you will find
some other shape that works in a direction that you want
to favor.

What direction is the long side of your lot alligned with?

The loop will tend to have more gain along the longer wires
like a ling wire. With the shape you have I bet a rhombic
shape would be the most gain on the high bands.

--- In SkyWires@yahoogroups.com, "Hulen Smith" <clay1952@c...> wrote:
>
>
> Hello to the group,
> Been reading the mail here with some interest for a few weeks now.
I've
> decided to throw out to the group my property dimensions. What I
have
> available is about 800' by 200', obviously not square. In the
interest of
> putting up as much wire as I can in order to have mulitple
wavelengths, I
> would need to use all the footage. What is the consensus of what
the signal
> would look like. Seems to me it would favor the long sides as
would a dipole
> but I'm not sure due to the numerous wavelengths. I'm operating a
skywire
> now using a fullwave loop at 7.150 mhz. I want to operate 160m.
Would the
> extra length be worth the effort ? If I can get a couple more db
as opposed
> to a single wavelength then my answer would be yes. But then I'm
not sure
> what I'll get, however it's fun to read about and worth
experimenting with.

> That's the part that makes ham radio a hobby for me. It isn't so
much the
> PTT circuit. :))
> Any opinons ?
> Thanks for any input
> Hulen Smith
> WB5UOI

173. Re: Xtra long loop

Yahoo group: SkyWires
Date: 2003-11-30 05:00:44 UTC
From: kl7r
Topic: 170 Message: 173

I went ahead and made a couple of MMANA files for your
800x200 foot lot.

Check out:
http://groups.yahoo.com/group/SkyWires/files/kl7r/

Load them up in the MMANA antenna modelling software
and experiment

I found out that the rectangular loop worked best if
fed in the center of the shorter side. If you feed
it in one of the corners the gain goes down a bit and
the patter becomes more omnidirectional.

I found out that the rhombic shape has a bunch more gain.
Something like 12dBi on 160 and has good low angle radiation
on the rest.

If you put it up, I bet you will be heard...

174. Off-Center Fed SkyWire Antenna ?

Yahoo group: SkyWires
Date: 2003-11-30 13:12:08 UTC
From: R H F
Topic: 174 Message: 174

FO&A,

What would be the Advantages of Disadvantages of a
SkyWire Loop Antenna that is a Non-Center-Side Fed
or a Non-Conner Fed; but is FED "Off-Center" on one
of the Sides ? ? ?

A "One Wave Length" SkyWire Loop Antenna of 529 Feet:
(Layed Out in an Isosceles Trapezoid Shape)

* FED End Length = 106 Feet

* * Feed Point 35 Feet from the Corner
= = = 1/4 WL = 40M
= = = 1/2 WL = 20M
= = = 1 WL = 10M

* * Feed Point 71 Feet from the other Corner
= = = 1/2 WL = 40M
= = = 1 WL = 20M

* Length of Sides = 145 Feet Each

* Far End Length = 132 Feet
= = = 1/4 WL @ 160M

? ? ? HOW DOES THIS SHAPE AND SIZE MODEL OUT ? ? ?

~ RHF

.

.

175. Re: [SkyWires] Re: Xtra long loop

Yahoo group: SkyWires
Date: 2003-11-30 14:31:17 UTC
From: Scott Erwin
Topic: 170 Message: 175

I run a full size 160 meter loop skywire and it works
great! I am planing on putting up a three times 160
meter loop, thats 1,590 feet of wire and feed it with
450 ohm ladder line. It should be intersting to see
how well it does.
--- kl7r <kl7r@...> wrote:
> I went ahead and made a couple of MMANA files for
> your
> 800x200 foot lot.
>
> Check out:
> http://groups.yahoo.com/group/SkyWires/files/kl7r/
>
> Load them up in the MMANA antenna modelling software
> and experiment
>
> I found out that the rectangular loop worked best if
>
> fed in the center of the shorter side. If you feed
> it in one of the corners the gain goes down a bit
> and
> the patter becomes more omnidirectional.
>
> I found out that the rhombic shape has a bunch more
> gain.
> Something like 12dBi on 160 and has good low angle
> radiation
> on the rest.
>
> If you put it up, I bet you will be heard...
>
>
>

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176. Re: I just installed SETI@home on my computer.

Yahoo group: SkyWires
Date: 2003-11-30 14:33:08 UTC
From: jdh7521
Topic: 169 Message: 176

--- In SkyWires@yahoogroups.com, "exemptfromlife" <junkmail@a...>
wrote:
> Here is the link to a more detailed explanation if anybody is
> interested.
>
http://setiathome.ssl.berkeley.edu/about_seti/about_seti_at_home_1.ht
ml

I've been on and off SETI for a couple of years now. For a different
angle on it, you can have several people/computers running SETI as a
team to pool efforts. Perhaps a "Skywires" team?

Regards,
-=JD=-

177. Re: [SkyWires] Off-Center Fed SkyWire Antenna ?

Yahoo group: SkyWires
Date: 2003-11-30 14:39:44 UTC
From: Scott Erwin
Topic: 174 Message: 177

The only thing it will effect is where the gain lobes
are on any band above the lowest band it's built for.
If you use plastic pullys at the corners and a rope
attached with an insulator that would allow you to
pull the feed point several feet one way and the other
you can point the gain lobes in the direction your
intrested in for which ever band you want to do that
on. For the loop on it's design band.. say 80 meters
pulling the feed point around will make no diffrence
as the signal is going almost stright up which on 80
meters works fine. On 20 meters and above you get gain
lobes taking off at low levels and pulling the feed
point a few feet eather direction can make a big
diffrence.
--- R H F <rhf-mail@...> wrote:
> FO&A,
>
> What would be the Advantages of Disadvantages of a
> SkyWire Loop Antenna that is a Non-Center-Side Fed
> or a Non-Conner Fed; but is FED "Off-Center" on one
> of the Sides ? ? ?
>
>
> A "One Wave Length" SkyWire Loop Antenna of 529
> Feet:
> (Layed Out in an Isosceles Trapezoid Shape)
>
> * FED End Length = 106 Feet
>
> * * Feed Point 35 Feet from the Corner
> = = = 1/4 WL = 40M
> = = = 1/2 WL = 20M
> = = = 1 WL = 10M
>
> * * Feed Point 71 Feet from the other Corner
> = = = 1/2 WL = 40M
> = = = 1 WL = 20M
>
> * Length of Sides = 145 Feet Each
>
> * Far End Length = 132 Feet
> = = = 1/4 WL @ 160M
>
> ? ? ? HOW DOES THIS SHAPE AND SIZE MODEL OUT ? ? ?
>

>
> ~ RHF
>
> .
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>

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http://companion.yahoo.com/

178. Re: [SkyWires] Xtra long loop

Yahoo group: SkyWires
Date: 2003-11-30 15:42:27 UTC
From: Jim Dunstan
Topic: 170 Message: 178

At 08:20 PM 11/29/03 -0600, you wrote:
>
>
>
>Hello to the group,
>
>Been reading the mail here with some interest for a few weeks now. I've
>decided to throw out to the group my property dimensions. What I have
>available is about 800' by 200', obviously not square. In the interest of
>putting as much wire as I can in order to have mulitple wavelengths, I
>would need to use all the footage. What is the consensus of what the
>signal would look like. Seems to me it would favor the long sides as would
>a dipole but I'm not sure due to the numerous wavelengths. I'm operating a
>skywire now using a fullwave loop at 7.150 mhz. I want to operate 160m.
>Would the extra length be worth the effort ? If I can get a couple more db
>as opposed to a single wavelength then my answer would be yes. But then
>I'm not sure what I'll get, however it's fun to read about and worth
>experimenting with. That's the part that makes ham radio a hobby for me.
>It isn't so much the PTT circuit. :))
>
>Any opinons ?
>
>Thanks for any input
>Hulen Smith
>WB5UOI

HI:

If you have a full wave length loop for 40M up already and you want to try out 160 M. I suggest feeding the whole thing as a vertical antenna against ground. The feed line (coax or open wire line) would be the vertical antenna, the 40 M loop would be a "capacitive hat". You will then have to provide a ground rod minimum with radials as you want to increase efficiency.

When you get this going you will most likely use this arrangement for transmission only and use a magnetic loop antenna for reception.

Jim Dunstan
Thunder Bay, ON

179. Re: I just installed SETI@home on my computer.

Yahoo group: SkyWires
Date: 2003-11-30 17:20:52 UTC
From: exemptfromlife
Topic: 169 Message: 179

At first when I heard about this I thought it sounded kind of cool, then I thought it sounded too "X-fileish", then I decided, Well its possible something else is out there, and within listening distance. Plus I do let my computer run during the day when I'm home, so I figured it was a win/win situation. At worst, I have a really good screensaver now that actually does something.

I just thought that some other people may not be aware that this existed, and it had to do with radio communications (sort of), and anybody reading this has access to a computer.

thanks.

--- In SkyWires@yahoogroups.com, "jdh7521" <jd770@p...> wrote:
> --- In SkyWires@yahoogroups.com, "exemptfromlife" <junkmail@a...>
> wrote:
> > Here is the link to a more detailed explanation if anybody is
> > interested.
> >
>
http://setiathome.ssl.berkeley.edu/about_seti/about_seti_at_home_1.ht
> ml
>
> I've been on and off SETI for a couple of years now. For a
different
> angle on it, you can have several people/computers running SETI as
a
> team to pool efforts. Perhaps a "Skywires" team?
>
> Regards,
> -=JD=-

180. Re: [SkyWires] Re: 2 meter

Yahoo group: SkyWires
Date: 2003-11-30 23:01:46 UTC
From: Dr.Ace Ratliff
Topic: 156 Message: 180

On Sun, 30 Nov 2003 03:09:29 -0000, kl7r wrote:
>dual band 2m/440 twinlead jpole

Hi ,
For an easy to build dual band 2m/440 twinlead jpole antenna try
this web page .

http://www2.arrl.org/tis/info/pdf/9409061.pdf

Good Luck and 73 ,
Ace - www.WH2T.com

181. Re: [SkyWires] Digest Number 52

Yahoo group: SkyWires
Date: 2003-11-30 23:21:45 UTC
From: Hulen Smith
Topic: 181 Message: 181
Attachments: 1 described; binary payloads are missing from this source WARC

KL7R Wrote:
>What direction is the long side of your lot alligned with?
The narrow ends would point east and west with the broad sides north and south. South doesn't help me much as I'm on the Texas Gulf coast but any other direction would be lots of area for me !! :)
>I went ahead and made a couple of MMANA files for your
>800x200 foot lot.
Thanks for the link to the modeling program and the files you created. I hope to have some time this week to play with that some.
Thanks also for your comments. I found them to be very interesting indeed !! :) I've always thought about a rhombic but don't like the idea of one or two band use and directional or bi-directional signal. Besides I think a rhombic would have to be very high in order to be effective, just AWAG. I know that isn't what you were saying though. Your comment was about a loop in the shape of a Rhombic and that's what was interesting.
>I found out that the rectangular loop worked best if
>fed in the center of the shorter side. If you feed
>it in one of the corners the gain goes down a bit and
>the patter becomes more omnidirectional.

>I found out that the rhombic shape has a bunch more gain.
>Something like 12dBi on 160 and has good low angle radiation
>on the rest.

>If you put it up, I bet you will be heard...

I hope I can figure out the program. Thanks again for your efforts KL7R.
Best
WB5UOI

182. Re: [SkyWires] Xtra long loop

Yahoo group: SkyWires
Date: 2003-12-01 06:17:38 UTC
From: Dr.Ace Ratliff
Topic: 170 Message: 182

On Sat, 29 Nov 2003 20:20:10 -0600 (Central Standard Time), Hulen Smith wrote:

>
>
>
>
>Hello to the group,
>
>Been reading the mail here with some interest for a few weeks now.
>I've decided to throw out to the group my property
>dimensions. What I have available is about 800' by 200',
>obviously not square. In the interest of putting up as much
>wire as I can in order to have mulitple wavelengths, I would
>need to use all the footage. What is the consensus of what
>the signal would look like. Seems to me it would favor the long
>sides as would a dipole but I'm not sure due to the numerous
>wavelengths. I'm operating a skywire now using a fullwave
>loop at 7.150 mhz. I want to operate 160m. Would the extra
>length be worth the effort ? If I can get a couple more db as
>opposed to a single wavelength then my answer would be yes.
>But then I'm not sure what I'll get, however it's fun to read about
>and worth experimenting with. That's the part that makes ham radio
>a hobby for me. It isn't so much the PTT circuit. :))
>
>Any opinons ?
>
>Thanks for any input
>Hulen Smith
>WB5UOI
>
> _____

Hello Hulen,
I use a 75 meter Delta Loop and a 1/4 wave inverted L antenna for the 160 meter band .
I like to be able to just flip a switch or switches to change bands .
I don't want to need to unscrew a PL259 and short it to feed the 75 meter loop on 160 .
The inverted L antenna is easy to build and works well .
For more info check out this Web Page .
http://www.bloomington.in.us/~wh2t/invertedl.html
73, Ace - WH2T.com

183. Re: [SkyWires] Re: Xtra long loop

Yahoo group: SkyWires
Date: 2003-12-01 06:41:30 UTC
From: Dr.Ace Ratliff
Topic: 170 Message: 183

On Sun, 30 Nov 2003 06:31:17 -0800 (PST), Scott Erwin wrote:
>I run a full size 160 meter loop skywire and it works
>great! I am planing on putting up a three times 160
>meter loop, thats 1,590 feet of wire and feed it with
>450 ohm ladder line. It should be intersting to see
>how well it does.
>--- kl7r <kl7r@...> wrote:
>_____

I had a 160 meter full wave loop skywire . Then I tried making it 2 wavelengths and then 3 wavelengths .
It was my experience that it was not worth the trouble to make the antenna any larger than one wavelength , it didn't work any better on 160 .
I also found it was much easier to change the frequency rather than changing the antenna size to do the testing . By increasing the frequency I did some tests with up to a 10 wavelength loop .
By the way 2 wavelengths presents a high VSWR the loops need to be an odd multiple of wavelengths such as 1 , 3 , 5 , etc.

I also did some experiments with the 160 meter inverted L antenna .
I tried a 1/4 wave length inverted L antenna , a 3/8 wave length inverted L antenna, a 1/2 wave length inverted L antenna , and a 3/4 wave length inverted L antenna all on the 160 meter band .
Once again I found that it was not worth messing with making the inverted L antenna any longer than a 1/4 wave length .
Many times the 160 meter 1/4 wave length inverted L antenna out performs my 75 meter loop skywire on the higher bands such as 6 mtrs , 10 mtrs etc.
73, Ace - WH2T

184. Re: [SkyWires] Digest Number 53

Yahoo group: SkyWires
Date: 2003-12-01 23:45:47 UTC
From: Hulen Smith
Topic: 184 Message: 184
Attachments: 1 described; binary payloads are missing from this source WARC

Thanks Ace for your comments. I did know about the odd muliple wavelength. I can do 3 or 5 wavelengths here but I did guess that I wouldn't be able to see an appreciable difference in that compared to a single wavelength. Even if it were 2-3 db difference, it's hard to justify the added costs and work envolved and who really can see a 3 db difference in signal ? That's not even an S unit.
I'd like to have an inverted L but all I've read about those is you need to be high up in the air. I'm limited to about 40' here. I lost my tower about 15 yrs back due to "quick out of nowhere" storm. I won't be going up with anything higher but will try an inverted L if some of you get good results with the appex at 40'.
Anyway Ace, good comments, thank you again for your take. Oh and the frequency thing was a good one. I've thought of it but then forgot again. I can claim to have some good ideas but then I loose them as rapidly as they come !! LOL!!!!!
Cheers !!
WB5UOI
Clay

Dr Ace wrote:

Hello Hulen,
I use a 75 meter Delta Loop and a 1/4 wave inverted L antenna for the 160 meter band .
I like to be able to just flip a switch or switches to change bands .
I don't want to need to unscrew a PL259 and short it to feed the 75 meter loop on 160 .
The inverted L antenna is easy to build and works well .
For more info check out this Web Page .
http://www.bloomington.in.us/~wh2t/invertedl.html
73, Ace - WH2T.com

On Sun, 30 Nov 2003 06:31:17 -0800 (PST), Scott Erwin wrote:
>I run a full size 160 meter loop skywire and it works
>great! I am planing on putting up a three times 160
>meter loop, thats 1,590 feet of wire and feed it with
>450 ohm ladder line. It should be intersting to see
>how well it does.
>--- kl7r <kl7r@...> wrote:
>_____

I had a 160 meter full wave loop skywire . Then I tried making it 2 wavelengths and then 3 wavelengths .
It was my experience that it was not worth the trouble to make the antenna any larger than one wavelength , it didn't work any better on

160 .
I also found it was much easier to change the frequency rather than changing the antenna size to do the testing . By increasing the frequency I did some tests with up to a 10 wavelength loop .
By the way 2 wavelengths presents a high VSWR the loops need to be an odd multiple of wavelengths such as 1 , 3 , 5 , etc.

I also did some experiments with the 160 meter inverted L antenna .
I tried a 1/4 wave length inverted L antenna , a 3/8 wave length inverted L antenna, a 1/2 wave length inverted L antenna , and a 3/4 wave length inverted L antenna all on the 160 meter band .
Once again I found that it was not worth messing with making the inverted L antenna any longer than a 1/4 wave length .
Many times the 160 meter 1/4 wave length inverted L antenna out performs my 75 meter loop skywire on the higher bands such as 6 mtrs , 10 mtrs etc.
73, Ace - WH2T

185. Re: Digest Number 53

Yahoo group: SkyWires
Date: 2003-12-02 08:22:49 UTC
From: Nick
Topic: 184 Message: 185

The difference in adding length to a full wave loop is not seen in
gain, but take off
angle of the largest lobe.

w4rnl goes in to much more detail on his website (www.cebik.com), but
in general a
full wave loop is a horrible antenna for DX, but great for close in
contacts. if you
extend the length
of the antenna past 1 wavelength of intended use, the take off angle
becomes lower
and increases the chance that can work DX. Example: if you use a 75M
loop on 75M,
you will get plenty
of local HAMS and not much DX. If you use a 75M loop on a higher
band, like 20M,
you will get stations from much further out. If you build a 160M full
wave loop, the
DX on 80M
increases.

Hope this helps.

Best 73's, W6GNU

--- In SkyWires@yahoogroups.com, "Hulen Smith" <clay1952@c...> wrote:
> Thanks Ace for your comments. I did know about the odd muliple
wavelength. I
> can do 3 or 5 wavelengths here but I did guess that I wouldn't be
able to
> see an appreciable difference in that compared to a single
wavelength. Even
> if it were 2-3 db difference, it's hard to justify the added costs
and work
> envolved and who really can see a 3 db difference in signal ?
That's not
> even an S unit.
> I'd like to have an inverted L but all I've read about those is you
need to
> be high up in the air. I'm limited to about 40' here. I lost my
tower
> about 15 yrs back due to "quick out of nowhere" storm. I won't be
going up
> with anything higher but will try an inverted L if some of you get
good
> results with the appex at 40'.

> Anyway Ace, good comments, thank you again for your take. Oh and the
> frequency thing was a good one. I've thought of it but then forgot
again. I
> can claim to have some good ideas but then I loose them as rapidly
as they
> come !! LOL!!!!!
> Cheers !!
> WB5UOI
> Clay
>
> Dr Ace wrote:
>
> Hello Hulen,
> I use a 75 meter Delta Loop and a 1/4 wave inverted L antenna for
> the 160 meter band .
> I like to be able to just flip a switch or switches to change bands
.
> I don't want to need to unscrew a PL259 and short it to feed the 75
> meter loop on 160 .
> The inverted L antenna is easy to build and works well .
> For more info check out this Web Page .
> http://www.bloomington.in.us/~wh2t/invertedl.html
> 73, Ace - WH2T.com
>
>
> On Sun, 30 Nov 2003 06:31:17 -0800 (PST), Scott Erwin wrote:
> >I run a full size 160 meter loop skywire and it works
> >great! I am planing on putting up a three times 160
> >meter loop, thats 1,590 feet of wire and feed it with
> >450 ohm ladder line. It should be intersting to see
> >how well it does.
> >--- kl7r <kl7r@y...> wrote:
> >_________________________________
>
> I had a 160 meter full wave loop skywire . Then I tried making it 2
> wavelengths and then 3 wavelengths .
> It was my experience that it was not worth the trouble to make the
> antenna any larger than one wavelength , it didn't work any better
on
> 160 .
> I also found it was much easier to change the frequency rather than
> changing the antenna size to do the testing . By increasing the
> frequency I did some tests with up to a 10 wavelength loop .
> By the way 2 wavelengths presents a high VSWR the loops need to be
> an odd multiple of wavelengths such as 1 , 3 , 5 , etc.
>
> I also did some experiments with the 160 meter inverted L antenna .
> I tried a 1/4 wave length inverted L antenna , a 3/8 wave length
> inverted L antenna, a 1/2 wave length inverted L antenna , and a
3/4

> wave length inverted L antenna all on the 160 meter band .
> Once again I found that it was not worth messing with making the
> inverted L antenna any longer than a 1/4 wave length .
> Many times the 160 meter 1/4 wave length inverted L antenna out
> performs my 75 meter loop skywire on the higher bands such as 6
mtrs
> , 10 mtrs etc.
> 73, Ace - WH2T

186. Re: [SkyWires] Digest Number 54

Yahoo group: SkyWires
Date: 2003-12-02 12:43:44 UTC
From: Hulen Smith
Topic: 186 Message: 186
Attachments: 1 described; binary payloads are missing from this source WARC

Nick wrote:

>The difference in adding length to a full wave loop is not seen in gain, but take off
angle of the largest lobe.

w4rnl goes in to much more detail on his website (www.cebik.com), but in general a
full wave loop is a horrible antenna for DX, but great for close in contacts. if you
extend the length
of the antenna past 1 wavelength of intended use, the take off angle becomes lower
and increases the chance that can work DX. Example: if you use a 75M loop on 75M,
you will get plenty
of local HAMS and not much DX. If you use a 75M loop on a higher band, like 20M,
you will get stations from much further out. If you build a 160M full wave loop, the
DX on 80M
increases.

Hope this helps.

>Best 73's, W6GNU

Indeed it does Nick, thanks !!!
WB5UOI, Hulen

187. Re: [SkyWires] Digest Number 53

Yahoo group: SkyWires
Date: 2003-12-02 22:37:12 UTC
From: Dr.Ace Ratliff
Topic: 184 Message: 187

On Mon, 1 Dec 2003 17:45:47 -0600 (Central Standard Time), Hulen Smith wrote:

>Thanks Ace for your comments. I did know about the odd muliple
>wavelength. I can do 3 or 5 wavelengths here but I did guess that I
>wouldn't be able to see an appreciable difference in that compared
>to a single wavelength. Even if it were 2-3 db difference,
>it's hard to justify the added costs and work envolved and
>who really can see a 3 db difference in signal ? That's not
>even an S unit.
>
>I'd like to have an inverted L but all I've read about those is you
>need to be high up in the air. I'm limited to about 40' here.
>I lost my tower about 15 yrs back due to "quick out of nowhere"
>storm. I won't be going up with anything higher but will try
>an inverted L if some of you get good results with the appex
>at 40'.
>
>Anyway Ace, good comments, thank you again for your take. Oh and the
>frequency thing was a good one. I've thought of it but then forgot
>again. I can claim to have some good ideas but then I loose
>them as rapidly as they come !! LOL!!!!!
>
>Cheers !!
>
>WB5UOI
>Clay
>
>
>
>Dr Ace wrote:
>
>
>Hello Hulen,
>I use a 75 meter Delta Loop and a 1/4 wave inverted L antenna
>for
>the 160 meter band .
>I like to be able to just flip a switch or switches to change
>bands .
>I don't want to need to unscrew a PL259 and short it to feed
>the 75
>meter loop on 160 .
>The inverted L antenna is easy to build and works well .
>For more info check out this Web Page .
>http://www.bloomington.in.us/~wh2t/invertedl.html
>73, Ace - WH2T.com

>
>
>On Sun, 30 Nov 2003 06:31:17 -0800 (PST), Scott Erwin wrote:
>>I run a full size 160 meter loop skywire and it works
>>great! I am planing on putting up a three times 160
>>meter loop, thats 1,590 feet of wire and feed it with
>>450 ohm ladder line. It should be intersting to see
>>how well it does.
>>--- kl7r <kl7r@...> wrote:
>>_____
>
>I had a 160 meter full wave loop skywire . Then I tried
>making it 2
>wavelengths and then 3 wavelengths .
>It was my experience that it was not worth the trouble to
>make the
>antenna any larger than one wavelength , it didn't work any
>better on
>160 .
>I also found it was much easier to change the frequency
>rather than
>changing the antenna size to do the testing . By increasing
>the
>frequency I did some tests with up to a 10 wavelength loop .
>By the way 2 wavelengths presents a high VSWR the loops need to
>be
>an odd multiple of wavelengths such as 1 , 3 , 5 , etc.
>
>I also did some experiments with the 160 meter inverted L
>antenna .
>I tried a 1/4 wave length inverted L antenna , a 3/8 wave
>length
>inverted L antenna, a 1/2 wave length inverted L antenna , and a 3/4
>
>wave length inverted L antenna all on the 160 meter band .
>Once again I found that it was not worth messing with making
>the
>inverted L antenna any longer than a 1/4 wave length .
>Many times the 160 meter 1/4 wave length inverted L antenna
>out
>performs my 75 meter loop skywire on the higher bands such as
>6 mtrs
>, 10 mtrs etc.
>73, Ace - WH2T
>
> _____

Hi All,
I am using a 1/4 wave , 160 meter band inverted L antenna .I get
good results with the apex on my tower at about 40' maybe 2 or 3 feet

lower . I have the end tied in a tree about 50' above ground .
I have worked all 50 states and several countries with it on 160
using 100 watts . I am not much of a DXer.

For more info check out this Web Page .
http://www.bloomington.in.us/~wh2t/invertedl.html

73 and Happy Holidays, Ace - WH2T.com

188. Art Bell's Band Blaster

Yahoo group: SkyWires
Date: 2003-12-02 23:28:14 UTC
From: rocketradio2002
Topic: 188 Message: 188

After hearing Art's fantastic signal on 3.840 even during poor conditions, I really want to build something similar. A search turned up this group and the articles on eham. Lots of excellent information. Thank you. However I have one question that hasn't turned up an answer yet. On Art's series of pictures it shows a double loop that apparently is 6 foot lower from the top section. How are the two different sections fed together? Also it seems that there seems to be a point where additional height doesn't gain that much in performance.

Thanks for any input.

George
N7BUI

189. Re: Art Bell's Band Blaster

Yahoo group: SkyWires
Date: 2003-12-03 02:55:46 UTC
From: exemptfromlife
Topic: 188 Message: 189

Thanks for joining.

I've seen the photos of this double loop that Mr. Bell has. I can't figure out how its fed either. It looks pretty cool. I don't know If I would want it wrapped around my house/compound as he does. I would think that would be asking for electrical interference.

It could be that the coax center is attached to one end and the braid to another, or that it is actually just one big loop that spirals up with two twists.

I did read about his loop creating an electrical charge. He seemed to think it was being generated by something other than static electricity. I tend to believe the logical, earthly explanations first. I think since he is in the desert, and its dry, that there is a lot of static build up, even on a windless day. There is still dust in the air.

If you have the room, and don't mind spending the cash to put up 8 or so poles, then I think it would be a great idea.

Have you tried writing him to find out how his loop antenna is fed?

Thanks.

--- In SkyWires@yahoogroups.com, "rocketradio2002"
<rocketradio2002@y...> wrote:
> After hearing Art's fantastic signal on 3.840 even during poor
> conditions, I really want to build something similar. A search
> turned up this group and the articles on eham. Lots of excellent
> information. Thank you. However I have one question that hasn't
> turned up an answer yet. On Art's series of pictures it shows a
> double loop that apparently is 6 foot lower from the top section.
> How are the two different sections fed together? Also it seems
that
> there seems to be a point where additional height doesn't gain that
> much in performance.
>
> Thanks for any input.
>
> George
> N7BUI

190. Re: [SkyWires] Digest Number 54

Yahoo group: SkyWires
Date: 2003-12-03 03:41:13 UTC
From: Scott Erwin
Topic: 186 Message: 190

I have started work on a very large loop and hope to
have all the required supports in the trees and paths
between them cleared soon. I have 1,590 feet of wire
measured and rolled up ready to start pulling up
between the trees for a three times 160 mter loop. I
hope to be able to get some low angle off of it for DX
on 160 meters!
--- Hulen Smith <clay1952@...> wrote:
> Nick wrote:
>
> >The difference in adding length to a full wave loop
> is not seen in
> gain, but take off
> angle of the largest lobe.
>
> w4rnl goes in to much more detail on his website
> (www.cebik.com), but
> in general a
> full wave loop is a horrible antenna for DX, but
> great for close in
> contacts. if you
> extend the length
> of the antenna past 1 wavelength of intended use,
> the take off angle
> becomes lower
> and increases the chance that can work DX. Example:
> if you use a 75M
> loop on 75M,
> you will get plenty
> of local HAMS and not much DX. If you use a 75M loop
> on a higher
> band, like 20M,
> you will get stations from much further out. If you
> build a 160M full
> wave loop, the
> DX on 80M
> increases.
>
>
>
>
>
> Hope this helps.
>
>

> >Best 73's, W6GNU
>
> Indeed it does Nick, thanks !!!
> WB5UOI, Hulen
>
>
>

Do you Yahoo!?
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http://companion.yahoo.com/

191. Re: Art Bell's Band Blaster

Yahoo group: SkyWires
Date: 2003-12-06 01:32:17 UTC
From: kl7r
Topic: 188 Message: 191

> After hearing Art's fantastic signal on 3.840 even during poor
> conditions, I really want to build something similar. A search
> turned up this group and the articles on eham. Lots of excellent
> information. Thank you. However I have one question that hasn't
> turned up an answer yet. On Art's series of pictures it shows a
> double loop that apparently is 6 foot lower from the top section.
> How are the two different sections fed together? Also it seems that
> there seems to be a point where additional height doesn't gain that
> much in performance.
>
> Thanks for any input.
>
> George
> N7BUI

The original loop was a single wire:
Check out:
http://www.candlewater.com/3830/artsloop/

From what I have seen it appears that he was picking up a lot of
induced current in his area (400v) I bet he put up the second
loop below the real antenna above to shield his top loop
from the power grid 60 HZ induced current?

192. Re: Art Bell's Band Blaster

Yahoo group: SkyWires
Date: 2003-12-06 20:52:46 UTC
From: rocketradio2002
Topic: 188 Message: 192

Thanks for the info! I think that you might be correct on the lower loop being some type of "shield". I have downloaded and printed many many pages of loop antenna designs and none of them refer to a lower loop in any of the plans. I have seen some reference to a counterpoise being used on some designs, but they were mainly some type of ground rod near each corner of the loop. But why would a balanced antenna need a counterpoise? I'm figuring out this weekend where on the property to put the loop. I have about three different areas where I could place one. The closest being a 3 acre field near the house, but would still require about a three hundred foot run of coax or ladder line to make it to the shack.

George

--- In SkyWires@yahoogroups.com, "kl7r" <kl7r@y...> wrote:
>
> > After hearing Art's fantastic signal on 3.840 even during poor
> > conditions, I really want to build something similar. A search
> > turned up this group and the articles on eham. Lots of excellent
> > information. Thank you. However I have one question that hasn't
> > turned up an answer yet. On Art's series of pictures it shows a
> > double loop that apparently is 6 foot lower from the top
section.
> > How are the two different sections fed together? Also it seems
that
> > there seems to be a point where additional height doesn't gain
that
> > much in performance.
> >
> > Thanks for any input.
> >
> > George
> > N7BUI
>
> The original loop was a single wire:
> Check out:
> http://www.candlewater.com/3830/artsloop/
>
> From what I have seen it appears that he was picking up a lot of
> induced current in his area (400v) I bet he put up the second
> loop below the real antenna above to shield his top loop
> from the power grid 60 HZ induced current?

193. Radio Guys are a great bunch..

Yahoo group: SkyWires
Date: 2003-12-08 04:53:40 UTC
From: exemptfromlife
Topic: 193 Message: 193

I would like to tell all of you that In my opinion the Amateur/SWR guys on yahoo and in general are really a bunch of nice people.

Lately I've encountered some people in other groups in other hobbies
that are, well lets just be polite and say their personalities and character are less than ideal.

I feel really lucky to be involved in a group where people can discuss their own interests and make you feel welcome.

Thanks.

194. Re: Art Bell's Band Blaster

Yahoo group: SkyWires
Date: 2003-12-08 05:31:16 UTC
From: rickfrazier96720
Topic: 188 Message: 194

A few accumulated comments about Art Bell's loop....

When Art first spoke about his loop on the air on his radio program, I looked at the pictures of it he had on the web site. It appeared that he had both loops fed in phase, though the lower loop is slightly smaller in total diameter. In looking at how a normal antenna would act, the spacing of the two elements would act as if it were a larger diameter element than the wire being used. In essence, it would be as if he had put up a five foot diameter tube as the radiating element. This would tend to make the antenna more broadband... that is, it would allow using it over a wider frequency range with reasonable swr.

I'm still not sure how this really works out in practice, particularly for a horizontal loop. As (at most frequencies, anyway) a horizontal loop isn't necessarily resonant on the frequency of interest, the effect may not be the same as a dipole with a second wire spaced some number of inches below the main wire. With the dipole, if it were cut to 75 meters, with a single wire the swr may be acceptably low for a 300khz segment of the band, but with two wires of the same length, spaced 6 or 9 inches apart, the swr may be acceptable for 600khz. With a horizontal loop, the action may or may not be the same. Somehow I don't expect it would provide a counterpoise or reflector, particularly as both wires are connected together, and they are so close together at HF frequencies. Besides, a horizontal loop at it's fundamental frequency is pretty well known to be a "cloud burner" anyway, so I can't imagine why anyone would want to increase this effect. A horizontal loop is generally a pretty quiet antenna to begin with, so I'm not sure how much any shielding effect would help. Still, what effect his second wire has at this point is still a mystery to me.

Currently, I have about a 800' (to 900') horizontal loop at an average height of 38 feet, and it seems to be pretty effective. When I put up the supports, I prepared it to be able to put up a second (or even a third) wire below the first at 5 foot spacings. I still need to clear a corridor through a couple of trees before I put up a second or third wire to find out what the effect really is. I don't think it would be a fair test to add even a second wire right now, as one leg of the roughly rectangular loop sort of zig-zags through three trees, and it would be nearly impossible to maintain decent spacing with a second wire through this area. However, once I get the path through these trees cleared, I'll be characterizing the single wire first, then pulling up the second wire, and even possibly a third. Then I'll at least have some empirical data on the effect of the additional wire.

Art has also mentioned a charge on the loop, though I don't recall if he specified whether it was DC or AC... I'm assuming it is a DC voltage, as I don't recall seeing any AC powerlines in the immediate vicinity of the loop, from the pictures he had on the web site. Given his location in the high desert, with relatively low humidity and near constant wind, it is definitely possible that this is a static charge generated by wind across the wire.

Initially, Art was indicating he was getting a really high gain figure from the antenna, which he didn't expect. In thinking about it, depending upon the actual loop length and the band he was talking about, he could see considerable gain, particularly at higher frequencies, where the loop has the correct number of multiple wavelengths to provide a high gain lobe in a particular direction.

I'm not in the shack right now, or could provide more accurate number of the length of my loop, and also provide a brief list of how it looks at higher bands. Perhaps one of these days, I'll model it and see what the eznec has to say about it....

Thanks
--Rick

--- In SkyWires@yahoogroups.com, "rocketradio2002"
<rocketradio2002@y...> wrote:
> Thanks for the info! I think that you might be correct on the
lower
> loop being some type of "shield". I have downloaded and printed
many
> many pages of loop antenna designs and none of them refer to a
lower
> loop in any of the plans. I have seen some reference to a
> counterpoise being used on some designs, but they were mainly some
> type of ground rod near each corner of the loop. But why would a
> balanced antenna need a counterpoise? I'm figuring out this
weekend
> where on the property to put the loop. I have about three
different
> areas where I could place one. The closest being a 3 acre field
near
> the house, but would still require about a three hundred foot run
of
> coax or ladder line to make it to the shack.
>
> George
>
>
>
>
>
>
>

>
>
>
>
>
> --- In SkyWires@yahoogroups.com, "kl7r" <kl7r@y...> wrote:
> >
> > > After hearing Art's fantastic signal on 3.840 even during poor
> > > conditions, I really want to build something similar. A search
> > > turned up this group and the articles on eham. Lots of
excellent
> > > information. Thank you. However I have one question that hasn't
> > > turned up an answer yet. On Art's series of pictures it shows
a
> > > double loop that apparently is 6 foot lower from the top
> section.
> > > How are the two different sections fed together? Also it seems
> that
> > > there seems to be a point where additional height doesn't gain
> that
> > > much in performance.
> > >
> > > Thanks for any input.
> > >
> > > George
> > > N7BUI
> >
> > The original loop was a single wire:
> > Check out:
> > http://www.candlewater.com/3830/artsloop/
> >
> > From what I have seen it appears that he was picking up a lot of
> > induced current in his area (400v) I bet he put up the second
> > loop below the real antenna above to shield his top loop
> > from the power grid 60 HZ induced current?

195. Long run of feedline (was Art Bell)

Yahoo group: SkyWires
Date: 2003-12-08 19:48:45 UTC
From: kl7r
Topic: 188 Message: 195

> areas where I could place one. The closest being a 3 acre field
near
> the house, but would still require about a three hundred foot run
of
> coax or ladder line to make it to the shack.
>

I would definately avoid the 300 foot coax run
in favor of ladderline or twinlead or windowire
to avoid losses in the feeder.

196. Folded full wave loop question

Yahoo group: SkyWires
Date: 2003-12-09 01:12:11 UTC
From: Jim Dunstan
Topic: 188 Message: 196

Hi all:

I am interested in transmitting/receiving with a loop antenna (for 20M) from my apartment balcony. I am not thinking of a small tuned loop, but a full size loop that is coiled into 2 or 3 turns. Here is what I have in mind:

A 20 M wavelength is approximately 65', which would represent about 16' for side in a square configuration (too big for my balcony). If I arrange the wire into a 2 turn loop the square would now be about 8' on a side and a 3 turn loop would be about 5' on a side. I could barely manage an 8' square .... but a 5' square would be great. I would feed it with about 8' of open wire line to my antenna tuner. Its orientation would be vertical and could be rotatable.

I wonder if anyone has tried this kind of arrangement? What opinions are there about what one might expect in performance from such an arrangement Re bandwidth, directionality, ease of loading, etc.

This would be a minimum type skywire .... hi.

>

Jim Dunstan
Thunder Bay, ON

197. Re: Off-Center Fed SkyWire Antenna ?

Yahoo group: SkyWires
Date: 2003-12-09 01:32:11 UTC
From: kl7r
Topic: 174 Message: 197

I put a mmana file in the files section of the antenna you describe.

--- In SkyWires@yahoogroups.com, "R H F" <rhf-mail@u...> wrote:
> FO&A,
>
> What would be the Advantages of Disadvantages of a
> SkyWire Loop Antenna that is a Non-Center-Side Fed
> or a Non-Conner Fed; but is FED "Off-Center" on one
> of the Sides ? ? ?
>
>
> A "One Wave Length" SkyWire Loop Antenna of 529 Feet:
> (Layed Out in an Isosceles Trapezoid Shape)
>
> * FED End Length = 106 Feet
>
> * * Feed Point 35 Feet from the Corner
> = = = 1/4 WL = 40M
> = = = 1/2 WL = 20M
> = = = 1 WL = 10M
>
> * * Feed Point 71 Feet from the other Corner
> = = = 1/2 WL = 40M
> = = = 1 WL = 20M
>
> * Length of Sides = 145 Feet Each
>
> * Far End Length = 132 Feet
> = = = 1/4 WL @ 160M
>
> ? ? ? HOW DOES THIS SHAPE AND SIZE MODEL OUT ? ? ?
>
>
> ~ RHF
>
> .
>
> .

198. MARS Loop antenna link.

Yahoo group: SkyWires
Date: 2003-12-09 17:15:15 UTC
From: n4zou
Topic: 198 Message: 198

I just found this link and thought it very intersting for the group.
http://www.almars.org/Loop%20Final%20D.pdf
I run a 160 meter loop here with 450 ohm ladder line feed. Of note here is the use of a counterpoice under the loop. I do not use a counterpoice and never thought one would be required. It would be very easy for me to add one using nail up electric fence insulators and aluminum electric fence wire. I think the reason for use is to make the loop even more of a cloud burner than normal without the counterpoice. In this situation I would think you would want the counterpoice 5% larger than the loop element. This would produce a two element beam pointed stright up! I might be incorrect in my thinking here as the elements would be spaced so narrow. The other possability is that the counterpoice is about the same size as the main loop and causes the loop to mushroom and have gain out the sides and not be as much of a cloud burner. I am getting a headache thinking about it right now! I think I will add a counterpoice of 565 feet of wire as I have 530 feet up in the loop. I can try it for a while and then cut out the extra 26.5 feet and see what happens...If anything.

199. Re: [SkyWires] Folded full wave loop question

Yahoo group: SkyWires
Date: 2003-12-09 17:38:15 UTC
From: Scott Erwin
Topic: 188 Message: 199

You can have a multi-turn loop but you must have a capacitor on each turn that is tuned for the frequency you are going to use. You start out with small receive type verable capacitors and tune the loop using an SWR analyzer or QRP power and a SWR meter. After you find the point where the loop is showing a low SWR and all the capacitors have the exact same capacitance you replace them with high voltage door knob capacitors of the same capacitance except for one on the first turn connected to the feedpoint where the center conductor is attached. You will need a capacitor rated for very high voltage here. These small loop antenna's are not very popular as there hard to setup and larger than a simple single turn small loop also known as a ARMY LOOP. MFJ still sells them and units from AEA are still to be found on the used market. You may also make your own. It only requires one loop turn and one capacitor. The ARRL antenna book details how to build one.

--- Jim Dunstan <jimdunstan@...> wrote:

> Hi all:
>
> I am interested in transmitting/receiving with a
> loop antenna (for 20M)
> from my apartment balcony. I am not thinking of a
> small tuned loop, but a
> full size loop that is coiled into 2 or 3 turns.
> Here is what I have in mind:
>
> A 20 M wavelength is approximately 65', which would
> represent about 16' for
> side in a square configuration (too big for my
> balcony). If I arrange the
> wire into a 2 turn loop the square would now be
> about 8' on a side and a 3
> turn loop would be about 5' on a side. I could
> barely manage an 8' square
> .... but a 5' square would be great. I would feed
> it with about 8' of open
> wire line to my antenna tuner. Its orientation
> would be vertical and could
> be rotatable.
>
> I wonder if anyone has tried this kind of
> arrangement? What opinions are

> there about what one might expect in performance
> from such an arrangement
> Re bandwidth, directionality, ease of loading, etc.
>
> This would be a minimum type skywire .... hi.
>
> >
>
> Jim Dunstan
> Thunder Bay, ON
>
>
>

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201. Re: Folded full wave loop question

Yahoo group: SkyWires
Date: 2003-12-10 22:30:01 UTC
From: kl7r
Topic: 188 Message: 201

The carpet loop looks interesting:

You would need a high voltage cap or a good tuner
or reduce power some.

http://mysite.verizon.net/vze20h45/radio/carpetloop/carpetloop.html

I had a lot of success with oversized slinkys...
I never tried to arrange one into a loop
That might be a fun experiment.

202. Re: MARS Loop antenna link.

Yahoo group: SkyWires
Date: 2003-12-10 22:52:45 UTC
From: kl7r
Topic: 198 Message: 202

What the fellow is calling a counterpoise is really acting
like a reflector which I imagine causes the antenna to work very
well as an NVIS (shoots straight up for close in work) antenna
on 80 meters. I imagine the reflector would have less effect on the
higher bands.

I dont think that a loop needs a counterpoise.

It is a balanced antenna like a dipole and so
half of the antenna works against the other half.

A counterpoise is needed when you endfeed a random piece
of wire. I dont think it is needed when you feed a loop.

I base this statement on the experience of getting
PSK and other digital modes working at my station.

When I load up a semirandom antenna (like a 32foot metal vertical)
against my station ground (which is acting like a counterpoise), I
get a lot of rf in the shack. My soundcard speakers are the
canary which let me know that I have high rf levels floating
around on my audio lines. When I tune up my loop, I rarely,
and only on certain bands, hear rf on my soundcard speakers.
I think that I have feedline length problems on those bands
I have a tuner which allows me to tune my ground (counterpoise)
so I am always able to remove rf feedback from my speakers.

When a windstorm comes and my loop breaks and half is laying on
the ground you can bet that I know right away because the balance
is gone and my son comes in the shack worried that I have popped
his subwoofer...

203. Putting the loop together..

Yahoo group: SkyWires
Date: 2003-12-12 03:00:01 UTC
From: Hal
Topic: 203 Message: 203

Wow.. this is a lot of work...Just measuring out the wire took a long time..now if the weather will co-operate with me..the high temp. for tomorrow is only going to be 21 degrees F.
The funniest thing is that a 40 meter loop is the only antenna I can put up... I have trees on three sides in the back yard but its only 65 feet E-W and 55 feet N-S..So hopefully I'll have the loop up this weekend..

Hal
KC0BDW

204. Re: [SkyWires] Digest Number 62

Yahoo group: SkyWires
Date: 2003-12-12 14:05:34 UTC
From: Hulen Smith
Topic: 204 Message: 204
Attachments: 1 described; binary payloads are missing from this source WARC

Hal wrote :

Wow.. this is a lot of work...Just measuring out the wire took a
long time..now if the weather will co-operate with me..the high
temp. for tomorrow is only going to be 21 degrees F.
The funniest thing is that a 40 meter loop is the only antenna I
can put up... I have trees on three sides in the back yard but its
only 65 feet E-W and 55 feet N-S..So hopefully I'll have the loop up
this weekend..

Hal
KC0BDW

Let us know Hal what you think of the operation once you've kicked the tires

Hulen
WB5UOI

205. Loop question

Yahoo group: SkyWires
Date: 2003-12-12 23:15:48 UTC
From: Hal
Topic: 205 Message: 205

I've read that a 40 meter loop can be used on 80 meters..etc.. etc..
I understand how it works using coax but if you use balanced
feedline (ladderline) how would one do that? I will be using a tuner
on my loop once I get it up.

Hal
KC0BDW

206. Re: [SkyWires] Loop question

Yahoo group: SkyWires
Date: 2003-12-13 01:44:12 UTC
From: Scott Erwin
Topic: 205 Message: 206

There are three ways to do it. Use the coax as a vertical element by shorting the coax at the point where it connects to the tuner and hook it to the random wire post and the tuner ground is connected to a ground system. This is a pain and provides poor results unless you have an extincive ground radial system. If you had that already you would not be installing a loop skywire! The second way is to put an insulator in the wire on the other side of the feed point making it a folded dipole. It's no longer a loop now so you don't really want to do that! The third and better way to do it is to build a folded loop. In the case of a 40 meter loop the size would be 140 feet. A full size 80 meter loop is 272 feet. This is a diffrence of 132 feet so to operate on 80 meters we need to basicly add 132 feet of wire somewhere. This is where you build a section of ladder line with the wire seperated about 6 or more inches appart. 450 ohm ladder line spacing is too small to work properly. To make the folded part of the loop to add the missing 132 feet of wire make the 6 inches (or more is better)wide ladder line 70 feet long. Calculations show we need 66 feet but nothing ever comes out to exact lengths for antennas so we are making the special feed line 4 feet too long. Now grab some 50 ohm coax which can be any length and starting at the very end attach the coax to the feed line. Move the coax attachment point up the line a little at a time untill a good match is found. You may now attach the coax to this point with solder and cut off the extra feed line. The feed line adds nothing to the gain of the antenna and do not expect the 40 meter loop to work as well as a full size 80 meter loop. Dont let this discourage you! It will still work and you will get good signal reports. Also the low SWR bandwidth will be narrow as compaired to a full size loop. If you can bring the end of the ladder line to the back of the tuner where it can be attached to the 4 to 1 balun inside just tap the point where a 200 ohm impedance can be found. You also could use 450 ohm ladder line. Just find the 450 ohm match and connect it there. Hope this helps!
--- Hal <kc0bdw@...> wrote:
> I've read that a 40 meter loop can be used on 80
> meters..etc.. etc..

> I understand how it works using coax but if you use
> balanced
> feedline (ladderline) how would one do that? I will
> be using a tuner
> on my loop once I get it up.
>
> Hal
> KC0BDW
>
>

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207. Re: [SkyWires] Loop question

Yahoo group: SkyWires
Date: 2003-12-13 02:10:19 UTC
From: desmoface@aol.com
Topic: 205 Message: 207

In a message dated 12/12/2003 7:45:39 PM Eastern Standard Time,
kc0bdw@... writes:

> I've read that a 40 meter loop can be used on 80 meters..etc.. etc..
> I understand how it works using coax but if you use balanced
> feedline (ladderline) how would one do that? I will be using a tuner
> on my loop once I get it up.
>
> Hal
> KC0BDW
>

A full wave 40 meter loop is mathematically a half wave loop on 80...should
be able to use it with a good antenna tuner...

Steve
kb8viv

208. Re: [SkyWires] Loop question

Yahoo group: SkyWires
Date: 2003-12-13 02:43:41 UTC
From: Dr.Ace Ratliff
Topic: 205 Message: 208

On Fri, 12 Dec 2003 23:15:48 -0000, Hal wrote:
>I've read that a 40 meter loop can be used on 80 meters..etc.. etc..
>I understand how it works using coax but if you use balanced
>feedline (ladderline) how would one do that? I will be using a tuner
>on my loop once I get it up.
>
>Hal
>KC0BDW
>

Hi,
I like the K.I.S.S. method . Try it this way . Not knowing the exact frequencies involved . ie the design Freq of the 40 meter loop or the Center Freq you want on 80 meters . I used 7.15 Mhz and 3.75 Mhz respectively . Using those Frequencies you would feed the 40 meter loop with 64 Feet of 450 ohm ladder line then tune it up on 80 meters using the tuner . Since you will be using a tuner it should work fine across both bands . Just consider the ladder line to be part of the loop . The ladder line will not radiate so it will not work as well as a full size loop on 80 meters.
Ace - www.WH2T.com

209. Re: Loop question

Yahoo group: SkyWires
Date: 2003-12-13 05:11:03 UTC
From: Hal
Topic: 205 Message: 209

--- In SkyWires@yahoogroups.com, "Dr.Ace Ratliff" <wh2t@b...> wrote:
> On Fri, 12 Dec 2003 23:15:48 -0000, Hal wrote:
> >I've read that a 40 meter loop can be used on 80 meters..etc..
etc..
> >I understand how it works using coax but if you use balanced
> >feedline (ladderline) how would one do that? I will be using a
tuner
> >on my loop once I get it up.
> >
> >Hal
> >KC0BDW
> >
> --
--
> Hi,
> I like the K.I.S.S. method . Try it this way . Not knowing the
exact
> frequencies involved . ie the design Freq of the 40 meter loop or
the
> Center Freq you want on 80 meters . I used 7.15 Mhz and 3.75 Mhz
> respectively . Using those Frequencies you would feed the 40 meter
> loop with 64 Feet of 450 ohm ladder line then tune it up on 80
meters
> using the tuner . Since you will be using a tuner it should work
> fine across both bands . Just consider the ladder line to be part
of
> the loop . The ladder line will not radiate so it will not work as
> well as a full size loop on 80 meters.
> Ace - www.WH2T.com

Ah!... Thats what I thought but I had some doubts about it..
Thanks for all the help.

Hal
KC0BDW

210. The new loop (AKA my first)

Yahoo group: SkyWires
Date: 2003-12-14 01:05:09 UTC
From: Hal
Topic: 210 Message: 210

....all I have to say is WOW! The loop didn't quite go up as I thought it would, its more of a Sloop (sloping loop) the northside of it is up about 40 feet and the southside is up about 25 feet. but its so quiet and then POW! a +20 signal. its like some one just turned up my volume. It will tune 40 thru 10.. but 80m is a no go :(It seems that I am hearing alot more DX then stateside stations.

Thanks to all of you for your help.

Hal
KC0BDW

211. Re: [SkyWires] The new loop (AKA my first)

Yahoo group: SkyWires
Date: 2003-12-14 03:59:55 UTC
From: desmoface@aol.com
Topic: 210 Message: 211

In a message dated 12/13/2003 8:06:38 PM Eastern Standard Time,
kc0bdw@... writes:

> ....all I have to say is WOW! The loop didn't quite go up as I
> thought it would, its more of a Sloop (sloping loop) the northside
> of it is up about 40 feet and the southside is up about 25 feet. but
> its so quiet and then POW! a +20 signal. its like some one just
> turned up my volume. It will tune 40 thru 10.. but 80m is a no go :(
> It seems that I am hearing alot more DX then stateside stations.
>
> Thanks to all of you for your help.
>
> Hal
> KC0BDW
>

Alright Hal, glad to hear it works...is it a 40 meter full wave loop?
Congrats.

Steve
kb8viv

212. Re: The new loop (AKA my first)

Yahoo group: SkyWires
Date: 2003-12-14 04:34:11 UTC
From: Hal
Topic: 210 Message: 212

Yes it is a full wave 40 meter loop.

> Alright Hal, glad to hear it works...is it a 40 meter full wave loop?
> Congrats.
>
> Steve
> kb8viv

213. Re: [SkyWires] The new loop (AKA my first)

Yahoo group: SkyWires
Date: 2003-12-14 05:49:12 UTC
From: Dr.Ace Ratliff
Topic: 210 Message: 213

In a message dated 12/13/2003 8:06:38 PM Eastern Standard Time,
kc0bdw@hotmail.com writes:

...all I have to say is WOW! The loop didn't quite go up as I
thought it would, its more of a Sloop (sloping loop) the northside
of it is up about 40 feet and the southside is up about 25 feet. but
its so quiet and then POW! a +20 signal. its like some one just
turned up my volume. It will tune 40 thru 10.. but 80m is a no go :(
It seems that I am hearing alot more DX then stateside stations.

Thanks to all of you for your help.

Hal
KC0BDW

Hi Hal ,
Sorry I gave you some incorrect data . To make your loop play
on 80 meters you will need to adjust the length of the 450 ohm ladder
line . Here is some data to consider on ladder line.

For 80 meter antennas
[Avoid 66, 135, 190 ft]

For 40 meter antennas
[Avoid 32, 64, 96, 128 ft]

Ace www.WH2T.com

214. LDG RT-11 and sky loops

Yahoo group: SkyWires
Date: 2003-12-15 13:28:07 UTC
From: Tim
Topic: 214 Message: 214

Hello all -
I just switched antenna setups and cannot figure out what is wrong. If anyone has an idea I'd love to hear it! Prior to changing I had a wire loop around
my roof (roughly 200 feet) connected to ladder line which was connected to an LDG 4:1 balun and
then the LDG AT-11. I used it for 2 years and it worked extremely well EXCEPT the
ladder line caused RFI which interfered with my phones and alarm system - even after judicious use of chokes etc.....SO I decided to redue the loop. I thus mounted an LDG RT-11 outside. I tested the RT-11 with a dummy load before mounting and I believe it is working fine. My loop runs to a 1:1 balun and then to the tuner. The tuner has about a 50' run of coax to the shack. I have a 756ProII and have the LDG remote control box in my shack connected to the Icom. Using an MFJ meter I measure SWRs of 5.2 down to 1.8 on the frequencies I like to work - normal for a loop. However, I cannot get the tuner to show an SWR on the 756ProII SWR meter below around 4 for 40m and 20m. In general the SWR meter seems to go off the charts before it even gets close to 4 or so. Any thoughts? I believe a 1:1 balun is appropriate for this kind of loop with coax - ie a current type vs a transformer type - maybe I am missing something there? I used the 4:1 previously because of the ladder line. BTW the good news is that the RFI is gone!
Any thoughts would be appreciated. Thanks folks.
73/Tim NZ7C

215. Minimum height for a 40m Skywire?

Yahoo group: SkyWires
Date: 2003-12-16 14:29:10 UTC
From: JimMcSkate@aol.com
Topic: 215 Message: 215

Last night I finished putting up my 40m Skywire... of course to call it a "Skywire" is a bit of a misnomer - my max height is about 20 feet.

As advertised, it tunes on its fundamental at 1:1, and tunes via transmatch as a vertical on 80 when I short the feedline. I can tune it on all the bands I use... however either the bands were very quiet last evening, or the antenna doesn't work well at this height.

The question: At 20 feet, how can I expect this antenna to perform? Or better yet - can I expect this antenna to perform at all?

Many thanks,
Jim McAward
WA2LGN

216. Re: [SkyWires] Minimum height for a 40m Skywire?

Yahoo group: SkyWires
Date: 2003-12-16 15:15:56 UTC
From: nz7c@cox.net
Topic: 215 Message: 216
Attachments: 1 described; binary payloads are missing from this source WARC

Jim -
I've used a Sky Loop at about 22 feet for 2 years in Arizona. I've talked on 100 watts all over the world with it. I operate 99.9% cw, but I have talked SSB from Australia to France. So yes it works! Also, for me the bands were very quiet last night. The low noise level of the loop can also throw you at first.
Now I have a question for you: could you describe in exact detail how you constructed a "short to work 80m" - I'd like to know about it. I can work 80m with the Sky Loop as is (random length is about 200 feet), but it's not real great on 80. What did you do here?
73/Tim NZ7C

==========
From: JimMcSkate@...
Date: 2003/12/16 Tue AM 09:29:10 EST
To: SkyWires@yahoogroups.com
Subject: [SkyWires] Minimum height for a 40m Skywire?

==========

217. Re: Minimum height for a 40m Skywire?

Yahoo group: SkyWires
Date: 2003-12-16 16:00:19 UTC
From: JimMcSkate@aol.com
Topic: 215 Message: 217

Tim,
Thanks for the vote of confidence on my 20' Skywire. I'll play more with it over the next few nights and see how it goes.

As for the shorting details: I feed my loop with 300-ohm RadioShack twinlead... it's cheap, it works, and as I only get up to about 100 watts it's fine. At the shack end of the twinlead, it's connected to a dual banana plug, again from RadioShack, which plugs into posts on my transmatch.

The dual banana plug is meant for some type of test equipment, and has a pair of matching sockets on the top. To get on 80m, I plug in a shorting jumper to the sockets, then let one of the plugs "float" away from the matching binding post on the transmatch.

I am only now realizing how convoluted this sounds - but it's really easy to do. I'll send a picture if you need me to.

If you are using coax, you'll have to wire something up. I'd use a short piece of RG-8 cable with the outer braid removed - you attach a PL259 to one end and an SO239 - shorted - to the other... the inner conductor carries the juice, and there's no outer conductor!

Good luck!
73 DE Jim, WA2LGN

--- In SkyWires@yahoogroups.com, <nz7c@c...> wrote:

> Now I have a question for you: could you describe in exact detail how you constructed a "short to work 80m" - I'd like to know about it. I can work 80m with the Sky Loop as is (random length is about 200 feet), but it's not real great on 80. What did you do here?
> 73/Tim NZ7C
>

218. Re: [SkyWires] Re: Minimum height for a 40m Skywire?

Yahoo group: SkyWires
Date: 2003-12-16 17:10:35 UTC
From: nz7c@cox.net
Topic: 215 Message: 218
Attachments: 1 described; binary payloads are missing from this source WARC

Jim -
I think I lost you. Are you basically describing adding a radial to simulate a vertical element at the tuner? Thanks for responding - I appreciate it.
73/Tim NZ7C
==========
From: JimMcSkate@...
Date: 2003/12/16 Tue AM 11:00:19 EST
To: SkyWires@yahoogroups.com
Subject: [SkyWires] Re: Minimum height for a 40m Skywire?

==========

219. Re: Minimum height for a 40m Skywire?

Yahoo group: SkyWires
Date: 2003-12-16 17:23:25 UTC
From: JimMcSkate@aol.com
Topic: 215 Message: 219

Tim,

I got the design details from an old article in QST (November '85) called "The Loop Skywire" (by Dave Fischer/W0MHS)

For the band(s) under the fundamental loop frequency (i.e. 160 and 80m on a 40m loop), the author describes using the feedline itself as a vertical element with top-hat loading... this is done by shorting the feedline at the shack end, then driving it the same way as you'd drive a random wire. You need a tuner for this - but it does load nicely. As for reception? The jury is still out on that question ;-)

If you're an ARRL member, you can get this article from their archives - just search for keyword "Skywire"... if you are not a member I will figure out how to get you the details.

Have a great day,
Jim
--- In SkyWires@yahoogroups.com, <nz7c@c...> wrote:
> Jim -
> I think I lost you. Are you basically describing adding a radial to simulate a vertical element at the tuner? Thanks for responding - I appreciate it.
> 73/Tim NZ7C
>

220. Re: [SkyWires] Re: Minimum height for a 40m Skywire?

Yahoo group: SkyWires
Date: 2003-12-16 17:35:17 UTC
From: nz7c@cox.net
Topic: 215 Message: 220
Attachments: 1 described; binary payloads are missing from this source WARC

Oh that's right - I actually have the article and forgot that was in there! I'll check it out. Thanks Jim!

==========

From: JimMcSkate@...
Date: 2003/12/16 Tue PM 12:23:25 EST
To: SkyWires@yahoogroups.com
Subject: [SkyWires] Re: Minimum height for a 40m Skywire?

==========

221. Re: Loop question

Yahoo group: SkyWires
Date: 2003-12-16 23:18:41 UTC
From: kl7r@yahoo.com
Topic: 205 Message: 221

--- In SkyWires@yahoogroups.com, "Hal" <kc0bdw@h...> wrote:
> I've read that a 40 meter loop can be used on 80 meters..etc..
etc..
> I understand how it works using coax but if you use balanced
> feedline (ladderline) how would one do that? I will be using a
tuner
> on my loop once I get it up.
>
> Hal
> KC0BDW

My experience with my 80 meter loop is that it doesnt like
to take power on 160. So your 40 meter loop would probably
have the same problem taking power on 80.

When I want to load up on 160, I short my ladderline
together at the antenna tuner and use the ladderline/loop
combination as a "toploaded vertical" sort of random wire.

Others have solved this problem by breaking their loop
in half opposite the feedpoint and either placing a jumper
across the break for normal loop operation and opening
the break for "dipole like" operation or by placing a
trap where the break would be tuned for 80 meters in your
case or 160 meters in my case.

Here is a link to a program which helps you create traps
from just a hunk of coax:

http://members.shaw.ca/ve6yp/coaxtrap.zip

222. Re: Minimum height for a 40m Skywire?

Yahoo group: SkyWires
Date: 2003-12-16 23:38:49 UTC
From: junkmail@altonillinois.com
Topic: 215 Message: 222

For those new members, or anybody, the 1985 article is linked in the skywires links section.

here it is..

thanks.

http://www.gordonsweb.net/loop%20skywire.pdf

--- In SkyWires@yahoogroups.com, <nz7c@c...> wrote:
> Oh that's right - I actually have the article and forgot that was in there! I'll check it out. Thanks Jim!
> ==
> From: JimMcSkate@a...
> Date: 2003/12/16 Tue PM 12:23:25 EST
> To: SkyWires@yahoogroups.com
> Subject: [SkyWires] Re: Minimum height for a 40m Skywire?
>
> ==

223. Re: [SkyWires] Re: Minimum height for a 40m Skywire?

Yahoo group: SkyWires
Date: 2003-12-17 04:05:33 UTC
From: Jim Dunstan
Topic: 215 Message: 223

At 05:23 PM 12/16/03 +0000, you wrote:

Tim,

I got the design details from an old article in QST (November '85)
called "The Loop Skywire" (by Dave Fischer/W0MHS)

Have a great day,
Jim
--- In SkyWires@yahoogroups.com, wrote:
> Jim -
> I think I lost you. Are you basically describing adding a radial to
simulate a vertical element at the tuner? Thanks for responding - I
appreciate it.
> 73/Tim NZ7C

Hi Jim & Tim:

The idea is pretty simple and effective. I used the same system on 160M years ago. In my case though the antenna wasn't a horizontal loop but a 100' inverted Vee antenna mounted on the roof of a 2 story house. I used 300 ohm TV feedline to the shack in the basement of the house. I used a tuner to feed the inverted Vee on 20M, 40M, and 80M. I was using an old Heathkit DX100 AM Xmtr.

I also operated 160M by shorting the feedline, in effect making the 300 ohm feedline a single wire (in effect a vertical) going up to the inverted Vee which in turn acted as a capacitive hat. I used the copper pipe in the basement as the ground system. I had a great time that winter working the "Farmers net" on 160M every morning (before milking time hi).

Everyone was on AM on the net at that time. It sure sounded nice and all the signals came in great.

Jim Dunstan VE3CI
Thunder Bay, ON

224. Re: Minimum height for a 40m Skywire?

Yahoo group: SkyWires
Date: 2003-12-17 13:56:04 UTC
From: JimMcSkate@aol.com
Topic: 215 Message: 224

First night with the 40m Skywire, and it works! KL7R previously that his 80m loop would not take power on 160, and speculated that a 40m loop wouldn't take power on 80, which is the case for me. (I have to run the antenna in the vertical-with-capacitance-hat configuration to load on 80.) I made one sloppy contact on 80m phon this way, but had much better performance on 160... and for some reason my loop loads on 160 without the tuner - my SWR is around 3:1, which was fine for my tube-final TS-820. I had S9 reports in Hershey, PA and in Woodstock, CT running 75 watts. The antenna loads (also without the tuner) on 40 (1:1 at 7.200!), but needs the tuner for 20, 15, and 10. Either those bands were very quiet last night, or the antenna doesn't hear well... I'll experiment and post the results.
Have a great morning,
DE WA2LGN
Jim McAward
Blue Point (Long Island) NY

225. Re: [SkyWires] Re: Minimum height for a 40m Skywire?

Yahoo group: SkyWires
Date: 2003-12-17 16:46:35 UTC
From: nz7c@cox.net
Topic: 215 Message: 225
Attachments: 1 described; binary payloads are missing from this source WARC

Jim -
What state are you in?
73/Tim NZ7C

==========
From: JimMcSkate@...
Date: 2003/12/17 Wed AM 08:56:04 EST
To: SkyWires@yahoogroups.com
Subject: [SkyWires] Re: Minimum height for a 40m Skywire?

==========

226. Re: Minimum height for a 40m Skywire?

Yahoo group: SkyWires
Date: 2003-12-17 18:16:18 UTC
From: JimMcSkate@aol.com
Topic: 215 Message: 226

Tim,
I'm in New York - about 60 miles east of NY city on the south shore
of Long Island.
73 de WA2LGN
Jim
--- In SkyWires@yahoogroups.com, <nz7c@c...> wrote:
> Jim -
> What state are you in?
> 73/Tim NZ7C
>

227. Re: [SkyWires] Re: Minimum height for a 40m Skywire?

Yahoo group: SkyWires
Date: 2003-12-17 18:22:47 UTC
From: nz7c@cox.net
Topic: 215 Message: 227
Attachments: 1 described; binary payloads are missing from this source WARC

OK -
Just curious....I am experiencing a pretty quiet 20m band out here in Arizona as well - so I suspect it's not an issue with your antenna :-) BTW Long Beach area used to be my old stomping grounds 30 years ago. I bet a lot has changed since then (except Nathan's hot dogs)!
73/Tim
==========
From: JimMcSkate@...
Date: 2003/12/17 Wed PM 01:16:18 EST
To: SkyWires@yahoogroups.com
Subject: [SkyWires] Re: Minimum height for a 40m Skywire?

==========

228. More progress on 40m Skywire...

Yahoo group: SkyWires
Date: 2003-12-19 21:21:39 UTC
From: jimmcskate
Topic: 215 Message: 228

I dug into MMANA a bit, thanks to a previous post on this list. My 40m loop, at a 20' average height, is a cloudburner (NVIS) on 40, but has a lowered radiation angle on the higher bands. NVIS is not a bad thing - I've made some solid contacts within a 600 mile radius, including one CW mobile in Illinois.

This morning I bagged Italy on 10m. I performed some a/b tests between the loop and a 10m vertical - the noise floor was much lower on the loop than on the vertical, for the same received signal strength. While one contact does not tell a whole story, it seems to support what I've read elsewhere about these loops.

I'll keep playing, I mean "Experimenting"! (This is science, not play... or so I tell my family ;-)

229. Re: [SkyWires] More progress on 40m Skywire...

Yahoo group: SkyWires
Date: 2003-12-19 21:29:00 UTC
From: nz7c@cox.net
Topic: 215 Message: 229
Attachments: 1 described; binary payloads are missing from this source WARC

Jim -
One thing I have noticed about my loop which I think we should allocate to "the great mystery of propagation": it often communicates to locations that my NecPlus model says it should never reach! Guess that's what I love about ham radio - always a mystery to me!
73/Tim NZ7C
==========
From: "jimmcskate" <JimMcSkate@...>
Date: 2003/12/19 Fri PM 04:21:39 EST
To: SkyWires@yahoogroups.com
Subject: [SkyWires] More progress on 40m Skywire...

==========

230. Skywire Down!

Yahoo group: SkyWires
Date: 2003-12-21 03:35:31 UTC
From: exemptfromlife
Topic: 230 Message: 230

Yesterday my wife noticed that my skywire came down sometime during the week. Our dog had gotten himself all hung up in the trout line I used to hoist up one of the insulators.

Just as an informal poll, what doe most of you use to secure your skywire? trout line, wire, etc.?

thanks.

231. Re: [SkyWires] Skywire Down!

Yahoo group: SkyWires
Date: 2003-12-21 03:59:06 UTC
From: desmoface@aol.com
Topic: 230 Message: 231

In a message dated 12/20/2003 10:36:52 PM Eastern Standard Time,
junkmail@... writes:

> Yesterday my wife noticed that my skywire came down sometime during
> the week. Our dog had gotten himself all hung up in the trout line I
> used to hoist up one of the insulators.
>
> Just as an informal poll, what doe most of you use to secure your
> skywire? trout line, wire, etc.?
>
> thanks.
>
>

You want to use some good quality uv resistant rope, available from places
like davisrf.com...fishing line will eventually, well, do what it did to
you...good luck..

Steve
kb8viv

232. Re: [SkyWires] Skywire Down!

Yahoo group: SkyWires
Date: 2003-12-21 04:06:59 UTC
From: Dr.Ace Ratliff
Topic: 230 Message: 232

On Sun, 21 Dec 2003 03:35:31 -0000, exemptfromlife wrote:
>Yesterday my wife noticed that my skywire came down sometime during
>the week. Our dog had gotten himself all hung up in the trout line I
>used to hoist up one of the insulators.
>
>Just as an informal poll, what doe most of you use to secure your
>skywire? trout line, wire, etc.?
>
>thanks.
>

HI,
I am using wire right now , I have used yellow rope but it rots
after 5 - 10 years depending on the diameter .
But I talked to a guy on the radio that told me, He uses Weed Eater
line from Wal-Mart . I checked it out and you can get a giant roll
for less than $20 .
This guy told me that he hooked one end to the bumper of his truck
and pulled his antenna up and that it had been up for over 5 years .
The stuff is very hard to break . He said he is using clear and that
it is invisible and looks like the antenna is floating in the air .
When I went to my local Wal-Mart store they only had purple and green
. But they did have at least two different diameters .

http://www.bloomington.in.us/~wh2t/loop.html

233. Re: Skywire Down!

Yahoo group: SkyWires
Date: 2003-12-21 04:56:27 UTC
From: jimmcskate
Topic: 230 Message: 233

I use teflon-insulated 16 gauge wire on the supports for the 40m loop (and for the loop itself). The stuff has a pretty good tensile strngth, is (or should be) UV-immune, and the teflon keeps the support wires from binding in the trees.

Two corners are on springy 8 foot sticks (1.25 square stock) attached to structures; one corner is attached to a sturdy maple, and one is tossed over a treetop and attached to a tensioning weight. The wire floats in the insulators, and I rely on an old sash window weight to maintain tention.

Had some pretty good results on 15 today, and 20m was hopping tonight... but family commitments kept me from chasing some DX.

Have a great day, and get that wire back up soon!
DE WA2LGN
Jim McAward
> Just as an informal poll, what doe most of you use to secure your
> skywire? trout line, wire, etc.?
>
> thanks.

234. Re: Skywire Down !

Yahoo group: SkyWires
Date: 2003-12-21 07:53:40 UTC
From: R H F
Topic: 230 Message: 234

FO&A,

The Weed-Eater Line sounds like a Good Idea . . .
- - - But, it is a Mono-Filament and can be easily damaged
so that a Break will occur at the point of the damage.

FWIW: The UV resistant woven ropes usually hold up well
and are highly resistant to "Breakage" type Faliures.

IMHO: Parachute Cord (Shock-Line) is relatively small and durable.

* PARACHUTE CORD. (The Real Thing) Heavy Continuous Filament
Nylon Shroud Covers Seven Inner Nylon Cords. Rated at 550
Pound Test. Usually available in Olive Drab, Black, White, ETC.
Size: 300 Foot Spool at about $20.

* GI STYLE UTILITY CORD. (Cheaper Look-A-Like = Works OK)
Flat Woven Camouflage Colored Nylon Cord with a Poly Core
about 3/16" Diameter. Size: 100 Foot Hank at about $4.

? ANY ? OTHER ? SUGGESTIONS ?

iane ~ RHF
.
.
= = = In SkyWires@yahoogroups.com,
= = = "Dr.Ace Ratliff" <wh2t@b...> wrote:

On Sun, 21 Dec 2003 03:35:31 -0000, exemptfromlife wrote:

Yesterday my wife noticed that my skywire came down
sometime during the week. Our dog had gotten himself
all hung up in the trout line I used to hoist up one
of the insulators.

Just as an informal poll, what doe most of you use to
secure your skywire? trout line, wire, etc.?

thanks.

- -

HI,
I am using wire right now , I have used yellow rope but
it rots after 5 - 10 years depending on the diameter.
But I talked to a guy on the radio that told me,
He uses Weed Eater line from Wal-Mart . I checked it out
and you can get a giant roll for less than $20.

This guy told me that he hooked one end to the bumper
of his truck and pulled his antenna up and that it had
been up for over 5 years.
The stuff is very hard to break. He said he is using
clear and that it is invisible and looks like the antenna
is floating in the air.
When I went to my local Wal-Mart store they only had
purple and green.
But they did have at least two different diameters.

http://www.bloomington.in.us/~wh2t/loop.html

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235. Re: [SkyWires] Re: Skywire Down !

Yahoo group: SkyWires
Date: 2003-12-21 08:08:50 UTC
From: RON TROTTO
Topic: 230 Message: 235

what about 100 pound test salt water fishing line ron

R H F <rhf-mail@...> wrote:FO&A,

The Weed-Eater Line sounds like a Good Idea . . .
- - - But, it is a Mono-Filament and can be easily damaged
so that a Break will occur at the point of the damage.

FWIW: The UV resistant woven ropes usually hold up well
and are highly resistant to "Breakage" type Faliures.

IMHO: Parachute Cord (Shock-Line) is relatively small and durable.

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Nylon Shroud Covers Seven Inner Nylon Cords. Rated at 550
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Size: 300 Foot Spool at about $20.

* GI STYLE UTILITY CORD. (Cheaper Look-A-Like = Works OK)
Flat Woven Camouflage Colored Nylon Cord with a Poly Core
about 3/16" Diameter. Size: 100 Foot Hank at about $4.

? ANY ? OTHER ? SUGGESTIONS ?

iane ~ RHF
.
.
= = = In SkyWires@yahoogroups.com,
= = = "Dr.Ace Ratliff" wrote:

On Sun, 21 Dec 2003 03:35:31 -0000, exemptfromlife wrote:

Yesterday my wife noticed that my skywire came down
sometime during the week. Our dog had gotten himself
all hung up in the trout line I used to hoist up one
of the insulators.

Just as an informal poll, what doe most of you use to
secure your skywire? trout line, wire, etc.?

thanks.

- -

HI,
I am using wire right now , I have used yellow rope but
it rots after 5 - 10 years depending on the diameter.
But I talked to a guy on the radio that told me,

He uses Weed Eater line from Wal-Mart . I checked it out
and you can get a giant roll for less than $20.
This guy told me that he hooked one end to the bumper
of his truck and pulled his antenna up and that it had
been up for over 5 years.
The stuff is very hard to break. He said he is using
clear and that it is invisible and looks like the antenna
is floating in the air.
When I went to my local Wal-Mart store they only had
purple and green.
But they did have at least two different diameters.

http://www.bloomington.in.us/~wh2t/loop.html

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To unsubscribe from this group, send an email to:
SkyWires-unsubscribe@yahoogroups.com

Yahoo! Groups Links

To visit your group on the web, go to:
http://groups.yahoo.com/group/SkyWires/

To unsubscribe from this group, send an email to:
SkyWires-unsubscribe@yahoogroups.com

Your use of Yahoo! Groups is subject to:
http://docs.yahoo.com/info/terms/

Do you Yahoo!?
New Yahoo! Photos - easier uploading and sharing

236. Re: Skywire Down !

Yahoo group: SkyWires
Date: 2003-12-21 09:45:44 UTC
From: R H F
Topic: 230 Message: 236

RT,

Mono-Filament? -or- Braided ?

IMHO: One of the new Spectra Fiber (Micro-Filament) Fish
Line that is Fully Abrasion, UV and Chemical Resistant;
would be a Good Choice.

I would NOT use the cheaper Dacron Braided Fiber Fish Lines.
- - - Or, a Mono-Filament Fishing Line.

AFAIK: The big 'problem' with the using Fishing Lines as
Antenna Structural Guides is their "Small Size" and the
hard process of handling them.

FWIW: This is WHY I suggest using the Parachute Cord for
its 'ease' of handling; relative small size; high strength
and durability; and basic low cost.

NOTE: I were trying to build an OutSide "Stealth" Antenna
using a "Sky Blue" Colored #24 AWG Hook-Up Wire then Fishing
Line that is "Nearly Invisable" would be a major consideration
as part of the design and construction process.

iane ~ RHF
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.
= = = In SkyWires@yahoogroups.com,
= = = RON TROTTO <swl35years@y...> wrote:
> what about 100 pound test salt water fishing line
>
> ron
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> R H F <rhf-mail@u...> wrote:FO&A,
>
> The Weed-Eater Line sounds like a Good Idea . . .
> - - - But, it is a Mono-Filament and can be easily damaged
> so that a Break will occur at the point of the damage.
>
> FWIW: The UV resistant woven ropes usually hold up well
> and are highly resistant to "Breakage" type Faliures.
>
> IMHO: Parachute Cord (Shock-Line) is relatively small and durable.

>
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> Pound Test. Usually available in Olive Drab, Black, White, ETC.
> Size: 300 Foot Spool at about $20.
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> about 3/16" Diameter. Size: 100 Foot Hank at about $4.
>
> ? ANY ? OTHER ? SUGGESTIONS ?
>
> iane ~ RHF
> .
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>
> On Sun, 21 Dec 2003 03:35:31 -0000, exemptfromlife wrote:
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> of the insulators.
>
> Just as an informal poll, what doe most of you use to
> secure your skywire? trout line, wire, etc.?
>
> thanks.
>
> -
>
> HI,
> I am using wire right now , I have used yellow rope but
> it rots after 5 - 10 years depending on the diameter.
> But I talked to a guy on the radio that told me,
> He uses Weed Eater line from Wal-Mart . I checked it out
> and you can get a giant roll for less than $20.
> This guy told me that he hooked one end to the bumper
> of his truck and pulled his antenna up and that it had
> been up for over 5 years.
> The stuff is very hard to break. He said he is using
> clear and that it is invisible and looks like the antenna
> is floating in the air.
> When I went to my local Wal-Mart store they only had
> purple and green.
> But they did have at least two different diameters.
>
> http://www.bloomington.in.us/~wh2t/loop.html
>

>

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237. Re: [SkyWires] Re: Skywire Down !

Yahoo group: SkyWires
Date: 2003-12-21 20:33:10 UTC
From: Jim Dunstan
Topic: 230 Message: 237

At 09:45 AM 12/21/03 +0000, you wrote:

Re: discussion about support cable. I have had wire antennae of various kinds up in the trees out at my woodlot for almost 30 years. I use a good quality tight weave nylon rope 1/4'-3/8" (being able to stretch a bit helps). I have a small shack out there and I keep a fishing pole with spinning reel (closed face type) on hand. I also keep a sling shot on hand with a number of 3/4 oz lead weights. All of this is in case one of the halyards lets go.

When a halyard lets go I then put my re-stringing technique to work. I take the rod/reel out and place it in the vicinity of the target branch. I put it on the ground with the tip pointing in the general direction of the target. I release the bail on the reel, put the weight (with a colorful red ribbon) in the sling shot and then shoot it over the desired branch. I have pretty dense bush so the hardest part is finding the weight since the monofilament is all but invisible. This is where the colorful ribbon comes into play. I have tried dipping the weights in some kind of fish or gravy etc and get my beagle to sniff it out. He can do it except he is more interested in rabbits. Many of the halyards are up almost 50'.

All told I have about a dozen halyards up in the trees for the various wire antennae. To minimize the breakage and the time it takes to put them up again I do some simple maintenance twice a year. The result is that I often go by a whole year without fixing any of them. Here is how it goes:

I find that the quality nylon rope lasts many years between replacements. However, where the rope goes over the branch there is considerable wear/abrasion as well as degradation with moisture. This area of deterioration is usually no more than a foot in length. It doesn't make sense to replace the whole rope. So I lower the rope, splice in a short length at the abrasion point, then haul it back into place. I do this once a year .... usually in either the fall or spring when the leaves are down and the branches and ropes are more easily seen. This also the time of year any changes are made.

I have each halyard tied off at the ground level. To lower the halyard I use what I call a 'working rope'. I untie the halyard, attach my working rope, then lower the end down to the ground. I examine the halyard, find the critical section, then splice in fresh rope, and then raise it back up in place. A pair of binoculars is also handy to examine halyards when still in place.

I have tried different kinds of rope/material and have not found anything that stays up more than a couple of years. Regular maintenance is essential.

Jim Dunstan VE3CI
Thunder Bay, ON

238. Re: [SkyWires] Re: Skywire Down !

Yahoo group: SkyWires
Date: 2003-12-21 21:47:58 UTC
From: desmoface@aol.com
Topic: 230 Message: 238

In a message dated 12/21/2003 3:34:13 PM Eastern Standard Time,
jimdunstan@... writes:

> However, where the rope goes over the branch there is
> considerable wear/abrasion as well as degradation with moisture. This area
>

Sounds like you have a lot more experience in wire's than I..but a trick that
works pretty good is using plastic plumbing tubing...I ran the rope through
the tubing and haul it up into the tree..so that the tubing is taking the
abrasion...so far so good..

73's de kb8viv

Steve

239. Re: [SkyWires] Re: Skywire Down !

Yahoo group: SkyWires
Date: 2003-12-21 16:24:13 UTC
From: S. Cash Olsen
Topic: 230 Message: 239

The guys around southern New Mexico swear by hay bailing twine. It's readily available, try hardware for spools to a couple of hundred feet or farm supply for spools of a few thousand feet. It has great strength, is UV resistant, relatively cheap, compare to other suggestions, color is orange and it's flexible and easy to work with. Long life, many antennas have been in the sky for 5 - 10 years, needed no work.

Cash
At 02:45 AM 12/21/2003, you wrote:
>RT,
>
>Mono-Filament? -or- Braided ?
>
>IMHO: One of the new Spectra Fiber (Micro-Filament) Fish
>Line that is Fully Abrasion, UV and Chemical Resistant;
>would be a Good Choice.
>
>I would NOT use the cheaper Dacron Braided Fiber Fish Lines.
>- - - Or, a Mono-Filament Fishing Line.
>
>AFAIK: The big 'problem' with the using Fishing Lines as
>Antenna Structural Guides is their "Small Size" and the
>hard process of handling them.
>
>FWIW: This is WHY I suggest using the Parachute Cord for
>its 'ease' of handling; relative small size; high strength
>and durability; and basic low cost.
>
>NOTE: I were trying to build an OutSide "Stealth" Antenna
>using a "Sky Blue" Colored #24 AWG Hook-Up Wire then Fishing
>Line that is "Nearly Invisable" would be a major consideration
>as part of the design and construction process.
>
>iane ~ RHF
>.
>.
>= = = In SkyWires@yahoogroups.com,
>= = = RON TROTTO <swl35years@y...> wrote:
> > what about 100 pound test salt water fishing line
> >
> > ron
> >
>.
>.
>- -

> >
> > R H F <rhf-mail@u...> wrote:FO&A,
> >
> > The Weed-Eater Line sounds like a Good Idea . . .
> > - - - But, it is a Mono-Filament and can be easily damaged
> > so that a Break will occur at the point of the damage.
> >
> > FWIW: The UV resistant woven ropes usually hold up well
> > and are highly resistant to "Breakage" type Faliures.
> >
> > IMHO: Parachute Cord (Shock-Line) is relatively small and durable.
> >
> > * PARACHUTE CORD. (The Real Thing) Heavy Continuous Filament
> > Nylon Shroud Covers Seven Inner Nylon Cords. Rated at 550
> > Pound Test. Usually available in Olive Drab, Black, White, ETC.
> > Size: 300 Foot Spool at about $20.
> >
> > * GI STYLE UTILITY CORD. (Cheaper Look-A-Like = Works OK)
> > Flat Woven Camouflage Colored Nylon Cord with a Poly Core
> > about 3/16" Diameter. Size: 100 Foot Hank at about $4.
> >
> > ? ANY ? OTHER ? SUGGESTIONS ?
> >
> > iane ~ RHF
> > .
> > .
> > = = = In SkyWires@yahoogroups.com,
> > = = = "Dr.Ace Ratliff" wrote:
> >
> > On Sun, 21 Dec 2003 03:35:31 -0000, exemptfromlife wrote:
> >
> > Yesterday my wife noticed that my skywire came down
> > sometime during the week. Our dog had gotten himself
> > all hung up in the trout line I used to hoist up one
> > of the insulators.
> >
> > Just as an informal poll, what doe most of you use to
> > secure your skywire? trout line, wire, etc.?
> >
> > thanks.
> >
> > -
> >
> > HI,
> > I am using wire right now , I have used yellow rope but
> > it rots after 5 - 10 years depending on the diameter.
> > But I talked to a guy on the radio that told me,
> > He uses Weed Eater line from Wal-Mart . I checked it out
> > and you can get a giant roll for less than $20.
> > This guy told me that he hooked one end to the bumper

> > of his truck and pulled his antenna up and that it had
> > been up for over 5 years.
> > The stuff is very hard to break. He said he is using
> > clear and that it is invisible and looks like the antenna
> > is floating in the air.
> > When I went to my local Wal-Mart store they only had
> > purple and green.
> > But they did have at least two different diameters.
> >
> > http://www.bloomington.in.us/~wh2t/loop.html
> >
> >
>
>.
>
>
>
>
>To unsubscribe from this group, send an email to:
>SkyWires-unsubscribe@yahoogroups.com
>
>
>
>
>Yahoo! Groups Links
>
>To visit your group on the web, go to:
> http://groups.yahoo.com/group/SkyWires/
>
>To unsubscribe from this group, send an email to:
> SkyWires-unsubscribe@yahoogroups.com
>
>Your use of Yahoo! Groups is subject to:
> http://docs.yahoo.com/info/terms/

240. Re: [SkyWires] Re: Skywire Down !

Yahoo group: SkyWires
Date: 2003-12-21 23:13:05 UTC
From: Jim Dunstan
Topic: 230 Message: 240

At 04:47 PM 12/21/03 -0500, you wrote:
>In a message dated 12/21/2003 3:34:13 PM Eastern Standard Time,
>jimdunstan@... writes:
>
>
>>However, where the rope goes over the branch there is
>>considerable wear/abrasion as well as degradation with moisture. This area
>>of deterioration is usually no more than a foot in length.
>
>
>Sounds like you have a lot more experience in wire's than I..but a trick
>that works pretty good is using plastic plumbing tubing...I ran the rope
>through the tubing and haul it up into the tree..so that the tubing is
>taking the abrasion...so far so good..
>
>73's de kb8viv

Very interesting. When I first read your comment I thought ..... yeah,
but how do you get the tubing up in the appropriate location. Then I
thought .... "well wait .... maybe that has merit". You may be
right.... next time I will bring down the halyard long before
deterioration and note where the wear is taking place. I will run the
tubing over the rope and bring it over the abrasion portion then tape it on
either end to stay in place. I will then pull the halyard back up until
the tubing is over the branch .... and it should be in the right place.

Thanks for the idea. I'll try a couple of them in the spring.

Jim Dunstan VE3CI
Thunder Bay, ON

241. Re: [SkyWires] Re: Skywire Down !

Yahoo group: SkyWires
Date: 2003-12-21 23:41:09 UTC
From: desmoface@aol.com
Topic: 230 Message: 241

In a message dated 12/21/2003 6:14:39 PM Eastern Standard Time,
jimdunstan@... writes:

> Very interesting. When I first read your comment I thought ..... yeah,
> but how do you get the tubing up in the appropriate location. Then I
> thought .... "well wait .... maybe that has merit". You may be
> right.... next time I will bring down the halyard long before
> deterioration and note where the wear is taking place. I will run the
> tubing over the rope and bring it over the abrasion portion then tape it on
> either end to stay in place. I will then pull the halyard back up until
> the tubing is over the branch .... and it should be in the right place.
>
> Thanks for the idea. I'll try a couple of them in the spring.
>

Hi Jim..What I did was slip the tubing over the rope, attach my marine
pulley, and when I pull it up into the tree the pulley kind of holds it in
place..you can even tie a not in the rope at both ends of the tubing..but I just used
the pulley, thinking that if the tree grows around the tubing, I'd still be
able to lower the supporting rope through the tubing (if something jamed up the
rope in the pulley or to replace the pulley)..I figured the rope wouldn't last
too long without some protection from abrasion..

I found the tubing at a local Home Depot/Hardware store, it was like $5 for
twenty feet..I believe its used to run the water to ice makers in
refrigerators..worked perfectly.. If It weren't dark here I'd email you a pic of the setup
>
>

....Good luck and best 73's..de kb8viv

Steve

242. Rope

Yahoo group: SkyWires
Date: 2003-12-22 16:07:20 UTC
From: keith currie
Topic: 242 Message: 242

I have had very good luck using rewind-starter rope from snowmobiles and chain saws, and you can get it in a lot off different sizes to fit your needs.
Keith VE5HKC

243. Gravy Hunter... (was Skywire Down !)

Yahoo group: SkyWires
Date: 2003-12-22 19:22:32 UTC
From: jimmcskate
Topic: 230 Message: 243

--- In SkyWires@yahoogroups.com, Jim Dunstan <jimdunstan@r...> wrote
the funniest thing I've read in years:

> I have tried dipping the weights in some kind of fish or gravy
> etc and get my beagle to sniff it out.

Thanks for the great laugh, Jim!!
73 DE WA2LGN
Also a Jim, in Blue Point, NY

244. 40m prop or my loop change?

Yahoo group: SkyWires
Date: 2003-12-25 16:45:07 UTC
From: Tim
Topic: 244 Message: 244

Hi all -
I recently was off the air for about three months. for three years I had a loop up around my roof that worked quite well on all bands. A few weeks ago I replaced the wire with a longer wire/same thickness (maybe 20 feet longer - it's now about 200 feet) and I raised one corner of it to about 30 ft on a mast that I installed. I also created a much shorter coax run. I run about 20 feet of coax to the outside wall of my house to an LDG4:1 balun and then about another 15 feet of open ladder line to the loop. Most of the loop is around 22 feet..
Here is what is confusing me and I don't know if it's propagation or some kind of harmonic or loop elevation change etc. All bands are fine except 40 meters which is extremely noise and always seems to have a pulsing sort of noise at any time of the day. Last Tuesday I found it impossible to copy my Code Buddy from Idaho down here in Arizona on 40m. I still cannot locate and hear the 3905 Century Club net which usually operates on 7.230.5 around 0100UTC - I just get a ton of noise. I often use that net as a baseline measurement of 40m conditions. Do any of you engineering types have a thought regarding whether any antenna changes I have described could create this problem? Is there some sort of harmonic issue to look into? Are the lower freq more subject to interference from local electrical objects like transformers or street lights? Any ideas? As I say all is great except 40 meters!
Thanks for any suggestions in advance!
73/Tim NZ7C

245. Re: [SkyWires] 40m prop or my loop change?

Yahoo group: SkyWires
Date: 2003-12-25 17:44:51 UTC
From: desmoface@aol.com
Topic: 244 Message: 245

In a message dated 12/25/2003 11:55:01 AM Eastern Standard Time, nz7c@...
writes:

> Hi all -
> I recently was off the air for about three months. for three years I had a
> loop up around my roof that worked quite well on all bands. A few weeks ago
> I replaced the wire with a longer wire/same thickness (maybe 20 feet
>

Well, its not really the right length to operate efficiently on 40 meters...a
full wave loop on 40 would want to be approx 130ft or a little less with
insulated wire......if you go to ~260 you'd be 2 wl on 40 and a 1 wl on 80..

So, your gonna have to add or remove a bit of wire to get maximum efficiency
on 40m..good luck..

Steve
kb8viv

246. Re: [SkyWires] 40m prop or my loop change?

Yahoo group: SkyWires
Date: 2003-12-25 18:39:15 UTC
From: Dr.Ace Ratliff
Topic: 244 Message: 246

On Thu, 25 Dec 2003 09:45:07 -0700, Tim wrote:
Are
>the
>lower freq more subject to interference from local electrical
>objects like
>transformers or street lights? Any ideas? As I say all is great
>except 40
>meters!
>Thanks for any suggestions in advance!
>73/Tim NZ7C
>

Hi Tim ,
Yes , in general , the Lower the Freq the more noise you will usually get . But it sounds to me like you have something else going on .
One more thing , If you decide to change the size of your loop , it needs to be an odd multiple of wavelengths 1 , 3 , 5 etc ... If you make it 2 WL on 40m it will be a very high impedance and hard to tune to . Merry Christmas de WH2T , Ace
www.WH2T.com

247. Re: [SkyWires] 40m prop or my loop change?

Yahoo group: SkyWires
Date: 2003-12-25 19:23:47 UTC
From: Tim
Topic: 244 Message: 247

Ok Ace -
Gets me closer to sorting alternatives - say, Ace, if I took a setion of wire and folded it over on itself and taped it - would that be the temporary equivalent to shortening the length? Or is the electrical length still the same?
Thanks Ace!
73/Tim
----- Original Message -----
From: "Dr.Ace Ratliff" <wh2t@...>
To: <SkyWires@yahoogroups.com>
Sent: Thursday, December 25, 2003 11:39 AM
Subject: Re: [SkyWires] 40m prop or my loop change?

On Thu, 25 Dec 2003 09:45:07 -0700, Tim wrote:
Are
>the
>lower freq more subject to interference from local electrical
>objects like
>transformers or street lights? Any ideas? As I say all is great
>except 40
>meters!
>Thanks for any suggestions in advance!
>73/Tim NZ7C
>

Hi Tim ,
Yes , in general , the Lower the Freq the more noise you will usually get . But it sounds to me like you have something else going on .
One more thing , If you decide to change the size of your loop , it needs to be an odd multiple of wavelengths 1 , 3 , 5 etc ... If you make it 2 WL on 40m it will be a very high impedance and hard to tune to . Merry Christmas de WH2T , Ace
www.WH2T.com

248. Re: [SkyWires] 40m prop or my loop change?

Yahoo group: SkyWires
Date: 2003-12-25 19:28:16 UTC
From: Tim
Topic: 244 Message: 248

Thanks Steve -
I am running the whole thing the an LDG-11 tuner, but I believe I will shorten it to resonance anyway since I plan to make a separate 80 meter antenna. Although, you do always hear the maxim of "get up as much wire as you can and create the greatest circumference" ....hard to no which theiry to follow! I will have to keep in mind Ace's remark about making sure the length is an odd multiple of the operating frequencies I want to use as well.
Thanks!
73/tIM nz7c
----- Original Message -----
From: <desmoface@...>
To: <SkyWires@yahoogroups.com>
Sent: Thursday, December 25, 2003 10:44 AM
Subject: Re: [SkyWires] 40m prop or my loop change?

> In a message dated 12/25/2003 11:55:01 AM Eastern Standard Time,
nz7c@...
> writes:
>
>
> > Hi all -
> > I recently was off the air for about three months. for three years I
had a
> > loop up around my roof that worked quite well on all bands. A few weeks
ago
> > I replaced the wire with a longer wire/same thickness (maybe 20 feet
> >
>
> Well, its not really the right length to operate efficiently on 40
meters...a
> full wave loop on 40 would want to be approx 130ft or a little less with
> insulated wire......if you go to ~260 you'd be 2 wl on 40 and a 1 wl on
80..
>
> So, your gonna have to add or remove a bit of wire to get maximum
efficiency
> on 40m..good luck..
>
> Steve
> kb8viv
>

249. Re: [SkyWires] 40m prop or my loop change?

Yahoo group: SkyWires
Date: 2003-12-25 22:07:58 UTC
From: desmoface@aol.com
Topic: 244 Message: 249

In a message dated 12/25/2003 2:38:06 PM Eastern Standard Time, nz7c@...
writes:

> hard to no which theiry
> to follow! I will have to keep in mind Ace's remark about making sure the
> length is an odd multiple of the operating frequencies I want to use as
> well.
> Thanks!
> 73/tIM nz7c
>

Hi Tim...My loop is 2 wl on 40 and works great, the tuner in the rig tunes it
with no problem at all...although I'm sure it would be a little better if it
was an odd multiple...good luck..

Steve
kb8viv

250. Re: [SkyWires] 40m prop or my loop change?

Yahoo group: SkyWires
Date: 2003-12-26 05:23:47 UTC
From: Dr.Ace Ratliff
Topic: 244 Message: 250

On Thu, 25 Dec 2003 12:23:47 -0700, Tim wrote:
>Ok Ace -
>Gets me closer to sorting alternatives - say, Ace, if I took a
>setion of
>wire and folded it over on itself and taped it - would that be the
>temporary
>equivalent to shortening the length? Or is the electrical length
>still the
>same?
>Thanks Ace!
>73/Tim
>----- Original Message -----
>From: "Dr.Ace Ratliff" <wh2t@...>
>To: <SkyWires@yahoogroups.com>
>Sent: Thursday, December 25, 2003 11:39 AM
>Subject: Re: [SkyWires] 40m prop or my loop change?
>
>

>Hi Tim ,
>Yes , in general , the Lower the Freq the more noise you will
>usually get . But it sounds to me like you have something else
going
>on .
>One more thing , If you decide to change the size of your loop , it
>needs to be an odd multiple of wavelengths 1 , 3 , 5 etc ... If you
>make it 2 WL on 40m it will be a very high impedance and hard to
tune
>to . Merry Christmas de WH2T , Ace
>www.WH2T.com
>
Hi Tim,
If you take a section of BARE wire and fold it over on itself and
taped it - it would be the equivalent to shortening the length . If
the wire is insulated I doubt if it will work but I haven't tried it.

I also want to comment on Steve's remarks
"Hi Tim...My loop is 2 wl on 40 and works great, the tuner in the rig
tunes it with no problem at all...although I'm
sure it would be a little better if it was an odd multiple...good
luck.. Steve kb8viv "

If you decide to change the size of your loop , it
needs to be an odd multiple of wavelengths 1 , 3 , 5 etc ... If you
make it 2 WL on 40m it will be a very high impedance and harder to
tune to , not impossible to tune just harder . The automatic tuner in

my FT-920 will tune almost anything and so will my MFJ-989C . If you make a loop an odd multiple of wavelengths 1 , 3 , 5 etc ... It will resonate and you don't even need a tuner !
Merry Christmas de WH2T , Ace
www.WH2T.com

251. Re: Re: [SkyWires] 40m prop or my loop change?

Yahoo group: SkyWires
Date: 2003-12-26 15:46:22 UTC
From: nz7c@cox.net
Topic: 244 Message: 251
Attachments: 1 described; binary payloads are missing from this source WARC

Hi Ace -
Monday night, my first free time, I plan to shorten the wire to a 40 m length but before doing so I will check to see if that length becomes an even multiple of the higher frequencies.
You know, another question arises. When we talk about a length being an even multiple, how close to the even multiple is significant? For example, if we say that 280' is an even multiple of 140', is 290 still close enough to an even multiple to be of significance? You don't have to asnwer becauase I plan to do some more reading now that you have helped me get into the right ballpark - but is is an interesting question.
The other "debate" I often see about loops is whether or not to include an open ladder feed line. If you plan to use it as a vertical element and the loop as a top hat, it makes sense. However many loops run the feedline right next to the house which somewhat reduces the sensibility of ther vertical element - that's when I see the comments show up about direct connection to the coax without a balun - which perhaps might be acceptable for real short runs of coax. Any thoughtson this ACE?
73/Tim NZ7C

Hi Tim,
If you take a section of BARE wire and fold it over on itself and taped it - it would be the equivalent to shortening the length . If the wire is insulated I doubt if it will work but I haven't tried it.

I also want to comment on Steve's remarks
"Hi Tim...My loop is 2 wl on 40 and works great, the tuner in the rig tunes it with no problem at all...although I'm
sure it would be a little better if it was an odd multiple...good luck.. Steve kb8viv "

If you decide to change the size of your loop , it needs to be an odd multiple of wavelengths 1 , 3 , 5 etc ... If you make it 2 WL on 40m it will be a very high impedance and harder to tune to , not impossible to tune just harder . The automatic tuner in my FT-920 will tune almost anything and so will my MFJ-989C . If you make a loop an odd multiple of wavelengths 1 , 3 , 5 etc ... It will resonate and you don't even need a tuner !
Merry Christmas de WH2T , Ace
www.WH2T.com

==========

252. Re: Re: [SkyWires] 40m prop or my loop change?

Yahoo group: SkyWires
Date: 2003-12-26 17:47:00 UTC
From: Dr.Ace Ratliff
Topic: 244 Message: 252

On Fri, 26 Dec 2003 10:46:22 -0500, nz7c@... wrote:
>Hi Ace -
>Monday night, my first free time, I plan to shorten the wire to a 40
>m length but before doing so I will check to see if that length
>becomes an even multiple of the higher frequencies.
>You know, another question arises. When we talk about a length being
>an even multiple, how close to the even multiple is significant? For
>example, if we say that 280' is an even multiple of 140', is 290
>still close enough to an even multiple to be of significance? You
>don't have to answer because I plan to do some more reading now
>that you have helped me get into the right ballpark - but is is an
>interesting question.
>The other "debate" I often see about loops is whether or not to
>include an open ladder feed line. If you plan to use it as a
>vertical element and the loop as a top hat, it makes sense. However
>many loops run the feedline right next to the house which somewhat
>reduces the sensibility of the vertical element - that's when I see
>the comments show up about direct connection to the coax without a
>balun - which perhaps might be acceptable for real short runs of
>coax. Any thoughts on this ACE?
>73/Tim NZ7C
>
>Hi Tim,
>If you take a section of BARE wire and fold it over on itself and
>taped it - it would be the equivalent to shortening the length . If
>the wire is insulated I doubt if it will work but I haven't tried
it.
>
>I also want to comment on Steve's remarks
>"Hi Tim...My loop is 2 wl on 40 and works great, the tuner in the
>rig
>tunes it with no problem at all...although I'm
>sure it would be a little better if it was an odd multiple...good
>luck.. Steve kb8viv "
>
>If you decide to change the size of your loop , it
>needs to be an odd multiple of wavelengths 1 , 3 , 5 etc ... If you
>make it 2 WL on 40m it will be a very high impedance and harder to
>tune to , not impossible to tune just harder . The automatic tuner
>in
>my FT-920 will tune almost anything and so will my MFJ-989C . If you
>make a loop an odd multiple of wavelengths 1 , 3 , 5 etc ... It will
>resonate and you don't even need a tuner !
>Merry Christmas de WH2T , Ace
>www.WH2T.com

>
>==

Hi Tim,
I use my 75 meter Full Wave Delta Loop on 75 meters much more than
any other band because 75 is my favorite band . I don't use a balun .
It will cover the entire phone band on 75 with less than a 3:1 vswr
at the band edges and flat near the middle of the band without using
a tuner ! I am feeding my loop with Coax . I am using a Quarter Wave
Matching Q Section of 75 Ohm coax coming off of the antenna to a
random length of 50 Ohm coax to reach my equipment. The formula to
figure the length of 75 ohm coax needed is " 246 VF / Freq in Mhz "
----- VF = Velocity Factor of the 75 Ohm coax used.
With my tuner it will tune 6 thu 75 meter bands . I use a 1/4 wave
inverted L antenna on 160 meter band , I don't want to mess with
shorting a feedline , I just want to flip a switch .
But if you short the feedline and feed a loop as a vertical it will
make no difference if you use coax or ladder line .
Ace - WH2T

http://www.bloomington.in.us/~wh2t/loop.html
----

253. Re: 40m prop or my loop change?

Yahoo group: SkyWires
Date: 2003-12-26 19:03:44 UTC
From: Tim
Topic: 244 Message: 253

Just a thought, but don't assume the changing of the length of your loop is what caused the poor performance. You mentioned the qrn was a "pulsating" type noise and that you had been off the air for three months previously. Makes me wonder if something else is at work. For example, my daughter recently moved in with us and I couldn't figure out why my noise level on 80-meters was so high that I could barely hear the traffic net anymore. I finally tracked it down to her computer and power strip. Turn them off, the noise was gone, turn them on and hello S9 noise level. The thing is generating so much RFI that my radios in the van lock in on it from the driveway.

Ask yourself if you've added any potential RFI producers to the house in the last three months? Or did you route the antenna closer to an outside source of noise?

Food for thought, and good luck!

Tim
W9THD

--- In SkyWires@yahoogroups.com, "Tim" <nz7c@c...> wrote:
> Hi all -
> I recently was off the air for about three months. for three years I had a
> loop up around my roof that worked quite well on all bands. A few weeks ago
> I replaced the wire with a longer wire/same thickness (maybe 20 feet
> longer - it's now about 200 feet) and I raised one corner of it to about 30
> ft on a mast that I installed. I also created a much shorter coax run. I
> run about 20 feet of coax to the outside wall of my house to an LDG4:1 balun
> and then about another 15 feet of open ladder line to the loop. Most of the
> loop is around 22 feet..
> Here is what is confusing me and I don't know if it's propagation or some
> kind of harmonic or loop elevation change etc. All bands are fine except 40
> meters which is extremely noise and always seems to have a pulsing sort of
> noise at any time of the day. Last Tuesday I found it impossible to copy my
> Code Buddy from Idaho down here in Arizona on 40m. I still cannot locate and

> hear the 3905 Century Club net which usually operates on 7.230.5 around
> 0100UTC - I just get a ton of noise. I often use that net as a baseline
> measurement of 40m conditions. Do any of you engineering types have a
> thought regarding whether any antenna changes I have described could
create
> this problem? Is there some sort of harmonic issue to look into? Are the
> lower freq more subject to interference from local electrical
objects like
> transformers or street lights? Any ideas? As I say all is great
except 40
> meters!
> Thanks for any suggestions in advance!
> 73/Tim NZ7C

254. Re: Re: [SkyWires] 40m prop or my loop change?

Yahoo group: SkyWires
Date: 2003-12-26 21:25:18 UTC
From: Tim
Topic: 244 Message: 254

Ace -
What impedence did you measure at the loop ends before you connected the
75ohm ribbon? Or did you measure it? Thanks. Tim
----- Original Message -----
From: "Dr.Ace Ratliff" <wh2t@...>
To: <SkyWires@yahoogroups.com>
Sent: Friday, December 26, 2003 10:47 AM
Subject: Re: Re: [SkyWires] 40m prop or my loop change?

On Fri, 26 Dec 2003 10:46:22 -0500, nz7c@... wrote:
>Hi Ace -
>Monday night, my first free time, I plan to shorten the wire to a 40
>m length but before doing so I will check to see if that length
>becomes an even multiple of the higher frequencies.
>You know, another question arises. When we talk about a length being
>an even multiple, how close to the even multiple is significant? For
>example, if we say that 280' is an even multiple of 140', is 290
>still close enough to an even multiple to be of significance? You
>don't have to answer because I plan to do some more reading now
>that you have helped me get into the right ballpark - but is is an
>interesting question.
>The other "debate" I often see about loops is whether or not to
>include an open ladder feed line. If you plan to use it as a
>vertical element and the loop as a top hat, it makes sense. However
>many loops run the feedline right next to the house which somewhat
>reduces the sensibility of the vertical element - that's when I see
>the comments show up about direct connection to the coax without a
>balun - which perhaps might be acceptable for real short runs of
>coax. Any thoughts on this ACE?
>73/Tim NZ7C
>
>Hi Tim,
>If you take a section of BARE wire and fold it over on itself and
>taped it - it would be the equivalent to shortening the length . If
>the wire is insulated I doubt if it will work but I haven't tried
it.
>
>I also want to comment on Steve's remarks
>"Hi Tim...My loop is 2 wl on 40 and works great, the tuner in the
>rig
>tunes it with no problem at all...although I'm
>sure it would be a little better if it was an odd multiple...good
>luck.. Steve kb8viv "
>
>If you decide to change the size of your loop , it

>needs to be an odd multiple of wavelengths 1 , 3 , 5 etc ... If you
>make it 2 WL on 40m it will be a very high impedance and harder to
>tune to , not impossible to tune just harder . The automatic tuner
>in
>my FT-920 will tune almost anything and so will my MFJ-989C . If you
>make a loop an odd multiple of wavelengths 1 , 3 , 5 etc ... It will
>resonate and you don't even need a tuner !
>Merry Christmas de WH2T , Ace
>www.WH2T.com
>
>==

Hi Tim,
I use my 75 meter Full Wave Delta Loop on 75 meters much more than any other band because 75 is my favorite band . I don't use a balun . It will cover the entire phone band on 75 with less than a 3:1 vswr at the band edges and flat near the middle of the band without using a tuner ! I am feeding my loop with Coax . I am using a Quarter Wave Matching Q Section of 75 Ohm coax coming off of the antenna to a random length of 50 Ohm coax to reach my equipment. The formula to figure the length of 75 ohm coax needed is " 246 VF / Freq in Mhz "
----- VF = Velocity Factor of the 75 Ohm coax used.
With my tuner it will tune 6 thu 75 meter bands . I use a 1/4 wave inverted L antenna on 160 meter band , I don't want to mess with shorting a feedline , I just want to flip a switch .
But if you short the feedline and feed a loop as a vertical it will make no difference if you use coax or ladder line .
Ace - WH2T

http://www.bloomington.in.us/~wh2t/loop.html
----

255. Re: Re: [SkyWires] 40m prop or my loop change?

Yahoo group: SkyWires
Date: 2003-12-26 23:03:56 UTC
From: Dr.Ace Ratliff
Topic: 244 Message: 255

On Fri, 26 Dec 2003 14:25:18 -0700, Tim wrote:
>Ace -
>What impedence did you measure at the loop ends before you connected
>the
>75ohm ribbon? Or did you measure it? Thanks. Tim
>----- Original Message -----
>From: "Dr.Ace Ratliff" <wh2t@...>
>To: <SkyWires@yahoogroups.com>
>Sent: Friday, December 26, 2003 10:47 AM
>Subject: Re: Re: [SkyWires] 40m prop or my loop change?
>
>

>http://www.bloomington.in.us/~wh2t/loop.html
>--
Tim,
I didn't measure the Impedance , But it should be about 100 Ohms .
Ace

256. Re: Skywire Down!

Yahoo group: SkyWires
Date: 2003-12-27 00:57:18 UTC
From: kl7r
Topic: 230 Message: 256

I am currently using the black line you buy by the pound
at commercial fishing supply stores for reparing gill nets.
It is almost invisible and seems to be holding up pretty well.
I think it is nylon or dacron line covered in tar.

--- In SkyWires@yahoogroups.com, "exemptfromlife" <junkmail@a...>
wrote:
> Yesterday my wife noticed that my skywire came down sometime during
> the week. Our dog had gotten himself all hung up in the trout line
I
> used to hoist up one of the insulators.
>
> Just as an informal poll, what doe most of you use to secure your
> skywire? trout line, wire, etc.?
>
> thanks.

257. Re: 40m prop or my loop change?

Yahoo group: SkyWires
Date: 2003-12-27 01:13:49 UTC
From: kl7r
Topic: 244 Message: 257

Propagation has been pretty poor lately especially in high latitudes.
Christmas propagation was pretty good.

I am a firm believer in A/B tests.
Put up a dipole in addition to your loop and put the loop
and dipole on an A/B switch. You can then compare signals
between the two and then bootstrap yourself into better
and better antennas or detect when a good antenna goes bad.

Noise:

There are some good articles on the net about noise.
I learned that you can take a junk transistor portable
AM radio and go "Walk-About". This has helped me find
noise sources in my house (my sons stereo amp is bad,
my wifes dimmer lamp is much worse).

You can also hook your rig up to a car battery and
shut the power off in your house at the breaker box
then turn on breakers one at a time till you find
the circuit which has the noisy device. If there is
noise with the main breaker off then the problem is
not in your house and you can go "DF-ing" with your
transistor radio in the neighborhood.

See:
http://www.arrl.org/tis/info/powerline-FAQ.html

258. Today is the day!

Yahoo group: SkyWires
Date: 2003-12-27 14:42:04 UTC
From: GOD
Topic: 258 Message: 258

I'm a finishin up my cuppa joe and fixin to go out and put up my 160 meter loop.

Gonna be da bomb!

Tally Ho!!

259. Re: [SkyWires] Today is the day!

Yahoo group: SkyWires
Date: 2003-12-27 22:45:56 UTC
From: desmoface@aol.com
Topic: 258 Message: 259

In a message dated 12/27/2003 9:44:19 AM Eastern Standard Time,
pcsutton@... writes:

> I'm a finishin up my cuppa joe and fixin to go out and put up my 160
> meter loop.
>
> Gonna be da bomb!
>
> Tally Ho!!
>

Alrighty....good luck...I'd help you test it but im running an 80 meter loop
:-(

We can test her on 80 if you'd like??

73's de kb8viv/steve

260. Re: [SkyWires] Today is the day!

Yahoo group: SkyWires
Date: 2003-12-28 02:53:47 UTC
From: Dr.Ace Ratliff
Topic: 258 Message: 260

On Sat, 27 Dec 2003 17:45:56 EST, desmoface@... wrote:
>In a message dated 12/27/2003 9:44:19 AM Eastern Standard Time,
>pcsutton@... writes:
>
>
>I'm a finishin up my cuppa joe and fixin to go out and put up my 160
>
>meter loop.
>
>Gonna be da bomb!
>
>Tally Ho!!
>
>
>
>Alrighty....good luck...I'd help you test it but im running an 80
>meter loop :-(
>
>We can test her on 80 if you'd like??
>
>73's de kb8viv/steve

Hello Guys,
I will be on the air all night tonight "probably' .
Mostly on 75 , But I will be happy to go to 160 meters to give a
signal report .
Ace - www.WH2T.com

261. Re: [SkyWires] Today is the day!

Yahoo group: SkyWires
Date: 2003-12-28 05:03:10 UTC
From: desmoface@aol.com
Topic: 258 Message: 261

In a message dated 12/27/2003 9:57:24 PM Eastern Standard Time,
wh2t@... writes:

> Hello Guys,
> I will be on the air all night tonight "probably' .
> Mostly on 75 , But I will be happy to go to 160 meters to give a signal
> report .
> Ace - www.WH2T.com
>

Hey Ace, got stuck watching a movie with the xyl...maybe next time..let me
know when your on again..

Steve
kb8viv

262. Re: [SkyWires] Digest Number 74

Yahoo group: SkyWires
Date: 2003-12-28 20:21:22 UTC
From: Hulen Smith
Topic: 262 Message: 262
Attachments: 2 described; binary payloads are missing from this source WARC

Not having been on this news group very long, I'm wondering if anyone has ever suggested a weekly Loop Net on say 40 or 75 or both ? Hey, perhaps one already exists ? I do like the info and the excitement of each new anticipated installation written about. There may not be much to talk about in the way of LOOPS, however it would make it easy for all who are interested to share and compare what works for them. If such a net already exists, someone point me to it. If not..... what ya say ? What would be a good time ? Week-ends I would assume ?

Hulen
WB5UOI

263. Re: [SkyWires] Digest Number 74

Yahoo group: SkyWires
Date: 2003-12-29 01:12:23 UTC
From: desmoface@aol.com
Topic: 262 Message: 263

In a message dated 12/28/2003 3:22:32 PM Eastern Standard Time,
clay1952@... writes:

> Not having been on this news group very long, I'm wondering if anyone has
> ever suggested a weekly Loop Net on say 40 or 75 or both ? Hey, perhaps one
> already exists ? I do like the info and the excitement of each new anticipated
> installation written about. There may not be much to talk about in the way
> of LOOPS, however it would make it easy for all who are interested to share
> and compare what works for them. If such a net already exists, someone point
> me to it. If not..... what ya say ? What would be a good time ? Week-ends I
> would assume ?
>
> Hulen
> WB5UOI
>

Hi Hulen, I think its a great idea..I'd be in if it happens...73's de
kb8viv/Steve..

Steve

264. Re: [SkyWires] Digest Number 74

Yahoo group: SkyWires
Date: 2003-12-29 04:03:15 UTC
From: Dr.Ace Ratliff
Topic: 262 Message: 264

On Sun, 28 Dec 2003 14:21:22 -0600 (Central Standard Time), Hulen Smith wrote:

>
>Not having been on this news group very long, I'm wondering if
>anyone has ever suggested a weekly Loop Net on say 40 or 75
>or both ? Hey, perhaps one already exists ? I do like the
>info and the excitement of each new anticipated installation
>written about. There may not be much to talk about in the way
>of LOOPS, however it would make it easy for all who are
>interested to share and compare what works for them. If such
>a net already exists, someone point me to it. If not..... what ya
>say ? What would be a good time ? Week-ends I would assume ?
>
>Hulen
>WB5UOI
>
>_____

I'm Game .
Ace - www.WH2T.com

265. "Loopers"

Yahoo group: SkyWires
Date: 2003-12-30 05:16:35 UTC
From: Hulen Smith
Topic: 265 Message: 265
Attachments: 2 described; binary payloads are missing from this source WARC

Hulen Smith wrote:
>
>Not having been on this news group very long, I'm wondering if
>anyone has ever suggested a weekly Loop Net on say 40 or 75
>or both ? Hey, perhaps one already exists ? I do like the
>info and the excitement of each new anticipated installation
>written about. There may not be much to talk about in the way
>of LOOPS, however it would make it easy for all who are
>interested to share and compare what works for them. If such
>a net already exists, someone point me to it. If not..... what ya
>say ? What would be a good time ? Week-ends I would assume ?
>
>Hulen
>WB5UOI
>
>_____
>>I'm Game .
>>Ace - www.WH2T.com

Well I don't claim to be familiar with all the varied nets that operate on
the bands, so I suppose we could just pick a time and place and adjust
as nessesary. We all know this here works for getting the word out. I'd
like to suggest 3930 khz and 7230 khz as a general hangout. I know my
present signal is too high to reach out past 5 land, maybe 4 land but maybe
they will be some who can make cantact with a few in their own local areas.
Twenty meters may even be good mid-day on Sunday. Oh say 14230 khz, 3pm
Sunday's and go from there ? I'd be glad to here any other suggestions.
Rather than "Call a Net", we could just ID and say something about looking
for other "Loopers" untill we see what this is going to do. Let me know
what you guys think.
Hulen
WB5UOI

P.S. I'm getting into the MMana program. That signal goes straight up on the fundamental
but starts to look real good on the second and third harmonic. :)

266. Sky Wires Net

Yahoo group: SkyWires
Date: 2003-12-30 09:13:59 UTC
From: N4EHX
Topic: 266 Message: 266

I'm game, Name time and place, my 1000' loop at 40' is ready,
willing and able....

THANKS..Mac
w4glm@...

267. Re: [SkyWires] "Loopers"

Yahoo group: SkyWires
Date: 2003-12-30 13:22:50 UTC
From: desmoface@aol.com
Topic: 265 Message: 267

In a message dated 12/29/03 9:19:05 PM Pacific Standard Time,
clay1952@... writes:
Well I don't claim to be familiar with all the varied nets that operate on
the bands, so I suppose we could just pick a time and place and adjust
as nessesary. We all know this here works for getting the word out. I'd like
to suggest 3930 khz and 7230 khz as a general hangout. I know my
present signal is too high to reach out past 5 land, maybe 4 land but maybe
they will be some who can make cantact with a few in their own local areas.
Twenty meters may even be good mid-day on Sunday. Oh say 14230 khz, 3pm Sunday's
and go from there ? I'd be glad to here any other suggestions. Rather than
"Call a Net", we could just ID and say something about looking for other
"Loopers" untill we see what this is going to do. Let me know what you guys think.
40 would probably be perfect if it weren't for the European broadcast
stations booming in at night, 80 gets really crowded in the evening...but 3930 or
thereabouts sounds doable, I'l listen around there tonight and see if there is a
group laying claim to that freq...although not sure if everyone can get on 80,
I know I've seen posts about 40 meter loops also...how bout this, a 80 meter
net on new years eve just to test the waters? most people will be off work..
3930 @ 8pm est?

kb8viv/steve

268. Re: [SkyWires] "Loopers"

Yahoo group: SkyWires
Date: 2003-12-30 15:19:36 UTC
From: Gordon McCleery
Topic: 265 Message: 268

3930 at 8 PM EST on New Year's Eve has my vote.....

w4glm@...

Do you Yahoo!?
Find out what made the Top Yahoo! Searches of 2003

269. Re: [SkyWires] "Loopers"

Yahoo group: SkyWires
Date: 2003-12-30 15:35:33 UTC
From: desmoface@aol.com
Topic: 265 Message: 269

In a message dated 12/30/03 7:21:36 AM Pacific Standard Time, n4ehx@...
writes:
3930 at 8 PM EST on New Year's Eve has my vote.....

w4glm@...
Well, I'll be there...unless the sched gets changed..

Steve/kb8viv

270. Re: [SkyWires] "Loopers"

Yahoo group: SkyWires
Date: 2003-12-30 22:00:55 UTC
From: Jeff Leach (N3YEA)
Topic: 265 Message: 270

I'll be there as well

Jeff - N3YEA

----- Original Message -----
From: desmoface@...
To: SkyWires@yahoogroups.com
Cc: Kb8viv@...
Sent: Tuesday, December 30, 2003 10:35 AM
Subject: Re: [SkyWires] "Loopers"

In a message dated 12/30/03 7:21:36 AM Pacific Standard Time, n4ehx@... writes:
3930 at 8 PM EST on New Year's Eve has my vote.....

w4glm@...
Well, I'll be there...unless the sched gets changed..

Steve/kb8viv

Yahoo! Groups Links

a.. To visit your group on the web, go to:
http://groups.yahoo.com/group/SkyWires/

b.. To unsubscribe from this group, send an email to:
SkyWires-unsubscribe@yahoogroups.com

c.. Your use of Yahoo! Groups is subject to the Yahoo! Terms of Service.

271. Scanner Antenna people welcome.

Yahoo group: SkyWires
Date: 2004-01-01 00:17:42 UTC
From: exemptfromlife
Topic: 271 Message: 271

Anybody who is interested in Scanner Antennas is welcome to join up to the skywire loop antenna group without having to worry about the moderator (me) diddling with your email settings, or treating you like an addled lab rat whose cage has just been banged on and shaken to provoke signs of life.

For the rest of you who are wondering what I'm talking about, A certain yahoo group moderator decided (as best I can figure out) to see which of his members were still "Alive" and which ones weren't. He decided to do this by setting all members NO EMAIL option to accept email. When I came home from work yesterday my email inbox was flooded with emails from this group by people who were trying to figure out what was going on, or angry at what the moderator had done. Yahoo takes time to catch up when setting the NO EMAIL option back, so It took an hour of or so before the emails stopped, but by that time almost 50 members had decided they had had enough and pulled the plug.

The moderator was defending his action to do this after each post, by replying to each post, which was compounding both the problem and the perception that this was not a desirable action on his part. It seems the result was the group is now left with people who are die-hard members, "dead-members" who have long since abandoned their email addresses, and those who are still on holiday and haven't checked their email yet.

Once again. You can rest assure that nothing like this will ever happen on the skywires group.

Thanks.

272. Re: "Loopers"

Yahoo group: SkyWires
Date: 2004-01-01 00:59:53 UTC
From: desmoface
Topic: 265 Message: 272

Well, kids...3930 is pretty bad at 755pm, but we'll try to meet and
qsy someplace else...3919 is clear..

Steve/kb8viv

--- In SkyWires@yahoogroups.com, "Jeff Leach \(N3YEA\)" <n3yea@i...>
wrote:
> I'll be there as well
>
> Jeff - N3YEA
>
> ----- Original Message -----
> From: desmoface@a...
> To: SkyWires@yahoogroups.com
> Cc: Kb8viv@a...
> Sent: Tuesday, December 30, 2003 10:35 AM
> Subject: Re: [SkyWires] "Loopers"
>
>
> In a message dated 12/30/03 7:21:36 AM Pacific Standard Time,
n4ehx@y... writes:
> 3930 at 8 PM EST on New Year's Eve has my vote.....
>
> w4glm@a...
> Well, I'll be there...unless the sched gets changed..
>
> Steve/kb8viv
>
>
> --

> Yahoo! Groups Links
>
> a.. To visit your group on the web, go to:
> http://groups.yahoo.com/group/SkyWires/
>
> b.. To unsubscribe from this group, send an email to:
> SkyWires-unsubscribe@yahoogroups.com
>
> c.. Your use of Yahoo! Groups is subject to the Yahoo! Terms of
Service.

273. Re: [SkyWires] Re: "Loopers"

Yahoo group: SkyWires
Date: 2004-01-01 01:22:54 UTC
From: Dr.Ace Ratliff
Topic: 265 Message: 273

On Thu, 01 Jan 2004 00:59:53 -0000, desmoface wrote:
>Well, kids...3930 is pretty bad at 755pm, but we'll try to meet and
>qsy someplace else...3919 is clear..
>

>>----------

I am unable to find the group .
I need the Freq .
Ace - WH2T

274. Re: "Loopers"

Yahoo group: SkyWires
Date: 2004-01-01 04:41:25 UTC
From: jimmcskate
Topic: 265 Message: 274

I tried, but then again it was close to 9 EST when I got on the air and all you guys were gone. Do we have any stats on the number of checkins?

Definitely a good idea & we should do this more often...

Have a great evening, and sorry I couldn't wish you all a Happy New Year on the air!!

73 DE WA2LGN

Jim

--- In SkyWires@yahoogroups.com, "Dr.Ace Ratliff" <wh2t@b...> wrote:
> On Thu, 01 Jan 2004 00:59:53 -0000, desmoface wrote:
> >Well, kids...3930 is pretty bad at 755pm, but we'll try to meet and
> >qsy someplace else...3919 is clear..
> >

275. many, Many. MANY ! "HAPPY" New Years to All ~ RHF

Yahoo group: SkyWires
Date: 2004-01-01 13:33:53 UTC
From: R H F
Topic: 275 Message: 275

many, Many. MANY ! "HAPPY" New Years to All ~ RHF

276. Re: many, Many. MANY ! "HAPPY" New Years to All ~ RHF

Yahoo group: SkyWires
Date: 2004-01-01 16:53:12 UTC
From: exemptfromlife
Topic: 275 Message: 276

Many happy years to you too. RHF!!!

thanks.

--- In SkyWires@yahoogroups.com, "R H F" <rhf-mail@u...> wrote:
> many, Many. MANY ! "HAPPY" New Years to All ~ RHF

277. SkyWire Loopers

Yahoo group: SkyWires
Date: 2004-01-01 20:33:43 UTC
From: H.C. Smith
Topic: 277 Message: 277
Attachments: 1 described; binary payloads are missing from this source WARC

Well Loopers I was there in 5 land at 9 est put there was this huge qso in progress. So I tuned up and down 5 khz and found WA5ZTM calling cq and I answered him on 3.935. We carried on till 9:30 when the Southwest Traffic Net started. We were both talking about antennas, loops and the Mmana program. I was hoping some of you would have heard us and jumped in. He was running the limit but I was bare "feet" :) So I didn't expect to be heard far with my signal going straight up.

I hope some of you were more successful. Please let the group know if you were. Many thanks for all of your efforts. Lets do continue to try. The 40's and 50's khz range is always busy here in 5 land. So let's continue to hang out on 3.930 unless it's better in your area elsewhere. If you get established elsewhere, please let the rest of us know about it. I'll continue to call qrz Loopers on 3.930 at night and 7.230 durring the day when I'm looking for a contact and 14.230 on weekends. (I hear more areas calls on 20M than I do on 75 or 40).

Good luck fellows !!!
73
de WB5UOI

278. New to Group

Yahoo group: SkyWires
Date: 2004-01-04 00:55:47 UTC
From: Dave
Topic: 278 Message: 278

Greetings to the group,
My name is Dave and I have been a ham since '94 and upgraded to Extra a couple of years ago and live in the northern part of the lower peninsular of Michigan.

I have read most of the archives and have a couples of questions;

1) I saw the mention of " NVIS type antenna", I am not familiar with that and was wondering what it is?

2) I want to get something clear in my mind, for a loop antenna, I plan on installing a 160 Meter loop, if I am understanding it correctly regardless weather a person uses coax or TV lead or ladder line, the connection is a DC short, but the radio doesn't see a short, not as far as RF is concerned.

3) I think some mentioned that the loop works well even on the new 60 Meter band as well, has any one else used it there as well and what did you think of it on that band?

From what I have read I get the idea that the loop is quieter than a dipole antenna as well as out performers a dipole too. In my situation height or the lack there of will be my problem, I suspect if I am lucky I might be able to get it up on average maybe 15 or best 20 feet off the ground, which is where my dipole antennas are now and get acceptable to me results. So I know that height off ground is one of the important things for performance but if the loop is better than a dipole it should be an improvement, the only thing that I am going to need to do is to find a source to get the 530 plus feet of wire without paying that proverbial arm and leg for it. Thanks in advance for your ideas, suggestions and commits.

73
Dave N8PU

279. 160 M loop feedline

Yahoo group: SkyWires
Date: 2004-01-04 01:58:42 UTC
From: organbuilderjon
Topic: 279 Message: 279

I finally decided to become a ham after 45+ yrs in electronics. I am without a rig yet but hope for a K2 shortly (March) for my birthday. I am going to put up a 160 meter loop and am thinking of using 450 ladder line. I have a tuner ordered but should I need anything between antenna and line? Any comments to a newby would be appreciated. 73 AD7AW (also member Radio Club Tacoma, W7DK)

280. Re: [SkyWires] 160 M loop feedline

Yahoo group: SkyWires
Date: 2004-01-04 02:20:16 UTC
From: Gordon McCleery
Topic: 279 Message: 280

John, to get the RF out of the shack, I use about 10 - 12' of RG-214, because it was handy, to a 4:1 balun, and about 40' of twin lead to a
1000' corner fed loop up at 35', I love it, probably the best antenna
I ever had, get fantastic reports, I use a manual tuner with the amp, but
the rig's internal tuner will match it on all bands, with the amp turned
off the best of both world's.
If I could be of further assistance please e-mail off the list..good luck
with your 160 meter loop, you will like it..Mac

w4glm@...

Do you Yahoo!?
Find out what made the Top Yahoo! Searches of 2003

281. SkyWire Loop Antenna -=V=- Dipole Antenna [Was: New to Group]

Yahoo group: SkyWires
Date: 2004-01-04 03:13:19 UTC
From: R H F
Topic: 278 Message: 281

DAVE - N8PU,
.
Hello and Wecome :o)
.
= = = In SkyWires@yahoogroups.com,
= = = Dave <aq392@t...> wrote:

Greetings to the group,
My name is Dave and I have been a ham since '94 and
upgraded to Extra a couple of years ago and live in
the northern part of the lower peninsular of Michigan.

I have read most of the archives and have a couples
of questions;

1) I saw the mention of " NVIS type antenna", I am not
familiar with that and was wondering what it is ?

=R= To some degree a SkyWire Loop Antenna is a form
of NVIS "Near Vertical Incident Skywave" Antenna.

GoTo=> http://www.qsl.net/k5eph/nvis.htm

2) I want to get something clear in my mind, for a loop
antenna, I plan on installing a 160 Meter loop, if I am
understanding it correctly regardless weather a person
uses coax or TV lead or ladder line, the connection is
a DC short, but the radio doesn't see a short, not as far
as RF is concerned.

=R= If your Loop Antenna Element is 'cut' for the 160
Meter Band. It will resonate for that band and have the
necessary RF Impedance for you to transmit and receive
properly.

3) I think some mentioned that the loop works well even on
the new 60 Meter band as well, has any one else used it
there as well and what did you think of it on that band?

=R= Good Question - I can not answer that Question.

4) From what I have read I get the idea that the loop is
quieter than a dipole antenna as well as out performers
a dipole too. In my situation height or the lack there
of will be my problem, I suspect if I am lucky I might
be able to get it up on average maybe 15 or best 20 feet
off the ground, which is where my dipole antennas are

now and get acceptable to me results. So I know that height off ground is one of the important things for performance but if the loop is better than a dipole it should be an improvement, the only thing that I am going to need to do is to find a source to get the 530 plus feet of wire without paying that proverbial arm and leg for it. Thanks in advance for your ideas, suggestions and commits.

=R= IMHO: A Low-to-the-Ground (Near-the-Ground)
* SkyWire Loop Antenna - = V = - Dipole Antenna *

* For the same XX Meter Band; the Loop Antenna has:
* * Twice the Wire-in-the-Air as a Dipole
* * A 'greater' Signal Capture Area then the Dipole

* The LOW Horizontal "SkyWire" Loop Antenna perfroms like a NVIS type antenna and is Omni-Directional. While the LOW Dipole will exhibit some directionality.

* Think of the Loop Element as a Horizontal Folded Dipole that has the center spread out. The Folded Dipole usually performs better than a plain dipole closer to the ground.

TBL: The Loop will perform better then the Dipole.

? ? ? NOW ? IS ? THAT ? TRUE ? ? ?

73
Dave N8PU
.
.
iane ~ RHF
.
.

282. NVIS (was: New to Group)

Yahoo group: SkyWires
Date: 2004-01-04 05:01:49 UTC
From: jimmcskate
Topic: 278 Message: 282

The term NVIS (near vertical incidence skywave) was a new one to me as well, and I have been a ham for a long time. It's sort of what happens when you have a dipole that's too low - the radiation tends towards "straight up". Straight up is not desireable for DX - for that you want a shallower take-off angle. But for closer work the NVIS behavior rocks. My loop is cut for 40m, and is not very high - 18 to 20 feet over level ground. On 40m the antenna performs really well in a radius of about 500 miles under even poor band conditions... NVIS is reliable!

On 20, 15, and 10 I am getting good DX, as the takeoff angle is lower.

Incidentally, I feed my loop with 300-ohm twinlead, and tune it through my manual Kenwood AT-200. This tuner doesn't have a balanced output, so I tune it Zepp-style: one leg goes to the tuner's random wire output, the other leg is grounded at the tuner. I can also switch in a 4:1 balun, but so far the random-wire feed has outperformed it.

This antenna design is WAY quieter than a vertical... don't have a dipole handy to compare it with, but I suspect it's not as quiet as the loop.

Have a great evening,
Jim
WA2LGN

283. Re: NVIS (was: New to Group)

Yahoo group: SkyWires
Date: 2004-01-04 05:49:26 UTC
From: n8pu
Topic: 278 Message: 283

Thanks for the quick replies, and answers to my questions. I am now convinced that I will put `up' a 160 Meter loop over a G5RV if for no other reason than its ease of installation for me, about the only other question I have is what type of wire did you use; braided wire, household wire, also what gauge did you use and why? Was is because it was what you had laying around or was it a particular gauge because you were concerned it might stretch. I checked at a local hardware about getting a roll of wire and they only had a 500 foot spool. I am wondering if you had to have it ordered or would some place like Home Depot have longer lengths than 500 feet without asking for that arm and leg? And thanks again for your help.

Dave N8PU

--- In SkyWires@yahoogroups.com, "jimmcskate" <JimMcSkate@a...> wrote:
The term NVIS (near vertical incidence skywave) was a new one to me as well, and I have been a ham for a long time. It's sort of what happens when you have a dipole that's too low - the radiation tends towards "straight up". Straight up is not desireable for DX - for that you want a shallower take-off angle. But for closer work the NVIS behavior rocks. My loop is cut for 40m, and is not very high - 18 to 20 feet over level ground. On 40m the antenna performs really well in a radius of about 500 miles under even poor band conditions... NVIS is reliable!

On 20, 15, and 10 I am getting good DX, as the takeoff angle is lower.

Incidentally, I feed my loop with 300-ohm twinlead, and tune it through my manual Kenwood AT-200. This tuner doesn't have a balanced output, so I tune it Zepp-style: one leg goes to the tuner's random wire output, the other leg is grounded at the tuner. I can also switch in a 4:1 balun, but so far the random-wire feed has outperformed it.

This antenna design is WAY quieter than a vertical... don't have a dipole handy to compare it with, but I suspect it's not as quiet as the loop.

Have a great evening,
Jim
WA2LGN

284. Sunday Loopers

Yahoo group: SkyWires
Date: 2004-01-04 07:57:55 UTC
From: Clay
Topic: 284 Message: 284

I will be on 14.230 Sunday at 3PM CST for those of you that don't watch much football :o), hope to hear some loopers. If this frequency is busy I will try 5khz up till something is free.

Cheers
Hulen
WB5UOI

285. Re: [SkyWires] Sunday Loopers

Yahoo group: SkyWires
Date: 2004-01-04 14:13:58 UTC
From: Lloyd M. Mitchell
Topic: 284 Message: 285

Isn't 14.230 the recognized SSTV freq?

Clay <clay1952@...> wrote:I will be on 14.230 Sunday at 3PM CST for those of you that don't watch much football :o), hope to hear some loopers. If this frequency
is busy I will try 5khz up till something is free.

Cheers
Hulen
WB5UOI

Yahoo! Groups Links

To visit your group on the web, go to:
http://groups.yahoo.com/group/SkyWires/

To unsubscribe from this group, send an email to:
SkyWires-unsubscribe@yahoogroups.com

Your use of Yahoo! Groups is subject to the Yahoo! Terms of Service.

286. Re: [SkyWires] Re: NVIS (was: New to Group)

Yahoo group: SkyWires
Date: 2004-01-04 14:39:43 UTC
From: kb8viv@aol.com
Topic: 278 Message: 286

In a message dated 1/4/2004 12:50:19 AM Eastern Standard Time,
aq392@... writes:

> Thanks for the quick replies, and answers to my questions. I am now
> convinced that I will put `up' a 160 Meter loop over a G5RV if for no
> other reason than its ease of installation for me, about the only
> other question I have is what type of wire did you use; braided wire,
>

Hi Dave, I'm sure you'll be happy with the loop, I know I am...I used 13
guage polyethylene insulated 13 strand copperclad steel wire available from
www.davisrf.com...it's expensive compared to the cheaeper store bought wire but I
have my wire in the trees and this stuff is strong and very abrasion
resistant..I only wanted to do this once hi hi...worked great..it has no memory other
than straight...I've talked to guys that hate the stuff and think it's hard to
work with..I disagree and think it was easy to work with as it comes off the
spool totally straight.

I almost went with the flexweave rope type wire but this stuff is not easy to
repair should it become necessary..it's main benefit is its flexibility, it
can even be tied into knots...but should it be necessary to make a repair
(solder) it usually breaks after a short time at the solder...

Good luck es 73's..de kb8viv/steve

287. Re: [SkyWires] Sunday Loopers

Yahoo group: SkyWires
Date: 2004-01-04 14:42:17 UTC
From: kb8viv@aol.com
Topic: 284 Message: 287

In a message dated 1/4/2004 2:59:12 AM Eastern Standard Time,
clay1952@... writes:

> I will be on 14.230 Sunday at 3PM CST for those of you that don't
> watch much football :o), hope to hear some loopers. If this frequency
> is busy I will try 5khz up till something is free.
>
> Cheers
> Hulen
> WB5UOI
>

Damn, I will probably not be there as I'm going to a family get together at
around that time...20 would have worked out great too...oh well, maybe next
time...73's..

kb8viv
steve

288. Re: [SkyWires] 160 M loop feedline

Yahoo group: SkyWires
Date: 2004-01-04 14:54:52 UTC
From: Scott Erwin
Topic: 279 Message: 288

Just connect the 450 ohm ladder line to the loop and
the other end to the BALUN inside the antenna tuner.
Nothing else is required!
--- organbuilderjon <John_SusanH@...> wrote:
> I finally decided to become a ham after 45+ yrs in
> electronics. I am
> without a rig yet but hope for a K2 shortly (March)
> for my birthday.
> I am going to put up a 160 meter loop and am
> thinking of using 450
> ladder line. I have a tuner ordered but should I
> need anything
> between antenna and line? Any comments to a newby
> would be
> appreciated. 73 AD7AW (also member Radio Club
> Tacoma, W7DK)
>
>

_____
Do you Yahoo!?
Find out what made the Top Yahoo! Searches of 2003
http://search.yahoo.com/top2003

289. Re: New to Group

Yahoo group: SkyWires
Date: 2004-01-04 15:15:50 UTC
From: exemptfromlife
Topic: 278 Message: 289

Welcome to the group!!!

--- In SkyWires@yahoogroups.com, Dave <aq392@t...> wrote:
> Greetings to the group,
> My name is Dave and I have been a ham since '94 and upgraded to
Extra a
> couple of years ago and live in the northern part of the lower
> peninsular of Michigan.
>
> I have read most of the archives and have a couples of questions;
>
> 1) I saw the mention of " NVIS type antenna", I am not familiar
with
> that and was wondering what it is?
>
> 2) I want to get something clear in my mind, for a loop antenna, I
plan
> on installing a 160 Meter loop, if I am understanding it correctly
> regardless weather a person uses coax or TV lead or ladder line,
the
> connection is a DC short, but the radio doesn't see a short, not
as far
> as RF is concerned.
>
> 3) I think some mentioned that the loop works well even on the new
60
> Meter band as well, has any one else used it there as well and
what did
> you think of it on that band?
>
> From what I have read I get the idea that the loop is quieter
than a
> dipole antenna as well as out performers a dipole too. In my
situation
> height or the lack there of will be my problem, I suspect if I am
lucky
> I might be able to get it up on average maybe 15 or best 20 feet
off the
> ground, which is where my dipole antennas are now and get
acceptable to
> me results. So I know that height off ground is one of the
important
> things for performance but if the loop is better than a dipole it
should
> be an improvement, the only thing that I am going to need to do is

to
> find a source to get the 530 plus feet of wire without paying that
> proverbial arm and leg for it. Thanks in advance for your ideas,
> suggestions and commits.
>
> 73
> Dave N8PU

290. Re: Sunday Loopers

Yahoo group: SkyWires
Date: 2004-01-04 17:02:36 UTC
From: n1iv
Topic: 284 Message: 290

Yes, 14.230 is the SSTV base frequency... they also use .233 and .236
when it's busy! A shift to another frequency would be appropriate.

73 de N1IV

--- In SkyWires@yahoogroups.com, "Clay" <clay1952@c...> wrote:
> I will be on 14.230 Sunday at 3PM CST for those of you that don't
> watch much football :o), hope to hear some loopers. If this frequency
> is busy I will try 5khz up till something is free.
>
> Cheers
> Hulen
> WB5UOI

291. Re: Fwd: Re: New to Group >> Off Topic

Yahoo group: SkyWires
Date: 2004-01-04 20:24:39 UTC
From: Dave
Topic: 291 Message: 291

Thank You,
Yahoo email servers must be very slow, the reason I say this is I have had to go to the groups home page and forward the messages since I joined so I would have a local copy, I even went and re-checked my preferences to make sure I had individual emails checked, I re-saved them again to make sure their computer has it the way I wanted it. SO I guess I will have to keep checking until their computers catch up with themselves. Thanks for starting this group, I am glad I found it and thanks to the others that have offered their help in answering my many questions!!

73
Dave N8PU

>--- In SkyWires@yahoogroups.com, "exemptfromlife" <junkmail@a...> wrote:
>Welcome to the group!!!
>
>

292. Re: [SkyWires] Re: Sunday Loopers

Yahoo group: SkyWires
Date: 2004-01-05 01:29:32 UTC
From: Hulen Smith
Topic: 284 Message: 292
Attachments: 2 described; binary payloads are missing from this source WARC

LOL !!! I did indeed find that out today !!! :)) I called a few times on 14
245 and worked a guy in Florida from southeast Texas. Persistance may pay
off some day.

Hulen
WB5UOI

-------Original Message-------

From: SkyWires@yahoogroups.com
Date: Sunday, January 04, 2004 11:02:40 AM
To: SkyWires@yahoogroups.com
Subject: [SkyWires] Re: Sunday Loopers

Yes, 14.230 is the SSTV base frequency... they also use .233 and .236
when it's busy! A shift to another frequency would be appropriate.

73 de N1IV

--- In SkyWires@yahoogroups.com, "Clay" <clay1952@c...> wrote:
> I will be on 14.230 Sunday at 3PM CST for those of you that don't
> watch much football :o), hope to hear some loopers. If this frequency
> is busy I will try 5khz up till something is free.
>
> Cheers
> Hulen
> WB5UOI

Yahoo! Groups Links

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http://groups.yahoo.com/group/SkyWires/

To unsubscribe from this group, send an email to:
SkyWires-unsubscribe@yahoogroups.com

Your use of Yahoo! Groups is subject to the Yahoo! Terms of Service.

293. Re: [SkyWires] Sunday Loopers

Yahoo group: SkyWires
Date: 2004-01-05 01:43:12 UTC
From: Hulen Smith
Topic: 284 Message: 293
Attachments: 2 described; binary payloads are missing from this source WARC

yup sure appears to be something digital !!! LOL!!!!
But as promised I moved up the band to a quieter freq, no Loopers found
though.

Hulen

-------Original Message-------

From: SkyWires@yahoogroups.com
Date: Sunday, January 04, 2004 08:14:01 AM
To: SkyWires@yahoogroups.com
Subject: Re: [SkyWires] Sunday Loopers

Isn't 14.230 the recognized SSTV freq?

Clay <clay1952@...> wrote:
I will be on 14.230 Sunday at 3PM CST for those of you that don't
watch much football :o), hope to hear some loopers. If this frequency
is busy I will try 5khz up till something is free.

Cheers
Hulen
WB5UOI

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http://groups.yahoo.com/group/SkyWires/

To unsubscribe from this group, send an email to:
SkyWires-unsubscribe@yahoogroups.com

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Your use of Yahoo! Groups is subject to the Yahoo! Terms of Service.

294. Fwd: Re: New to Group >> Off Topic

Yahoo group: SkyWires
Date: 2004-01-05 02:57:52 UTC
From: exemptfromlife
Topic: 291 Message: 294

Thanks for posting, and you're welcome...

yes, they are very slow, and in some cases some settings or numbers take up to a week to change.

--- In SkyWires@yahoogroups.com, Dave <aq392@t...> wrote:
> Thank You,
> Yahoo email servers must be very slow, the reason I say this is I have
> had to go to the groups home page and forward the messages since I
> joined so I would have a local copy, I even went and re-checked my
> preferences to make sure I had individual emails checked, I re-saved
> them again to make sure their computer has it the way I wanted it. SO I
> guess I will have to keep checking until their computers catch up with
> themselves. Thanks for starting this group, I am glad I found it and
> thanks to the others that have offered their help in answering my many
> questions!!
>
> 73
> Dave N8PU
>
> >--- In SkyWires@yahoogroups.com, "exemptfromlife" <junkmail@a...> wrote:
> >Welcome to the group!!!
> >
> >

295. Re: 160 M loop feedline

Yahoo group: SkyWires
Date: 2004-01-05 22:06:40 UTC
From: kl7r
Topic: 279 Message: 295

--- In SkyWires@yahoogroups.com, "organbuilderjon" <John_SusanH@a...>
wrote:
> I finally decided to become a ham after 45+ yrs in electronics. I am
> without a rig yet but hope for a K2 shortly (March) for my birthday.
> I am going to put up a 160 meter loop and am thinking of using 450
> ladder line. I have a tuner ordered but should I need anything
> between antenna and line? Any comments to a newby would be
> appreciated. 73 AD7AW (also member Radio Club Tacoma, W7DK)

If your tuner has an internal 4:1 balun you are all set up.
If not, you might (not absolutely necessary) get a 4:1 balun
and hang it out the end of your tuner with a piece of coax.
(I assume you have enough coax to reach from your rig to the tuner.

296. Re: New to Group

Yahoo group: SkyWires
Date: 2004-01-05 22:22:23 UTC
From: kl7r
Topic: 278 Message: 296

1) NVIS
Someone else answered this.
A loop "shoots straight up" on its lowest frequency but no
worse than a dipole at the same height. This is a "good thing"
on the low bands. It has low angle gain on higher frequencies.

> 2) I want to get something clear in my mind, for a loop antenna, I plan
> on installing a 160 Meter loop, if I am understanding it correctly
> regardless weather a person uses coax or TV lead or ladder line, the
> connection is a DC short, but the radio doesn't see a short, not as far
> as RF is concerned.

Sort of like a single turn coil (inductor)

> 3) I think some mentioned that the loop works well even on the new 60
> Meter band as well, has any one else used it there as well and what did
> you think of it on that band?

I use my 80 meter loop on 60 meters.
Be advized though that the rules for 60 meters are pretty restrictive.
An 80 meter loop has gain over a dipole so you need to back your power
down to just less than 25 watts on an 80 meter loop in order to not
exceed the 50 watts ERP requirement for 60 meters. (I believe
that on a 160 meter loop you would be limited to 12.5 watts)

Interestingly, inside the state of alaska the 80 meter loop did
best of my antennas. But for reaching out to Utah etc, I found that
my best lashup was to transmit on a 32 foot vertical with 97 watts
then switch to the loop to listen. (The loop has lower gain
than the loop so I can run almost 100 watts into the vert and
not exceed the 50 watt erp requirement. The vert was much
too noisy to hear the returning signals.)

297. Fwd: >>Even More Off Topic

Yahoo group: SkyWires
Date: 2004-01-05 22:36:47 UTC
From: n8pu
Topic: 291 Message: 297

This even more weird, I belong to about 40 Yahoo groups, now today when I logged into my groups it only showed 18 of them, I am starting to think that they are loosing it. With thig group being one of the'lost' ones.

Dave N8PU

--- In SkyWires@yahoogroups.com, "exemptfromlife" <junkmail@a...> wrote:
Thanks for posting, and you're welcome...

Yes, they are very slow, and in some cases some settings or numbers take up to a week to change.

298. My loop

Yahoo group: SkyWires
Date: 2004-01-05 22:57:31 UTC
From: Hal
Topic: 298 Message: 298

About a month ago I built a 40 meter loop. It's up about 35 feet at the highest point. So far I've worked the coast mostly with it on 40 meters, so NVIS isn't working on my loop. I've even worked some caribbean stations with it on 40. I run mostly QRP and get excellent reports. Just for those that are wondering its a full wave on 40 meters fed with 450 ohm ladderline to a MFJ 949E tuner. It does tune 40 thru 10, but 17 an 12 meters are a bit tricky.

Hal
KC0BDW

299. Scanner antennas an d filters??

Yahoo group: SkyWires
Date: 2004-01-06 13:58:21 UTC
From: n1qha
Topic: 299 Message: 299

Seems that the Channel Master Monitenna is gone now. No real good scanner antennas left. Grove makes no more filters either. I found one place selling filters with very low loss.

http://www.econn.cjb.net

Not bad.

300. We need to call Channel Master

Yahoo group: SkyWires
Date: 2004-01-06 14:02:55 UTC
From: n1qha
Topic: 300 Message: 300

Tell the bums that discontinuing the 5094A was a dumb idea. The
greedy s.o.b's........ Call them. They told me they quit making 25
antennas. I could imagine how many jobs were lost too.
They claimed they stopped making antennas with odd parts. Dont they
think all antennas have odd parts? Pukes. Call Mr. Hiney he said
and complain........now I know why his name is Hiney.

301. Re: Fwd: >>Even More Off Topic

Yahoo group: SkyWires
Date: 2004-01-08 02:07:37 UTC
From: exemptfromlife
Topic: 291 Message: 301

maybe someone is trying to tell you something .. (just kidding)..
:-)

--- In SkyWires@yahoogroups.com, "n8pu" <aq392@t...> wrote:
> This even more weird, I belong to about 40 Yahoo groups, now today
> when I logged into my groups it only showed 18 of them, I am
starting
> to think that they are loosing it. With thig group being one of
> the'lost' ones.
>
> Dave N8PU
>
> --- In SkyWires@yahoogroups.com, "exemptfromlife" <junkmail@a...>
wrote:
> Thanks for posting, and you're welcome...
>
> Yes, they are very slow, and in some cases some settings or numbers
> take up to a week to change.

302. Re: We need to call Channel Master

Yahoo group: SkyWires
Date: 2004-01-08 02:10:15 UTC
From: exemptfromlife
Topic: 300 Message: 302

I asked a bunch of people online last year for the best scanner
antenna.

about 90%+ kept telling me the Scantenna was the one to get..

--- In SkyWires@yahoogroups.com, "n1qha" <n1qha@y...> wrote:
> Tell the bums that discontinuing the 5094A was a dumb idea. The
> greedy s.o.b's........ Call them. They told me they quit making
25
> antennas. I could imagine how many jobs were lost too.
> They claimed they stopped making antennas with odd parts. Dont
they
> think all antennas have odd parts? Pukes. Call Mr. Hiney he said
> and complain........now I know why his name is Hiney.

303. Re: [SkyWires] Re: Fwd: >>Even More Off Topic

Yahoo group: SkyWires
Date: 2004-01-08 10:33:36 UTC
From: Dave
Topic: 291 Message: 303

Well later on that day all my groups finally showed back up, and today
January 7 is the first email I received from their servers without
having to go to the group home page to read it. :-(:-)

Dave N8PU

exemptfromlife wrote:

>maybe someone is trying to tell you something .. (just kidding)..
>:-)
>
>
>--- In SkyWires@yahoogroups.com, "n8pu" <aq392@t...> wrote:
>
>
>>This even more weird, I belong to about 40 Yahoo groups, now today
>>when I logged into my groups it only showed 18 of them, I am
>>
>>
>starting
>
>
>>to think that they are loosing it. With thig group being one of
>>the'lost' ones.
>>
>>Dave N8PU
>>
>>--- In SkyWires@yahoogroups.com, "exemptfromlife" <junkmail@a...>
>>
>>
>wrote:
>
>
>>Thanks for posting, and you're welcome...
>>
>>Yes, they are very slow, and in some cases some settings or numbers
>>take up to a week to change.
>>
>>
>
>
>
>
>Yahoo! Groups Links
>
>To visit your group on the web, go to:

> http://groups.yahoo.com/group/SkyWires/
>
>To unsubscribe from this group, send an email to:
> SkyWires-unsubscribe@yahoogroups.com
>
>Your use of Yahoo! Groups is subject to:
> http://docs.yahoo.com/info/terms/
>
>
>
>

304. ChannelMaster 5094A Monitenna

Yahoo group: SkyWires
Date: 2004-01-08 14:42:25 UTC
From: N4EHX
Topic: 304 Message: 304

Anyone looking for a NIB 5094A channelMaster Monitenna,

go to QTH.COM and do a search for 5094A

Tell Jon, Mac sent ya, he had two last week I know I bought one.

PS: My 1000' loop is beyond my expectations.....Mac

305. Re: [SkyWires] ChannelMaster 5094A Monitenna

Yahoo group: SkyWires
Date: 2004-01-08 16:10:29 UTC
From: Rob Mills
Topic: 304 Message: 305

----- Original Message -----
From: N4EHX
To: SkyWires@yahoogroups.com
Sent: Thursday, January 08, 2004 8:42 AM
Subject: [SkyWires] ChannelMaster 5094A Monitenna

Anyone looking for a NIB 5094A channelMaster Monitenna,

a..
In case the above doesn't pan out, what about this one ? The sketch looks similar as near as I can tell. RM~ http://www.starkelectronic.com/ac.htm#SCANNER

306. Email from Art Bell.

Yahoo group: SkyWires
Date: 2004-01-10 00:30:51 UTC
From: exemptfromlife
Topic: 306 Message: 306

Some of you had asked about Art Bell's giant SkyWire loop. I decided
to email him and ask him about it. He responded last night. Here is
his answer.

Yes, I have a very large loop soon to be double in size (5 acres)
fed at 100 ft, the top loop is at 75 ft the 2nd loop at 68 feet.
Four foot wire mesh under the whole loop grounded to my water well.
Wire is #10.

I would like to get some more details from him if he is willing to
provide them. If you have some questions about the specifics of the
skywire, please post them here and I'll send him a consolidated
list
of questions.

I also offered for him to join the SkyWires group.

Thanks.

307. Re: [SkyWires] Email from Art Bell.

Yahoo group: SkyWires
Date: 2004-01-10 00:42:53 UTC
From: Lloyd M. Mitchell
Topic: 306 Message: 307

OMG. An illustration of how he supports and the feed point would be great!
Is it in trees or in the clear. Are there any resistors to bleed off static? WOW

Lloyd KD4HTW

exemptfromlife <junkmail@...> wrote:
Some of you had asked about Art Bell's giant SkyWire loop. I
decided
to email him and ask him about it. He responded last night. Here is
his answer.

Yes, I have a very large loop soon to be double in size (5 acres)
fed at 100 ft, the top loop is at 75 ft the 2nd loop at 68 feet.
Four foot wire mesh under the whole loop grounded to my water well.
Wire is #10.

I would like to get some more details from him if he is willing to
provide them. If you have some questions about the specifics of the
skywire, please post them here and I'll send him a consolidated
list
of questions.

I also offered for him to join the SkyWires group.

Thanks.

Yahoo! Groups Links

To visit your group on the web, go to:
http://groups.yahoo.com/group/SkyWires/

To unsubscribe from this group, send an email to:
SkyWires-unsubscribe@yahoogroups.com

Your use of Yahoo! Groups is subject to the Yahoo! Terms of Service.

308. Re: Email from Art Bell.

Yahoo group: SkyWires
Date: 2004-01-10 00:53:05 UTC
From: exemptfromlife
Topic: 306 Message: 308

Here are some photos from his website..

http://www.coasttocoastam.com/gen/page159.html

--- In SkyWires@yahoogroups.com, "Lloyd M. Mitchell"
<kd4htw2001@y...> wrote:
> OMG. An illustration of how he supports and the feed point would
be great!
> Is it in trees or in the clear. Are there any resistors to bleed
off static? WOW
>
> Lloyd KD4HTW
>
> exemptfromlife <junkmail@a...> wrote:
> Some of you had asked about Art Bell's giant SkyWire loop. I
> decided
> to email him and ask him about it. He responded last night. Here
is
> his answer.
>
> Yes, I have a very large loop soon to be double in size (5 acres)
> fed at 100 ft, the top loop is at 75 ft the 2nd loop at 68 feet.
> Four foot wire mesh under the whole loop grounded to my water
well.
> Wire is #10.
>
> I would like to get some more details from him if he is willing to
> provide them. If you have some questions about the specifics of
the
> skywire, please post them here and I'll send him a consolidated
> list
> of questions.
>
> I also offered for him to join the SkyWires group.
>
> Thanks.
>
>
>
>
> ---------------------------------
> Yahoo! Groups Links
>
> To visit your group on the web, go to:
> http://groups.yahoo.com/group/SkyWires/

>
> To unsubscribe from this group, send an email to:
> SkyWires-unsubscribe@yahoogroups.com
>
> Your use of Yahoo! Groups is subject to the Yahoo! Terms of
Service.

309. Re: [SkyWires] Email from Art Bell.

Yahoo group: SkyWires
Date: 2004-01-10 02:39:16 UTC
From: Dr.Ace Ratliff
Topic: 306 Message: 309

On Sat, 10 Jan 2004 00:30:51 -0000, exemptfromlife wrote:
>Some of you had asked about Art Bell's giant SkyWire loop. I
>decided
>to email him and ask him about it. He responded last night. Here is
>his answer.
>
>Yes, I have a very large loop soon to be double in size (5 acres)
>fed at 100 ft, the top loop is at 75 ft the 2nd loop at 68 feet.
>Four foot wire mesh under the whole loop grounded to my water well.
>Wire is #10.
>
>I would like to get some more details from him if he is willing to
>provide them. If you have some questions about the specifics of the
>skywire, please post them here and I'll send him a consolidated
>list
>of questions.
>
>I also offered for him to join the SkyWires group.
>
>Thanks.
>

I have tried to catch Art on 75 meters with no success yet .
What does " fed at 100 ft " mean ? Does that mean the feed point is
100 ft above ground but most of the loop is 75 ft high ?
Is Art feeding both loops ? If so how , in phase, 90 degrees out of
phase, etc. ?
If he is not feeding the bottom loop what is it's purpose ?
Thanks , Ace www.WH2T.com

310. DX on 40m Loop

Yahoo group: SkyWires
Date: 2004-01-11 01:19:00 UTC
From: jimmcskate
Topic: 310 Message: 310

I bagged my first ever ZS this afternoon on my 40m loop! From here to the Transvaal is close to 8000 miles, and both of us were "barefoot" - which in my case is about 70 watts. I didn't expect this antenna to perform so well since it's only 18 feet above ground. (for a diagram: check out www qsl.net\wa2lgn)

In my local club (Grumman Amateur Radio Club) I am getting a reputation as a "Loop Evangelist."

73,
Smilin' Jim

311. A Loop Mystery...

Yahoo group: SkyWires
Date: 2004-01-11 13:34:30 UTC
From: jimmcskate
Topic: 311 Message: 311

Kind folks,
I have a bit of a mystery, and I'd like to call upon those skilled in transmission lines and the theory behind them.

My 40m loop is fed with 300-ohm twinlead (about 30' or so of feedline.) At the tuner end, I normally connect one leg of the twinlead to the random wire out (Kenwood AT200), and ground the other leg. I also have a 4:1 balun, but either I wound it wrong or it's the wrong "thing" to have since the antenna never performs well with it.

When I drive the line with one leg "floating" (i.e. not grounded) and the other leg connected to my tuner's Random Wire out, I get better receive performance (nearly 3 S units on my admittedly uncalibrated rig meter), and transmitting performance is either the same or better (still experimenting on air and getting signal reports.)

So: What's happening here? Any clues would be much appreciated... email me at WA2LGN<at>AOL.COM if you need more info.

Many thanks & 73,
Jim WA2LGN

312. Re: [SkyWires] A Loop Mystery...

Yahoo group: SkyWires
Date: 2004-01-11 16:19:04 UTC
From: Jim Dunstan
Topic: 311 Message: 312

At 01:34 PM 1/11/04 +0000, you wrote:
>Kind folks,
>I have a bit of a mystery, and I'd like to call upon those skilled
>in transmission lines and the theory behind them.
>
>My 40m loop is fed with 300-ohm twinlead (about 30' or so of
>feedline.) At the tuner end, I normally connect one leg of the
>twinlead to the random wire out (Kenwood AT200), and ground the
>other leg. I also have a 4:1 balun, but either I wound it wrong or
>it's the wrong "thing" to have since the antenna never performs well
>with it.

What do you mean, "never performs well" ? Do you mean your tuner won't bring the SWR down to an acceptable level when you feed the 300 ohm line with the balun?

>When I drive the line with one leg "floating" (i.e. not grounded)
>and the other leg connected to my tuner's Random Wire out, I get
>better receive performance (nearly 3 S units on my admittedly
>uncalibrated rig meter), and transmitting performance is either the
>same or better (still experimenting on air and getting signal
>reports.)
>So: What's happening here? Any clues would be much appreciated...
>email me at WA2LGN<at>AOL.COM if you need more info.
>
>Many thanks & 73,
>Jim WA2LGN

Well Jim, when you connect one wire to the 'Random Wire' out on your tuner you convert your arrangement to a "Random Wire" antenna! Trying to explain performance of this arrangement is the same as trying to explain performance when you connect you tuner to your rain gutter. In short, you don't have a loop but some kind of strange random wire antenna. If it works use it.

Jim Dunstan VE3CI
Thunder Bay, ON

313. Re: [SkyWires] A Loop Mystery...

Yahoo group: SkyWires
Date: 2004-01-11 16:49:38 UTC
From: JimMcSkate@aol.com
Topic: 311 Message: 313

Using the balun and the tuner, I can get the SWR down without trouble - but the signal reports are markedly worse. It's very fast to switch configurations, so I can try it several ways in a single QSO.

Note that I'm not using the "vertical/top hat" configuration, i.e. I am not shorting the feedline at the transmitter and driving the thing as an inverted "L". This configuration doesn't perform as well as leaving one feedline leg floating.

It works and I love it and I will continue to experiment... but it's still a mystery to me ;-)

Thanks for your help!
Jim

In a message dated 1/11/2004 11:20:17 AM Eastern Standard Time, jimdunstan@... writes:

>
> What do you mean, "never performs well" ? Do you mean your tuner won't
> bring the SWR down to an acceptable level when you feed the 300 ohm line
> with the balun?
>
>
> >Many thanks &73,
> >Jim WA2LGN
>
> Well Jim, when you connect one wire to the 'Random Wire' out on your tuner
> you convert your arrangement to a "Random Wire" antenna! Trying to explain
> performance of this arrangement is the same as trying to explain
> performance when you connect you tuner to your rain gutter. In short, you
> don't have a loop but some kind of strange random wire antenna. If it
> works use it.
>
>

314. Re: Email from Art Bell.

Yahoo group: SkyWires
Date: 2004-01-12 04:59:01 UTC
From: exemptfromlife
Topic: 306 Message: 314

Here is Art's response to the questions posed..

Yes feed at 100 ft. BOTH loops fed at same point and quickly angle away from each other. VERY BROAD 3.5-4MHZ no re-tuning. They are IN PHASE. Gain is added. (Don't ask me how) Diversity? Idea from book about W6AM who did the same thing to his Rhombic's and found a second wire below the main added a lot of gain and made them VERY broad. I use a commercial piece of gear which keeps the loops at dc ground at all times+ lightning protection.

thanks.

--- In SkyWires@yahoogroups.com, "Dr.Ace Ratliff" <wh2t@b...> wrote:
> On Sat, 10 Jan 2004 00:30:51 -0000, exemptfromlife wrote:
> >Some of you had asked about Art Bell's giant SkyWire loop. I
> >decided
> >to email him and ask him about it. He responded last night. Here
is
> >his answer.
> >
> >Yes, I have a very large loop soon to be double in size (5 acres)
> >fed at 100 ft, the top loop is at 75 ft the 2nd loop at 68 feet.
> >Four foot wire mesh under the whole loop grounded to my water
well.
> >Wire is #10.
> >
> >I would like to get some more details from him if he is willing to
> >provide them. If you have some questions about the specifics of
the
> >skywire, please post them here and I'll send him a consolidated
> >list
> >of questions.
> >
> >I also offered for him to join the SkyWires group.
> >
> >Thanks.
> >
> ----------
> I have tried to catch Art on 75 meters with no success yet .
> What does " fed at 100 ft " mean ? Does that mean the feed point
is
> 100 ft above ground but most of the loop is 75 ft high ?
> Is Art feeding both loops ? If so how , in phase, 90 degrees out
of
> phase, etc. ?
> If he is not feeding the bottom loop what is it's purpose ?

> Thanks , Ace www.WH2T.com

315. Re: [SkyWires] Re: Email from Art Bell.

Yahoo group: SkyWires
Date: 2004-01-12 05:11:41 UTC
From: Lloyd M. Mitchell
Topic: 306 Message: 315

Wonder if Art Bell would be the guest of the 'hour' on one of the Echolink Conference Servers where he could talk on the topic of Large Loops (his) and how it is configured and how it works?

I bet we could get server time from one of the conferences on Echolink.

and then he could take some questions (canned if necessary) and respond directly.

Let me know if Art is open to possibly doing this and I'll contact a Server Owner.

Lloyd KD4HTW
Echolink Node KD4HTW-L #47477

exemptfromlife <junkmail@...> wrote:
Here is Art's response to the questions posed..

Yes feed at 100 ft. BOTH loops fed at same point and quickly angle
away from each other. VERY BROAD 3.5-4MHZ no re-tuning. They are IN
PHASE. Gain is added. (Don't ask me how) Diversity? Idea from book
about W6AM who did the same thing to his Rhombic's and found a
second wire below the main added a lot of gain and made them VERY
broad. I use a commercial piece of gear which keeps the loops at dc
ground at all times+ lightning protection.

thanks.

--- In SkyWires@yahoogroups.com, "Dr.Ace Ratliff" <wh2t@b...> wrote:
> On Sat, 10 Jan 2004 00:30:51 -0000, exemptfromlife wrote:
> >Some of you had asked about Art Bell's giant SkyWire loop. I
> >decided
> >to email him and ask him about it. He responded last night. Here
is
> >his answer.
> >
> >Yes, I have a very large loop soon to be double in size (5 acres)
> >fed at 100 ft, the top loop is at 75 ft the 2nd loop at 68 feet.
> >Four foot wire mesh under the whole loop grounded to my water
well.
> >Wire is #10.
> >
> >I would like to get some more details from him if he is willing to
> >provide them. If you have some questions about the specifics of
the
> >skywire, please post them here and I'll send him a consolidated
> >list
> >of questions.
> >

> >I also offered for him to join the SkyWires group.
> >
> >Thanks.
> >
> ----------
> I have tried to catch Art on 75 meters with no success yet .
> What does " fed at 100 ft " mean ? Does that mean the feed point
is
> 100 ft above ground but most of the loop is 75 ft high ?
> Is Art feeding both loops ? If so how , in phase, 90 degrees out
of
> phase, etc. ?
> If he is not feeding the bottom loop what is it's purpose ?
> Thanks , Ace www.WH2T.com

Yahoo! Groups Links

To visit your group on the web, go to:
http://groups.yahoo.com/group/SkyWires/

To unsubscribe from this group, send an email to:
SkyWires-unsubscribe@yahoogroups.com

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316. echolink conference

Yahoo group: SkyWires
Date: 2004-01-13 01:01:40 UTC
From: kl7r
Topic: 306 Message: 316

The new *QRP* conference is still pretty inactive
you are welcome to use it if you like.

--- In SkyWires@yahoogroups.com, "Lloyd M. Mitchell"
<kd4htw2001@y...> wrote:
> Wonder if Art Bell would be the guest of the 'hour' on one of the
Echolink Conference Servers where he could talk on the topic of Large
Loops (his) and how it is configured and how it works?
Service.

317. Re: A Loop Mystery...

Yahoo group: SkyWires
Date: 2004-01-13 01:21:16 UTC
From: kl7r
Topic: 311 Message: 317

> My 40m loop is fed with 300-ohm twinlead (about 30' or so of
> feedline.) At the tuner end, I normally connect one leg of the
> twinlead to the random wire out (Kenwood AT200), and ground the
> other leg. I also have a 4:1 balun, but either I wound it wrong or
> it's the wrong "thing" to have since the antenna never performs
> well with it.

Might be a lossy balun.. If you had two of them, you could put them
back to back into a dummy load and measure the power into the
pair and the power out of the pair and see if there was a lot of loss.
If you wired it yourself, double check. Did you use a toroid sized
for your power level?

> When I drive the line with one leg "floating" (i.e. not grounded)
> and the other leg connected to my tuner's Random Wire out, I get
> better receive performance (nearly 3 S units on my admittedly
> uncalibrated rig meter), and transmitting performance is either the
> same or better (still experimenting on air and getting signal
> reports.)
>

Are you seeing the s-meter reading of noise?
I would expect that disconnecting one leg of the loop
would raise your noise level up a bunch... Check the
meter reading on a SW broadcast carrier and note the
difference there. If it still shows a high s-meter reading
on signals (not noise) then it could be that releasing
one leg of the feedline changes the shape of the radiation
pattern enough to cause the difference.

Try borrowing a tuner with a balun from a ham friend
and see how that tuner acts with your setup.

318. problem

Yahoo group: SkyWires
Date: 2004-01-13 05:14:35 UTC
From: ron trotto
Topic: 318 Message: 318

i have two problems but heres the main lol.i can no longer hear no stations but a few i get white hash noise, from unfortunatly wireless broadband.the main antenna is on the water tower two blocks away from me. 14 neibors have subscribed. not me can i bury my antenna its insulated wire and 200 ft i have the equipment to do it would this help. and would i need to ground it or will the lightning be a factor.all i can hear is medium wave and 120,90 meters i use a grundig sat 800 ron trotto and thanks

319. Re: A Loop Mystery...

Yahoo group: SkyWires
Date: 2004-01-13 16:25:35 UTC
From: R H F
Topic: 311 Message: 319

JMS,

The 300 Ohm Twin Lead should work well with your Tuner
connected as a Balanced Antenna; without the Matching
Transformer.

If your 4:1 Matching Transformer is wire up in to the
feedline circuit as a Balun (BAL > UN) then it should work.

IMHO: Your best use of the 4:1 BALUN is at the Antenna
Element and FeedLine Junction. Using a Coax Cable FeedLine
between the Antenna Element and the Tuner/Receiver.

Hey, What Works... W O R K S !
(Be Happy : Just Use It !)

~ RHF
.
.
= = = In SkyWires@yahoogroups.com,
= = = "jimmcskate" <JimMcSkate@a...> wrote:
> Kind folks,
> I have a bit of a mystery, and I'd like to call upon those skilled
> in transmission lines and the theory behind them.
>
> My 40m loop is fed with 300-ohm twinlead (about 30' or so of
> feedline.) At the tuner end, I normally connect one leg of the
> twinlead to the random wire out (Kenwood AT200), and ground the
> other leg. I also have a 4:1 balun, but either I wound it wrong
or
> it's the wrong "thing" to have since the antenna never performs
well
> with it.
>
> When I drive the line with one leg "floating" (i.e. not grounded)
> and the other leg connected to my tuner's Random Wire out, I get
> better receive performance (nearly 3 S units on my admittedly
> uncalibrated rig meter), and transmitting performance is either
the
> same or better (still experimenting on air and getting signal
> reports.)
>
> So: What's happening here? Any clues would be much
appreciated...
> email me at WA2LGN<at>AOL.COM if you need more info.
>

> Many thanks & 73,
> Jim WA2LGN

320. New to group

Yahoo group: SkyWires
Date: 2004-01-13 22:15:29 UTC
From: Michael
Topic: 320 Message: 320

Hello Everyone,

I just got done reading through the past messages.
A lot of good information!

My antenna sounds odd enough to fit right in!
Even with my restrictions (Aptment dweller in stelth mode)
I was very lucky. Behind the apartment building complex is
a unkept greenway and a creek.

I was able to get 368 feet
of insulated #12 copper stranded wire. It floats in the
trees with only the feed point secured. The AVERAGE height
is 45 feet, with the highest point being 60 feet and the
lowest point being at 35 foot. It's not a perfect square
and I'm using a 1:1 balun with part of the RG-8 6 inches
underground.

Radios used are: IC-745
FT-707

I can contact almost every one I can hear.

73
Michael N7RDV

321. Re: [SkyWires] Re: A Loop Mystery...

Yahoo group: SkyWires
Date: 2004-01-13 23:38:14 UTC
From: Scott Erwin
Topic: 311 Message: 321

Have you put a meter across the feedline? It should
read the resistance of the wire length which for a 40
meter loop wont be much, only a few ohms. If it reads
open then you have a broken wire in the feedline or
antenna somewhere. If it reads high resistance say 20
ohms or more you have a poor connection somewhere.
When you first put up a loop you should always check
the resistance and post it at the antenna connection
in the shack and check it every week or so or if you
have a big jump in the inductor/capacitor settings
when tuning up on a frequency you use all the time
like a net or where you meet your friends to talk.
This way you will know when you develop a problem with
your antenna.
--- kl7r <kl7r@...> wrote:
>
> > My 40m loop is fed with 300-ohm twinlead (about
> 30' or so of
> > feedline.) At the tuner end, I normally connect
> one leg of the
> > twinlead to the random wire out (Kenwood AT200),
> and ground the
> > other leg. I also have a 4:1 balun, but either I
> wound it wrong or
> > it's the wrong "thing" to have since the antenna
> never performs
> > well with it.
>
> Might be a lossy balun.. If you had two of them,
> you could put them
> back to back into a dummy load and measure the power
> into the
> pair and the power out of the pair and see if there
> was a lot of loss.
> If you wired it yourself, double check. Did you use
> a toroid sized
> for your power level?
>
>
> > When I drive the line with one leg "floating"
> (i.e. not grounded)
> > and the other leg connected to my tuner's Random
> Wire out, I get
> > better receive performance (nearly 3 S units on my
> admittedly

> > uncalibrated rig meter), and transmitting
> performance is either the
> > same or better (still experimenting on air and
> getting signal
> > reports.)
> >
>
> Are you seeing the s-meter reading of noise?
> I would expect that disconnecting one leg of the
> loop
> would raise your noise level up a bunch... Check
> the
> meter reading on a SW broadcast carrier and note the
>
> difference there. If it still shows a high s-meter
> reading
> on signals (not noise) then it could be that
> releasing
> one leg of the feedline changes the shape of the
> radiation
> pattern enough to cause the difference.
>
> Try borrowing a tuner with a balun from a ham friend
>
> and see how that tuner acts with your setup.
>
>
>

Do you Yahoo!?
Yahoo! Hotjobs: Enter the "Signing Bonus" Sweepstakes
http://hotjobs.sweepstakes.yahoo.com/signingbonus

322. Loop Question

Yahoo group: SkyWires
Date: 2004-01-14 03:16:45 UTC
From: Dave
Topic: 322 Message: 322

Just put up, not very high about 10 feet off ground, it is a 160 meter loop, I/we (my son and I) will go back out and do some better measuring of the length to see what we got exactly. We were racing against dark; the one thing I noticed first off on some bands it is a very broad band tune (easy), but on some it is VERY critical to not hardly breath when I am adjusting the tuner, MFJ VERSA TUNER II, model 944. I am direct connecting the loop with about 20 feet of RG58U coax. The only band that doesn't want to tune in is 40 Meter, only the top 50 KC or there abouts tunes acceptable to me. Now I am guessing and hoping that this isn't normal. Am I correct in that assumption. I know that getting it up higher would help out a lot, but that really isn't an option right now. Any other ideas to try would be appreciated.

Thanks and 73
Dave N8PU

323. Re: [SkyWires] Loop Question

Yahoo group: SkyWires
Date: 2004-01-14 04:44:27 UTC
From: JimMcSkate@aol.com
Topic: 322 Message: 323

Dave,
Try tuning this on 40 using the vertical/top hat configuration - short the coax at the transmitter and drive it as a random wire against ground. You could make up a special connector for this out of a short length of RG-8 coax - should be pretty straightforward.

73,
Jim

In a message dated 1/13/2004 10:20:19 PM Eastern Standard Time, aq392@... writes:

> The only band that
> doesn't want to tune in is 40 Meter, only the top 50 KC or there abouts
> tunes acceptable to me. Now I am guessing and hoping that this isn't
> normal. Am I correct in that assumption. I know that getting it up
> higher would help out a lot, but that really isn't an option right now.
> Any other ideas to try would be appreciated.
>
> Thanks and 73
> Dave N8PU
>

324. Re: [SkyWires] Loop Question

Yahoo group: SkyWires
Date: 2004-01-14 15:43:24 UTC
From: keith currie
Topic: 322 Message: 324
Attachments: 2 described; binary payloads are missing from this source WARC

Dave I found with my large loop that the groune from my tuner was very
very important, I run heavy wire from a ground rod direct to the tuner,
it helped tuning and also noise a bunch
Keith VE5HKC
JimMcSkate@... wrote:

> Dave,
> Try tuning this on 40 using the vertical/top hat configuration - short
> the coax at the transmitter and drive it as a random wire against
> ground. You could make up a special connector for this out of a short
> length of RG-8 coax - should be pretty straightforward.
>
> 73,
> Jim
>
> In a message dated 1/13/2004 10:20:19 PM Eastern Standard Time,
> aq392@... writes:
>
>
>> The only band that
>> doesn't want to tune in is 40 Meter, only the top 50 KC or there
>> abouts
>> tunes acceptable to me. Now I am guessing and hoping that this isn't
>>
>> normal. Am I correct in that assumption. I know that getting it up
>> higher would help out a lot, but that really isn't an option right
>> now.
>> Any other ideas to try would be appreciated.
>>
>> Thanks and 73
>> Dave N8PU
>
>
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>
> ---
> Yahoo! Groups Links
>
> * To visit your group on the web, go to:

> http://groups.yahoo.com/group/SkyWires/
>
> * To unsubscribe from this group, send an email to:
> SkyWires-unsubscribe@yahoogroups.com
>
> * Your use of Yahoo! Groups is subject to the Yahoo! Terms of
> Service.
>

325. A Hunting we will go, A hunting we will go..

Yahoo group: SkyWires
Date: 2004-01-15 02:53:58 UTC
From: exemptfromlife
Topic: 325 Message: 325

Sorry about being completely off topic, but..

This is really worth watching if you have a high speed data connection. These guys are lucky that they still have a head left, and that they didn't shoot each other.

http://myweb.cableone.net/jlflanagan/lion.wmv

I wish I spoke Swahili to know what their guide is screaming towards the end. Probably something like "stupid yuppies, I'm getting too old for this.."

(Note the guide diving for cover when the bullets start flying, and the chick running like crazy)

326. Re: [SkyWires] A Hunting we will go, A hunting we will go..

Yahoo group: SkyWires
Date: 2004-01-15 03:19:44 UTC
From: Rob Mills
Topic: 325 Message: 326

----- Original Message -----
From: exemptfromlife
To: SkyWires@yahoogroups.com
Sent: Wednesday, January 14, 2004 8:53 PM
Subject: [SkyWires] A Hunting we will go, A hunting we will go..

>>>These guys are lucky that they still have a head left,<<,

Yeah, I think that lion was ticked. I wouldn't have thought it would have attacked in that situation. Guess they didn't either. RM~

a..

327. Re: A Hunting we will go, A hunting we will go..

Yahoo group: SkyWires
Date: 2004-01-15 03:52:37 UTC
From: exemptfromlife
Topic: 325 Message: 327

yeah, I guess its a lot different than hunting a deer that is just going to stand there and be made into sausage.. :-)

--- In SkyWires@yahoogroups.com, "Rob Mills" <robmills@c...> wrote:
>
> ----- Original Message -----
> From: exemptfromlife
> To: SkyWires@yahoogroups.com
> Sent: Wednesday, January 14, 2004 8:53 PM
> Subject: [SkyWires] A Hunting we will go, A hunting we will go..
>
>
>
> >>>These guys are lucky that they still have a head left,<<,
>
> Yeah, I think that lion was ticked. I wouldn't have thought it would have attacked in that situation. Guess they didn't either. RM~
>
> a..

328. Re: Loop Question

Yahoo group: SkyWires
Date: 2004-01-15 22:38:26 UTC
From: kl7r
Topic: 322 Message: 328

..,or try some twinlead or window wire or ladderline

I have read that since open wire line has a higher
characteristic impedance, it is easier to tuneup
than 50 ohm coax. I dont believe I have noticed
that behavior but you can try it and see how that
works for you.

I have read that 55 feet is a good non-resonant length for
openwire feeder but experiment and see what works.

I have seen that feedline lengths have a huge impact
on tunablilty of antennas. I borrowed an mfj antenna
analyzer for an afternoon and attached to my loop and noticed
that i could change the length of my loop by 20 feet or more
and I still had a nice dip in swr on the 17 meter band
no matter what the length of the antenna.
I was actually trying to make the 80 meter antenna resonante
on 20 meters. It took me a bit to realize that the feedline was
causing the behavior.

329. Re: [SkyWires] Re: Loop Question

Yahoo group: SkyWires
Date: 2004-01-16 00:52:24 UTC
From: keith currie
Topic: 322 Message: 329
Attachments: 2 described; binary payloads are missing from this source WARC

I am having trouble tuning on 160 even though that is what I made the loop for, it tunes real good every where else. I am using 70' of 450ohm ladder line straight to my MFJ 989c tunner. Any one got any ideas what to try next?
Keith VE5HKC

kl7r wrote:

> ..,or try some twinlead or window wire or ladderline
>
> I have read that since open wire line has a higher
> characteristic impedance, it is easier to tuneup
> than 50 ohm coax. I dont believe I have noticed
> that behavior but you can try it and see how that
> works for you.
>
> I have read that 55 feet is a good non-resonant length for
> openwire feeder but experiment and see what works.
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> I have seen that feedline lengths have a huge impact
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> analyzer for an afternoon and attached to my loop and noticed
> that i could change the length of my loop by 20 feet or more
> and I still had a nice dip in swr on the 17 meter band
> no matter what the length of the antenna.
> I was actually trying to make the 80 meter antenna resonante
> on 20 meters. It took me a bit to realize that the feedline was
> causing the behavior.
>
>
>
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330. Re: [SkyWires] Re: Loop Question

Yahoo group: SkyWires
Date: 2004-01-16 00:52:51 UTC
From: keith currie
Topic: 322 Message: 330
Attachments: 2 described; binary payloads are missing from this source WARC

I am having trouble tuning on 160 even though that is what I made the loop for, it tunes real good every where else. I am using 70' of 450ohm ladder line straight to my MFJ 989c tunner. Any one got any ideas what to try next?
Keith VE5HKC

kl7r wrote:

> ..,or try some twinlead or window wire or ladderline
>
> I have read that since open wire line has a higher
> characteristic impedance, it is easier to tuneup
> than 50 ohm coax. I dont believe I have noticed
> that behavior but you can try it and see how that
> works for you.
>
> I have read that 55 feet is a good non-resonant length for
> openwire feeder but experiment and see what works.
>
> I have seen that feedline lengths have a huge impact
> on tunablilty of antennas. I borrowed an mfj antenna
> analyzer for an afternoon and attached to my loop and noticed
> that i could change the length of my loop by 20 feet or more
> and I still had a nice dip in swr on the 17 meter band
> no matter what the length of the antenna.
> I was actually trying to make the 80 meter antenna resonante
> on 20 meters. It took me a bit to realize that the feedline was
> causing the behavior.
>
>
>
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331. Re: Loop Question

Yahoo group: SkyWires
Date: 2004-01-16 00:01:19 UTC
From: R H F
Topic: 322 Message: 331

KC,

If your Skywire Loop Antenna is 'cut' for 160 Meters:

1. Check your connections.

2. Try using it on 160 Meters without the MFJ-989
Tuner. [" Low Power ONLY for Testing "]

3. Try changing the Feed Line Length from 70 Feet to:
* Shorten to 66 Feet - If Possible.
* Lengthen to 75 Feet or 87.5 feet - If Practical.

4. Type using a 1:1 Matching Transformer between the
Antenna Element and the FeedLine. (Outside Up-in-the-Air)

iane ~ RHF
.
.
= = = In SkyWires@yahoogroups.com,
= = = keith currie <kecurrie@s...> wrote:

I am having trouble tuning on 160 even though that is what
I made the loop for, it tunes real good every where else.

I am using 70' of 450ohm ladder line
straight to my MFJ 989c tunner.

Any one got any ideas what to try next?

Keith VE5HKC

.

332. Re: [SkyWires] Re: Loop Question

Yahoo group: SkyWires
Date: 2004-01-16 19:29:20 UTC
From: keith currie
Topic: 322 Message: 332

Well it is trying to tick me off now, If I feed it as a vertical it
tunes very easy on 160, 75, and 40, but dont hear as good and dont tune
on the higher bands very good at all which it did the other way.
Keith VE5HKC
R H F wrote:

> KC,
>
> If your Skywire Loop Antenna is 'cut' for 160 Meters:
>
> 1. Check your connections.
>
> 2. Try using it on 160 Meters without the MFJ-989
> Tuner. [" Low Power ONLY for Testing "]
>
> 3. Try changing the Feed Line Length from 70 Feet to:
> * Shorten to 66 Feet - If Possible.
> * Lengthen to 75 Feet or 87.5 feet - If Practical.
>
> 4. Type using a 1:1 Matching Transformer between the
> Antenna Element and the FeedLine. (Outside Up-in-the-Air)
>
>
> iane ~ RHF
> .
> .
> = = = In SkyWires@yahoogroups.com,
> = = = keith currie <kecurrie@s...> wrote:
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> I am having trouble tuning on 160 even though that is what
> I made the loop for, it tunes real good every where else.
>
> I am using 70' of 450ohm ladder line
> straight to my MFJ 989c tunner.
>
> Any one got any ideas what to try next?
>
> Keith VE5HKC
>
> .
>
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333. Re: Loop Question = Check & Re-Check

Yahoo group: SkyWires
Date: 2004-01-16 19:12:07 UTC
From: R H F
Topic: 322 Message: 333

KC,

I guess my first assumption is that your stated the you
made this SkyWire Loop Antenna for the 160 Meter Band.

The the Antenna Loop Element should be about 525 Feet long.
? Is that Correct ? - ? If Not Then - What Length Is It ?

What type of wire did you use for the Antenna Element ?
? Is the Wire Continuos (One Piece) -or- Joined Pieces ?
? I There are Joints - What Type ?
[Should be Western Union both Soldered and Wrapped]

How is the Antenna Element Rigged ? -&- Insulated ?
? Any Bare Wire on any Tree Limbs ?
[Minimum Clearence of Three Feet at All Points]

Did you 'check' the Continuity of the Antenna Loop Element ?

Usually smaller/shorter loops that are designed for 80M
or 40M are used as Vertical Top on 160M with some success.

It is easy to Load-Up a piece of wire with an antenna tuner,
but that in and of itself does not mean that your are getting
out or that you can Hear in return.

I will repeat myself. If your have a a 160 Meter Band
SkyWire Loop Antenna cut at about 525 Feet: Then an
Antenna Tuner should not be required at low power for
testing and evaluation; until you have resolved your
problems.
1. Check & Re-Check the Antenna Loop Element
2. Check & Re-Check the FeedLine
3. Try 'different' Lenghts of 450 Ohm Ladder Line
FeedLine for the Best performance on the 160 Meter Band.
4. Then use the Antenna Tuner for the rest of the bands.

iane ~ RHF
.
.
= = = In SkyWires@yahoogroups.com,
= = = keith currie <kecurrie@s...> wrote:
> Well it is trying to tick me off now, If I feed it as a vertical
it
> tunes very easy on 160, 75, and 40, but dont hear as good and dont
tune
> on the higher bands very good at all which it did the other way.

> Keith VE5HKC
> R H F wrote:
>
> > KC,
> >
> > If your Skywire Loop Antenna is 'cut' for 160 Meters:
> >
> > 1. Check your connections.
> >
> > 2. Try using it on 160 Meters without the MFJ-989
> > Tuner. [" Low Power ONLY for Testing "]
> >
> > 3. Try changing the Feed Line Length from 70 Feet to:
> > * Shorten to 66 Feet - If Possible.
> > * Lengthen to 75 Feet or 87.5 feet - If Practical.
> >
> > 4. Type using a 1:1 Matching Transformer between the
> > Antenna Element and the FeedLine. (Outside Up-in-the-Air)
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> >
> > iane ~ RHF
> > .
> > .
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> > I am using 70' of 450ohm ladder line
> > straight to my MFJ 989c tunner.
> >
> > Any one got any ideas what to try next?
> >
> > Keith VE5HKC
> >
> > .

334. Meeting on HF

Yahoo group: SkyWires
Date: 2004-01-16 21:13:05 UTC
From: ve3ral
Topic: 334 Message: 334

Hi guys, did you ever get together for a net if so when and where.
Thanks. Ralph

335. Re: [SkyWires] Re: Loop Question

Yahoo group: SkyWires
Date: 2004-01-17 18:50:49 UTC
From: keith currie
Topic: 322 Message: 335

Is it true that insulated wire should be cut 5% shorter? I used 14ga
stranded insulated copper.
VE5HKC
R H F wrote:

> KC,
>
> If your Skywire Loop Antenna is 'cut' for 160 Meters:
>
> 1. Check your connections.
>
> 2. Try using it on 160 Meters without the MFJ-989
> Tuner. [" Low Power ONLY for Testing "]
>
> 3. Try changing the Feed Line Length from 70 Feet to:
> * Shorten to 66 Feet - If Possible.
> * Lengthen to 75 Feet or 87.5 feet - If Practical.
>
> 4. Type using a 1:1 Matching Transformer between the
> Antenna Element and the FeedLine. (Outside Up-in-the-Air)
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>
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> I made the loop for, it tunes real good every where else.
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> I am using 70' of 450ohm ladder line
> straight to my MFJ 989c tunner.
>
> Any one got any ideas what to try next?
>
> Keith VE5HKC
>
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336. Re: [SkyWires] Re: Loop Question

Yahoo group: SkyWires
Date: 2004-01-18 03:28:54 UTC
From: Dr.Ace Ratliff
Topic: 322 Message: 336

On Sat, 17 Jan 2004 10:50:49 -0800, keith currie wrote:
>Is it true that insulated wire should be cut 5% shorter? I used
>14ga stranded insulated copper.
>VE5HKC

If insulated wire is used a 3 to 5% shortening will be required to obtain resonance . This is due to insulated wires lower velocity factor usually .97 to .95 .
Ace- www.WH2T.com

337. Re: Loop Question

Yahoo group: SkyWires
Date: 2004-01-18 12:15:19 UTC
From: R H F
Topic: 322 Message: 337

KC,

YES - An "Insulated Wire" usually is TRIMMED to a Length
that is Less Than the Formula/Calculated Wave Length (WL)
for a Bare Wire.

BUT - Remember these Calculations for a Wave Length,
Half WL and Quarter WL Resonant Antenna Element are for
the Optimum Antenna Mounting Height.

TRIMMED - This is Why I Say TRIMMED. Since most 160M
SkyWave Loop Antennas are Not Set at 1/4WL = 132Ft;
1/8WL=66Ft; 1/16WL=33Ft.

NOTE: Practical Resonance = Getting Out and Being Heard
+ Hearing the other Guy + and Having a Low SWR. Is a
Combination of FACTORS when a Relatively Large Antenna
Element is Mounted "So-Close-To" the Ground.

THE PROCESS: So my recommendation is to have the Antenna
'connected' using your FeedLine directly to the transmitter
(without an Antenna Tuner) using low power for SWR Testing.

Start at the Full Length of the Bare Wire Calculated
Length and TRIM One Percent (1%) Ruffly Five Feet and
Three Inches (5' 3") at a Time.

First Test; Then Trim and Test Again; until you reach your
Optimum Trimmed Antenna Point for best operating conditions.

iane ~ RHF
.
.
= = = In SkyWires@yahoogroups.com,
= = = keith currie <kecurrie@s...> wrote:
> Is it true that insulated wire should be cut 5% shorter? I used
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> stranded insulated copper.
> VE5HKC
> R H F wrote:
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> > KC,
> >
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> >
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> > Keith VE5HKC
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> > --
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338. Re: [SkyWires] Re: Loop Question

Yahoo group: SkyWires
Date: 2004-01-18 19:18:49 UTC
From: keith currie
Topic: 322 Message: 338
Attachments: 2 described; binary payloads are missing from this source WARC

How do you hook up 450ohm ladder line directly to a Radio?

R H F wrote:

> KC,
>
> YES - An "Insulated Wire" usually is TRIMMED to a Length
> that is Less Than the Formula/Calculated Wave Length (WL)
> for a Bare Wire.
>
> BUT - Remember these Calculations for a Wave Length,
> Half WL and Quarter WL Resonant Antenna Element are for
> the Optimum Antenna Mounting Height.
>
> TRIMMED - This is Why I Say TRIMMED. Since most 160M
> SkyWave Loop Antennas are Not Set at 1/4WL = 132Ft;
> 1/8WL=66Ft; 1/16WL=33Ft.
>
> NOTE: Practical Resonance = Getting Out and Being Heard
> + Hearing the other Guy + and Having a Low SWR. Is a
> Combination of FACTORS when a Relatively Large Antenna
> Element is Mounted "So-Close-To" the Ground.
>
> THE PROCESS: So my recommendation is to have the Antenna
> 'connected' using your FeedLine directly to the transmitter
> (without an Antenna Tuner) using low power for SWR Testing.
>
> Start at the Full Length of the Bare Wire Calculated
> Length and TRIM One Percent (1%) Ruffly Five Feet and
> Three Inches (5' 3") at a Time.
>
> First Test; Then Trim and Test Again; until you reach your
> Optimum Trimmed Antenna Point for best operating conditions.
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> = = = In SkyWires@yahoogroups.com,
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> > Is it true that insulated wire should be cut 5% shorter? I used
> 14ga
> > stranded insulated copper.
> > VE5HKC

> > R H F wrote:
> >
> > > KC,
> > >
> > > If your Skywire Loop Antenna is 'cut' for 160 Meters:
> > >
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> > > 2. Try using it on 160 Meters without the MFJ-989
> > > Tuner. [" Low Power ONLY for Testing "]
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> > > 3. Try changing the Feed Line Length from 70 Feet to:
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> > >
> > > 4. Type using a 1:1 Matching Transformer between the
> > > Antenna Element and the FeedLine. (Outside Up-in-the-Air)
> > >
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> > > .
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> > >
> > > I am using 70' of 450ohm ladder line
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> > >
> > > Any one got any ideas what to try next?
> > >
> > > Keith VE5HKC
> > >
> > > .
> > >
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> > >
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339. Re: [SkyWires] Re: Loop Question

Yahoo group: SkyWires
Date: 2004-01-18 18:58:36 UTC
From: Jim Dunstan
Topic: 322 Message: 339

At 11:18 AM 1/18/04 -0800, you wrote:

>How do you hook up 450ohm ladder line directly to a
>Radio?

All modern HF transceivers have an unbalanced input with a coaxial connector for 50 ohm coaxial cable. The usual method of connecting to a balanced feed line is to use a 4:1 balanced to unbalanced device called a 'balun'. Now, unless you have a good match as is, you will in all likely hood connect the unbalanced output of the 'balun' to the coax input of the transceiver with an antenna tuner. The majority of modern antenna tuners match unbalanced to unbalanced lines. In addition most modern antenna tuners incorporate a 4:1 'balun' for the express purpose of matching balanced lines such as the 450 ohm ladder line or 300 ohm TV twinlead.

If you are connecting to a receiver instead of a transceiver you will note that some have provision for connecting a balanced line directly to the radio. In this case what you will see at the back of the radio is both a coax connector and a pair of screw terminal connectors for connecting balanced lines directly. Such receivers have a built in 'balun' and for receive purposes they don't try to actually tune the antenna.

Jim Dunstan
Thunder Bay, ON

340. Re: [SkyWires] Re: Loop Question

Yahoo group: SkyWires
Date: 2004-01-18 19:18:14 UTC
From: Lloyd M. Mitchell
Topic: 322 Message: 340

Along the same lines as the question below.

Do you really bring the ladderline into the house? I guess lightening protection is necessary too but for instance in my home. the radio is adjacent to an outside wall (approx) 4 ft from the actual wall, so I bring the ladderline in (thru the floor) and directly to the tuner/radio? Should I use a coaxial cable as a shielded feed in case the path is near a metal stud or other metallic object?

Hmmm

Jim Dunstan <jimdunstan@...> wrote:
At 11:18 AM 1/18/04 -0800, you wrote:

>How do you hook up 450ohm ladder line directly to a
>Radio?

All modern HF transceivers have an unbalanced input with a coaxial connector for 50 ohm coaxial cable. The usual method of connecting to a balanced feed line is to use a 4:1 balanced to unbalanced device called a 'balun'. Now, unless you have a good match as is, you will in all likely hood connect the unbalanced output of the 'balun' to the coax input of the transceiver with an antenna tuner. The majority of modern antenna tuners match unbalanced to unbalanced lines. In addition most modern antenna tuners incorporate a 4:1 'balun' for the express purpose of matching balanced lines such as the 450 ohm ladder line or 300 ohm TV twinlead.

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Jim Dunstan
Thunder Bay, ON

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341. Re: [SkyWires] Re: Loop Question

Yahoo group: SkyWires
Date: 2004-01-18 21:42:04 UTC
From: Jim Dunstan
Topic: 322 Message: 341

At 11:18 AM 1/18/04 -0800, you wrote:
>Along the same lines as the question below.
>
>Do you really bring the ladderline into the house? I guess lightening
>protection is necessary too but for instance in my home. the radio is
>adjacent to an outside wall (approx) 4 ft from the actual wall, so I bring
>the ladderline in (thru the floor) and directly to the
>tuner/radio? Should I use a coaxial cable as a shielded feed in case the
>path is near a metal stud or other metallic object?
>
>Hmmm

450 ohm ladder line can represent a mechanical problem bringing it to the operating position. There are a couple of ways of handling it:

- bring the ladder line in as close as convenient and connect to a 4:1 balun. Then you can run coax cable from the coax side of your balun to your xcvr or antenna tuner as the case may be. This requires either removing the balun from your tuner and relocating it or buying a separate balun. If your tuner already includes a balun I can see you not wanting the extra work and or expense.

- another way of handling it is to end your 450 ohm ladder line at a convenient location and connecting a good quality 300 ohm TV twin-lead to it. You then run the TV twin-lead to the balanced input on your antenna tuner as it is as convenient as coax cable. TV twin-lead works very well and will have no problem handling RF power in the 100W range. TV twin-lead has a bit more loss than 450 ladder-line but nothing to worry about with a short run.

I ran a 100' inverted vee antenna up 30' above the peak of a second story roof. I connected the center of the inverted vee with 300 ohm TV feed-line down to the rig in the basement (a good 60') to an antenna tuner. I used to run a full 100W input and full AM. It was a great antenna and never had a bit of problem. In fact you can get all kinds of insulated stand-off hardware at your local RadioShack or similar store.

PS I've never had lightning problem. However if your concerned you can locate a DPDT knife switch at a convenient location ..... throw the switch one way to connect the antenna to your rig and other way to connect the antenna to a convenient ground eg a water pipe.

Jim Dunstan VE3CI
Thunder Bay, ON

342. Re: [SkyWires] Re: Loop Question

Yahoo group: SkyWires
Date: 2004-01-19 01:17:55 UTC
From: keith currie
Topic: 322 Message: 342

I run the 450ohm ladderline to the tuner in the house, It seemes the
best way to me, why change, If I used coaxial cable I would run it uo
to the loop also. Keith
"Lloyd M. Mitchell" wrote:

> Along the same lines as the question below. Do you really bring the
> ladderline into the house? I guess lightening protection is necessary
> too but for instance in my home. the radio is adjacent to an outside
> wall (approx) 4 ft from the actual wall, so I bring the ladderline in
> (thru the floor) and directly to the tuner/radio? Should I use a
> coaxial cable as a shielded feed in case the path is near a metal stud
> or other metallic object? Hmmm
>
> Jim Dunstan <jimdunstan@...> wrote:
>
> At 11:18 AM 1/18/04 -0800, you wrote:
>
> >How do you hook up 450ohm ladder line directly to a
> >Radio?
>
> All modern HF transceivers have an unbalanced input with a
> coaxial
> connector for 50 ohm coaxial cable. The usual method of
> connecting to a
> balanced feed line is to use a 4:1 balanced to unbalanced
> device called a
> 'balun'. Now, unless you have a good match as is, you will
> in all likely
> hood connect the unbalanced output of the 'balun' to the
> coax input of the
> transceiver with an antenna tuner. The majority of modern
> antenna tuners
> match unbalanced to unbalanced lines. In addition most
> modern antenna
> tuners incorporate a 4:1 'balun' for the express purpose of
> matching
> balanced lines such as the 450 ohm ladder line or 300 ohm TV
> twinlead.
>
> If you are connecting to a receiver instead of a transceiver
> you will note
> that some have provision for connecting a balanced line
> directly to the
> radio. In this case what you will see at the back of the
> radio is both a

> coax connector and a pair of screw terminal connectors for
> connecting
> balanced lines directly. Such receivers have a built in
> 'balun' and for
> receive purposes they don't try to actually tune the
> antenna.
>
>
> Jim Dunstan
> Thunder Bay, ON
>
>
>
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343. Re: [SkyWires] Re: Loop Question

Yahoo group: SkyWires
Date: 2004-01-19 01:45:55 UTC
From: Dr.Ace Ratliff
Topic: 322 Message: 343

On Sun, 18 Jan 2004 16:42:04 -0500, Jim Dunstan wrote:
>At 11:18 AM 1/18/04 -0800, you wrote:
>>Along the same lines as the question below.
>>
>>Do you really bring the ladderline into the house? I guess
>>lightening
>>protection is necessary too but for instance in my home. the radio
>>is
>>adjacent to an outside wall (approx) 4 ft from the actual wall, so
>>I bring
>>the ladderline in (thru the floor) and directly to the
>>tuner/radio? Should I use a coaxial cable as a shielded feed in
>>case the
>>path is near a metal stud or other metallic object?
>>
>>Hmmm
>
>450 ohm ladder line can represent a mechanical problem bringing it
>to the
>operating position. There are a couple of ways of handling it:
>
>- bring the ladder line in as close as convenient and connect to a
>4:1
>balun. Then you can run coax cable from the coax side of your balun
>to
>your xcvr or antenna tuner as the case may be. This requires either
>removing the balun from your tuner and relocating it or buying a
>separate
>balun. If your tuner already includes a balun I can see you not
>wanting
>the extra work and or expense.
>
>- another way of handling it is to end your 450 ohm ladder line at a
>convenient location and connecting a good quality 300 ohm TV twin-
>lead to
>it. You then run the TV twin-lead to the balanced input on your
>antenna
>tuner as it is as convenient as coax cable. TV twin-lead works very
>well
>and will have no problem handling RF power in the 100W range. TV
>twin-lead
>has a bit more loss than 450 ladder-line but nothing to worry about
>with a
>short run.
>

>I ran a 100' inverted vee antenna up 30' above the peak of a second
>story
>roof. I connected the center of the inverted vee with 300 ohm TV
>feed-line
>down to the rig in the basement (a good 60') to an antenna tuner. I
>used
>to run a full 100W input and full AM. It was a great antenna and
>never had
>a bit of problem. In fact you can get all kinds of insulated stand-
>off
>hardware at your local RadioShack or similar store.
>
>PS I've never had lightning problem. However if your concerned you
>can
>locate a DPDT knife switch at a convenient location ..... throw the
>switch
>one way to connect the antenna to your rig and other way to connect
>the
>antenna to a convenient ground eg a water pipe.
>
>
>Jim Dunstan VE3CI
>Thunder Bay, ON
>
>
>
Here's a link to Info on How To Make A Homebrew 4:1 Balun , it will handle the legal power limit . Ace - WH2T

http://www.bloomington.in.us/~wh2t/balun.html

344. Re: [SkyWires] Re: Loop Question

Yahoo group: SkyWires
Date: 2004-01-19 02:06:13 UTC
From: Scott Erwin
Topic: 322 Message: 344

Zip cord wire is also fine to use on the 4 to 1 BALUN and half the trouble to wind up on the pvc pipe! Also the large ferite rod used in old AM radios works very well. Just remove all the old wire, wrap with black electrical tape and wind up with ZIP cord wire. Wrap again with another layer of black electrical tape. Do not try to use the very small rod used in modern radios as there too small to work properly unless you use very small wire and run QRP only.

--- "Dr.Ace Ratliff" <wh2t@...> wrote:

> On Sun, 18 Jan 2004 16:42:04 -0500, Jim Dunstan
> wrote:
> >At 11:18 AM 1/18/04 -0800, you wrote:
> >>Along the same lines as the question below.
> >>
> >>Do you really bring the ladderline into the house?
> I guess
> >>lightening
> >>protection is necessary too but for instance in my
> home. the radio
> >>is
> >>adjacent to an outside wall (approx) 4 ft from the
> actual wall, so
> >>I bring
> >>the ladderline in (thru the floor) and directly to
> the
> >>tuner/radio? Should I use a coaxial cable as a
> shielded feed in
> >>case the
> >>path is near a metal stud or other metallic
> object?
> >>
> >>Hmmm
> >
> >450 ohm ladder line can represent a mechanical
> problem bringing it
> >to the
> >operating position. There are a couple of ways of
> handling it:
> >
> >- bring the ladder line in as close as convenient
> and connect to a
> >4:1
> >balun. Then you can run coax cable from the coax
> side of your balun

> >to
> >your xcvr or antenna tuner as the case may be.
> This requires either
> >removing the balun from your tuner and relocating
> it or buying a
> >separate
> >balun. If your tuner already includes a balun I
> can see you not
> >wanting
> >the extra work and or expense.
> >
> >- another way of handling it is to end your 450 ohm
> ladder line at a
> >convenient location and connecting a good quality
> 300 ohm TV twin-
> >lead to
> >it. You then run the TV twin-lead to the balanced
> input on your
> >antenna
> >tuner as it is as convenient as coax cable. TV
> twin-lead works very
> >well
> >and will have no problem handling RF power in the
> 100W range. TV
> >twin-lead
> >has a bit more loss than 450 ladder-line but
> nothing to worry about
> >with a
> >short run.
> >
> >I ran a 100' inverted vee antenna up 30' above the
> peak of a second
> >story
> >roof. I connected the center of the inverted vee
> with 300 ohm TV
> >feed-line
> >down to the rig in the basement (a good 60') to an
> antenna tuner. I
> >used
> >to run a full 100W input and full AM. It was a
> great antenna and
> >never had
> >a bit of problem. In fact you can get all kinds of
> insulated stand-
> >off
> >hardware at your local RadioShack or similar store.
> >
> >PS I've never had lightning problem. However if
> your concerned you
> >can

> >locate a DPDT knife switch at a convenient location
> ..... throw the
> >switch
> >one way to connect the antenna to your rig and
> other way to connect
> >the
> >antenna to a convenient ground eg a water pipe.
> >
> >
> >Jim Dunstan VE3CI
> >Thunder Bay, ON
> >
> >
> >
> Here's a link to Info on How To Make A Homebrew 4:1
> Balun , it will
> handle the legal power limit . Ace - WH2T
>
> http://www.bloomington.in.us/~wh2t/balun.html
>
>

Do you Yahoo!?
Yahoo! Hotjobs: Enter the "Signing Bonus" Sweepstakes
http://hotjobs.sweepstakes.yahoo.com/signingbonus

345. Lets Talk Batteries and Grounds

Yahoo group: SkyWires
Date: 2004-01-19 03:39:02 UTC
From: Burr Patterson, Jr.
Topic: 345 Message: 345

This is the way I do it and I like it.

I run all my short-wave and scanners of 12v car batteries:
I have a cheap 12v battery charger from PIP Boys ($29) to recharge the batteries after I turn off the radios. I DO NOT charge them while I am using the radios because I want to keep the AC hum away from my radios.
I use wet batteries with caps so I can add water as needed, I set them on a piece of wood for the garage battery and have a plastic box for the house battery. If your wife doesn't like the battery in the house run the wife off.

Grounding antennas and mast:
I use a telephone grounding block on the antenna leads at the first place it touches the house grounded to a ground rod, all of this is at the bass of the mast. I put the bottom of the mast about 6 inches in the ground beside the ground rod. Because I live in the dessert I have 24 rose bushes on a drip watering system so I just added a drip at the ground rod and it and the mast get 20 minutes of drips twice a day. I also ground the sheath on the coax cable I use to feed into the house and garage and keep ALL THE ABOVE AWAY FROM ANY AC WIRES OR LIGHTS.

Use the grounds, no playing or you will burn your house down at sometime. NOTHING WILL STOP A DIRECT LIGHTNING STRIKE BUT THE STATIC FROM A CLOSE (one mile) WILL BURN UP YOU RADIOS.
Be sure to get lots of "carbons" when you get the grounding blocks (Graybar has them) and replace them after a lighting storm.

My time on the soap box about grounding this year. I'm going to the gym, Cya

Burr

346. Balanced Feedlines and Baluns

Yahoo group: SkyWires
Date: 2004-01-21 07:03:14 UTC
From: science_math
Topic: 346 Message: 346

Hello Loopers from Mike. Thanks for taking the time to share things you know and have learned about loop antennas. I have access to 60 acres of land [30 wooded] which is "begging" for a wonderful variety of wire antennas. With respect to loops and other antennas in general that are fed with balanced line, should I be concerned with RF in the shack, and if it is an issue, can an appropriate balun be placed anywhere in between the antenna and the tuner? For example, can an appropriate balun be placed right at the feed point of a loop and coax run from that point to the shack? Or must the balanced feedline be a given length, or as long as possible and the balun placed close to the tuner? My guess would be that if the run of coax is long, the cost/loss aspect of coax would make a balanced feeder more attractive, but that's only my guess.

And with respect to purchasing commercial baluns, are there, in your opinion, some baluns that are better constructed than others?

Thanks. During the upcoming warmer months, I plan to be stringing a great deal of wire and I will share with the group different things I learn.

347. large horz loop antenna(new to group)

Yahoo group: SkyWires
Date: 2004-01-21 15:07:39 UTC
From: desmoines_2000
Topic: 347 Message: 347

thank you moderator and members
i have an icom r-75 and would like to use a horizonta loop antenna
aprox 300 ft square fed with open wire -ladder line first i am not
sure if an antenna tuner will help i will be receive only i would
like to try to get as much out of 1mhz-60 mhz as i can how heavy
should the wire be 12 -10 -8 ga the longest span will be 70 ft i will
use metal poles at the corners the height will 20 ft
how will this antenna compare to groves sky wire or par end fedz swl
wire antenna

thank you for the replies
this group is just what i needed to save me time money and trouble
thanks again

348. Re: [SkyWires] large horz loop antenna(new to group)

Yahoo group: SkyWires
Date: 2004-01-21 16:02:32 UTC
From: kb8viv@aol.com
Topic: 347 Message: 348

In a message dated 1/21/04 7:38:15 AM Pacific Standard Time,
desmoines_2000@... writes:
thank you moderator and members
i have an icom r-75 and would like to use a horizonta loop antenna
aprox 300 ft square fed with open wire -ladder line first i am not
sure if an antenna tuner will help i will be receive only i would
like to try to get as much out of 1mhz-60 mhz as i can how heavy
should the wire be 12 -10 -8 ga the longest span will be 70 ft i will
use metal poles at the corners the height will 20 ft
how will this antenna compare to groves sky wire or par end fedz swl
wire antenna
Well, first off, it's a bit long/or short, for 60 meters, depending how you
look at it; it's way longer than a full wave but less than 2 wavelengths
(1005/freq.) For receive, it should work ok, a tuner would help a bit...also, if
you use metal poles, make sure you isolate them from the wire as they may couple
with it and become part of the antenna..this may be good or bad...as far as
guage wire, the larger the wire the better, specially for long stretches...I
used 13guage copper clad steal pe insulated wire and its working very well for
long stretches..good luck..

steve
kb8viv

349. Re: [SkyWires] Balanced Feedlines and Baluns

Yahoo group: SkyWires
Date: 2004-01-21 18:34:46 UTC
From: Jim Dunstan
Topic: 346 Message: 349

At 07:03 AM 1/21/04 +0000, you wrote:
>With respect to loops and other antennas in general
>that are fed with balanced line, should I be concerned with RF in the
>shack, and if it is an issue,

Generally, no. Unlike a random wire, a balanced feed line is not a radiating part of the antenna. If you have a balanced antenna eg a loop or a dipole and you are feeding with a balanced feed line, the feed line will not be a strong radiator of RF. Just because a balanced feed line is open wire and not shielded does not mean it will radiate RF. The theory is that as long as the antenna and the feed line are balanced the antenna currents at any particular point along the line will be in balance and cancel each other out. This does not mean there will not be standing waves along the feed line . However the reason open wire balanced feed line is popular is that energy loss due to standing waves is quite low as compared to coaxial feed line.

>can an appropriate balun be placed
>anywhere in between the antenna and the tuner? For example, can an
>appropriate balun be placed right at the feed point of a loop and
>coax run from that point to the shack?

As mentioned above, the usual reason for using a balanced feed line is to limit feed line loss in situations where there is a high Standing Wave Ratio (SWR) between the antenna and the output of the transmitter. So, for example. You have an antenna with a balanced feed point located approximately 100 ft away from you transceiver which has an unbalanced output fixed at 50 ohms. You would like to use this antenna on 3 different bands and you estimate that depending on the frequency the impedance of the antenna could be anywhere between 75 and 600 ohms. Also, your transceiver is QRP (eg puts out 5 watts or less) and you want to keep loss to minimum. What strategy should I use?

- I need to convert balanced to unbalanced
..... .get a balun!
- I need to minimize power
loss ..... get some
open wire feed line.
- I need to match a range of antenna impedances to my transceiver
..... get an antenna tuner

Therefor the ideal strategy will be - make the open wire feed line as long as possible .... right up to the antenna tuner if possible and limit the coaxial cable run from the output of the tuner to the transceiver. In this case the balun will be built into the tuner (most tuners include a built in balun for balanced lines). If for some reason you cannot bring the

balanced line to the operating position then locate an external balun at a location as close to the operating position as possible and connect the ouput of the balun to the antenna tuner with the highest quality, lowest loss coax you can afford.

> Or must the balanced feedline
>be a given length, or as long as possible and the balun placed close
>to the tuner? My guess would be that if the run of coax is long, the
>cost/loss aspect of coax would make a balanced feeder more
>attractive, but that's only my guess.

There are special cases where the design incorporates balanced feed line as part of the antenna in which case the length of the feedline is specific. Another situation is that the antenna is designed for a specific frequency and a special 1:1 balun is located right at the feedpoint of the antenna and the whole length of the feedline is coaxial cable .... eg dipoles and yagi antennas.

>And with respect to purchasing commercial baluns, are there, in your
>opinion, some baluns that are better constructed than others?
Baluns are quite easy to construct. Baluns that are included in antenna tuners are simply composed of a ferrite core and a few feet of wire and nothing more. However if you are going to locate the balun outside the tuner and even outside the house then the balun design must include provisions for securing it, shielding it from weather, and connectors to the coax and the balanced feed point. 90% of the cost of these baluns is a result of these necessities.

>Thanks. During the upcoming warmer months, I plan to be stringing a
>great deal of wire and I will share with the group different things I
>learn.
>

I also have a forested area and have spent many a happy hour stringing up wire antennas .... have fun this summer.

Jim Dunstan, Thunder Bay, ON VE3CI

350. Re: [SkyWires] large horz loop antenna(new to group)

Yahoo group: SkyWires
Date: 2004-01-21 18:50:08 UTC
From: Jim Dunstan
Topic: 347 Message: 350

At 03:07 PM 1/21/04 +0000, you wrote:
>thank you moderator and members
>i have an icom r-75 and would like to use a horizonta loop antenna
>aprox 300 ft square fed with open wire -ladder line first i am not
>sure if an antenna tuner will help i will be receive only i would
>like to try to get as much out of 1mhz-60 mhz as i can how heavy
>should the wire be 12 -10 -8 ga the longest span will be 70 ft i will
>use metal poles at the corners the height will 20 ft

If you use #12 you will need to pull real hard, if you use #10 you will
need a come along, and if you use #8 wire you will need a tractor and winch
Hi, Hi. I would recommend #18 .... no more than #14 !!

>how will this antenna compare to groves sky wire or par end fedz swl
>wire antenna

300 ft of horizontal loop should be a great antenna for SWL.

>thank you for the replies

Jim Dunstan
Thunder Bay, ON

351. Lightening Protection ?

Yahoo group: SkyWires
Date: 2004-01-22 00:21:38 UTC
From: kl7r
Topic: 346 Message: 351

We almost never have lightning here.

But I bet you get it every afternoon there
in Thunder Bay.

What do you do for lightning protection?
Spark Plugs? Grounding when not in use? Gas Tubes? Both legs?
Or just Dont Worry - Be Happy?

> I also have a forested area and have spent many a happy hour
stringing up
> wire antennas .... have fun this summer.
>
>
> Jim Dunstan, Thunder Bay, ON VE3CI

352. Re: large horz loop antenna(new to group)

Yahoo group: SkyWires
Date: 2004-01-22 04:06:23 UTC
From: exemptfromlife
Topic: 347 Message: 352

You are more than welcome.

also, welcome aboard..

--- In SkyWires@yahoogroups.com, "desmoines_2000"
<desmoines_2000@y...> wrote:
> thank you moderator and members
> i have an icom r-75 and would like to use a horizonta loop antenna
> aprox 300 ft square fed with open wire -ladder line first i am not
> sure if an antenna tuner will help i will be receive only i would
> like to try to get as much out of 1mhz-60 mhz as i can how heavy
> should the wire be 12 -10 -8 ga the longest span will be 70 ft i
will
> use metal poles at the corners the height will 20 ft
> how will this antenna compare to groves sky wire or par end fedz
swl
> wire antenna
>
> thank you for the replies
> this group is just what i needed to save me time money and trouble
> thanks again

353. Re: [SkyWires] Lightening Protection ?

Yahoo group: SkyWires
Date: 2004-01-22 21:46:52 UTC
From: Jim Dunstan
Topic: 346 Message: 353

At 12:21 AM 1/22/04 +0000, you wrote:
>We almost never have lightning here.
>
>But I bet you get it every afternoon there
>in Thunder Bay.
>
>What do you do for lightning protection?
>Spark Plugs? Grounding when not in use? Gas Tubes? Both legs?
>Or just Dont Worry - Be Happy?

#2 ..... Hi. I ground all my antennas with relays. My long wire comes down to a large open relay while all my other antennas use coax relays .... it takes power to un-ground an antenna and connect it to the feed line to the operating position. If there are no lights on my switching panel then everything is grounded. All the relays are located at the entry point to the house .... next to the ground wire at the basement window. I have never had a problem with static discharge at this location. However, when I was in Saskatchewan I found that real dry windy days could build up tremendous static voltages. I had a 200' long wire that could throw a spark 4 to 6 inches. I used tube type equipment then and don't remember it ever causing damage. I have always used a 'link' type of antenna tuner which keeps feed lines at DC ground potential.

Jim Dunstan
Thunder Bay, ON

354. New Loop on roof

Yahoo group: SkyWires
Date: 2004-01-26 17:27:49 UTC
From: Jeff
Topic: 354 Message: 354

Hi,

Due to antenna restrictions, I am thinking about putting up a loop on my roof. I know it isn't optimal, but hopefully it will at least get me something outside the attic for HF.

Has anyone tried this? If so, what sort of results did you have.

73,

Jeff (WI2T)

355. New Loop on roof - you'll like it

Yahoo group: SkyWires
Date: 2004-01-26 18:10:05 UTC
From: nz7c@cox.net
Topic: 355 Message: 355
Attachments: 1 described; binary payloads are missing from this source WARC

Jeff -
I have operated with a loop on my roof for three years. It is roughly 200 feet in length and ranges in height from 20 to 30 feet. It is fed with ladder line which is connected to a 4:1 balun which is then connected to about 20 feet of coax to get into my shack. I am able to work 80 meters and up all over the world. It is a great antenna and vastly underated. I don't get to operate as much as sum, but I know that I will be able to finish my 5 band WAS ca award with it as well as DXCC. Hope that helps. PS Loops can throw some RFI so you may have to put filters on your phone etc.
73/Tim NZ7C
==========
From: "Jeff" <jkembry@...>
Date: 2004/01/26 Mon PM 12:27:49 EST
To: SkyWires@yahoogroups.com
Subject: [SkyWires] New Loop on roof

==========

356. Re: [SkyWires] New Loop on roof - you'll like it

Yahoo group: SkyWires
Date: 2004-01-26 18:11:40 UTC
From: nz7c@cox.net
Topic: 355 Message: 356
Attachments: 2 described; binary payloads are missing from this source WARC

Oooops - that should have said 5 band WAS cW award....Tim

==========

From: <nz7c@...>
Date: 2004/01/26 Mon PM 01:10:05 EST
To: SkyWires@yahoogroups.com, SkyWires@yahoogroups.com
Subject: [SkyWires] New Loop on roof - you'll like it

==========

357. Re: New Loop on roof - you'll like it

Yahoo group: SkyWires
Date: 2004-01-27 21:24:01 UTC
From: Jeff
Topic: 355 Message: 357

Thanks,

This spring I will give the loop on the roof a shot. I plan on a
little QRP and hope this will give a little advantage over attic
antennae.

73,

Jeff (WI2T)

--- In SkyWires@yahoogroups.com, <nz7c@c...> wrote:
> Oooops - that should have said 5 band WAS cW award....Tim
> ==
> From: <nz7c@c...>
> Date: 2004/01/26 Mon PM 01:10:05 EST
> To: SkyWires@yahoogroups.com, SkyWires@yahoogroups.com
> Subject: [SkyWires] New Loop on roof - you'll like it
>
> ==

358. Follow-up to Roof-top Loop

Yahoo group: SkyWires
Date: 2004-01-27 21:30:42 UTC
From: Jeff
Topic: 358 Message: 358

As a follow-up, I will be feeding this antenna with coax at a corner. Any idea what sort of matching transformer I should build/purchase?

73,

Jeff (WI2T)

359. Re: New Loop on roof

Yahoo group: SkyWires
Date: 2004-01-29 01:11:13 UTC
From: kl7r
Topic: 354 Message: 359

> Has anyone tried this? If so, what sort of results did you have.

I have heard stories that NewZealand hams like to wrap their
houses in a loop of wire. Sort of an invisible skywire.

I would think that if you dont have a metal roof this should work
pretty well. Insulating the wire from the house would be important.

I have looked all over the net and cant find a writeup on
this "New Zeland Loop" other than an ARRL comment about the
loop and how popular it is in ZL. It would be cool if someone
could do some A/B tests and tell us about how it performs vs
a dipole at the same height.

360. Re: Follow-up to Roof-top Loop

Yahoo group: SkyWires
Date: 2004-01-30 18:39:38 UTC
From: Michael
Topic: 358 Message: 360

Jeff,

So far with my loop I have had the best luck wit just a center connector and a coax choke.

I'tried a 4:1 balun, 3:1, and 1:1 balun (current type)for my setup the 3:1 cam in second, the 1:1 last. For me ANY balun made my tuner very touchy to tune. The 3:1 was not bad to tune. But, the other two came down fast. Hated them.

73,
Michael (N7RDV)

--- In SkyWires@yahoogroups.com, "Jeff" <jkembry@w...> wrote:
> As a follow-up, I will be feeding this antenna with coax at a
> corner. Any idea what sort of matching transformer I should
> build/purchase?
>
> 73,
>
> Jeff (WI2T)

361. one low corner

Yahoo group: SkyWires
Date: 2004-02-04 13:08:17 UTC
From: desmoines_2000
Topic: 361 Message: 361

I was would like to know when three poles are at 30 ft and one pole
is at 15 or 20 ft will that make a larg loop directional or change to
vertical orientation or will it change the loop at all

wire loop aprox 300 ft aprox square

362. Re: [SkyWires] one low corner

Yahoo group: SkyWires
Date: 2004-02-04 14:06:12 UTC
From: JimMcSkate@aol.com
Topic: 361 Message: 362

This is a perfect application for Mmana modeling software - it's a shareware on the web, and I learned of it from this list. I am a novice at this program (its user interface is a bit rough) but I put in the numbers you described. Provided that I entered the stuff correctly, your antenna pattern is very slightly lopsided on the lower frequencies, with lobes
between the low corner and the diagonal across from it. The angle of incidence is also higher in the direction of the low corner, on the lower (40/80/160m) bands.

Just to check my work, I'd love it if other people dug into this question to see if I used the darned software correctly!

Have a great day,
Jim
WA2LGN
Blue Point, NY

In a message dated 2/4/2004 8:08:17 AM Eastern Standard Time, desmoines_2000@... writes:

> I was would like to know when three poles are at 30 ft and one pole
> is at 15 or 20 ft will that make a larg loop directional or
> change to
> vertical orientation or will it change the loop at all
>
> wire loop aprox 300 ft aprox square

363. as requested the site is back

Yahoo group: SkyWires
Date: 2004-02-04 14:10:43 UTC
From: n1qha
Topic: 363 Message: 363

live audio and weather too....

http://www.econn-hobbies.com

364. loop more than once?

Yahoo group: SkyWires
Date: 2004-02-04 13:26:28 UTC
From: desmoines_2000
Topic: 364 Message: 364

would it work to loop more than one time around making a giant spring
with to coils about 2 feet apart

square 300 ft 20 ft up

365. Re: loop more than once?

Yahoo group: SkyWires
Date: 2004-02-05 00:19:49 UTC
From: R H F
Topic: 364 Message: 365

DM2K,

This is where Antenna Modeling Software would be of Great Help.

My 'guess' is that for better low frequency operations
having more separation between the Two Loop Antenna
Elements in your SkyWire Loop Antenna would be better.
[Vertically 'Stacked' Two Loop - SkyWire Loop Antenna]

If the Top Loop Antenna Element is set at 20 Feet; then
the Bottom Loop Antenna Element would be at 10Ft to 15Ft.

For a Receive ONLY SkyWAve Antenna your 300 Foot [Square]
Size with Two Loop Antenna Elements would not be a problem.

However, for a SkyWire Loop Antenna used for Transmiting
then 'adjusting' your Loop Antenna Element Size "Down"
to 268 Feet with Four(4) 67 Feet Sides to your Square
for the 80 Meter Band would most likely work better for
the Amateur / HAM Bands.

AGAIN - Maybe someone with Antenna Modeling Software
would run the program and offer some Help.

iane ~ RHF
.
.
= = = In SkyWires@yahoogroups.com,
= = = "desmoines_2000" <desmoines_2000@y...> wrote:

would it work to loop more than one time around making
a giant spring with two coils about 2 feet apart ?

square 300 ft 20 ft up

.

366. more than one loop one wire or two?

Yahoo group: SkyWires
Date: 2004-02-05 13:44:31 UTC
From: desmoines_2000
Topic: 366 Message: 366

when you say staked loops are those one wire or two wires
i am interested in both but first i would like to know about one wire looped around twice but two staked with two feed lines sounds interesting too

367. Re: more than one loop one wire or two?

Yahoo group: SkyWires
Date: 2004-02-05 23:43:35 UTC
From: R H F
Topic: 366 Message: 367

DM2K,

One Single Continous Piece of Wire:
Starting at the Top and looping around for One Turn and
transitioning down to the Lower Loop that loops around
back to the Starting point and transitioning back up to
the Feed Point. Try to keep these two transitioning
up & down wires separated by a foot or two.

iane ~ RHF
.
.
= = = In SkyWires@yahoogroups.com,
= = = "desmoines_2000" <desmoines_2000@y...> wrote:
> when you say staked loops are those one wire or two wires
> i am interested in both but first i would like to know about one
wire
> looped around twice but two staked with two feed lines sounds
> interesting too

368. Load Coils?

Yahoo group: SkyWires
Date: 2004-02-06 19:08:46 UTC
From: Michael
Topic: 368 Message: 368

While were on the subect of getting more wire up in the air, with out using more land space . . .

Has anyone tried loading a loop with simple coils? What about using two, four, or several small loads spread around the loop?

73,
Michael (N7RDV)

369. RE: [SkyWires] Load Coils?

Yahoo group: SkyWires
Date: 2004-02-06 19:42:24 UTC
From: Stumm, John C
Topic: 368 Message: 369
Attachments: 1 described; binary payloads are missing from this source WARC

Generally speaking, you find loading coils used to tune unbalanced antennas, (mostly verticals) to allow for a shorter element to be resonant at a given wavelength. With loops, you want to tune a lower frequency, you make a bigger diameter, (sometimes cumbersome) or add more turns. Balanced loading coils might work, but with loops, aperture and number of turns is everything.
John

From: Michael [mailto:n7rdv@mind.net]
Sent: Fri 2/6/2004 11:08 AM
To: SkyWires@yahoogroups.com
Subject: [SkyWires] Load Coils?

While were on the subect of getting more wire up in the air, with out using more land space . . .

Has anyone tried loading a loop with simple coils? What about using two, four, or several small loads spread around the loop?

73,
Michael (N7RDV)

Yahoo! Groups Links

370. [Fwd: (no subject)]

Yahoo group: SkyWires
Date: 2004-02-12 16:54:13 UTC
From: keith currie
Topic: 370 Message: 370

hey Tami how about this what every girl needs?

371. Re: Load Coils?

Yahoo group: SkyWires
Date: 2004-02-13 00:23:47 UTC
From: Michael
Topic: 368 Message: 371

John,

Correct me if I am misunderstand you.

Are you saying that a skyloop style antenna acts like a Multi-Turn Receiving Loop? I am using a 40m 1.25 wave skywave, and was looking for a way to get more wire in the air to make it a better DX antenna on 80m. After I posted that question I realized that it would only help the "tuner" tune easier on 80m. But, only doing some "brain storming" with out deep thought. (hi hi) Do you have any ideas on a Multi-Turn SkyLoop? Feeding, Supporting? Spacing Ect. ?

73
Michael (N7RDV)

372. Re: Load Coils?

Yahoo group: SkyWires
Date: 2004-02-13 17:34:54 UTC
From: lowalacrity
Topic: 368 Message: 372

Michael, Are you employing it as an open or closed loop? You won't benefit much more if it's open. After doing some basic research in books and in groups, I just do trial and error experimentation. Joe Carr's Receiving Antenna Handbook is my main reference. Chapter 8 has some info on large loops. I imagine his book dedicated to loops does too but i don't have it handy. Check it out. You'll get a lot more accurate info than i can give you!
John

--- In SkyWires@yahoogroups.com, "Michael" <n7rdv@m...> wrote:
> John,
>
> Correct me if I am misunderstand you.
>
> Are you saying that a skyloop style antenna acts like a Multi-Turn
> Receiving Loop? I am using a 40m 1.25 wave skywave, and was
looking
> for a way to get more wire in the air to make it a better DX
antenna
> on 80m. After I posted that question I realized that it would only
> help the "tuner" tune easier on 80m. But, only doing some "brain
> storming" with out deep thought. (hi hi) Do you have any ideas on a
> Multi-Turn SkyLoop? Feeding, Supporting? Spacing Ect. ?
>
> 73
> Michael (N7RDV)

373. [SkyWires] Re: loop more than once?

Yahoo group: SkyWires
Date: 2004-02-15 10:21:24 UTC
From: Terry Conboy
Topic: 364 Message: 373
Attachments: 1 described; binary payloads are missing from this source WARC

On Wed Feb 4, 2004 5:26 am, desmoines_2000 asked:
>would it work to loop more than one time around making a giant spring
>with to coils about 2 feet apart
>
>square 300 ft 20 ft up

This is an intriguing question and the simple answer is yes, it will work. However, the bottom line is that it is probably a lot of work for what seems to be slightly poorer performance than a normal 1-turn loop.

I modeled the following with EZNEC 3.0:
"1T" = 75x75 square loop, 20 feet high, #14 wire, fed near one corner.

"2T" = 75x75 loops, first turn 20 feet high, second turn 19 feet high, #14, fed on top wire near corner, with a transposed 1 foot section of 450 ohm ladder line at the opposite corner connecting the top and bottom wires (which puts them in series).

"2C" = 75x75 loops, 20 feet & 19 feet, #14, fed on top wire near corner, with a 1 foot section of 450 ohm line (no transposition) in parallel with the feedpoint and connected to the bottom wire (places the two turns in parallel, effectively increasing the conductor diameter).

I compared the gain at 1 MHz, 3.34 MHz, and 6 MHz. I also swept the impedances from 0.5 to 30 MHz in 0.5 MHz steps to see what sort of variation occurs to check for the effectiveness of wideband compromise matching for receiving.

Here is a summary of the results:
All three loops have their first resonance at 3.34 MHz +/- 0.01 MHz. As you might expect, the 2 turn loop has an impedance very nearly 4 times that of the 1 turn or 2 conductor parallel loops (analogous to a folded dipole). (1T = 84 ohms, 2T = 331 ohms, 2C = 83 ohms) The gain at 30 degrees above the horizon peaks at -3.2 dBi within 0.1 dB for all three. At the zenith, for toasting clouds, the gain is +3.7 dBi for all.

The "gains" for 30 degree elevation, at 1 MHz are similar:
1T= -23.1 dBi, 2T= -24.6 dBi, 2C= -22.7 dBi.

At 6 MHz, all have a nearly identical egg-shaped pattern at a 30 degree elevation:
1T= +0.3 dBi, 2T= -0.3 dBi, 2C= +0.2 dBi.

The biggest differences are in the variation of the antenna impedance over the 0.5 to 30 MHz range. Taking a cue from our old friend John Doty from 1996 Dec 23, as noted

at http://www.anarc.org/naswa/badx/antennas/SWL_longwire.html , I was curious whether a 450 ohm or other matching transformer would reduce the mismatch loss from the antenna over the frequency range for the loops. It turns out that this is quite practical with the 1T and 2C loops, but the 2T loop isn't quite as good, since the range of feedpoint impedances is much greater. Here is a general idea of the variations of the resistive components of the impedances:
1T = 66 to 4821 ohms (73:1)
2T = 13 to 7254 ohms (571:1) !!
2C = 58 to 2272 ohms (39:1)

For SWL receiving, with the 1T loop, the best compromise match occurs with an 800 ohm transformer (4:1 turns ratio with a 50 ohm load). For the 2T and 2C loops, a 450 ohm transformer (3:1 turns ratio) looks best. However, due to the larger impedance swings with the 2T loop, the mismatch losses vary almost 10 dB peak-to-peak between 4 MHz and 30 MHz, compared to a variation of only about 5 dB p-p for the 1T and 2C loops. The 2T loop is OK, but the 1T and 2C are better.

For ham transmitting, both the 2T and 2C have wider SWR bandwidths around the first resonance than the 1T, but the lower impedance of the 2C loop is probably easier to match. It also produces lower voltages when your 4-1000 is on line. 8-)

73, Terry N6RY

374. Thank you tconboy

Yahoo group: SkyWires
Date: 2004-02-15 15:38:45 UTC
From: desmoines_2000
Topic: 374 Message: 374

Thank you for running my idea through your software this is a great group because of people like you

Thank you

375. My eggsperience with a full wave SW RX loop.

Yahoo group: SkyWires
Date: 2004-02-16 16:25:41 UTC
From: Greg W:-)
Topic: 375 Message: 375

Heres my story.

I used to live about 2 miles from one of the southern hemispheres
largest radio stations.
It is located in the suburb Hamersley in Perth , Western Australia.
The WRTH books had it written up as being in Waneroo ,,which is
aktualy another 18 or so miles north of where it realy is.
This radio station had 3 MW transmitters going 24 hours a day
omnidirectionaly ,,each at 50Kw if i remember corectly and a whole
bunch of beamed SW regional ABC radio stations.(6wf,6wn,vlw)

Western Oz is a huge place and when this site was set up (1950ś??) it
must have been cheaper to beam hf transmisions to the outback than
have local repeaters of some sort., where talking 1000ś of miles here.=

When you add up all the watts output from this place its verry
impressive ,,ime just glad i wasnt getting their electricity bill.

Now my house happened to be directly in the path of a HF beam , i
could easily see their curtain antenna from my back yard.
This is DISASTEROUS for the SWL , HAM or CBér.
I loved my shortwaves , so when i set it up with some sort of long
wire antenna it was stone deaf.
HUH????

There is so much rf floating around that it throttles back the radios
agc to nothing.
So ,ok ,,use a smaller antenna ,,well , it gets better , but then you
run out of usable signal strength.
So i tried all sorts of high pass filters to cut hard everything below
12MHZ ,and even tho i sacrificed everthing below that ..It was
somewhat a semi-success above that.
The SW broadcasts from up the road where in the 31Mb and below.

I even tried much newer and much more expensive radios in an endevour
to get ,,,sumthing.
Forget about portables ..!! rubbish.

As time went on ,,computers and fluro lights came more popular and
living across the road from a shopping centre with all there
electronic noise makers it was just getting hopeless.
Even piking up the BBC or VOA was near on impossible.

Then i found on the net info on full wave loops.
They said that it was low in gain ,,but verry low in man made noise.
I liked the sound of that.

What i ended up with after sum experimenting was a full wave loop
,,tuned to aproximately 10Mhz.
I had it aranged as a horizonatl square with each leg 7 meters long.
The wire was just solid hookup wire that i had spare from an irigation
job i did.
It was plastic coated ,,in green ,,which when just laying on my tiled
roof , which was also green ,,was invisible.
I used a balun off a tv antenna , 4 to 1 to the coax.
Yes i DID know that as that balun was desighn for VHF that there would
be losses when used at HF., but i didnt care.
The coax which was just long enuff ran into my shack into the back of
my YAESU FRG-7000.

And you know what ..it works !!!

For how much wire i had up there signal strength would be higher with
a longwire but i had dropped from a noise level of 10+ down to 2.
An equivealent length longwire for example mite have given me a signal
of a 9 maybe ,,but with the loop it was down to a 7 ,,,but still
,.,.,.a 7 with a noise floor of 2 is a way lot better than 10+ of noise.

I hope your following wat ime saying here.

Another thing i found was that the FRG-7000 and another radio DX-302
worked noticeably better than newer ¨high tech¨ radios.
These share the Barlow Wadley circuitry which has tunable front ends
from the front panel.

Enyway ,,so thats my story ..now days i am out in the country on a
farm where i can try out long wires hundreds of feet long if i wish
and a noise level ,,well , internal circuitry noise is my only trublez
now :-)

Hope u like my story:-)

gregW:-)

376. Re: [SkyWires] My eggsperience with a full wave SW RX loop.

Yahoo group: SkyWires
Date: 2004-02-16 16:59:13 UTC
From: eddiebangsdrum@aol.com
Topic: 375 Message: 376

In a message dated 16/02/04 16:27:33 GMT Standard Time,
onegammyleg@... writes:

> Enyway ,,so thats my story ..now days i am out in the country on a
> farm where i can try out long wires hundreds of feet long if i wish
> and a noise level ,,well , internal circuitry noise is my only trublez
> now :-)
>
> Hope u like my story:-)
>
> gregW:-)
>

Loved it Greg.
You've certainly earned your quiet time in the country!!
I live in a fairly electrically noisy environment, (North London, UK) but
your huge transmitters take the prize for front-end testing.

I used to have an FRG7700 and found that connected to a 160ft long wire, it
also overloaded to S9+10 on the meter, due to two powerful local AM
frequencies, (BBC Radio 1 and Capital radio, now called Capital gold).

For a quick solution I made two wave traps and, with the S-Meter, tuned them
for maximum dip, (min signal) on the two respective frequencies. These traps
worked a treat and successfully stopped the overload.
The traps were made from two MW coins from an old push button car radio,
connected in parallel with, I think 100pf variable capacitors. They were inserted
in line with the antenna feed and tuned by moving the ferrite slug in the
coil centre and then adjusting the variable capacitor.
An ATU was also used to better match the wire.
Later on I did a swap and gave the 7700 away in exchange for an excellent
condition RACAL RA17L, (Superb). which I used for about ten years in combination
with an Heathkit DX40 transmitter for my morse only amateur station.
Still got my licence but don't have a transmitting station just now.
I spend some spare time playing with my newly aquired Yupiteru MVT 7100.
I think I've become a scanner nut!!
All the best.
73's
Ed
G0AQI

377. Re: [SkyWires] My eggsperience with a full wave SW RX loop.

Yahoo group: SkyWires
Date: 2004-02-16 17:05:52 UTC
From: eddiebangsdrum@aol.com
Topic: 375 Message: 377

In a message dated 16/02/04 16:27:33 GMT Standard Time,
onegammyleg@... writes:

> Enyway ,,so thats my story ..now days i am out in the country on a
> farm where i can try out long wires hundreds of feet long if i wish
> and a noise level ,,well , internal circuitry noise is my only trublez
> now :-)
>
> Hope u like my story:-)
>
> gregW:-)
>

OOps!
I made a smelling mistake - Should have typed, MW COILS, not "coins"
Sorry.
Ed.

378. Re: [SkyWires] New Loop on roof - you'll like it

Yahoo group: SkyWires
Date: 2004-02-16 20:09:08 UTC
From: Jim Dunstan
Topic: 355 Message: 378

At 01:10 PM 1/26/04 -0500, you wrote:
>Jeff -
>I have operated with a loop on my roof for three years. It is roughly 200
>feet in length and ranges in height from 20 to 30 feet. It is fed with
>ladder line which is connected to a 4:1 balun which is then connected to
>about 20 feet of coax to get into my shack. I am able to work 80 meters
>and up all over the world. It is a great antenna and vastly underated. I
>don't get to operate as much as sum, but I know that I will be able to
>finish my 5 band WAS ca award with it as well as DXCC. Hope that helps. PS
>Loops can throw some RFI so you may have to put filters on your phone etc.
>73/Tim NZ7C

Hi Jeff:

I'm curious how you place the loop wire on the roof of your house. Do you use standoffs of some kind or other, or do you simply lay the wire on the shingles. If so, do you use any kind of clips to hold the wire down to the shingles? It is a very interesting idea. I operate almost exclusively on 20 mtr and hve a very nice monoband beam up for that purpose. However I am also interested in 80 and 40 mtrs. I really like the loop idea since it avoids a lot of digging in the yard putting in radials.

I'm interested how you handled the mechanical aspect of putting up your roof loop hi.

Jim Dunstan VE3CI
Thunder Bay, ON

379. Re: [SkyWires] Re: Load Coils?

Yahoo group: SkyWires
Date: 2004-02-16 20:44:56 UTC
From: Jim Dunstan
Topic: 368 Message: 379

At 12:23 AM 2/13/04 +0000, you wrote:
>John,
>
>Correct me if I am misunderstand you.
>
>Are you saying that a skyloop style antenna acts like a Multi-Turn
>Receiving Loop? I am using a 40m 1.25 wave skywave, and was looking
>for a way to get more wire in the air to make it a better DX antenna
>on 80m. After I posted that question I realized that it would only
>help the "tuner" tune easier on 80m. But, only doing some "brain
>storming" with out deep thought. (hi hi) Do you have any ideas on a
>Multi-Turn SkyLoop? Feeding, Supporting? Spacing Ect. ?
>
>73
>Michael (N7RDV)

Michael:

For what it's worth here is a simple way of creating a 2 turn loop: use (zip cord), you know, the simple lamp cord. I built a 2 turn loop for 20M portable work using this method and it works like a charm. I wanted a 'Delta' antenna that I could quickly hang up between 2 trees with the feed point close to the ground. However a full wavelength is about 64' making it a bit bulky for quick assembly out in the woods.

So I picked up some lamp cord .... #18 wire which is nice an flexible. I cut the wire to 1/2 wavelength, about 32'. I then soldered one wire to the other wire at the other end forming a 2 turn loop with a total length of 64'. Now when I hang it up as a Delta antenna each side of the triangle is a little over 10', much easier to handle in portable situations. I use the same lamp cord as the feed line (10-15') to my antenna tuner. It easily tunes to 1:1 and performance seems to comparable to full size dipole. It is also handy that it is available at your local hardware store.

Now I have been thinking of a roof top loop at home for 80M & 40M. Full size on 80M would be approx. 260' ..... while a 2 turn loop using zip cord would shorten that to about 130' which is more convenient for my modest bungalow roof. If it worked for my portable loop I don't see why it shouldn't work for a roof loop. I'll have to try it in the spring .... when all the snow is gone hi. I have been giving thought as to how to mechanically mount this on the roof. Again I will have to check out the handy hardware store. There must be some kind of clips to hold wire to roof shingles. I know I have seen heating cables fastened to the roof. Home Hardware should have an answer hi.

Jim Dunstan VE3CI
Thunder Bay, ON

380. Re: [SkyWires] My eggsperience with a full wave SW RX loop.

Yahoo group: SkyWires
Date: 2004-02-16 20:55:50 UTC
From: Jim Dunstan
Topic: 375 Message: 380

At 04:25 PM 2/16/04 +0000, you wrote:
>Heres my story.
>
>And you know what ..it works !!!
>
>Hope u like my story:-)
>
>gregW:-)

I enjoyed your story very much Greg. I was thinking of putting up a roof loop myself and your story sort of confirmed that HI.

Jim Dunstan VE3CI
Thunder Bay, ON

381. RE: My eggsperience with a full wave SW RX loop.

Yahoo group: SkyWires
Date: 2004-02-17 18:44:38 UTC
From: Ron McConnell
Topic: 375 Message: 381

Greg W., onegammyleg@..., says,
"... 2 miles from ...3 MW transmitters going 24 hours a day...
...full wave loop tuned to aproximately 10Mhz. ..."

Wow!
Maybe you could have built a loop or two
tuned to the SW station's main frequencies
and used a RF-DC-AC inverter system
to provide electrical power for your whole house.
With 24 hour operation,
you wouldn't even need battery backup.

Great story.
Thanks for posting it.

Cheers, 73,

Ron McConnell

w2iol@...

WGS-84: N 40° 46' 57.9" W 74° 41' 21.9"
Magnetic Variation/Declination = 13° in early 2004

FN20ps77GV75 per w2iol
or FN20ps77GU46 per K2RIW

http://home.earthlink.net/~rcmcc

382. Skywire NEC2 Model

Yahoo group: SkyWires
Date: 2004-02-18 13:18:59 UTC
From: Edson
Topic: 382 Message: 382

Greetings,

Does anyone have or know where I could find a NEC2 model for the Loop
Skywire?

Thanks in advance,

-- Edson, N1VTN

383. White Squirrel CB Radio Club

Yahoo group: SkyWires
Date: 2004-02-18 17:05:02 UTC
From: inu6080
Topic: 383 Message: 383

All CBers Are Invited To Join The White Squirrel Citizen Band Radio Club. If You Have A CB Radio Or Equipment For Sale You may Post It Here. You May Also Post The URL For Your CB Radio Club Here. We Are Located In Olney ILLINOIS

http://groups.yahoo.com/group/Olney_CB/

384. Re: [SkyWires] White Squirrel is the spam maker, giver, sender

Yahoo group: SkyWires
Date: 2004-02-18 23:49:04 UTC
From: landlubbers@worldnet.att.net
Topic: 384 Message: 384

he spams all the groups until he gets the boot. seaweed119---------- > > > > All CBers Are Invited To Join The White Squirrel Citizen Band Radio
> Club. If You Have A CB Radio Or Equipment For Sale You may Post It
> Here. You May Also Post The URL For Your CB Radio Club Here. We Are
> Located In Olney ILLINOIS
>
>
> http://groups.yahoo.com/group/Olney_CB/
>
> > > > > > > > >
> > Yahoo! Groups Links
> >
- To visit your group on the web, go to:
http://groups.yahoo.com/group/SkyWires/
? >
- To unsubscribe from this group, send an email to:
SkyWires-unsubscribe@yahoogroups.com
? >
- Your use of Yahoo! Groups is subject to the Yahoo! Terms of Service (http://docs.yahoo.com/info/terms/). > > > > > > > > >

385. Re: White Squirrel is the spam maker, giver, sender

Yahoo group: SkyWires
Date: 2004-02-21 18:30:32 UTC
From: exemptfromlife
Topic: 384 Message: 385

I would be better to ask first, but no big deal. If its radio/antenna related its fine. Just as long as it doesn't get annoying or abusive. thanks. --- In SkyWires@yahoogroups.com, wrote: > he spams all the groups until he gets the boot. > seaweed119-- > > > > > > > > All CBers Are Invited To Join The White Squirrel Citizen Band Radio
> > Club. If You Have A CB Radio Or Equipment For Sale You may Post It
> > Here. You May Also Post The URL For Your CB Radio Club Here. We Are
> > Located In Olney ILLINOIS
> >
> >
> > http://groups.yahoo.co m/group/Olney_CB/ (http://groups.yahoo.com/group/Olney_CB/)
> >
> > > > > > > > > > > > > > > >
> > > > Yahoo! Groups Links
> > > >
- To visit your group on the web, go to:
http://groups.yahoo.co m/group/SkyWires/ (http://groups.yahoo.com/group/SkyWires/)
> >
- To unsubscribe from this group, send an email to:
SkyWires-unsubscribe@yahoogroups.com
> >
- Your use of Yahoo! Groups is subject to the Yahoo! Terms of Service
(http://docs.yahoo.com/info/terms/). > > > > > > > > > > > > > > > > > > >

386. Re: Skywire NEC2 Model

Yahoo group: SkyWires
Date: 2004-02-23 18:49:16 UTC
From: kl7r
Topic: 382 Message: 386

Check out:
http://www.qsl.net/mmhamsoft/mmana/

On that page you will see nec-2 for mmana

I used it to convert between mmana and nec-2

I might still have the files at home somewhere
If I find them I will post them. I am not that
familiar with NEC-2 so I may have not done it
properly.

--- In SkyWires@yahoogroups.com, "Edson" <pu1jte@y...> wrote:
>
> Greetings,
>
> Does anyone have or know where I could find a NEC2 model for the
Loop
> Skywire?
>
> Thanks in advance,
>
> -- Edson, N1VTN

387. Re: Skywire NEC2 Model

Yahoo group: SkyWires
Date: 2004-02-24 01:28:02 UTC
From: kl7r
Topic: 382 Message: 387

Here is (I believe) a nec-2 model for an 80 meter square
skywire on 20 meters...

```
CE
GW 1 40 -0.3125 0 0 -0.3125 20.825 0 0.0008
GW 2 40 20.5125 0 0 20.5125 20.825 0 0.0008
GW 3 40 20.5125 20.825 0 -0.3125 20.825 0 0.0008
GW 4 40 20.5125 0 0 -0.3125 0 0 0.0008
GM 0 0 0 0 0 0 0 10 0
GS 0 0 1
GE 1
LD 5 1 0 0 58139534
LD 5 2 0 0 58139534
LD 5 3 0 0 58139534
LD 5 4 0 0 58139534
GN 2 0 0 0 13 0.005
FR 0 1 0 0 14.05 0
EX 0 4 1 0 1.0000 0.0000
RP 0 1 360 1000 70 0 0 1
RP 0 181 1 1000 90 0 -1 0
EN
```

388. Single freq loop

Yahoo group: SkyWires
Date: 2004-02-27 19:32:25 UTC
From: k1pns
Topic: 388 Message: 388

I've been considering a SkyWire loop for a long time but I keep
getting lost on the best way to configure for the single freq of
10.150. What the ideas from you pro's?
Roger

389. Re: [SkyWires] Single freq loop

Yahoo group: SkyWires
Date: 2004-02-27 20:27:59 UTC
From: Terry Conboy
Topic: 388 Message: 389
Attachments: 1 described; binary payloads are missing from this source WARC

At 11:32 AM 2004-02-27, k1pns wrote:
>I've been considering a SkyWire loop for a long time but I keep
>getting lost on the best way to configure for the single freq of
>10.150. What the ideas from you pro's?
>Roger

I'd make it 2 wavelengths in circumference for the best gain. See
http://www.cebik.com/atl1.html for patterns and info on where to feed it, etc.

73, Terry

390. Re: [SkyWires] Single freq loop

Yahoo group: SkyWires
Date: 2004-02-27 23:52:51 UTC
From: Dr.Ace Ratliff
Topic: 388 Message: 390
Attachments: 1 described; binary payloads are missing from this source WARC

On Fri, 27 Feb 2004 19:32:25 -0000, k1pns wrote:
>I've been considering a SkyWire loop for a long time but I keep
>getting lost on the best way to configure for the single freq of
>10.150. What the ideas from you pro's?
>Roger
>

Hi Roger ,
I would put up a Full Wave Loop. 99 feet of wire in a square with 24 feet 9 inches on each side .
I would NOT make the loop 2 wavelengths. If you make it 2 wavelengths it will have a high VSWR at 10.15 Mhz
Here is a chart showing the SWR to Frequency relationship of an antenna that is resonant at 5 Mhz

If you feed the Full wave Loop antenna direct with a single piece of coax you can only adjust add/prune the antenna till the VSWR gets down to about 1.7:1 at resonance , so you will probably want to use a tuner if you want to cover an entire HF band . And Yes the tuner in the radio will work fine as long as you are not using a linear amplifier. The impedance of a Full Wave Loop antenna is theoretically in the vicinity of 100 ohms. That is why I use a 75 ohm "Q section" to provide a perfect match to the 50 ohm coax. My Loop antenna is flat 1:1 VSWR around 3.875 Mhz and rises to about 2:1 SWR at 3.75 and 4 Mhz . So I cover the entire 75 meter band without using a tuner.

Here is How I Do It.

Connect the shield of a "Short Piece" of 75 ohm coax to one end of the loop antenna , Connect the center of the 75 ohm coax to the other end of the loop antenna. The length of the 75 ohm coax is most important. It will be used as a Q section.
To determine the length to use, Use this formula "Length in feet = 246 x VF / Freq in Mhz" VF = the Velocity Factor of the coax. So multiply 246 by the Velocity Factor of the coax , Then divide by the frequency .

If you use RG59 or RG11 with a Velocity Factor of 0.66 , For the 75 meter band the Piece of 75 ohm coax should be about 42 feet long , It doesn't need to be exact . RG59 and RG11 coax usually have a Velocity Factor of 0.66 , Foam dielectric coax such as RG6 might have a Velocity Factor of 0.81 or more.

Put a PL259 coax connector on the unused end of the 75 ohm coax, Screw a PL258 double female coax connector onto this PL259 coax connector. Then connect 50 ohm coax to the other side of the PL258 double female coax connector, Use any length 50 ohm coax needed to reach your Transceiver.

73, Ace - WH2T http://www.bloomington.in.us/~wh2t/loop.html

391. Re: [SkyWires] Single freq loop

Yahoo group: SkyWires
Date: 2004-02-27 23:58:38 UTC
From: Dr.Ace Ratliff
Topic: 388 Message: 391

On Fri, 27 Feb 2004 19:32:25 -0000, k1pns wrote:
>I've been considering a SkyWire loop for a long time but I keep
>getting lost on the best way to configure for the single freq of
>10.150. What the ideas from you pro's?
>Roger
>
>
CORRECTION : The chart shows the Mismatch Loss to Frequency
relationship of an antenna that is resonant at 5 Mhz.
But the VSWR will also act in a similar manner as the Mismatch Loss
by rising or falling in direct proportion with it.

Ace

392. Re: [SkyWires] Single freq loop

Yahoo group: SkyWires
Date: 2004-02-28 00:02:58 UTC
From: Dr.Ace Ratliff
Topic: 388 Message: 392

On Fri, 27 Feb 2004 19:32:25 -0000, k1pns wrote:
>I've been considering a SkyWire loop for a long time but I keep
>getting lost on the best way to configure for the single freq of
>10.150. What the ideas from you pro's?
>Roger
>
>
>
CORRECTION : The chart shows the Mismatch Loss to
Frequency relationship of an antenna that is resonant at 5 Mhz.
But the VSWR will also act in a similar manner as the Mismatch
Loss by rising or falling in direct proportion with it.

Ace

393. Re: [SkyWires] Single freq loop

Yahoo group: SkyWires
Date: 2004-02-28 01:36:15 UTC
From: Terry Conboy
Topic: 388 Message: 393
Attachments: 2 described; binary payloads are missing from this source WARC

At 03:52 PM 2004-02-27, Dr.Ace Ratliff wrote:
>I would put up a Full Wave Loop. 99 feet of wire in a square with 24 feet
>9 inches on each side. I would NOT make the loop 2 wavelengths. If you
>make it 2 wavelengths it will have a high VSWR at 10.15 Mhz.
>Here is a chart showing the SWR to Frequency relationship of an antenna
>that is resonant at 5 Mhz
>14812d6f.jpg

Actually this chart is for a 15m vertical antenna (it is from John Doty's correspondence on longwire matching at http://www.anarc.org/naswa/badx/antennas/SWL_longwire.html).

The impedance of a 1 wavelength loop is about 117 ohms (#14 wire, mounted 1/2 wavelength high), but the impedance of a 2 wl loop is about 83 ohms when corner fed or 285 ohms when mid-side fed. Either of these impedances is easily matched. One of the really great things about these loops is that the impedance is low to moderate at all harmonics, not just at odd harmonics as for linear verticals and dipoles. Note that the feed impedance will vary with height above ground just like any other horizontally polarized antenna.

A 1 wl loop will have about 6.3 dBi gain (at 1/2 wl height), with a broad bidirectional pattern with side levels about 6 dB down. SWR bandwidth is 320 kHz (not an issue on 30m). Side or corner feed produces essentially the same pattern, just rotated 45 degrees.

A 2 wl loop will have 7.6 dBi gain in 4 directions, when mid-side fed (4 shallow nulls about 7 dB down). SWR bandwidth is 680 kHz, about twice the 1 wl loop. If corner fed, the gain drops to 6.5 dBi, but the dips between the four lobes are only about 4.5 dB down. The SWR bandwidth with corner feed is much narrower, only about 200 kHz.

Like any other design activity, you have to decide what configuration fits your situation best. It's always good to understand your options. I'll be glad to share my EZNEC models.

73, Terry

394. Re: Single freq loop

Yahoo group: SkyWires
Date: 2004-02-28 03:55:36 UTC
From: k1pns
Topic: 388 Message: 394

--- In SkyWires@yahoogroups.com, "Dr.Ace Ratliff" <wh2t@b...> wrote:
> On Fri, 27 Feb 2004 19:32:25 -0000, k1pns wrote:
> >I've been considering a SkyWire loop for a long time but I keep
> >getting lost on the best way to configure for the single freq of
> >10.150. What the ideas from you pro's?
> >Roger
> >
> To determine the length to use, Use this formula "Length in feet =
> 246 x VF / Freq in Mhz" VF = the Velocity Factor of the coax. So
> multiply 246 by the Velocity Factor of the coax , Then divide by
the
> frequency .

Thanks ACE,

Check my math. For the single freq of 10.150 I would use 15.99 feet
of 75 Ohm. It is another 15 feet to get into the Transceiver. I
would use 50 ohm coax for that. I will not use any other freq other
than 10.150.

I was going to put this about 5 feet above the roof(25 feet above
the ground. Would there be a problem using 1/4 copper tubing in
place of wire? Receive(low noise) is more important than xmit.

Thanks again
Roger

395. Re: [SkyWires] Single freq loop

Yahoo group: SkyWires
Date: 2004-02-28 03:59:21 UTC
From: Dr.Ace Ratliff
Topic: 388 Message: 395

On Fri, 27 Feb 2004 17:36:15 -0800, Terry Conboy wrote:
>At 03:52 PM 2004-02-27, Dr.Ace Ratliff wrote:
>I would put up a Full Wave Loop. 99 feet of wire in a square with 24
>feet 9 inches on each side. I would NOT make the loop 2
>wavelengths. If you make it 2 wavelengths it will have a high VSWR
>at 10.15 Mhz.
>Here is a chart showing the SWR to Frequency relationship of an
>antenna that is resonant at 5 Mhz
>
>Actually this chart is for a 15m vertical antenna (it is from John
>Doty's correspondence on longwire matching at
>http://www.anarc.org/naswa/badx/antennas/SWL_longwire.html
).
>
>The impedance of a 1 wavelength loop is about 117 ohms (#14 wire,
>mounted 1/2 wavelength high), but the impedance of a 2 wl loop is
>about 83 ohms when corner fed or 285 ohms when mid-side fed. Either
>of these impedances is easily matched. One of the really great
>things about these loops is that the impedance is low to moderate at
>all harmonics, not just at odd harmonics as for linear verticals and
>dipoles. Note that the feed impedance will vary with height above
>ground just like any other horizontally polarized antenna.
>
>A 1 wl loop will have about 6.3 dBi gain (at 1/2 wl height), with a
>broad bidirectional pattern with side levels about 6 dB down. SWR
>bandwidth is 320 kHz (not an issue on 30m). Side or corner feed
>produces essentially the same pattern, just rotated 45 degrees.
>
>A 2 wl loop will have 7.6 dBi gain in 4 directions, when mid-side
>fed (4 shallow nulls about 7 dB down). SWR bandwidth is 680 kHz,
>about twice the 1 wl loop. If corner fed, the gain drops to 6.5
>dBi, but the dips between the four lobes are only about 4.5 dB
down.
>The SWR bandwidth with corner feed is much narrower, only about 200
>kHz.
>
>Like any other design activity, you have to decide what
>configuration fits your situation best. It's always good to
>understand your options. I'll be glad to share my EZNEC models.
>
>73, Terry
>

The chart is for a 15m vertical antenna . I should have said "Here is
a chart showing the Mismatch Loss to Frequency relationship of an

antenna that is resonant at about 5 Mhz . A vertical antenna that is 15m or 49.5 feet will be a 1/4 wave antenna that resonates at 4.7272 Mhz .
15 mtrs = 49.5 feet .

I have had a 1 wavelength loop , a 2 wavelength loop , and a 3 wavelength loop up , all were for the 160 meter band . Any gain difference was unnoticeable . A 3db difference is said to be barely discernible . It was definitely not worth the extra wire. Experience is a good teacher.
Anyone with a full wave loop can measure the SWR at the design Frequency , Then Double the Frequency effectively making it a 2 Wavelength loop, and measure the SWR again.
I just did this simple test . As a one wave loop the SWR is 1:1 , as a 2 wave loop the SWR jumped to over 4:1 . Try it yourself.

And Yes , It is usually pretty easy to match most antennas with a tuner .
But if I were making an antenna
"for the single freq of 10.150"
I would not want or need an antenna tuner.
I stand by my original statement
"I would put up a Full Wave Loop. 99 feet of wire in a square with 24 feet 9 inches on each side .
I would NOT make the loop 2 wavelengths. If you make it 2 wavelengths it will have a high VSWR at 10.15 Mhz"
Very 73, Ace - WH2T

396. Re: [SkyWires] Re: Single freq loop

Yahoo group: SkyWires
Date: 2004-02-28 04:06:48 UTC
From: Dr.Ace Ratliff
Topic: 388 Message: 396

On Sat, 28 Feb 2004 03:55:36 -0000, k1pns wrote:
>--- In SkyWires@yahoogroups.com, "Dr.Ace Ratliff" <wh2t@b...> wrote:
>>On Fri, 27 Feb 2004 19:32:25 -0000, k1pns wrote:
>>>I've been considering a SkyWire loop for a long time but I keep
>>>getting lost on the best way to configure for the single freq of
>>>10.150. What the ideas from you pro's?
>>>Roger
>>>
>>To determine the length to use, Use this formula "Length in feet =
>>246 x VF / Freq in Mhz" VF = the Velocity Factor of the coax. So
>>multiply 246 by the Velocity Factor of the coax , Then divide by
>the
>>frequency .
>
>Thanks ACE,
>
>Check my math. For the single freq of 10.150 I would use 15.99 feet
>of 75 Ohm. It is another 15 feet to get into the Transceiver. I
>would use 50 ohm coax for that. I will not use any other freq other
>than 10.150.
>
>I was going to put this about 5 feet above the roof(25 feet above
>the ground. Would there be a problem using 1/4 copper tubing in
>place of wire? Receive(low noise) is more important than xmit.
>
>Thanks again
>Roger
>
>
>
Roger,
Your math is right on . I would use 16 feet of NON foam dielectric
75 ohm coax . 1/4 copper tubing will work great . Loops are very
quiet antennas.
Very 73, Ace - WH2T

397. Re: Single freq loop

Yahoo group: SkyWires
Date: 2004-02-28 04:33:29 UTC
From: k1pns
Topic: 388 Message: 397

-I'll try to put this thing together tomorrow

Great help here.

Roger

-- In SkyWires@yahoogroups.com, "Dr.Ace Ratliff" <wh2t@b...> wrote:
> On Sat, 28 Feb 2004 03:55:36 -0000, k1pns wrote:
> >--- In SkyWires@yahoogroups.com, "Dr.Ace Ratliff" <wh2t@b...>
wrote:
> >>On Fri, 27 Feb 2004 19:32:25 -0000, k1pns wrote:
> >>>I've been considering a SkyWire loop for a long time but I keep
> >>>getting lost on the best way to configure for the single freq of
> >>>10.150. What the ideas from you pro's?
> >>>Roger
> >>>
> >>To determine the length to use, Use this formula "Length in feet
=
> >>246 x VF / Freq in Mhz" VF = the Velocity Factor of the coax. So
> >>multiply 246 by the Velocity Factor of the coax , Then divide by
> >the
> >>frequency .
> >>
> >Thanks ACE,
> >>
> >Check my math. For the single freq of 10.150 I would use 15.99
feet
> >of 75 Ohm. It is another 15 feet to get into the Transceiver. I
> >would use 50 ohm coax for that. I will not use any other freq
other
> >than 10.150.
> >>
> >I was going to put this about 5 feet above the roof(25 feet above
> >the ground. Would there be a problem using 1/4 copper tubing in
> >place of wire? Receive(low noise) is more important than xmit.
> >>
> >Thanks again
> >Roger
> >>
> >>
> >>
> Roger,
> Your math is right on . I would use 16 feet of NON foam
dielectric
> 75 ohm coax . 1/4 copper tubing will work great . Loops are very
> quiet antennas.

> Very 73, Ace - WH2T

398. Re: [SkyWires] Single freq loop

Yahoo group: SkyWires
Date: 2004-02-28 06:00:25 UTC
From: Terry Conboy
Topic: 388 Message: 398
Attachments: 1 described; binary payloads are missing from this source WARC

At 07:59 PM 2004-02-27, Dr.Ace Ratliff wrote:
>The chart is for a 15m vertical antenna . I should have said "Here is a
>chart showing the Mismatch Loss to Frequency relationship of an
>antenna that is resonant at about 5 Mhz . A vertical antenna that is 15m
>or 49.5 feet will be a 1/4 wave antenna that resonates at 4.7272 Mhz .
>15 mtrs = 49.5 feet .

My only point was that your chart showed very high mismatch loss at even harmonics, which isn't the case with a loop. Skywire loops have high mismatch losses at frequencies where the loop is about 1.5 wl, 2.5 wl, 3.5 wl, etc., which are normally between the ham bands.

(Note that a 4:1 SWR produces only a potential 2 dB mismatch loss, although this is only important for wideband receiving applications where no precise impedance matching is used.)

>I have had a 1 wavelength loop , a 2 wavelength loop , and a 3 wavelength
>loop up , all were for the 160 meter band . Any gain difference was
>unnoticeable . A 3db difference is said to be barely discernible . It was
>definitely not worth the extra wire. Experience is a good teacher.

It will depend on the azimuth to the station you are working. Off the "side" of a 1 wl loop pattern, the signal may be down about 6 dB, which can be noticeable. (Loops at heights below 1/2 wavelength will be more omnidirectional.) A 2 wl loop will have about the same gain at all 4 of the 90 degrees points. It will also have less response to NVIS signals and noise due to the pattern null at the zenith.

>Anyone with a full wave loop can measure the SWR at the design Frequency ,
>Then Double the Frequency effectively making it a 2 Wavelength loop, and
>measure the SWR again.
> I just did this simple test . As a one wave loop the SWR is 1:1 , as a 2
> wave loop the SWR jumped to over 4:1 . Try it yourself.

I'm sure you are right. This is partly because the 1/4 wave line used for matching is a half wave at the 2nd harmonic and doesn't do any transformation there.

>And Yes , It is usually pretty easy to match most antennas with a tuner .

Or a 4:1 balun or a "series-section" match on a single band.

>But if I were making an antenna "for the single freq of 10.150"
>I would not want or need an antenna tuner.
>I stand by my original statement
>"I would put up a Full Wave Loop. 99 feet of wire in a square with

>24 feet 9 inches on each side .
>I would NOT make the loop 2 wavelengths. If you make it 2
>wavelengths it will have a high VSWR at 10.15 Mhz"

That's certainly a good approach, simple to match, and definitely takes less real estate. However, the VSWR isn't a problem if you use a matching arrangement that accommodates the feed impedance, just as you have done for the impedance of a 1 wl loop.

73, Terry

399. Re: Single freq loop

Yahoo group: SkyWires
Date: 2004-02-28 14:56:42 UTC
From: k1pns
Topic: 388 Message: 399

(Loops at heights below 1/2 wavelength will be more
> omnidirectional.) A 2 wl loop will have about the same gain at
all 4 of > the 90 degrees points. It will also have less response
to NVIS signals and > noise due to the pattern null at the zenith.
> "for the single freq of 10.150"

Is there an optimum height above ground for the single operating
freq of 10.150?

Thanks
Roger

400. Re: Single freq loop

Yahoo group: SkyWires
Date: 2004-03-01 08:32:38 UTC
From: kl7r
Topic: 388 Message: 400

--- In SkyWires@yahoogroups.com, "k1pns" <FLKITFOX@J...> wrote:
> I've been considering a SkyWire loop for a long time but I keep
> getting lost on the best way to configure for the single freq of
> 10.150. What the ideas from you pro's?
> Roger

You said you wanted a SINGLE FREQUENCY 30 meter loop.

I might put it up as a vertical delta loop
fed at the bottom with a balun.

There was an article in Sprat/Qrp Quarterly
describing a "Quiet 30m Antenna" vertical
delta loop.

It was 3x33.1 feet around (99.3 foot loop)
It had a choke/matching section made out of 17 feet 4
inches of rg59 (75 ohm coax) at the bottom
corner and was supported at the top two corners
by two ropes into two trees.

If you can get the horizontal top at 55.5 feet that
looks to be the highest gain but the higher you go,
the lower the take off angle.

It will NOT work as well on other bands in the vertical
configuration as it would if it were horizontal but
it will work very well on the design frequency.

Some other reading on loops:

http://www.cebik.com/vdelt.html

http://www.qsl.net/wd8rif/text/looper.txt

http://www.qsl.net/wd8rif/text/delta.txt

http://www.qsl.net/wd8rif/text/40mloop.txt

http://www.qsl.net/wd8rif/text/w6rca.txt

http://www.qsl.net/wd8rif/text/40m_rect.txt

http://www.qsl.net/wd8rif/text/loops.txt

If you really want a skywire (horizontal loop) then
I would go with "big and high" and a tuner/ladderline
and dont worry too much about the swr on the feedline.

401. will metal poles efect my lobes

Yahoo group: SkyWires
Date: 2004-03-04 04:02:36 UTC
From: desmoines_2000
Topic: 401 Message: 401

if i use metal poles at each corner the wire will be inside the pole
if i feed at the corner the mjor lobes will be from the corners will
the signal having to pass through or go around the metal pole have an
efect on the signal

thank you to all that reply

402. Lightning

Yahoo group: SkyWires
Date: 2004-03-04 17:34:01 UTC
From: keith currie
Topic: 402 Message: 402

With the up cumming electrical storm season what is the best way to protect every thing with these large loope antennas in our yard just waiting for a strike?

403. tuning stub

Yahoo group: SkyWires
Date: 2004-03-06 20:46:31 UTC
From: Rick
Topic: 403 Message: 403

Hello everyone,
I'm new to the group.
I am curious to know if anyone has any experience using a tuning stub on the loop.
I am currently feeding it with RG8 and the auto tuner on one of my rigs won't tune it for 75 meters. The resonant freq of the loop is 3530.
I am considering using a stub of RG11 (75 ohm) coax cut to the resonant freq.
My concern is that it will alter how well it tunes on other bands.
Anyone have any experience with this?
Thanks in advance,

Rick

404. New member

Yahoo group: SkyWires
Date: 2004-03-07 00:23:07 UTC
From: Rick Henderson
Topic: 404 Message: 404

Hello everyone,

I've been running a 280 foot loop for almost 2 years
now.
Since I went from balanced line to RG8, it is stubborn
to tune on 75 meters, my rig's built-in tuner, won't
tune it.
I have been considering making a tuning stud out of
RG11 (75 ohm), but I'm concerned that it will degrade
the performance on the other bands (the loop is used
for 80-10 meters).
Anyone have any experience or ideas on this?

Thanks,
Rick

_____
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405. Load Coil Re-visited

Yahoo group: SkyWires
Date: 2004-03-08 20:58:12 UTC
From: Michael
Topic: 405 Message: 405

Just passing on what I found.

I put up a 5 foot long coil on 2" o.d. pvc with
118 foot of #12 insulated wire didn't do any
calculations or tests on values. I just put it up,
and used it.

What I found:

1. Tuner is easier to tune on 160 and 80 meters,
a lot harder to tune on 40 - 10 meter.

2. Heard people on the noontime net that I had
never heard before. I was also able to speak
to them after the net.

3. Signal reports from friends opposite the load
coil went up an average of 1/2 to 1 1/2S units.
Friends on the same side as the coil (S.S.W.)
went down by 1/2 to 3/4 of an S unit. Xmit and
receive.

In all not bad.

Worth the trouble for me?
NO

More wire up in a larger horizontal loop?
Yes, that is what I'm doing this coming weekend !

And YES the coil is being pulled out!

Michael Williams N7RDV

406. Re: New member

Yahoo group: SkyWires
Date: 2004-03-09 23:38:55 UTC
From: kl7r
Topic: 404 Message: 406

Did it work well with balanced feedline?
If so, I would go back to that unless you
have a strong reason not to.

Answering your question though,
I did have a 40 meter with a 75 ohm matching
section that worked well for me through a
tuner on 40 through 10 ("NoviLoop")

I am however a fan of balanced feedline and
would go back to that given the choice

--- In SkyWires@yahoogroups.com, Rick Henderson <w1hen@y...> wrote:
> Hello everyone,
>
> I've been running a 280 foot loop for almost 2 years
> now.
> Since I went from balanced line to RG8, it is stubborn
> to tune on 75 meters, my rig's built-in tuner, won't
> tune it.
> I have been considering making a tuning stud out of
> RG11 (75 ohm), but I'm concerned that it will degrade
> the performance on the other bands (the loop is used
> for 80-10 meters).
> Anyone have any experience or ideas on this?
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> Thanks,
> Rick
>
> _____________________________________
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407. Re: [SkyWires] Re: New member

Yahoo group: SkyWires
Date: 2004-03-10 02:19:59 UTC
From: keith currie
Topic: 404 Message: 407
Attachments: 2 described; binary payloads are missing from this source WARC

Rick
I fooled around with all kinds os feed lines, But ladder line is by far
the best for me.
i have a 840' loop and feed it with 450ohm to a tunner and it tunes
good from 160 to 10.
Keith

kl7r wrote:

> Did it work well with balanced feedline?
> If so, I would go back to that unless you
> have a strong reason not to.
>
> Answering your question though,
> I did have a 40 meter with a 75 ohm matching
> section that worked well for me through a
> tuner on 40 through 10 ("NoviLoop")
>
> I am however a fan of balanced feedline and
> would go back to that given the choice
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> --- In SkyWires@yahoogroups.com, Rick Henderson <w1hen@y...> wrote:
> > Hello everyone,
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> > Since I went from balanced line to RG8, it is stubborn
> > to tune on 75 meters, my rig's built-in tuner, won't
> > tune it.
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> > RG11 (75 ohm), but I'm concerned that it will degrade
> > the performance on the other bands (the loop is used
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> > Rick
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> > _________________________________
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> Service.
>

408. Re: [SkyWires] Re: New member

Yahoo group: SkyWires
Date: 2004-03-10 00:20:03 UTC
From: Rick Henderson
Topic: 404 Message: 408

The balanced feedline worked VERY well till I tried to use a linear amp with it. It cooked my 2kw balun (4:1 current) after only a few transmissions...cheap balun.

The majority of my 100 ft transmission line is near my aluminum siding or in my house. So went back to coax.

I can tune and operate full power anywhere 80-10 meters with my Heath SA-2060A tuner...not a problem there.

But, I sometimes like to run my newest xcvr direct to the antenna and use the internal autotuner. Very convenient! This is where my problem arises.

The antenna is resonant on 3540. The autotuner will not tune any freq on 80/75 meters above 3700....so that tells me that the antenna is a tough match there. Also on 30 meters...the autotuner will only let me run about 20 watts at 1.3 to 1.

I am feeding my loop through 100 feet of RG8 now. I am going to replace the 50 ft section at the antenna end with a 50 ft piece of RG11 (There is a formula that gave me 47.8 feet for a 75 ohm stub for 3540). Now, I am hoping that this will help the autotuner do 75 meters, and I am sure it will.
But I am also hoping that the rest of the bands work just as well as they do now.
You are right though...the balance feedline works the best, but my set up here just doesn't allow the freedom to use it. The feed point of my antenna is only 35 ft away from the second floor of my aluminum sided house and there really isn't enough room to take it anywhere else. I have found that the longer the feed line, the easier the tune too.
Thanks for the input, and I'll let you know how it works out.

Rick

--- kl7r <kl7r@...> wrote:
> Did it work well with balanced feedline?
> If so, I would go back to that unless you
> have a strong reason not to.
>
> Answering your question though,

> I did have a 40 meter with a 75 ohm matching
> section that worked well for me through a
> tuner on 40 through 10 ("NoviLoop")
>
> I am however a fan of balanced feedline and
> would go back to that given the choice
>
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> --- In SkyWires@yahoogroups.com, Rick Henderson
> <w1hen@y...> wrote:
> > Hello everyone,
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> > I've been running a 280 foot loop for almost 2
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> > to tune on 75 meters, my rig's built-in tuner,
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> > I have been considering making a tuning stud out
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> > RG11 (75 ohm), but I'm concerned that it will
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> > the performance on the other bands (the loop is
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> > for 80-10 meters).
> > Anyone have any experience or ideas on this?
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> > Thanks,
> > Rick
> >
> > _____________________________________
> > Do you Yahoo!?
> > Yahoo! Search - Find what you're looking for
> faster
> > http://search.yahoo.com
>
>

____
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http://search.yahoo.com

409. Balanced Feedlines...

Yahoo group: SkyWires
Date: 2004-03-10 01:01:36 UTC
From: JimMcSkate@aol.com
Topic: 409 Message: 409

[Body unavailable in the source archive]

410. Balanced feedlines...

Yahoo group: SkyWires
Date: 2004-03-10 01:01:57 UTC
From: JimMcSkate@aol.com
Topic: 410 Message: 410

[Body unavailable in the source archive]

411. Re: [SkyWires] Re: New member

Yahoo group: SkyWires
Date: 2004-03-10 01:09:26 UTC
From: Rick Henderson
Topic: 404 Message: 411

Thanks Keith,
Wow 840 feet?! That's a loop. How high up is it and
what holds it up?

Rick

--- keith currie <kecurrie@...> wrote:
> Rick
> I fooled around with all kinds os feed lines, But
> ladder line is by far
> the best for me.
> i have a 840' loop and feed it with 450ohm to a
> tunner and it tunes
> good from 160 to 10.
> Keith
>
> kl7r wrote:
>
> > Did it work well with balanced feedline?
> > If so, I would go back to that unless you
> > have a strong reason not to.
> >
> > Answering your question though,
> > I did have a 40 meter with a 75 ohm matching
> > section that worked well for me through a
> > tuner on 40 through 10 ("NoviLoop")
> >
> > I am however a fan of balanced feedline and
> > would go back to that given the choice
> >
> >
> > --- In SkyWires@yahoogroups.com, Rick Henderson
> <w1hen@y...> wrote:
> > > Hello everyone,
> > >
> > > I've been running a 280 foot loop for almost 2
> years
> > > now.
> > > Since I went from balanced line to RG8, it is
> stubborn
> > > to tune on 75 meters, my rig's built-in tuner,
> won't
> > > tune it.
> > > I have been considering making a tuning stud out
> of

> > > RG11 (75 ohm), but I'm concerned that it will
> degrade
> > > the performance on the other bands (the loop is
> used
> > > for 80-10 meters).
> > > Anyone have any experience or ideas on this?
> > >
> > > Thanks,
> > > Rick
> > >
> > > _____________________________________
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412. Balanced Feedlines...

Yahoo group: SkyWires
Date: 2004-03-10 01:10:38 UTC
From: JimMcSkate@aol.com
Topic: 409 Message: 412

Once I figure out which button on this ^&^#&@@ laptop means "SEND" I think I'll hack it out with a butter knife ;-)

I've been having great luck with my 40m loop fed with balanced line. The original article on Loop Skywires called for coax (RG58) which today would seem to be a poor (lossy) choice.

This is a question for those folks who go back a while in this hobby: Was there a time (late 1970's?) where coax was king, and balanced line was considered old fashioned? I got my ticket in '77, and there seemed to be nary a mention of balanced line for transmitting purposes, and the 300-ohm twinlead was just used for TV antennas. I think if Dave Fischer wrote his article today, he would've suggested balanced line first.

Just a theory...

My loop is fed with 30 or so feet of 300-ohm twinlead straight from Radio Shack (for those outside of North America, Radio Shack is a chain of consumer electronics stores that still manages to keep a corner somewhere with resistors and chips and connectors. Like McDonald's franchises, they are all laid out the same way, and in that far corner you usually find, well, folks like us. In fact, I've come to call it the "Geek Orthodox Church".)

Have a great day, everyone!
73 de WA2LGN
Jim

413. Re: [SkyWires] Balanced feedlines...

Yahoo group: SkyWires
Date: 2004-03-10 01:12:17 UTC
From: eddiebangsdrum@aol.com
Topic: 410 Message: 413

C'mon Jim, what'r you saying?.....

414. Re: [SkyWires] Re: New member

Yahoo group: SkyWires
Date: 2004-03-10 05:24:57 UTC
From: keith currie
Topic: 404 Message: 414

Rick
It is up at 42' (about) I have a bobcat and do a lot of postholes so I put three long poles up , and I have two towers so that is what keeps it up there.I also have a lot of space here to work with.
It sounds like your on the right track with yours, let me know how it works on all bands.
Best 73 Keith

Rick Henderson wrote:

> Thanks Keith,
> Wow 840 feet?! That's a loop. How high up is it and
> what holds it up?
>
> Rick
>
> --- keith currie <kecurrie@...> wrote:
> > Rick
> > I fooled around with all kinds os feed lines, But
> > ladder line is by far
> > the best for me.
> > i have a 840' loop and feed it with 450ohm to a
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> > good from 160 to 10.
> > Keith
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> > kl7r wrote:
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> > > Did it work well with balanced feedline?
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> > > Answering your question though,
> > > I did have a 40 meter with a 75 ohm matching
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> > > tuner on 40 through 10 ("NoviLoop")
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> > > I am however a fan of balanced feedline and
> > > would go back to that given the choice
> > >
> > >
> > > --- In SkyWires@yahoogroups.com, Rick Henderson
> > <w1hen@y...> wrote:
> > > > Hello everyone,
> > > >

> > > > I've been running a 280 foot loop for almost 2
> > years
> > > > > now.
> > > > > Since I went from balanced line to RG8, it is
> > stubborn
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> > > > > RG11 (75 ohm), but I'm concerned that it will
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> > > > > the performance on the other bands (the loop is
> > used
> > > > > for 80-10 meters).
> > > > > Anyone have any experience or ideas on this?
> > > > >
> > > > > Thanks,
> > > > > Rick
> > > > >
> > > > > _____________________________________
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415. StarLoop (skywire with alternate geometry)

Yahoo group: SkyWires
Date: 2004-03-10 20:09:18 UTC
From: kl7r
Topic: 415 Message: 415

W4RNL has a cool idea for getting more
low angle radiation out of SkyWires...

http://www.cebik.com/40star.html

416. "Electromagnetic Waves and Antennas," draft textbook online

Yahoo group: SkyWires
Date: 2004-03-11 01:15:50 UTC
From: Ron McConnell
Topic: 416 Message: 416

This online draft text book should be of interest to many.

==========

Electromagnetic Waves and Antennas

http://www.ece.rutgers.edu/~orfanidi/ewa/

Sophocles J. Orfanidis
ECE Department
Rutgers University
94 Brett Road
Piscataway, NJ 08854-8058

Tel: 732-445-5017
e-mail: orfanidi@...rs.edu

This book is a work in progress.
Any feedback from readers is welcome.

==========

Cheers, 73,

Ron McConnell

w2iol@...

WGS-84: N 40º 46' 57.9" W 74º 41' 21.9"
Magnetic Variation/Declination = 13º in early 2004
FN20ps77GV75 per w2iol
or FN20ps77GU46 per K2RIW

http://home.earthlink.net/~rcmcc

417. Loops

Yahoo group: SkyWires
Date: 2004-03-15 21:52:28 UTC
From: keith currie
Topic: 417 Message: 417

Does any one know if a 2 WL loop works better then a single WL or 1.5
Wl loop.
I guess the SWR would be better on the designed freq then it would on a
1.5 WL.

Keith

418. Re: [SkyWires] Loops

Yahoo group: SkyWires
Date: 2004-03-16 16:16:33 UTC
From: Rick
Topic: 417 Message: 418

In my humble opinion, the more wavelengths the better!

Rick

--- keith currie <kecurrie@...> wrote:
> Does any one know if a 2 WL loop works better then a
> single WL or 1.5
> Wl loop.
> I guess the SWR would be better on the designed freq
> then it would on a
> 1.5 WL.
>
> Keith
>
>

_____
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419. Re: [SkyWires] Loops

Yahoo group: SkyWires
Date: 2004-03-16 23:07:29 UTC
From: Bud Jenkins
Topic: 417 Message: 419

I have run loops for several years and at one time I had up a 5 wavelengths 160 Meter loop. I could not tell any difference between it and a 1 wavelength 160 loop. The only difference is the difficulty keeping the big one up

Rick <w1hen@...> wrote:In my humble opinion, the more wavelengths the better!

Rick

--- keith currie <kecurrie@...> wrote:
> Does any one know if a 2 WL loop works better then a
> single WL or 1.5
> Wl loop.
> I guess the SWR would be better on the designed freq
> then it would on a
> 1.5 WL.
>
> Keith
>
>

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420. Re: [SkyWires] Loops

Yahoo group: SkyWires
Date: 2004-03-16 23:49:42 UTC
From: Dr.Ace Ratliff
Topic: 417 Message: 420

Hi All,
I also have ran loops for several years. I agree with Rick , I tried one , two and three wavelength loops on the 160 meter band . The only difference I could see was that it was harder to match the two wavelength loop to coax.
I am currently using a 75 meter full wave delta loop.
Ace - WH2T
----- Original Message -----
From: Bud Jenkins
To: SkyWires@yahoogroups.com
Sent: Tuesday, March 16, 2004 6:07 PM
Subject: Re: [SkyWires] Loops

I have run loops for several years and at one time I had up a 5 wavelengths 160 Meter loop. I could not tell any difference between it and a 1 wavelength 160 loop. The only difference is the difficulty keeping the big one up

Rick <w1hen@...> wrote:
In my humble opinion, the more wavelengths the better!

Rick

--- keith currie <kecurrie@...> wrote:
> Does any one know if a 2 WL loop works better then a
> single WL or 1.5
> Wl loop.
> I guess the SWR would be better on the designed freq
> then it would on a
> 1.5 WL.
>
> Keith
>
>

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Outgoing mail is certified Virus Free.
Checked by AVG anti-virus system (http://www.grisoft.com).
Version: 6.0.627 / Virus Database: 402 - Release Date: 3/16/2004

421. Re: [SkyWires] Loops

Yahoo group: SkyWires
Date: 2004-03-16 23:52:18 UTC
From: Dr.Ace Ratliff
Topic: 417 Message: 421

CORRECTION - My last eMail should have read "I agree with Bud" .

Ace - WH2T
----- Original Message -----
From: Bud Jenkins
To: SkyWires@yahoogroups.com
Sent: Tuesday, March 16, 2004 6:07 PM
Subject: Re: [SkyWires] Loops

I have run loops for several years and at one time I had up a 5 wavelengths 160 Meter loop. I could not tell any difference between it and a 1 wavelength 160 loop. The only difference is the difficulty keeping the big one up

Rick <w1hen@...> wrote:
In my humble opinion, the more wavelengths the better!

Rick

--- keith currie <kecurrie@sasktel.net> wrote:
> Does any one know if a 2 WL loop works better then a
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> Wl loop.
> I guess the SWR would be better on the designed freq
> then it would on a
> 1.5 WL.
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> Keith
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>

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Outgoing mail is certified Virus Free.
Checked by AVG anti-virus system (http://www.grisoft.com).
Version: 6.0.627 / Virus Database: 402 - Release Date: 3/16/2004

422. Gathering ?

Yahoo group: SkyWires
Date: 2004-03-25 02:04:53 UTC
From: Clay
Topic: 422 Message: 422

Did any of you manage to meet other Loopers online ? I've been away
and haven't been keeping up. What did I miss ? :)

Clay
WB5UOI

423. shortwave radio is in trouble

Yahoo group: SkyWires
Date: 2004-03-25 21:49:17 UTC
From: Stephanie
Topic: 423 Message: 423

The following is an URGENT plea to all shortwave radio listeners, ham radio operators and anyone that has an interest in the shortwave radio spectrum.

BPL - Broadband Over Power Line is a new form of broadband internet service being deployed by Electric Utilities around the world. BPL uses the shortwave radio spectrum to deliver internet service over their power lines to the home. In field trials thus far conducted around the world, BPL causes severe interference to shortwave radio reception. Japan and The Netherlands have concluded that BPL is too great a threat to the shortwave radio spectrum and have banned its deployment. The electric utilities deny that this service causes interference to shortwave radio reception.

A typical scenario just to give you an idea of how much a threat BPL is - Part 15 governs BPL deployment and Part 15 does not adequately address our concerns for the prevention of interference. Part 15 states that the hard limit is 30uv/meter at 30 meters (98.4 feet). According to W1RFI, this type of signal at 3.5 MHz will produce a S-meter reading of S9 +16 when using a dipole antenna. Clearly, an issue for most shortwave radio spectrum users that live close to power lines in their neighborhood.

You must investigate the following links:

ARRL Power line Communications information page
http://www.arrl.org/tis/info/HTML/plc/

W1RFI's excellent technical presentation on BPL
http://www.arrl.org/tis/info/HTML/plc/BPL_Presentation.htm

Observe this threat for yourself and then file your comments on FCC Notice of proposed rulemaking for Dockets 03-104 and 04-37. The comment filing window is only 45 days and is already ticking away. File your comments now.

Downloadable copy of FCC Notice of proposed rulemaking
http://hraunfoss.fcc.gov/edocs_public/attachmatch/FCC-04-29A1.doc

Please understand that your comments made on this NPRM must demonstrate to the FCC that BPL must avoid using the shortwave radio spectrum. It is very easy to file comments online.

Follow Broadband Over Power Line (BPL) - Docket 04-37
http://gullfoss2.fcc.gov/ecfs/Upload/

Comments from individuals are needed to let the FCC understand there are lots of shortwave enthusiasts out there who choose to listen to HF broadcasts without interference from BPL.

Please forward this email message on to inform others of this impending threat.

Stephanie WX3K
wx3k@...
"BPL - Broadband Over Power Line, is a dire threat to the shortwave radio spectrum. "
http://www.wxpage.com

424. 80 Meter Loop

Yahoo group: SkyWires
Date: 2004-03-26 13:24:15 UTC
From: craig_mohn
Topic: 424 Message: 424

I have had great results with my 80 meter loop.
It wount work on 30, 12,17, 6 or 440.
It does work and works well on 2 meters.
I'm glad my backyard is not any smaller. Height varies from 30 to 7 feet.
Hope to work you all!

73 Craig, KA3ICJ

425. New member with a big decision

Yahoo group: SkyWires
Date: 2004-03-28 03:57:50 UTC
From: Daniel Stephens
Topic: 425 Message: 425

Hello to the group:
I want to try a new antenna, and was considering a full wave 80 meter loop or a long wire. Because I can only put it up about 20 feet, I am not sure which to go with. I modeled both on MMANA and the loop is a cloud burner, and the long wire shows a better take off angle and as much gain. Any help would be appreciated. I would like a loop for it's quite operation and multiband use with a tuner. What do the experts think???

Dan

426. Re: [SkyWires] New member with a big decision

Yahoo group: SkyWires
Date: 2004-03-28 04:08:42 UTC
From: JimMcSkate@aol.com
Topic: 425 Message: 426

Takeoff angle is high on 80, but lowers on the higher bands. I have a 40m loop up 18 feet and I consider it the best antenna I've ever owned - just this weekend I've worked as far south as Argentina and as far west as Siberia, and all sorts of places in between... on 10, 15, and 20m phone running about 75 watts.

You'll love the loop. It's the most underutilized antenna ever invented! Plus, it's cheap - if you don't like it, keep the feedline and straighten your loop into a long wire... you'll go back to the loop soon enough.

Check out mine on www.qsl.net/wa2lgn

73,
Jim
WA2LGN

In a message dated 3/27/2004 10:58:02 PM Eastern Standard Time, bigdawg74@... writes:

> Hello to the group:
> I want to try a new antenna, and was considering a full wave 80
> meter loop or a long wire. Because I can only put it up about 20
> feet, I am not sure which to go with. I modeled both on MMANA and the
> loop is a cloud burner, and the long wire shows a better take off
> angle and as much gain. Any help would be appreciated. I would like a
> loop for it's quite operation and multiband use with a tuner. What do
> the experts think???
>
> Dan
>

427. RE: [SkyWires] New member with a big decision

Yahoo group: SkyWires
Date: 2004-03-28 13:29:42 UTC
From: David Shrum
Topic: 425 Message: 427

One thing I would add, I find it to be a slightly quieter antenna in the noise department too.

Dave N8PU

P.S. Mine is a 160 Meter loop that isn't more than 12 to 15 feet above ground and I have good results (for me) with mine.

-----Original Message-----
From: JimMcSkate@... [mailto:JimMcSkate@...]
Sent: Saturday, March 27, 2004 11:09 PM
To: SkyWires@yahoogroups.com
Subject: Re: [SkyWires] New member with a big decision

Takeoff angle is high on 80, but lowers on the higher bands. I have a 40m loop up 18 feet and I consider it the best antenna I've ever owned - just this weekend I've worked as far south as Argentina and as far west as Siberia, and all sorts of places in between... on 10, 15, and 20m phone running about 75 watts.

You'll love the loop. It's the most underutilized antenna ever invented! Plus, it's cheap - if you don't like it, keep the feedline and straighten your loop into a long wire... you'll go back to the loop soon enough.

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73,
Jim
WA2LGN

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Dan

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428. Re: [SkyWires] New member with a big decision

Yahoo group: SkyWires
Date: 2004-03-28 13:50:20 UTC
From: Rick
Topic: 425 Message: 428

I would recommend the loop, even though it LOOKS like
a cloud burner, I work all over the northeast on 80
mtrs phone during the day and as far south as Florida
at nite. I've worked Europe many times at nite on 80
cw (All barefoot!) It's awesome on 20-17-15-12-10 for
dx too.
I love my 80 meter loop!

Rick
W1HEN

--- Daniel Stephens <bigdawg74@...> wrote:
> Hello to the group:
> I want to try a new antenna, and was considering
> a full wave 80
> meter loop or a long wire. Because I can only put it
> up about 20
> feet, I am not sure which to go with. I modeled both
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> a tuner. What do
> the experts think???
>
> Dan
>
>

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http://taxes.yahoo.com/filing.html

429. Re: [SkyWires] New member with a big decision

Yahoo group: SkyWires
Date: 2004-03-28 16:31:57 UTC
From: Gordon McCleery
Topic: 425 Message: 429

Dan, Best wire antenna I've ever had.

I agree with the others who have mentioned take off angle is high on 160 and also 80 but becomes a better DX antenna on the higher bands. Mine is a 1000' at between 30' and 35' up in almost a square shape fed with commercial ladder line terminates into a 4:1 balun and into the shack through RG-214 coax (because I had some) into a Dentron tuner, works all bands, easy to tune and is quieter and some signal increase over my 80 Mtr dipole at 80' (Inverted Vee) I cannot say enough, been licensed since 1955 and truly this is the best antenna I've ever put up, reasonable in cost, easy.....

Go for it, you will be proud of it.....Mac

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430. 40M loop has impressive 20M performance.

Yahoo group: SkyWires
Date: 2004-04-03 03:40:01 UTC
From: nc9k
Topic: 430 Message: 430

I'm impressed with the Skywire Loop and this discussion group. Thanks for all the postings on this antenna. One of the main things I learned from postings here is to operate the Skywire Loop on its harmonics, and not fundamental in order to push the angle of radiation down for DX work.

I became a SWL in 1969 at age 9, using a 30 tube E.H. Scott receiver and an 18ga 120ft. "magnetic loop" antenna wrapped around my grandparents' house where I lived. This antenna had been recommended to me by a neighbor who had himself been a SWL since WWII. The reception was wonderful, and impulse noise was never a problem. I joined Wis. Civil Air Patrol, got involved with its 75M net as Badger 205 in 1974, and eventually became net control because I could "hear" better other stations with my double extended Zepp up about 50ft. fed with homemade 14ga 600 ohm ladderline. My grandparents didn't have trees in the right spots to get a "magnetic loop" up to replace the Zepp, and I wasn't about to feed my Desk Kilowatt into the 18ga SWL loop wrapped around my grandparents' house! I got my First Phone with Radar in 1976, and became Chief Engineer at a number of broadcast stations around Northern Illinois. I got my Ham ticket in 1984 with my present call. Enough background.

I've experimented with numerous antennas for shortwave receiving, including hooking up and tuning an insulated base 550 ft. commercial broadcast tower at night just to see how it would receive on higher bands.

I'll tell you what, the simple 12ga 135 ft long Skywire Loop I just erected at 40 ft. on 4 trees, fed with 450 ohm ladderline into the antenna tuner I built from scratch 30 years ago "hears" better on 20M better than any antenna I've tried over the past 25 years, including most recently a 204 ft G5RV! This Skywire Loop tunes properly on 40 through 10M. Listening to 20M nets all day today, I was copying stations trying to check in that most if not all stations in the various nets could not hear. European stations were pegging my S-Meter!

My next project will be to erect a 320M long Skywire Loop for use on 160M through 40M sometime this spring. I just have to find the right combination of trees. Thanks again for this Skywire group.

431. Two (or more) feedpoints?

Yahoo group: SkyWires
Date: 2004-04-08 13:44:27 UTC
From: cpa2000
Topic: 431 Message: 431

Many of us use 1 wl horizontal loops configured in a rectangle like shape.

When these loops are operated at frequencies greater than the fundamental, the horizontal pattern changes.

For example, if we operate a 1 wl, side fed, square, 80 meter horizontal loop on 40 meters, the horizontal pattern is that of a cloverleaf with four major lobes and four nulls.

Now this is great if you intend to QSO with a station in the direction of a lobe but not so great if your target is in the direction of a null.

Now if I move the feed point to an adjacent side of the loop, the lobes & nulls change places. In essence, I "rotate" the pattern by moving the feed point.

I have attempted to take advantage of this shift in pattern by erecting a 160 meter loop that "floats" in pulleys at the corners. I then tried to physically drag the loop wire through their supporting pulleys & move the entire antenna wire until the feed point was where I wanted it. This has not really worked out due to the weight of the wire, binding at the pulleys & other mechanical problems & I have abandoned this idea.

I'm thinking now that I should just add a second feed line on a side adjacent to the original feed point and simply select the feed line (and pattern) that suits my operating needs.

My problem is that I'm not sure of the effect of adding that second feed line. Should the unused feed line be grounded or simply left unconnected at the transmitter? Or should I use relays at the feedpoints to "jumper" the unused feedline?

My goal is an antenna that covers 160- 17 meters, has "gain" on the frequencies greater than 2.0 mc & that has a way of shifting the pattern on the frequencies greater than 2.0 mc.

Any help, comments will be appreciated.

Tnx

Terry
W8EJO

432. Re: [SkyWires] Two (or more) feedpoints?

Yahoo group: SkyWires
Date: 2004-04-08 16:57:42 UTC
From: JimMcSkate@aol.com
Topic: 431 Message: 432

I would think that relays could do the trick. Or... ever consider running a second loop, just under or over the first, with the feedline in a different place?

Good, good question!
73 de WA2LGN
Jim

In a message dated 4/8/2004 9:44:27 AM Eastern Daylight Time, cpa2000@... writes:

> Or should I use relays at the
> feedpoints to "jumper" the unused feedline?

433. Re: Two (or more) feedpoints?

Yahoo group: SkyWires
Date: 2004-04-08 18:26:17 UTC
From: cpa2000
Topic: 431 Message: 433

Thanks Jim, for another good option. It begs the question; how much separation between the loops?

Anyone with modeling software out there that can give us the best route to take?

It may just come down to cost (the extra wire/insulator cost vs the cost of the relays)

Terry
W8EJO

--- In SkyWires@yahoogroups.com, JimMcSkate@a... wrote:
> I would think that relays could do the trick. Or... ever consider running a second loop, just under or over the first, with the feedline in a different place?
>
> Good, good question!
> 73 de WA2LGN
> Jim
>
> In a message dated 4/8/2004 9:44:27 AM Eastern Daylight Time, cpa2000@y... writes:
>
> > Or should I use relays at the
> > feedpoints to "jumper" the unused feedline?

434. New file uploaded to SkyWires

Yahoo group: SkyWires
Date: 2004-04-08 18:36:05 UTC
From: SkyWires@yahoogroups.com
Topic: 434 Message: 434

Hello,

This email message is a notification to let you know that
a file has been uploaded to the Files area of the SkyWires
group.

File : /atl1-12b.jpg
Uploaded by : cpa2000 <cpa2000@...>
Description : 7 mhz pattern - 3.5mhz loop

You can access this file at the URL

http://groups.yahoo.com/group/SkyWires/files/atl1-12b.jpg

To learn more about file sharing for your group, please visit

http://help.yahoo.com/help/us/groups/files

Regards,

cpa2000 <cpa2000@...>

435. Re: Two (or more) feedpoints?

Yahoo group: SkyWires
Date: 2004-04-08 18:42:21 UTC
From: cpa2000
Topic: 431 Message: 435

I just posted a file to the "Files" section of this group.

It is the H (horizontal) pattern of an 80 meter, 1 wl, side fed,
square loop @ 7mhz. Note the "4 leaf clover" pattern that develops @
twice the fundamental frequency. The 4 lobes & nulls switch positions
when the feed point is moved to an adjacent side.

Terry
W8EJO

436. Re: [SkyWires] Re: Two (or more) feedpoints?

Yahoo group: SkyWires
Date: 2004-04-09 16:46:35 UTC
From: Scott Erwin
Topic: 431 Message: 436

It would be easy to use say two relays at two diffrent points that can get there power throught the feedline. Placment is up to you as to how far appart to place the relays. As a part of the loop between the relays I would run RG-58 coax for it's weight and has very low loss at HF frequencys. I would use the shield of the coax as a part of the loop. The relays would be set up so that with no power applyed the loop feed point would be at the relay where the coax would normally feed the loop. That relay would be open and the relay at the end of the coax would be closed so it not breaking the loop. When DC power is applyed to the feed line it would power up both relays and the normal feedline relay would close the loop at that point and the relay at the end of the coax would open the loop and feed it with that end of the coax. Using the shield of the coax as part of the loop will make no diffrence to the center lead of the coax. You will need to have a DC blocking capacitor at the transmitter and at each relay feedpoint of the loop as a loop is a DC short. You will also need an inductor at the relay DC supply to keep the RF during transmit out the power supply and also one at each of the relays coils to keep it out of the relay coils. Each capacitor will block DC voltage to the antenna and transmiter. The inductor will block RF voltage from the DC power supply and the relay coils. I hope this helps with your project as it would be cheap to do it this way.

--- cpa2000 <cpa2000@...> wrote:

> Thanks Jim, for another good option. It begs the
> question; how much
> separation between the loops?
>
> Anyone with modeling software out there that can
> give us the best
> route to take?
>
> It may just come down to cost (the extra
> wire/insulator cost vs the
> cost of the relays)
>
> Terry
> W8EJO
>

>
> --- In SkyWires@yahoogroups.com, JimMcSkate@a...
> wrote:
> > I would think that relays could do the trick.
> Or... ever consider
> running a second loop, just under or over the first,
> with the
> feedline in a different place?
> >
> > Good, good question!
> > 73 de WA2LGN
> > Jim
> >
> > In a message dated 4/8/2004 9:44:27 AM Eastern
> Daylight Time,
> cpa2000@y... writes:
> >
> > > Or should I use relays at the
> > > feedpoints to "jumper" the unused feedline?
>
>

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http://promotions.yahoo.com/design_giveaway/

437. Re: [SkyWires] Two (or more) feedpoints?

Yahoo group: SkyWires
Date: 2004-04-09 16:57:54 UTC
From: Rick
Topic: 431 Message: 437

I would go with the relays. A second loop may act as
a counterpoise or reflector or director...too many
variables!

Let us know how you make out!
73's,
Rick W1HEN

--- JimMcSkate@... wrote:
> I would think that relays could do the trick. Or...
> ever consider running a second loop, just under or
> over the first, with the feedline in a different
> place?
>
> Good, good question!
> 73 de WA2LGN
> Jim
>
> In a message dated 4/8/2004 9:44:27 AM Eastern
> Daylight Time, cpa2000@... writes:
>
> > Or should I use relays at the
> > feedpoints to "jumper" the unused feedline?
>

_____
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http://promotions.yahoo.com/design_giveaway/

438. Re: New member with a big decision

Yahoo group: SkyWires
Date: 2004-04-09 17:27:03 UTC
From: craig_mohn
Topic: 425 Message: 438

Hey Dan!
Cloud burner? Ain't software great!
I would like to suggest you give it a try - the skywire that is, not the software. I think you will be pleasently suprised.

After 1,000 contacts, take it down and put up the long-wire. Send me an email to let me know how you like that one.

Friends are very happy with their Carolina Windom....

I am about due for a new hunk of wire and need to decide myself.
Keeping the loop though it outperforms my G5RV - with apologies.

Craig, KA3ICJ

439. Re: [SkyWires] Re: Two (or more) feedpoints?

Yahoo group: SkyWires
Date: 2004-04-10 11:55:29 UTC
From: Rick
Topic: 431 Message: 439

Any idea what the pattern looks like for a "corner
fed" loop?

Rick
W1HEN

--- cpa2000 <cpa2000@...> wrote:
> I just posted a file to the "Files" section of this
> group.
>
> It is the H (horizontal) pattern of an 80 meter, 1
> wl, side fed,
> square loop @ 7mhz. Note the "4 leaf clover"
> pattern that develops @
> twice the fundamental frequency. The 4 lobes & nulls
> switch positions
> when the feed point is moved to an adjacent side.
>
> Terry
> W8EJO
>
>
>
>
>

Do you Yahoo!?
Yahoo! Tax Center - File online by April 15th
http://taxes.yahoo.com/filing.html

440. loops and grounding

Yahoo group: SkyWires
Date: 2004-04-15 18:01:45 UTC
From: keith currie
Topic: 440 Message: 440

What are you all doing for a ground system on your big loops. And what to do about lightning storms thios summer has me thinking, any suggestions?

441. Re: loops and grounding

Yahoo group: SkyWires
Date: 2004-04-15 21:12:50 UTC
From: Bryan
Topic: 440 Message: 441

Hey Keith, YOU know? I was thinking the same thing about grounding and how to accomplish it.
I just put up aprox a 500 ft loop yesterday and IM thinking "LIGHTNING" what to do next!

im open to any good suggestions. I am feeding with balanced 450 ohm ladderline but will use a pigtail of 9913 to bring it in to the shack as I dont want the RF too close to the radios much less ME!

anyone having links to good ideas for grounding/ and feedline entry into the house please post them!
thanks and 73s Bryan KC8HPS S.w. MICHIGAN

--- In SkyWires@yahoogroups.com, keith currie <kecurrie@s...> wrote:
> What are you all doing for a ground system on your big loops. And what
> to do about lightning storms thios summer has me thinking, any
> suggestions?

442. Re: [SkyWires] Re: loops and grounding

Yahoo group: SkyWires
Date: 2004-04-15 22:52:05 UTC
From: keith currie
Topic: 440 Message: 442

Hi Bryan,
I have a 840' loop and like you I use 450 ohm feedline, however I do run mine direct to the tunner in the shack, I never thought that rf was a problim on hf but maybe I am wrong. I ground my tunner and radio to a 10' rod just out side the shack, I found it tuned better after I but the ground in. However that wont be any good for lightning , I will need something more for sure. This should help some with static though.

Bryan wrote:

> Hey Keith, YOU know? I was thinking the same thing about grounding and
> how to accomplish it.
> I just put up aprox a 500 ft loop yesterday and IM thinking
> "LIGHTNING" what to do next!
>
> im open to any good suggestions. I am feeding with balanced 450 ohm
> ladderline but will use a pigtail of 9913 to bring it in to the shack
> as I dont want the RF too close to the radios much less ME!
>
> anyone having links to good ideas for grounding/ and feedline entry
> into the house please post them!
> thanks and 73s Bryan KC8HPS S.w. MICHIGAN
>
> --- In SkyWires@yahoogroups.com, keith currie <kecurrie@s...> wrote:
> > What are you all doing for a ground system on your big loops. And what
> > to do about lightning storms thios summer has me thinking, any
> > suggestions?
>
>
> ---
> Yahoo! Groups Links
>
> * To visit your group on the web, go to:
> http://groups.yahoo.com/group/SkyWires/
>
> * To unsubscribe from this group, send an email to:
> SkyWires-unsubscribe@yahoogroups.com
> <mailto:SkyWires-unsubscribe@yahoogroups.com?subject=Unsubscribe>
>
> * Your use of Yahoo! Groups is subject to the Yahoo! Terms of
> Service <http://docs.yahoo.com/info/terms/>.
>
>

443. Re: loops and grounding

Yahoo group: SkyWires
Date: 2004-04-16 05:01:24 UTC
From: nc9k
Topic: 440 Message: 443

Hello Keith and Bryan,

I've learned over the years that the best lightning protection for a home system is a complete disconnect of the station equipment from the antenna system with concurrent grounding of the balanced antenna transmission line feeds outside the building. I use a very large mil-surplus dpdt RF knife switch located just above a copper ground rod system. I also use a pair of 100k ohm static bleed resistors outside the building from each balanced feedline to ground. Your RF feed through the station wall should be of a non-flammable material like ceramic or glass tubing, etc.. You should also use high capacity AC power surge arrestor (with built-in telephone line surge arrestor if you have an online station computer) in your station tied directly to your station ground.

One of the things to remember is to discourage secondary lightning groundpaths leading through power cords, modems, transformer windings etc. inside the building. It is best to apply the concept of "star grounding" which means one common extremely low resistance - low inductance grounding point outside the building that all station equipment ties to directly through individual heavy busses (if possible). Then if a direct strike does originate at your station (lightning travels from the ground upward) all your equipment remains at the same electrical potential relative to each other and the AC feed and overvoltage conditions do not occur. Any high amperage lightning currents flow outside of and away from the building thus reducing the chance of fire. I used the above techniques (minus throwing the knife switch) while operating a double extended Zepp on 75M during electrical storms as a net control station. While operating I would experience the occasional lightning induced static flash across the plates of the balanced capacitor in my homemade antenna tuner. After net signoff I would throw the knife switch and not worry. I never lost any equipment. I am currently using this technique with my Skywire loop.

From my commercial broadcast days the lightning control solution for tall insulated base AM towers (which were always experiencing direct lightning strikes) was to use 2 inch diameter copper balls spaced 1/4 to 1/2 inch from each other (depending on peak RF voltage present) at the base of each tower on heavy arms as a lightning sparkgap. Then the 1/4 inch tubing feeding station RF into each tower base would be formed into a 3 turn loop with a 12 inch diameter, with about 2 inch spacing between each turn. I would do the same with the coax feeding repeaters and studio-transmitter links on these towers. I never lost any equipment using these techniques.

I hope my experiences give you some ideas.

Leland - NC9K

444. Additional lightning info

Yahoo group: SkyWires
Date: 2004-04-17 02:36:06 UTC
From: nc9k
Topic: 444 Message: 444

I realized I have to mention that I use an inductive RF coupling-impedance transformer in my homemade transmatch in order to eliminate a direct dc path from the ladder line to the trancsceiver input. I also use high tension teflon coated wire for the primary turns in the transformer. Lightning would be common mode on the transmission line and therefore not inductively coupled through the transmatch. The issue then becomes voltage breakdown between transformer primary and secondary windings (along with minor capacitive coupling), hence the teflon coated wire.

Concerning possible lightning on the ladder line, I use adjustable spark gaps from each conductor to ground outside of my building.

Leland NC9K

445. My Horz Loop is Noisy?

Yahoo group: SkyWires
Date: 2004-04-17 13:12:49 UTC
From: Scott Gordon
Topic: 445 Message: 445

I have a Horzontal loop up about 35 feet cut for 75 meters and I am feeding it with 450 ohm ladder line. This things play wonderful on 75 and 40. And seems to do ok on the other bands compared to my vertical.

Here is my question and would like to see if anyone else has this issue? I am on 15 meters right now and with my skywire loop I have a S8 noise level. With my Gap Titan Vertical I have a S1 noise level. Tuning across the band I come across a station who is peaking 10 Over on the Skywire and S8 on the Gap.

I see this on 60 meters, 15 and 10 meters just a very hig noise level. Not real sure if it is picking up a horz polorized manmade noise or what?

Any ideas?

Scott
http://www.kq8rp.com

446. RE: [SkyWires] My Horz Loop is Noisy?

Yahoo group: SkyWires
Date: 2004-04-17 14:19:58 UTC
From: David Shrum
Topic: 445 Message: 446

Scott,
My problem is on the low end of the band, 160 and 75, but in my case it is caused (on 75) by my computer (160 I suspect is just 'normal' noise), it is setting next to my older TS-430S radio, anything at my QTH 40 Meter and up is quite in the noise department with or without my PC running.

Just a thought, what electronic device(s) do you have near your radio that might cause interference; if any you might try and experiment, if you haven't already, try and turn off all devices and see if your noise goes away.

I am running RG-8 from the wire to my tuner and two (2) RG-58 2 foot jumpers from my radio to the tuner and from the tuner to the external SWR Bridge that stays inline all the time, since neither my tuner nor the radio has a built in SWR meter. The wire is maybe up 30 feet at the highest and down to 10 feet where the coax is attached. Just a side note, my wire will not match any where below 3 to 1 without the tuner, that is why I leave every thing in line all the time.

Good luck in chancing down that noise.

73
Dave N8PU

-----Original Message-----
From: Scott Gordon [mailto:sgordon@...]
Sent: Saturday, April 17, 2004 9:13 AM
To: SkyWires@yahoogroups.com
Subject: [SkyWires] My Horz Loop is Noisy?

I have a Horzontal loop up about 35 feet cut for 75 meters and I am feeding it with 450 ohm ladder line. This things play wonderful on 75 and 40. And seems to do ok on the other bands compared to my vertical.

Here is my question and would like to see if anyone else has this issue? I am on 15 meters right now and with my skywire loop I have a S8 noise level. With my Gap Titan Vertical I have a S1 noise level. Tuning across the band I come across a station who is peaking 10 Over on the Skywire and S8 on the Gap.

I see this on 60 meters, 15 and 10 meters just a very hig noise level. Not real sure if it is picking up a horz polorized manmade noise or what?

Any ideas?

Scott
http://www.kq8rp.com

447. Re: [SkyWires] My Horz Loop is Noisy?

Yahoo group: SkyWires
Date: 2004-04-17 16:37:18 UTC
From: Jim Dunstan
Topic: 445 Message: 447

At 01:12 PM 4/17/04 +0000, you wrote:

>I have a Horzontal loop up about 35 feet cut for 75 meters and I am
>feeding it with 450 ohm ladder line. This things play wonderful on
>75 and 40. And seems to do ok on the other bands compared to my
>vertical.
>
>Here is my question and would like to see if anyone else has this
>issue? I am on 15 meters right now and with my skywire loop I have
>a S8 noise level. With my Gap Titan Vertical I have a S1 noise
>level. Tuning across the band I come across a station who is
>peaking 10 Over on the Skywire and S8 on the Gap.
>
>I see this on 60 meters, 15 and 10 meters just a very hig noise
>level. Not real sure if it is picking up a horz polorized manmade
>noise or what?
>
>Any ideas?
>
>Scott

Hi Scott:

I don't have a horizontal loop antenna with which to compare notes; I just have some observations. I assume you do not experience the poor S/N performance on 75 and 40 mtrs.; only the bands higher in frequency have the poor S/N ratios. I also infer that the xmit performance at the higher frequencies is as good or better than the vertical.

- is the loop intact? eg. be sure it is not broken somewhere and performing as a long wire antenna of some sort.

- perhaps the bandwidth of the loop is very broad at these higher frequencies. S/N is related to bandwidth.

- if xmit performance of the loop is superior you may consider xmit on the loop and receiving on the vertical. After all a 26 db reduction in the S/N ratio is nothing to sneeze at. eg loop 64db - 48db = 16db S/N vs vertical 48db - 6db = 42db S/N.

Jim Dunstan
Thunder Bay, ON

448. Re: loops and grounding

Yahoo group: SkyWires
Date: 2004-04-18 04:49:34 UTC
From: Bryan
Topic: 440 Message: 448

HI Leland,

Indeed thanks for the ideas concerning lightning control.. my home/station sets atop a hill over looking the city by about 100ft so if we get a strike it usually is close by. (with in a block or so of home QTH)

I will definately look at the grounding ideas more.. I currently use a solid #6 copper wire posted on cermaic insulators along the backside of the ham bench. this #6 wire goes outside and is attached to a 6 ft ground rod about 3 feet away from the side of the house and driven deep. I use lightning arresting pl258 connectors and a wire attached to an alligator clip that gets clipped on when the station is not in use.. I figure it just drains off static..
(this has been my dipole policy in the past) the new SKY LOOP is about 490 ft and ranges from 12' to about 45' up in several places... it is strung 1/2 of it through a wooded area. ill be curious how it fairs in storms and from lightning.

I used 450ohm ladder line and and then put a 20 ft r213 pigtail to bring it into the shack. << this being 50ohms or there about.. I did a ohm meter check on the circuit while not attached to the radio.. it was 158ohms before It goes into my MFJ 300watt tuner with artificial ground. the skywire seems to be a quiet listener.. im hearing things i never heard on the dipole..
with the tuner I get a breeze of a match. im curious how it will talk.
anyone with suggestions or ideas.. keep them coming.. the sky loop concept is very new to me..
by the way for the information of all.. I used stainless steel wired coated with vinyl its about 2-3mm thick with coating.. found it last summer on Ebay... I implimented the bungee cord Idea on the stress points. and I think it will do well.

73's Bryan Kc8hps Thanks for listening!

we are expecting rain this eve in s.w. michigan so maybe tommarrow I will have more data.--- In SkyWires@yahoogroups.com, "nc9k" <jasminemeese@h...> wrote:
> Hello Keith and Bryan,
>
> I've learned over the years that the best lightning protection for a
> home system is a complete disconnect of the station equipment from
> the antenna system with concurrent grounding of the balanced antenna

> transmission line feeds outside the building. I use a very large
mil-
> surplus dpdt RF knife switch located just above a copper ground
rod
> system. I also use a pair of 100k ohm static bleed resistors
outside
> the building from each balanced feedline to ground. Your RF feed
> through the station wall should be of a non-flammable material
like
> ceramic or glass tubing, etc.. You should also use high capacity
AC
> power surge arrestor (with built-in telephone line surge arrestor
if
> you have an online station computer) in your station tied directly
to
> your station ground.
>
> One of the things to remember is to discourage secondary lightning
> groundpaths leading through power cords, modems, transformer
windings
> etc. inside the building. It is best to apply the concept
of "star
> grounding" which means one common extremely low resistance - low
> inductance grounding point outside the building that all station
> equipment ties to directly through individual heavy busses (if
> possible). Then if a direct strike does originate at your station
> (lightning travels from the ground upward) all your equipment
remains
> at the same electrical potential relative to each other and the AC
> feed and overvoltage conditions do not occur. Any high amperage
> lightning currents flow outside of and away from the building thus
> reducing the chance of fire. I used the above techniques (minus
> throwing the knife switch) while operating a double extended Zepp
on
> 75M during electrical storms as a net control station. While
> operating I would experience the occasional lightning induced
static
> flash across the plates of the balanced capacitor in my homemade
> antenna tuner. After net signoff I would throw the knife switch
and
> not worry. I never lost any equipment. I am currently using this
> technique with my Skywire loop.
>
> From my commercial broadcast days the lightning control solution
for
> tall insulated base AM towers (which were always experiencing
direct
> lightning strikes) was to use 2 inch diameter copper balls spaced
1/4
> to 1/2 inch from each other (depending on peak RF voltage present)

at
> the base of each tower on heavy arms as a lightning sparkgap. Then
> the 1/4 inch tubing feeding station RF into each tower base would
be
> formed into a 3 turn loop with a 12 inch diameter, with about 2
inch
> spacing between each turn. I would do the same with the coax
feeding
> repeaters and studio-transmitter links on these towers. I never
lost
> any equipment using these techniques.
>
> I hope my experiences give you some ideas.
>
> Leland - NC9K

449. RE: [SkyWires] Re: loops and grounding

Yahoo group: SkyWires
Date: 2004-04-18 12:34:43 UTC
From: David Shrum
Topic: 440 Message: 449

Bryan and the group,
When I check my resistance at the connecter where I screw it into my MFJ 300 watt tuner, I only get about 2 ohm (with a digital volt ohm meter), I was wondering if your result had any thing to do with the ladder line. I have my RG-8 coax soldered directly to the 12 gauge wire. I am using about 530 feet of wire; I don't know if the loop should give me a good SWR, less than 2 to 1 match WITHOUT using my tuner, but my set up does not. On 160 and 75 it is a son of a gun to tune a good match, I can do it but it is very fussy and on those 2 bands I can only move about 20 KHz or so before thinking I want to re-tune, now maybe I don't need to retune that often but a 2 to 1 match is not acceptable to me. When I get to 40 and up (except for 10) I can get just about the whole band without needing to readjust my tuner; My SWR meter stays in line all the time since my tuner does not have a SWR meter in it.

Those of you that have had a loop for several years maybe could let me know if my results are about average, the wire is house gauge #12, so it has the plastic coating on it, but the wire is strung in the trees against the trunk of the tree on the corners, the configuration of the loop is sort of a delta in its shape. I do like the way it works once I have it tuned, as others have said it is a quite loop.

Dave N8PU

-----Original Message-----
From: Bryan [mailto:kc8hps_2003@...]
Sent: Sunday, April 18, 2004 12:50 AM
To: SkyWires@yahoogroups.com
Subject: [SkyWires] Re: loops and grounding

(Edited)

I used 450ohm ladder line and and then put a 20 ft r213 pigtail to bring it into the shack. << this being 50ohms or there about.. I did a ohm meter check on the circuit while not attached to the radio... it was 158ohms before It goes into my MFJ 300watt tuner with artificial ground. The skywire seems to be a quiet listener... im hearing things I never heard on the dipole...with the tuner I get a breeze of a match.

450. Re: loops and grounding

Yahoo group: SkyWires
Date: 2004-04-18 23:01:03 UTC
From: Bryan
Topic: 440 Message: 450

Hello David and the Group,

I dont know but I would assume its the ladderline that give me the 158ohms.. I do know it tunes real decent all over the place and the kicker is I have LOW NOISE and great ability to hear.. I have been listening to the weather net on 80meters for area 9 wisconsin. those guys are booming in like nobodys business.
im talking nearly full scale.

I think the combo of ladderline and the RG8 213 give me the ohm reading.. just as a side note I use a digital ohm meter as well.. boy I like that thing

73s Kc8hps Bryan

--- In SkyWires@yahoogroups.com, "David Shrum" <aq392@t...> wrote:
> Bryan and the group,
> When I check my resistance at the connecter where I screw it into my MFJ
> 300 watt tuner, I only get about 2 ohm (with a digital volt ohm meter),
> I was wondering if your result had any thing to do with the ladder line.
> I have my RG-8 coax soldered directly to the 12 gauge wire. I am using
> about 530 feet of wire; I don't know if the loop should give me a good
> SWR, less than 2 to 1 match WITHOUT using my tuner, but my set up does
> not. On 160 and 75 it is a son of a gun to tune a good match, I can do
> it but it is very fussy and on those 2 bands I can only move about 20
> KHz or so before thinking I want to re-tune, now maybe I don't need to
> retune that often but a 2 to 1 match is not acceptable to me. When I get
> to 40 and up (except for 10) I can get just about the whole band without
> needing to readjust my tuner; My SWR meter stays in line all the time
> since my tuner does not have a SWR meter in it.
>
> Those of you that have had a loop for several years maybe could let me
> know if my results are about average, the wire is house gauge #12,

so it
> has the plastic coating on it, but the wire is strung in the trees
> against the trunk of the tree on the corners, the configuration of
the
> loop is sort of a delta in its shape. I do like the way it works
once I
> have it tuned, as others have said it is a quite loop.
>
> Dave N8PU
>
>
> -----Original Message-----
> From: Bryan [mailto:kc8hps_2003@y...]
> Sent: Sunday, April 18, 2004 12:50 AM
> To: SkyWires@yahoogroups.com
> Subject: [SkyWires] Re: loops and grounding
>
> (Edited)
>
> I used 450ohm ladder line and and then put a 20 ft r213 pigtail to
bring
> it into the shack. << this being 50ohms or there about.. I did a
ohm
> meter check on the circuit while not attached to the radio... it
was
> 158ohms before It goes into my MFJ 300watt tuner with artificial
ground.
> The skywire seems to be a quiet listener... im hearing things I
never
> heard on the dipole...with the tuner I get a breeze of a match.

451. Re: loops and grounding

Yahoo group: SkyWires
Date: 2004-04-18 23:37:29 UTC
From: dr_ace1
Topic: 440 Message: 451

> I used 450ohm ladder line and and then put a 20 ft r213 pigtail to
> bring it into the shack. << this being 50ohms or there about.. I
did
> a ohm meter check on the circuit while not attached to the radio..
> it was 158ohms before It goes into my MFJ 300watt tuner with
> artificial ground. the skywire seems to be a quiet listener.. im
> hearing things i never heard on the dipole..
> with the tuner I get a breeze of a match. im curious how it will
> talk.
> anyone with suggestions or ideas.. keep them coming.. the sky loop
> concept is very new to me..
> by the way for the information of all.. I used stainless steel wire
> coated with vinyl its about 2-3mm thick with coating.. found it
last
> summer on Ebay... I implimented the bungee cord Idea on the stress
> points. and I think it will do well.
>
> 73's Bryan Kc8hps Thanks for listening!
>
Hi Bryan,
I suspect your ohm meter is reading 158 ohms because you are using
stainless steel wire instead of copper wire.
73, Ace - WH2T

452. Re: loops and grounding

Yahoo group: SkyWires
Date: 2004-04-20 04:24:32 UTC
From: Bryan
Topic: 440 Message: 452

wh2t and the Group,

Yes I think your likely right about the stainless steel.. I never stopped to think the resistance could be that much higher using that vs. copper wire. I know one thing I think it will be stronger than the copper was, and I just hope its as good of a talker.

73's Bryan Kc8hps

--- In SkyWires@yahoogroups.com, "dr_ace1" <wh2t@b...> wrote:
>
>
> > I used 450ohm ladder line and and then put a 20 ft r213 pigtail to
> > bring it into the shack. << this being 50ohms or there about.. I
> did
> > a ohm meter check on the circuit while not attached to the radio..
> > it was 158ohms before It goes into my MFJ 300watt tuner with
> > artificial ground. the skywire seems to be a quiet listener.. im
> > hearing things i never heard on the dipole..
> > with the tuner I get a breeze of a match. im curious how it will
> > talk.
> > anyone with suggestions or ideas.. keep them coming.. the sky loop
> > concept is very new to me..
> > by the way for the information of all.. I used stainless steel wire
> > coated with vinyl its about 2-3mm thick with coating.. found it
> last
> > summer on Ebay... I implimented the bungee cord Idea on the stress
> > points. and I think it will do well.
> >
> > 73's Bryan Kc8hps Thanks for listening!
> >
> Hi Bryan,
> I suspect your ohm meter is reading 158 ohms because you are using
> stainless steel wire instead of copper wire.
> 73, Ace - WH2T

453. Re: loops and grounding

Yahoo group: SkyWires
Date: 2004-04-21 05:12:59 UTC
From: nc9k
Topic: 440 Message: 453

Hello Bryan,

I preume you hit ledge rock with your ground rod being only 6 ft. down. If so, you need to have at least 3 ground rods spaced 5 to 10 ft. apart and connected together with # 4 or larger copper wire to get an effective ground for lightning control.

My 135 ft. 40M loop is contructed of # 12 housewire, and has a measured dc resistance of 0.2 ohms. My 75 ft. of commercial 450 ohm hard drawn # 18 copper wire ladderline has a measured dc resistance of 2 ohms. The entire antenna free-floats through electric fence corner insulators up on 36 inch UV resistant bungee cords.

Your coaxial pigtail has minor dc resistance, as does your ladderline. Your stainless steel small gauge antenna wire is contributing close to 155 ohms of dc resistance, and likely much higher RF resistance because of skin effect losses.

12 soft drawn copper wire has a dc resistance of about 1.6 ohms per 1000 ft. If your antenna were constructed of such wire it would have a dc resistance in the loop of about 0.8 ohms. The ARRL charts indicate soft drawn copper wire has a conductivity of 100, hard drawn copper wire 87, and steel wire between 3 to 15. Loop antennas 1 wavelength or longer have sizeable current loops. You are giving up a great deal of transmitter power because your small conductor stainless steel wire antenna is akin to nichrome wire in conductivity, especially in light of very high RF skin losses associated with thin steel wire. Maybe you could use your stainless wire to "fish" through # 12 copper wire as its replacement to reduce your antenna losses.

Concerning your coaxial "pigtail", one of the nice things design-wise about a loop antenna (being mainly magnetic) is that in their balanced form they do not respond much to common-mode electric fields from things such as noisy powerlines. My loop system is entirely balanced, the loop feeding 450 ohm ladderline into my inductively coupled balanced input antenna tuner. The availability of trees for my loop unfortunately places one section of my loop within 75 ft. of a somewhat noisy 13.6 KV powerline. With my balanced system I do not hear any noise from this powerline on my FT 101B. I do not use a NB or ANL either. My receiver S meter comes up about 1/2 S unit with 20M sky noise "hiss" when I connect the loop. This "hiss" level varies with band conditions, going up somewhat when the band is really open, and almost completely disappears when the band is weak.

I tried an experiment with grounding one side and then the other of the ladderline input to my tuner. When I grounded the ladderline conductor feeding the side of the loop furthest away from the powerline I suddenly had powerline interference and it was very annoying. I then moved the ground clip to the other ladderline conductor and the interference was about half as bad. Retuning the tuner under these alternate grounding conditions did not make the interference go away. The interference again was completely gone when I stopped grounding either conductor.

What I conclude from this simple, yet telling experiment is stations using coax connected to their loops, or ladderline that eventually feeds coax going into a station, are losing the common-mode electric field interference rejection benefit that a loop antenna is capable of offering. The importance of this would vary from station to station.

73 Leland NC9K

--- In SkyWires@yahoogroups.com, "Bryan" <kc8hps_2003@y...> wrote:
> HI Leland,
>
> Indeed thanks for the ideas concerning lightning control.. my
> home/station sets atop a hill over looking the city by about 100ft
> so if we get a strike it usually is close by. (with in a block or
> so of home QTH)
>
> I will definately look at the grounding ideas more.. I currently
use
> a solid #6 copper wire posted on cermaic insulators along the
> backside of the ham bench. this #6 wire goes outside and is
attached
> to a 6 ft ground rod about 3 feet away from the side of the house
> and driven deep. I use lightning arresting pl258 connectors and a
> wire attached to an alligator clip that gets clipped on when the
> station is not in use.. I figure it just drains off static..
> (this has been my dipole policy in the past) the new SKY LOOP is
> about 490 ft and ranges from 12' to about 45' up in several
> places... it is strung 1/2 of it through a wooded area. ill be
> curious how it fairs in storms and from lightning.
>
> I used 450ohm ladder line and and then put a 20 ft r213 pigtail to
> bring it into the shack. << this being 50ohms or there about.. I
did
> a ohm meter check on the circuit while not attached to the radio..
> it was 158ohms before It goes into my MFJ 300watt tuner with
> artificial ground. the skywire seems to be a quiet listener.. im
> hearing things i never heard on the dipole..
> with the tuner I get a breeze of a match. im curious how it will
> talk.
> anyone with suggestions or ideas.. keep them coming.. the sky loop
> concept is very new to me..

> by the way for the information of all.. I used stainless steel
wired
> coated with vinyl its about 2-3mm thick with coating.. found it
last
> summer on Ebay... I implimented the bungee cord Idea on the stress
> points. and I think it will do well.
>
> 73's Bryan Kc8hps Thanks for listening!
>
> we are expecting rain this eve in s.w. michigan so maybe tommarrow
I
> will have more data.---

454. Re: [SkyWires] Re: loops and grounding

Yahoo group: SkyWires
Date: 2004-04-21 19:23:52 UTC
From: Jim Dunstan
Topic: 440 Message: 454

At 05:12 AM 4/21/04 +0000, you wrote:

>Concerning your coaxial "pigtail", one of the nice things design-wise
>about a loop antenna (being mainly magnetic) is that in their
>balanced form they do not respond much to common-mode electric fields
>from things such as noisy powerlines. My loop system is entirely
>balanced, the loop feeding 450 ohm ladderline into my inductively
>coupled balanced input antenna tuner. The availability of trees for
>my loop unfortunately places one section of my loop within 75 ft. of
>a somewhat noisy 13.6 KV powerline. With my balanced system I do not
>hear any noise from this powerline on my FT 101B. I do not use a NB
>or ANL either. My receiver S meter comes up about 1/2 S unit with
>20M sky noise "hiss" when I connect the loop. This "hiss" level
>varies with band conditions, going up somewhat when the band is
>really open, and almost completely disappears when the band is weak.
>
>I tried an experiment with grounding one side and then the other of
>the ladderline input to my tuner. When I grounded the ladderline
>conductor feeding the side of the loop furthest away from the
>powerline I suddenly had powerline interference and it was very
>annoying. I then moved the ground clip to the other ladderline
>conductor and the interference was about half as bad. Retuning the
>tuner under these alternate grounding conditions did not make the
>interference go away. The interference again was completely gone
>when I stopped grounding either conductor.
>
>What I conclude from this simple, yet telling experiment is stations
>using coax connected to their loops, or ladderline that eventually
>feeds coax going into a station, are losing the common-mode electric
>field interference rejection benefit that a loop antenna is capable
>of offering. The importance of this would vary from station to
>station.
>
>73 Leland NC9

Hi Leland:

I found your comments very interesting, especially the effect of keeping a 'balanced' antenna such as the loop completely balanced. I do not know if there is a significant difference in performance from the transmitting point of view but I agree there is a significant difference from the receiving point of view. I do not have experience with a large horizontal loop eg full wavelength on 80 M for example, but I have used a full wave vertical loop on 20M, eg a quad and also small, 1/10 wavelength receiving loops.

In the first case, the 20M 1 wavelength loop, (quad) antenna, I have used coax feed to an unbalanced tuner, balanced feed (300 feed line) to an air core balun and then to a unbalanced tuner, the same system with a ferrite balun, and finally a balanced feed (300 ohm) to an inductively coupled balanced tuner. In all cases I was able to achieve satisfactory stable power transmission. However, on reception only the last arrangement (balanced loop, to balanced feed line, to inductively coupled balanced tuner) managed to reduce the local EMI. Every time I introduced coaxial cable I also significantly increased the noise from EMI ! Now that is contrary to what everyone tells you !

My experience with small 1/10 wave length tuned loops is for reception only. I tried a lot of different small antennas for SW broadcast reception in a rather noisy and space limited environment (apartment block balcony), and soon concluded that the loop was the best bet. I started out with tuned loops made from coaxial cable and soon found tuning limitations due to the inherent capacity of the coaxial feed line. This limitation dictated that the antenna tuner needed to be close to the loop. I then experimented with using a simple wire loop fed with 300 ohm line to a balun/antenna tuner. This provided a quantum leap in performance and allowed the tuner/receiver to be located together in a convenient location. However, just by accident I replaced the balun/tuner arrangement with my old inductively coupled balanced antenna tuner and was impressed with the additional noise reduction and improved loop null.

My conclusion from this experience is similar to yours:

- noise reduction of a balanced antenna is due primarily to the fact it is balanced and has less to due with orientation.
- feeding the antenna has 2 major factors ..... impedance match for transmission, and maintenance of balance for reception.
- coax feed is not a 'no brainer'!
- the ideal situation is a balanced, low loss, feedline fed directly to an inductively coupled balanced antenna tuner (commercial units are rare).
- if you use an unbalanced antenna tuner the kind of device used to convert 'balanced' to 'unbalnced' eg "balun" is important from the reception perspective. For reception purposes I find RF transformers wound on ferrite or powdered iron cores with complete isolation from ground on the antenna side works just fine.

Now how could it be more simple than running 300 ohm feed line directly from the antenna to the tuner, with NO connection to ground! Use an ohm meter to check. I know we are not dealing with DC but RF .... however, it will affect antenna balance. Such an arrangement will handle a standard 100 W transmitter with good electrical and mechanical efficiency.

Jim Dunstan VE3CI, Thunder Bay, ON

455. Another feedline question (new member)

Yahoo group: SkyWires
Date: 2004-04-22 22:50:04 UTC
From: mvbanks08
Topic: 455 Message: 455

I have put up a 600 ft loop of 12 gauge copper suspended from 32' lengths of 2" aluminum irrigation pipe. I am currently feeding it with about 50' of 450 ohm ladder line into a radioworks 4:1 remote current balun. I then have a short run of rg-8 into an old kenwood at-120. The loop tunes fine on all the bands available on this old tuner (80/40/20/15/10) and is about 2.5:1 on 160 straight through. The average height above the ground for my wire is around 30' over shale/rocky terrain. Some points are probably 35' while other may be as low as 25'. I am questioning the length of the ladder line at 50' and am wondering if it should be longer or ? Also, with the loop being theoritically resonant at 1.67 hz (formula only, to be verified with an analyzer soon) am I shooting myself in the foot ie should I shorten it to 1.8mhz while we have the analyzer on site ?

Great group ! Wish I had found it before putting all the hardware in the air...
73
de
W6SPT
Mark

456. Re: [SkyWires] Another feedline question (new member)

Yahoo group: SkyWires
Date: 2004-04-22 23:41:26 UTC
From: Rick
Topic: 455 Message: 456

Hi Mark,

I found by experimentation with my 80 meter loop that everthing is happier with at least a quarter wave of ladder line before the balun.

The "happy" frequency of my 280 foot loop is 3.540 mhz and I run just over 68 feet of 450 ohm to a DX-Engineering 4:1 current balun and then 50 feet of RG8 to and into the house. I actually run the feed line a longer distance than necesary in order to fit the extra ladder line in.

With shorter lengths of ladder line, it tuned "oddly" at some frequencies. Especially the top end of 75 meters,and sometimes 30 meters.

Now it is a happy camper on all frequencies, 80-10 meters. Loads up pretty well on the lower end of 6 meters too!

I've been playing with this loop for about 2 years now and highly recommend it as a great all around antenna.

73's and good luck!
Rick
W1HEN

--- mvbanks08 <mvbanks@...> wrote:
> I have put up a 600 ft loop of 12 gauge copper
> suspended from 32'
> lengths of 2" aluminum irrigation pipe. I am
> currently feeding it
> with about 50' of 450 ohm ladder line into a
> radioworks 4:1 remote
> current balun. I then have a short run of rg-8 into
> an old kenwood at-
> 120. The loop tunes fine on all the bands available
> on this old tuner
> (80/40/20/15/10) and is about 2.5:1 on 160 straight
> through. The
> average height above the ground for my wire is
> around 30' over
> shale/rocky terrain. Some points are probably 35'
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> as low as 25'. I am questioning the length of the
> ladder line at 50'

> and am wondering if it should be longer or ? Also,
> with the loop
> being theoritically resonant at 1.67 hz (formula
> only, to be verified
> with an analyzer soon) am I shooting myself in the
> foot ie should I
> shorten it to 1.8mhz while we have the analyzer on
> site ?
>
> Great group ! Wish I had found it before putting all
> the hardware in
> the air...
> 73
> de
> W6SPT
> Mark
>
>

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457. RE: [SkyWires] Another feed line question

Yahoo group: SkyWires
Date: 2004-04-23 00:09:34 UTC
From: David Shrum
Topic: 455 Message: 457

I have a question to any one in the group that uses only coax to attach to their loop, does your loop (mine is about 530 feet long and about 15 to 20 feet above ground looped around trees at the corners making a delta shape, sort of) tune on ANY frequency without needing the tuner to get your SWR below 2 to 1? Mine is the toughest to tune on 160 and 75 Meter, my set up doesn't seem to have a "happy" frequency any where, just wondering and thanks. It still makes a good and quite DX antenna.

Dave N8PU

-----Original Message-----
From: Rick [mailto:w1hen@...]
Sent: Thursday, April 22, 2004 7:41 PM
To: SkyWires@yahoogroups.com
Subject: Re: [SkyWires] Another feedline question (new member)

Hi Mark,

I found by experimentation with my 80 meter loop that everthing is happier with at least a quarter wave of ladder line before the balun.

The "happy" frequency of my 280 foot loop is 3.540 mhz and I run just over 68 feet of 450 ohm to a DX-Engineering 4:1 current balun and then 50 feet of RG8 to and into the house. I actually run the feed line a longer distance than necesary in order to fit the extra ladder line in.

With shorter lengths of ladder line, it tuned "oddly" at some frequencies. Especially the top end of 75 meters,and sometimes 30 meters.

Now it is a happy camper on all frequencies, 80-10 meters. Loads up pretty well on the lower end of 6 meters too!

I've been playing with this loop for about 2 years now and highly recommend it as a great all around antenna.

73's and good luck!
Rick
W1HEN

458. RE: [SkyWires] Another feed line question

Yahoo group: SkyWires
Date: 2004-04-23 01:11:24 UTC
From: Rick
Topic: 455 Message: 458

Thats a tough match Dave. I tried using just RG8 for
mine for a little while (about 100 feet of it) and
there were several frequencies that my auto tuner
would NOT tune, and my big old SA-2060A tuner even had
a hard time with some of them.
I finally made a quarter wave matching section of 75
ohm coax and that helped quite a bit.
My happy frequency was the "resonant" frequency of
3.540, and the best swr was there, at 1.5:1. I never
got around to checking the swr of the harmonics but it
tuned easier on the harmonics.

-Rick W1HEN

--- David Shrum <aq392@...> wrote:
> I have a question to any one in the group that uses
> only coax to attach
> to their loop, does your loop (mine is about 530
> feet long and about 15
> to 20 feet above ground looped around trees at the
> corners making a
> delta shape, sort of) tune on ANY frequency without
> needing the tuner to
> get your SWR below 2 to 1? Mine is the toughest to
> tune on 160 and 75
> Meter, my set up doesn't seem to have a "happy"
> frequency any where,
> just wondering and thanks. It still makes a good and
> quite DX antenna.
>
> Dave N8PU
>
>
> -----Original Message-----
> From: Rick [mailto:w1hen@...]
> Sent: Thursday, April 22, 2004 7:41 PM
> To: SkyWires@yahoogroups.com
> Subject: Re: [SkyWires] Another feedline question
> (new member)
>
> Hi Mark,
>
> I found by experimentation with my 80 meter loop
> that
> everthing is happier with at least a quarter wave of

> ladder line before the balun.
>
> The "happy" frequency of my 280 foot loop is 3.540
> mhz
> and I run just over 68 feet of 450 ohm to a DX-
> Engineering 4:1 current balun and then 50 feet of
> RG8
> to and into the house. I actually run the feed line
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> longer distance than necesary in order to fit the
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> meters,and sometimes 30 meters.
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> Now it is a happy camper on all frequencies, 80-10
> meters. Loads up pretty well on the lower end of 6
> meters too!
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> I've been playing with this loop for about 2 years
> now
> and highly recommend it as a great all around
> antenna.
>
> 73's and good luck!
> Rick
> W1HEN
>
>
>

_____
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459. RE: [SkyWires] Another feed line question

Yahoo group: SkyWires
Date: 2004-04-23 02:07:23 UTC
From: Scott Erwin
Topic: 455 Message: 459

Here is the trick, add a little coax or take a little coax away. This will change the SWR for any given frequency at the end of the coax feed line. The loop is not a 50 ohm match on any band unless you make the 1/4 wave times velocity factor 75 ohm coaxal matching transformer for the band it's made for. This transformer will give a good match to amy length of 50 ohm coax close the it's cut frequency. After that you have high and low SWR peaks and dips along the coax line. If you have a length of 1/2 wave times the velocity factor of the coax used the SWR will be exactly the same at each end, and something else in the middle if it's not connected to an exact 50 ohm match. So the trick is to add a few feet to the end untill you have a close match at the end of the coax for the bands you operate on. Putting in that few feet will change the SWR readings on all the other bands. If you use 450 ohm ladder line even a foot or two will make a big diffrence. One trick with ladder like was to form a loop in the ladder line a few feet long with a relay connecting or disconnecting the added feed line length. This would allow changing the feed point impedance at the transmitter end of the line. The same could be done with coax. Just remember, your not changing the antenna impedance, just the SWR at the point where the antenna tuner or transmitter is connected to it.

--- David Shrum <aq392@...> wrote:

> I have a question to any one in the group that uses
> only coax to attach
> to their loop, does your loop (mine is about 530
> feet long and about 15
> to 20 feet above ground looped around trees at the
> corners making a
> delta shape, sort of) tune on ANY frequency without
> needing the tuner to
> get your SWR below 2 to 1? Mine is the toughest to
> tune on 160 and 75
> Meter, my set up doesn't seem to have a "happy"
> frequency any where,
> just wondering and thanks. It still makes a good and
> quite DX antenna.
>
> Dave N8PU
>

>
> -----Original Message-----
> From: Rick [mailto:w1hen@...]
> Sent: Thursday, April 22, 2004 7:41 PM
> To: SkyWires@yahoogroups.com
> Subject: Re: [SkyWires] Another feedline question
> (new member)
>
> Hi Mark,
>
> I found by experimentation with my 80 meter loop
> that
> everthing is happier with at least a quarter wave of
> ladder line before the balun.
>
> The "happy" frequency of my 280 foot loop is 3.540
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> meters,and sometimes 30 meters.
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> meters. Loads up pretty well on the lower end of 6
> meters too!
>
> I've been playing with this loop for about 2 years
> now
> and highly recommend it as a great all around
> antenna.
>
> 73's and good luck!
> Rick
> W1HEN
>
>
>

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460. Re: [SkyWires] Another feed line question

Yahoo group: SkyWires
Date: 2004-04-23 05:07:03 UTC
From: Dr.Ace Ratliff
Topic: 455 Message: 460

The impedance of a Full Wave Loop antenna is theoretically in the vicinity of 100 ohms. That is why I use a 75 ohm "Q section" to provide a perfect match to the 50 ohm coax. My 260 ft Horizontal Loop antenna is flat 1:1 VSWR around 3.875 Mhz and rises to about 2:1 SWR at 3.75 and 4 Mhz . So I cover the entire 75 meter phone band without using a tuner.

Here is How I Do It.

Connect the shield of a "Short Piece" of 75 ohm coax to one end of the loop antenna , Connect the center of the 75 ohm coax to the other end of the loop antenna. The length of the 75 ohm coax is most important. It will be used as a Q section.
To determine the length to use, Use this formula "Length in feet = 246 x VF / Freq in Mhz" VF = the Velocity Factor of the coax. So multiply 246 by the Velocity Factor of the coax , Then divide by the frequency .

If you use RG59 or RG11 with a Velocity Factor of 0.66 , For the 75 meter band the Piece of 75 ohm coax should be about 42 feet long , It doesn't need to be exact . RG59 and RG11 coax usually have a Velocity Factor of 0.66 , Foam dielectric coax such as RG6 might have a Velocity Factor of 0.81 or more.

Put a PL259 coax connector on the unused end of the 75 ohm coax, Screw a PL258 double female coax connector onto this PL259 coax connector. Then connect 50 ohm coax to the other side of the PL258 double female coax connector, Use any length 50 ohm coax needed to reach your Transceiver.

I use the built in tuner on my FT-920 or a MFJ-989C when using a linear amplifier to cover all bands from 6 thru 75 meters with this setup.

73, Ace - WH2T

----- Original Message -----
From: David Shrum
To: SkyWires@yahoogroups.com
Sent: Thursday, April 22, 2004 7:09 PM
Subject: RE: [SkyWires] Another feed line question

I have a question to any one in the group that uses only coax to attach
to their loop, does your loop (mine is about 530 feet long and about 15
to 20 feet above ground looped around trees at the corners making a
delta shape, sort of) tune on ANY frequency without needing the tuner to
get your SWR below 2 to 1? Mine is the toughest to tune on 160 and 75
Meter, my set up doesn't seem to have a "happy" frequency any where,
just wondering and thanks. It still makes a good and quite DX antenna.

Dave N8PU

Outgoing mail is certified Virus Free by Dr.Ace .

Checked by AVG anti-virus system (http://www.grisoft.com).
Version: 6.0.665 / Virus Database: 428 - Release Date: 4/22/2004

461. Re: loops and grounding

Yahoo group: SkyWires
Date: 2004-04-23 06:07:51 UTC
From: nc9k
Topic: 440 Message: 461

Hello Jim,

I've been experimenting with HF radio and antennas since the early 1970s. One thing I've learned is if you cannot hear a station, you cannot expect to communicate with it either (except by relying on relays from other stations). With this basic truism in mind, it is always best to go for an antenna that gives you excellent reception, a low angle of radiation, good efficiency, and a good transmitter match.

Concerning receiving antennas, for most HF reception we are looking for fractions of a microvolt receive signal, and anything that can reduce local electric field noise problems is a big advantage.

Balanced antennas feeding balanced lines and inductive coupling networks will always have an advantage in the reduction of local E field noise compared to any system using an unbalanced connection at the antenna. And a loop antenna, being much smaller because it is a single turn coil vs. a linear run, will always have less variation in the E field interference across its dimension vs. what is to be found from one end to the other on a dipole antenna. Basically, the E field consistently rises and falls in potential across the entire loop. This is a common mode effect that can be prevented from being coupled to your receiver input by using ladder line and an inductively coupled matching network. This simple principle is used in telephone systems to reduce crosstalk and 60 Hz hum.

Using plastic coated antenna wire in conjuction with 100k ohm resistors from each side of the balanced ladder line antenna feed to ground reduces precipitation static.

There are a few commercial HF loop antennas, with one being manufactured in England being very impressive in performance for 20 - 15 - 10M limited space installations. The old American made Isotron is another one.

I do not see any theoretical difference in loop transmitting ability with balanced vs. unbalanced line (coax), as long as the unbalanced line impedance is close to that of the loop. If it is not, then unbalanced line dialectic losses become considerable with high VSWR ratios. This is not as much of a problem with air dialectic lines such as ladder line.

I used my same home made inductively coupled antenna matcher in the early 1970s with a 75M doubled extended Zepp (.625 wave on each antenna half), homemade 600 ohm ladder line, a Johnson Desk KW and a Heathkit transceiver as Badger 205 in WI Civil Air Patrol. I could

consistantly "hear" our 5 W backpack land rescue team com sets across the state on missions and they could "hear" me. Because of my "ears" I eventually was nominated state net control. My secret was reducing local electric noise reception with my balanced antenna system and inductive coupled tuner.

I had a chance today to visit a local ham buddy and listen to his 20M reception of the 14.300 Mhz Maritime Mobile net off of his five element 20 - 15 - 10 M beam up at 45 ft. I did this right after listening to the same net on my own station. He had both a new Ten-Tec Jupiter and a new Icom 746 PRO. We switched back and forth between the two radios. His antenna VSWR was less than 1.2:1. His antenna was aimed toward the mobile stations. His local 13.6 KV powerline was about 250 ft. away. His "ears" were weaker (background powerline "sizzle" masking weak mobile stations) than my $15.00 homemade 40M loop 75 ft. from a 13.6 KV powerline feeding a boat anchor FT101B that has been stored in a box and put through multiple moves over the past 15 years without re-alignment. His noise blankers and variable bandwidth filters did not bring the weak stations out of the noise. This confirms that for reception a station is only as good as its antenna system design.

73 Leland NC9K

You wrote:

Hi Leland:

I found your comments very interesting, especially the effect of keeping a 'balanced' antenna such as the loop completely balanced. I do not know if there is a significant difference in performance from the transmitting point of view but I agree there is a significant difference from the receiving point of view. I do not have experience with a large horizontal loop eg full wavelength on 80 M for example, but I have used a full wave vertical loop on 20M, eg a quad and also small, 1/10 wavelength receiving loops.

In the first case, the 20M 1 wavelength loop, (quad) antenna, I have used coax feed to an unbalanced tuner, balanced feed (300 feed line) to an air core balun and then to a unbalanced tuner, the same system with a ferrite balun, and finally a balanced feed (300 ohm) to an inductively coupled balanced tuner. In all cases I was able to achieve satisfactory stable power transmission. However, on reception only the last arrangement (balanced loop, to balanced feed line, to inductively coupled balanced tuner) managed to reduce the local EMI. Every time I introduced coaxial cable I also significantly increased the noise from EMI ! Now that is contrary to what everyone tells you !

My experience with small 1/10 wave length tuned loops is for reception only. I tried a lot of different small antennas for SW broadcast reception in a rather noisy and space limited environment

(apartment block balcony), and soon concluded that the loop was the best bet. I started out with tuned loops made from coaxial cable and soon found tuning limitations due to the inherent capacity of the coaxial feed line. This limitation dictated that the antenna tuner needed to be close to the loop. I then experimented with using a simple wire loop fed with 300 ohm line to a balun/antenna tuner. This provided a quantum leap in performance and allowed the tuner/receiver to be located together in a convenient location. However, just by accident I replaced the balun/tuner arrangement with my old inductively coupled balanced antenna tuner and was impressed with the additional noise reduction and improved loop null.

My conclusion from this experience is similar to yours:

- noise reduction of a balanced antenna is due primarily to the fact it is balanced and has less to due with orientation.

- feeding the antenna has 2 major factors ..... impedance match for transmission, and maintenance of balance for reception.

- coax feed is not a 'no brainer'!

- the ideal situation is a balanced, low loss, feedline fed directly to an inductively coupled balanced antenna tuner (commercial units are rare).

- if you use an unbalanced antenna tuner the kind of device used to convert 'balanced' to 'unbalnced' eg "balun" is important from the reception perspective. For reception purposes I find RF transformers wound on ferrite or powdered iron cores with complete isolation from ground on the antenna side works just fine.

Now how could it be more simple than running 300 ohm feed line directly from the antenna to the tuner, with NO connection to ground! Use an ohm meter to check. I know we are not dealing with DC but RF .... however, it will affect antenna balance. Such an arrangement will handle a standard 100 W transmitter with good electrical and mechanical efficiency.

Jim Dunstan VE3CI, Thunder Bay, ON

462. White Squirrel CB Radio Club

Yahoo group: SkyWires
Date: 2004-04-23 14:38:52 UTC
From: Robert Nicholas
Topic: 383 Message: 462

This is a place for CB'er's to post messages to other CB'er's;
locally or internationally and for The buying and selling of
all types of radio equipment! Join up and spread the news !!!
All CBers Are Invited To Join The White Squirrel Citizen Band
Radio Club. Located In Olney ILLINOIS.
They Call Me The Nasville Rebel,
http://groups.yahoo.com/group/White_Squirrel62450/

463. Re: [SkyWires] Re: loops and grounding

Yahoo group: SkyWires
Date: 2004-04-23 17:09:38 UTC
From: Jim Dunstan
Topic: 440 Message: 463

At 06:07 AM 4/23/04 +0000, you wrote:

I've been experimenting with HF radio and antennas since the early
>1970s. One thing I've learned is if you cannot hear a station, you
>cannot expect to communicate with it either (except by relying on
>relays from other stations). With this basic truism in mind, it is
>always best to go for an antenna that gives you excellent reception,
>a low angle of radiation, good efficiency, and a good transmitter
>match.

Hi Leland:

Yes, I agree .... years ago I used to be a real DX hound; I ran a 100 w AM transmitter and a HQ-129 receiver. The best antenna system I ever used (on 20M) was a cubical quad (home brew using bamboo) which was only up 30' on TV mast pipes. I fed it with 300 TV twin lead to an inductive antenna tuner. My technique was to listen at odd hours for very weak DX stations and was usually successful contacting them as I had no competition. I almost always avoided pileups during prime time hi. The key to the technique is good reception and a basic knowledge of propagation.

>Concerning receiving antennas, for most HF reception we are looking
>for fractions of a microvolt receive signal, and anything that can
>reduce local electric field noise problems is a big advantage.
>
>Balanced antennas feeding balanced lines and inductive coupling
>networks will always have an advantage in the reduction of local E
>field noise compared to any system using an unbalanced connection at
>the antenna. And a loop antenna, being much smaller because it is a
>single turn coil vs. a linear run, will always have less variation in
>the E field interference across its dimension vs. what is to be found
>from one end to the other on a dipole antenna.

I have found that dipole type antennae are most often not balanced. If you place an RF amp meter in each side of the open wire feed line you often will see that the currents are not equal. The first time I saw this I thought that the meters were not accurate. I swapped them and saw the same imbalance! I can only assume that the electromagnetic environment was not the same each side of the dipole.

> Basically, the E
>field consistently rises and falls in potential across the entire
>loop. This is a common mode effect that can be prevented from being
>coupled to your receiver input by using ladder line and an
>inductively coupled matching network. This simple principle is used
>in telephone systems to reduce crosstalk and 60 Hz hum.

It's interesting you mention telephone line. I have used outside balanced telephone wire for feed line in some situations. It is extremely strong and impervious to weather. I don't know what the impedance is, but it must be in the 100 ohm bracket.

>Using plastic coated antenna wire in conjuction with 100k ohm
>resistors from each side of the balanced ladder line antenna feed to
>ground reduces precipitation static.

I worked at a station out on the prairies years ago and we had balanced feed line coming into the radio room from an outside antenna .... I believe it was a rombic antenna ... . Where the feedline came through the wall on feed thru insulators we had spark gaps to ground just outside. I remember that when the wind came up the dust in the air would cause regular snapping across the spark gaps. The noise made reception all but impossible. The solution was what you suggest, small high value resistors by passing the spark gaps!

>There are a few commercial HF loop antennas, with one being
>manufactured in England being very impressive in performance for 20 -
>15 - 10M limited space installations. The old American made Isotron
>is another one.
>
>I do not see any theoretical difference in loop transmitting ability
>with balanced vs. unbalanced line (coax), as long as the unbalanced
>line impedance is close to that of the loop. If it is not, then
>unbalanced line dialectic losses become considerable with high VSWR
>ratios. This is not as much of a problem with air dialectic lines
>such as ladder line.
>
>I used my same home made inductively coupled antenna matcher in the
>early 1970s with a 75M doubled extended Zepp (.625 wave on each
>antenna half), homemade 600 ohm ladder line, a Johnson Desk KW and a
>Heathkit transceiver as Badger 205 in WI Civil Air Patrol. I could
>consistantly "hear" our 5 W backpack land rescue team com sets across
>the state on missions and they could "hear" me. Because of my "ears"
>I eventually was nominated state net control. My secret was reducing
>local electric noise reception with my balanced antenna system and
>inductive coupled tuner.

I have used a double extended Zepp (75M) for years out at my farm. I don't have commercial power there but operate from a battery with a solar panel. I use an old TenTec qrp Argonaut which puts out about 2.5 watts on SSB. I rag chew with stations and manage to keep up with everyone running 100 watts. In addition I often relay for others who can't "hear" the other hi! Of course being out at the farm I not only have the advantage of a great antenna .... but no local noise hi. The only noise I ever hear out there is some electrical storm off in the distance!

>I had a chance today to visit a local ham buddy and listen to his 20M
>reception of the 14.300 Mhz Maritime Mobile net off of his five
>element 20 - 15 - 10 M beam up at 45 ft. I did this right after

>listening to the same net on my own station. He had both a new Ten-
>Tec Jupiter and a new Icom 746 PRO. We switched back and forth
>between the two radios. His antenna VSWR was less than 1.2:1. His
>antenna was aimed toward the mobile stations. His local 13.6 KV
>powerline was about 250 ft. away. His "ears" were weaker (background
>powerline "sizzle" masking weak mobile stations) than my $15.00
>homemade 40M loop 75 ft. from a 13.6 KV powerline feeding a boat
>anchor FT101B that has been stored in a box and put through multiple
>moves over the past 15 years without re-alignment. His noise blankers
>and variable bandwidth filters did not bring the weak stations out of
>the noise. This confirms that for reception a station is only as
>good as its antenna system design.
>r
>73 Leland NC9K

It was very nice hearing from you and your refreshing point of view .... what I usually see vis-a-vis antenna performance is SWR ..... If you are only going to communicate with those S9 stations then I guess that is okay. However if you are going to hear and work the weak stations you have to look beyond the SWR performance and you don't necessarily have to have an expensive beam antenna.

Jim Dunstan, VE3CI, Thunder Bay, ON

464. White Squirrel CB Radio Club

Yahoo group: SkyWires
Date: 2004-04-24 14:07:57 UTC
From: Robert Nicholas
Topic: 383 Message: 464

This is a place for CB'er's to post messages to other CB'er's;
locally or internationally and for The buying and selling of
all types of radio equipment! Join up and spread the news !!!
All CBers Are Invited To Join The White Squirrel Citizen Band
Radio Club. Located In Olney ILLINOIS.
They Call Me The Nasville Rebel,
http://groups.yahoo.com/group/White_Squirrel62450/

465. Re: [SkyWires] White Squirrel CB Radio Club

Yahoo group: SkyWires
Date: 2004-04-24 17:45:48 UTC
From: Dr.Ace Ratliff
Topic: 383 Message: 465

Can't somebody block this guy ?
----- Original Message -----
From: Robert Nicholas
To: SkyWires@yahoogroups.com
Sent: Saturday, April 24, 2004 9:07 AM
Subject: [SkyWires] White Squirrel CB Radio Club

This is a place for CB'er's to post messages to other CB'er's;
locally or internationally and for The buying and selling of
all types of radio equipment! Join up and spread the news !!!
All CBers Are Invited To Join The White Squirrel Citizen Band
Radio Club. Located In Olney ILLINOIS.
They Call Me The Nasville Rebel,
http://groups.yahoo.com/group/White_Squirrel62450/

Yahoo! Groups Links

a.. To visit your group on the web, go to:
http://groups.yahoo.com/group/SkyWires/

b.. To unsubscribe from this group, send an email to:
SkyWires-unsubscribe@yahoogroups.com

c.. Your use of Yahoo! Groups is subject to the Yahoo! Terms of Service.

Outgoing mail is certified Virus Free by Dr.Ace .
Checked by AVG anti-virus system (http://www.grisoft.com).
Version: 6.0.667 / Virus Database: 429 - Release Date: 4/23/2004

466. Re: [SkyWires] White Squirrel CB Radio Club

Yahoo group: SkyWires
Date: 2004-04-24 18:46:32 UTC
From: Robert Nicholas
Topic: 383 Message: 466

I can leave the group if thats what you desire.

--- "Dr.Ace Ratliff" <wh2t@...> wrote:
> Can't somebody block this guy ?
> ----- Original Message -----
> From: Robert Nicholas
> To: SkyWires@yahoogroups.com
> Sent: Saturday, April 24, 2004 9:07 AM
> Subject: [SkyWires] White Squirrel CB Radio Club
>
>
> This is a place for CB'er's to post messages to
> other CB'er's;
> locally or internationally and for The buying and
> selling of
> all types of radio equipment! Join up and spread
> the news !!!
> All CBers Are Invited To Join The White Squirrel
> Citizen Band
> Radio Club. Located In Olney ILLINOIS.
> They Call Me The Nasville Rebel,
> http://groups.yahoo.com/group/White_Squirrel62450/
>
>
>
>

> Yahoo! Groups Links
>
> a.. To visit your group on the web, go to:
> http://groups.yahoo.com/group/SkyWires/
>
> b.. To unsubscribe from this group, send an
> email to:
> SkyWires-unsubscribe@yahoogroups.com
>
> c.. Your use of Yahoo! Groups is subject to the
> Yahoo! Terms of Service.
>
>
>
> ---
> Outgoing mail is certified Virus Free by Dr.Ace .
> Checked by AVG anti-virus system
> (http://www.grisoft.com).

> Version: 6.0.667 / Virus Database: 429 - Release
> Date: 4/23/2004

Do you Yahoo!?
Yahoo! Photos: High-quality 4x6 digital prints for 25?
http://photos.yahoo.com/ph/print_splash

467. RE: [SkyWires] White Squirrel CB Radio Club (3rd post)

Yahoo group: SkyWires
Date: 2004-04-24 19:45:03 UTC
From: David Shrum
Topic: 383 Message: 467

Well I will not tell you what to do, but checking the archives, this is the 3rd post to this group with almost the identical message; according to the archive someone with the Yahoo ID of "inu6080" made those posts on the dates of, Wed 2/18/2004, Fri 4/23/2004, Sat Apr 24, 2004. So the only thing I would like to know is why do we need to hear about this group for the third time. If it has something to do with making antennas that is one thing, but I do have my doubts. I personally have nothing CB, but this group IS about making antennas, specifically loop antennas. If you are willing to talk about that general subject, I am more than willing to listen to your ideas, other wise I will add you to my ignore list for this group.

Dave N8PU

-----Original Message-----
From: Robert Nicholas [mailto:inu6080@...]
Sent: Saturday, April 24, 2004 2:47 PM
To: SkyWires@yahoogroups.com
Subject: Re: [SkyWires] White Squirrel CB Radio Club

I can leave the group if thats what you desire.

--- "Dr.Ace Ratliff" <wh2t@...> wrote:
> Can't somebody block this guy ?

> ----- Original Message -----
> From: Robert Nicholas
> To: SkyWires@yahoogroups.com
> Sent: Saturday, April 24, 2004 9:07 AM
> Subject: [SkyWires] White Squirrel CB Radio Club

468. Twin roller inductors vs. coupling transformer

Yahoo group: SkyWires
Date: 2004-04-26 00:57:55 UTC
From: nc9k
Topic: 468 Message: 468

Hello Greg,

Your email inspired me to scan the W6SAI antenna coupler projects from his 1970 edition of the Radio Handbook. He also discusses harmonic reduction techniques. The files are posted in the Skywire Group at: http://groups.yahoo.com/group/SkyWires/files/

I also took a photo of the actual balanced coupler I built in 1974 and still use, now with a 40M loop, as well as a telephoto shot of my 450 ohm ladder line connection to the 40M loop. (Please excuse the look of the coupler, I was 14 at the time and on a tight budget. It handled a full tilt Johnson KW Desk without complaint on net control duty on a daily basis.)

On to the comparison of inductive coupling vs. twin roller inductors: The twin roller inductors would be useful for correcting the impedance of each half of a dipole, or say each feed connection to a loop. This matching could be necessary if there was enough of an impedance difference between the feed points. To be truly effective the roller inductors should be mounted at the antenna feedpoints and adjusted there (in conjuntion with any capacitive matching required) to provide a non-reactive load to the feed ladder line or coax. This is how it is done in military and commercial work. This would not be practical for most of us on a budget too small to afford remote tuning devices.

The second best place (and most practical) to locate the matching network would be in the station near the transceiver. This location then presumes a near symetrical antenna impedance load on the feed system. The antenna coupler then "tunes" the entire feedline and antenna as one unit. There will be a large impedance mismatch between the antenna and feed system at certain frequencies. This is not much of a problem with a balanced feedline, but becomes a potential source of major problems with coaxial feed connected directly to the antenna (voltage breakdown of the dialectic or current overheating of the inner conductor).

The question then becomes roller inductor vs. coupling transformer? If the load your antenna presents to a balanced feedline is uneven, you will get radiation from the feedline during transmit (and also noise pickup on it during receive). You could use the dual roller inductors to try to somewhat reduce the unbalanced condition on the feedline. But it is an expensive approach to a problem that should be addressed in the first place with the antenna itself. A single roller inductor based tuner would be the best approach for feeding an end fed single wire antenna or the center conductor of coax feeding

some type of dipole antenna.

If your antenna is nearly balanced electrically, then the inductive coupling transformer approach allows for lower overall project cost, dc isolation via winding separation, much faster bandchanging - retuning, and an overall comparable power transfer efficiency compared to twin roller inductors. I hope this helps.

73 Leland NC9K

>From: Greg S <oldlongbeard@...>

>To: jasminemeese@...
>Subject: your homebrew tuner....
>Date: Fri, 23 Apr 2004 18:56:00 -0700 (PDT)
>
>Greetings, Leland, form across the big pond! Greg
>here, in western Michigan. I have been reading the
>mail on the yahoo SKYWIRES group, and you have peaked
>my interest in building an homebrew tuner. I have been
>using a 275 +/- foot horizontal loop here for the past
>3-4 years, and I love it! It is currently fed with
>(GADS)RG-58. I have homebrewed some 600(?) Ohm ladder
>line to replace it, but REALLY want to stay with the
>balanced fed all the way thru to the tuner, as opposed
>to the ladder line-to balun-to coax thing. can you
>give me some druthers as to the advantages of an
>inductively coupled tuner VS. one using two roller
>inductors (ALA Rich Measures)? I really would like to
>build one, and have the skills. no problems there. I
>can even make the coils, if need be. (I am a machinist
>at a local factory, and have access to lots of
>equipment.)
>I am active in the NTS system here, and I can almost
>always here every station on the 75M phone nets here
>in the evening. (I often end up relaying for net
>control!) They always here me, too. (500-600W when
>needed doesn't hurt, either, but the amp goes on
>RARELY!) I checked in last week with my SG-2020, and
>no-one even mentioned that I was "weak"! The antenna
>is a winner.
>sorry to run-on.... better let you go.
>
>Greg Schippers, KC8HXO
>Thanks in advance for your help!

469. Re: Twin roller inductors vs. coupling transformer

Yahoo group: SkyWires
Date: 2004-04-27 04:40:48 UTC
From: Bryan
Topic: 468 Message: 469

HI Leland and the Group,

I just went to the FILE section here on Skywires and downloaded the pics of the coupling system you posted.. I would encourage anyone here to do the same..

I think there is much I will learn from reading the articles in full. from what I can see just glancing at them, there is some good stuff here.

I also want to take a minute to thank all those who have been so helpful in assisting me getting my wire working..
I found that with my MFJ tuner I had to go to each band and find my "OWN SETTINGS" not the ones that come with the book.. I think the instruction manual sort of assumes you have a balanced dipole and some sort of simple antenna, not a "500 ft loop"!!!! LOL
I found some settings to be close the book suggestions.. but many were far from them.
also I notices that I am struggling to get a match on the top of 10 meters and on the top of 75meter bands. anyone else have this issue arising? if so how are you working with it and so on..
IM getting at best a very shallow notch . thin bandwidth coverage "per tune" and at very best about 2:1 swr.. where on the rest of the band I get nice flat matches much of the time.

again thanks to the group.

73s from south west Michigan USA. Kc8hps Bryan

--- In SkyWires@yahoogroups.com, "nc9k" <jasminemeese@h...> wrote:
> Hello Greg,
>
> Your email inspired me to scan the W6SAI antenna coupler projects
> from his 1970 edition of the Radio Handbook. He also discusses
> harmonic reduction techniques. The files are posted in the Skywire
> Group at: http://groups.yahoo.com/group/SkyWires/files/
>
> I also took a photo of the actual balanced coupler I built in 1974
> and still use, now with a 40M loop, as well as a telephoto shot of
my
> 450 ohm ladder line connection to the 40M loop. (Please excuse the
> look of the coupler, I was 14 at the time and on a tight budget. It
> handled a full tilt Johnson KW Desk without complaint on net
control
> duty on a daily basis.)
>

> On to the comparison of inductive coupling vs. twin roller
> inductors: The twin roller inductors would be useful for
correcting
> the impedance of each half of a dipole, or say each feed connection
> to a loop. This matching could be necessary if there was enough of
> an impedance difference between the feed points. To be truly
> effective the roller inductors should be mounted at the antenna
> feedpoints and adjusted there (in conjuntion with any capacitive
> matching required) to provide a non-reactive load to the feed
ladder
> line or coax. This is how it is done in military and commercial
> work. This would not be practical for most of us on a budget too
> small to afford remote tuning devices.
>
> The second best place (and most practical) to locate the matching
> network would be in the station near the transceiver. This
location
> then presumes a near symetrical antenna impedance load on the feed
> system. The antenna coupler then "tunes" the entire feedline and
> antenna as one unit. There will be a large impedance mismatch
> between the antenna and feed system at certain frequencies. This
is
> not much of a problem with a balanced feedline, but becomes a
> potential source of major problems with coaxial feed connected
> directly to the antenna (voltage breakdown of the dialectic or
> current overheating of the inner conductor).
>
> The question then becomes roller inductor vs. coupling transformer?

> If the load your antenna presents to a balanced feedline is uneven,
> you will get radiation from the feedline during transmit (and also
> noise pickup on it during receive). You could use the dual roller
> inductors to try to somewhat reduce the unbalanced condition on the
> feedline. But it is an expensive approach to a problem that should
> be addressed in the first place with the antenna itself. A single
> roller inductor based tuner would be the best approach for feeding
an
> end fed single wire antenna or the center conductor of coax feeding
> some type of dipole antenna.
>
> If your antenna is nearly balanced electrically, then the inductive
> coupling transformer approach allows for lower overall project
cost,
> dc isolation via winding separation, much faster bandchanging -
> retuning, and an overall comparable power transfer efficiency
> compared to twin roller inductors. I hope this helps.
>
> 73 Leland NC9K
>
> >From: Greg S <oldlongbeard@y...>

>
> >To: jasminemeese@h...
> >Subject: your homebrew tuner....
> >Date: Fri, 23 Apr 2004 18:56:00 -0700 (PDT)
> >
> >Greetings, Leland, form across the big pond! Greg
> >here, in western Michigan. I have been reading the
> >mail on the yahoo SKYWIRES group, and you have peaked
> >my interest in building an homebrew tuner. I have been
> >using a 275 +/- foot horizontal loop here for the past
> >3-4 years, and I love it! It is currently fed with
> >(GADS)RG-58. I have homebrewed some 600(?) Ohm ladder
> >line to replace it, but REALLY want to stay with the
> >balanced fed all the way thru to the tuner, as opposed
> >to the ladder line-to balun-to coax thing. can you
> >give me some druthers as to the advantages of an
> >inductively coupled tuner VS. one using two roller
> >inductors (ALA Rich Measures)? I really would like to
> >build one, and have the skills. no problems there. I
> >can even make the coils, if need be. (I am a machinist
> >at a local factory, and have access to lots of
> >equipment.)
> >I am active in the NTS system here, and I can almost
> >always here every station on the 75M phone nets here
> >in the evening. (I often end up relaying for net
> >control!) They always here me, too. (500-600W when
> >needed doesn't hurt, either, but the amp goes on
> >RARELY!) I checked in last week with my SG-2020, and
> >no-one even mentioned that I was "weak"! The antenna
> >is a winner.
> >sorry to run-on.... better let you go.
> >
> >Greg Schippers, KC8HXO
> >Thanks in advance for your help!

470. Re: [SkyWires] Twin roller inductors vs. coupling transformer

Yahoo group: SkyWires
Date: 2004-04-27 20:38:36 UTC
From: Jim Dunstan
Topic: 468 Message: 470

At 12:57 AM 4/26/2004 +0000, you wrote:
>Hello Greg,
>
>Your email inspired me to scan the W6SAI antenna coupler projects
>from his 1970 edition of the Radio Handbook. He also discusses
>harmonic reduction techniques. The files are posted in the Skywire
>Group
>at:
><http://groups.yahoo.com/group/SkyWires/files/>http://groups.yahoo.com/group/SkyWires/files/
>
>
>I also took a photo of the actual balanced coupler I built in 1974
>and still use, now with a 40M loop, as well as a telephoto shot of my
>450 ohm ladder line connection to the 40M loop. (Please excuse the
>look of the coupler, I was 14 at the time and on a tight budget. It
>handled a full tilt Johnson KW Desk without complaint on net control
>duty on a daily basis.)
>
>On to the comparison of inductive coupling vs. twin roller
>inductors: The twin roller inductors would be useful for correcting
>the impedance of each half of a dipole, or say each feed connection
>to a loop. This matching could be necessary if there was enough of
>an impedance difference between the feed points. To be truly
>effective the roller inductors should be mounted at the antenna
>feedpoints and adjusted there (in conjuntion with any capacitive
>matching required) to provide a non-reactive load to the feed ladder
>line or coax. This is how it is done in military and commercial
>work. This would not be practical for most of us on a budget too
>small to afford remote tuning devices.
>
>The second best place (and most practical) to locate the matching
>network would be in the station near the transceiver. This location
>then presumes a near symetrical antenna impedance load on the feed
>system. The antenna coupler then "tunes" the entire feedline and
>antenna as one unit. There will be a large impedance mismatch
>between the antenna and feed system at certain frequencies. This is
>not much of a problem with a balanced feedline, but becomes a
>potential source of major problems with coaxial feed connected
>directly to the antenna (voltage breakdown of the dialectic or
>current overheating of the inner conductor).
>
>The question then becomes roller inductor vs. coupling transformer?
>If the load your antenna presents to a balanced feedline is uneven,
>you will get radiation from the feedline during transmit (and also

>noise pickup on it during receive). You could use the dual roller
>inductors to try to somewhat reduce the unbalanced condition on the
>feedline. But it is an expensive approach to a problem that should
>be addressed in the first place with the antenna itself. A single
>roller inductor based tuner would be the best approach for feeding an
>end fed single wire antenna or the center conductor of coax feeding
>some type of dipole antenna.
>
>If your antenna is nearly balanced electrically, then the inductive
>coupling transformer approach allows for lower overall project cost,
>dc isolation via winding separation, much faster bandchanging -
>retuning, and an overall comparable power transfer efficiency
>compared to twin roller inductors. I hope this helps.
>
>73 Leland NC9K

Hi Leland:

Very interesting comments again. My present balanced antenna tuner uses a coupled RF transformer. EG. I have a parallel resonant circuit made of old airdux inductor and a 250 pfd transmitting capacitor. One end grounded and the other end fed to my transmitter via another large 500 pfd transmitting capacitor. I have a larger diameter airdux coil that slips over the first inductor and it feeds the balanced line. I believe this is the Z-match circuit.

It works very well. however, I recall telling you that balanced antennae such as the doublet most often don't have equal antenna currents in the balanced feed line. I speculated that the reason was probably because the two sides of the doublet probably exist in different electromagnetic environments ... eg one side closer to metal objects or over different ground characteristics etc.

You mentioned using a double roller system for a balanced feed line system. What comes to my mind when I think of a double roller/inductor tuner is to place one in each side of the balanced feed line, place a capacitor between them to form a double L filter. The trick is feeding the other end of the inductors with the transmitter. Here is where the balun comes in ..... a much more appropriate place eg low impedance point. I saw the advantage of the double inductor system as simply allowing the use of the balun at the low impedance point (using them in hi impedance hi power situations is asking for trouble). I have tried this with matching airdux coils and taps and soon gave up since the mechanics got a little complicated. I thought of using roller inductors with some mechanical means of coupling them so they could be rotated in unison.

I went over to the Z-match circuit. However, I never thought of using them to balance the feedline as well as match the system. I wonder if you have had the opportunity to try and balance the feedline system to a doublet type system.

I have used a loop antenna in the past and fed that antenna with a balanced line and Zmatch tuner. I never had the opportunity to check the feedline balance. I would assume that loop type antennae would be naturally balanced unless it was extremely large and would not be subject to effects of the surroundings as is the doublet.

Jim Dunstan
Thunder Bay, ON

471. Re: Twin roller inductors vs. coupling transformer

Yahoo group: SkyWires
Date: 2004-04-28 02:53:36 UTC
From: nc9k
Topic: 468 Message: 471

Hello Jim,

You have a nice Z-match setup there. Usually the primary of a transformer type coupling circuit is series resonated. What type of variable capacitor in your Z-match "tunes" the output of the transformer coupled to the balanced line feeding the transmission line?

The only reason a dipole type antenna would present uneven loads to the balanced feedline is if there is some type of electrical discontinuity making one half of the dipole different from the other half. In this type of situation a person could use a "tuning" capacitor on the secondary of the coupling transformer that is not "center tapped" to ground. This would "float" the entire coupler secondary - antenna system and allow for a better chance of impedance correction of the entire system without introducing an unbalance due to a ground current being injected into the equation. You could use a vaccuum variable capacitor (best choice, but expensive and slow to tune), or, if you are creative, you could "float" the entire ganged dual tuning capacitor attached to the coupler transformer's secondary from ground. You would have to be careful to use high voltage RF isolation techniques for both the frame of the variable capacitor and the shaft connection to its tuning knob! I've seen this done sucessfully using bakelite.

Years ago I placed an RF ampmeter into each half of the coupler feeding the 600 ohm ladderline connected to my 75M double extended Zepp. The meter read the same current on each leg with carrier applied. Therefore, things appeared to be balanced at that point.

One has to watch out for imbalances introduced by toroidial or coaxial transformers used in antenna balun systems. Some circuit configurations such as using the toroid to introduce inductance effecting a "transformer" effect for the transmission line (twisted wire or coax) wound around it can result in uneven impedances and currents - phasing in the "output" of the balun. I conducted extensive network analyzer testing of this effect while a senior engineer at Northrop Corp. What you observed as an "uneven" condition in your dipole could have actually been an electrical impedance - phasing problem being caused by the balun feeding it.

A loop antenna can present uneven loads at its feedpoint due to discontinuities on the loop that are closer to one end of it than the other. Again, the best way to deal with this type of problem would be a coupler with the "floating" secondary capacitor system I described above.

Thanks for the interesting questions.

73 Leland NC9K

--- In SkyWires@yahoogroups.com, Jim Dunstan <jimdunstan@r...> wrote:
Hi Leland:

Very interesting comments again. My present balanced antenna tuner uses a coupled RF transformer. EG. I have a parallel resonant circuit made of old airdux inductor and a 250 pfd transmitting capacitor. One end grounded and the other end fed to my transmitter via another large 500 pfd transmitting capacitor. I have a larger diameter airdux coil that slips over the first inductor and it feeds the balanced line. I believe this is the Z-match circuit.

It works very well. however, I recall telling you that balanced antennae such as the doublet most often don't have equal antenna currents in the balanced feed line. I speculated that the reason was probably because the two sides of the doublet probably exist in different electromagnetic environments ... eg one side closer to metal objects or over different ground characteristics etc.

You mentioned using a double roller system for a balanced feed line system. What comes to my mind when I think of a double roller/inductor tuner is to place one in each side of the balanced feed line, place a capacitor between them to form a double L filter. The trick is feeding the other end of the inductors with the transmitter. Here is where the balun comes in ..... a much more appropriate place eg low impedance point. I saw the advantage of the double inductor system as simply allowing the use of the balun at the low impedance point (using them in hi impedance hi power situations is asking for trouble). I have tried this with matching airdux coils and taps and soon gave up since the mechanics got a little complicated. I thought of using roller inductors with some mechanical means of coupling them so they could be rotated in unison.

I went over to the Z-match circuit. However, I never thought of using them to balance the feedline as well as match the system. I wonder if you have had the opportunity to try and balance the feedline system to a doublet type system.

I have used a loop antenna in the past and fed that antenna with a balanced line and Zmatch tuner. I never had the opportunity to check the feedline balance. I would assume that loop type antennae would be naturally balanced unless it was extremely large and would not be subject to effects of the surroundings as is the doublet.

Jim Dunstan
Thunder Bay, ON

472. Emergencey ---Attempt to Locate

Yahoo group: SkyWires
Date: 2004-04-29 16:47:27 UTC
From: Robert Nicholas
Topic: 472 Message: 472

This Is The Owner Of White Squirrel CB Radio Club.

All Members Get On Your CB Radio.
Please Holler For Trouble.(DUSTY WILSON)
On Channel 19. He Drives For
Cedar Valley Transportation
He Has A Emergencey At Home
Tell Him To Call Bob NicholaS
618 838 3022

473. AH-4 loop

Yahoo group: SkyWires
Date: 2004-04-30 12:26:44 UTC
From: Tom
Topic: 473 Message: 473
Attachments: 1 described; binary payloads are missing from this source WARC

Hi skywire fans,

Here is the schematic of my horizontal loop using an Icom AH-4 automatic antenna tuner:

Is anyone out there using an AH-4 in their horizontal loop? I am getting good results on 6M and general
shortwave listening. Yes, the tuner(coupler) is outside on the mast up about 30 feet and the loop is
directly connected to the tuner. SWR is always less than 1.5 to 1 after the TUNE button is pressed
on the radio. The only limitation is that the power must be less than 100 watts(Icom tuner). With a larger
loop the AH-4 can tune down to 160M. My next modification is to make the loop square and larger.

Good listening to all.

Tom
KE6YNH, 73

474. Re: [SkyWires] AH-4 loop

Yahoo group: SkyWires
Date: 2004-04-30 15:16:43 UTC
From: Roger Rockwell
Topic: 473 Message: 474

Great info TOM

This is exactly what I've been looking for. I have Icom 706 and the AH4. I was not sure if using it (AH4) with loop you would connect both ends of the loop to the tuner or the ground of tuner to ground. I was going to ask on the list but now I know. As soon as it stops raining here I'll give it a try. Thanks again.

Roger
K1PNS

_____
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475. Re: [SkyWires] AH-4 loop

Yahoo group: SkyWires
Date: 2004-04-30 18:24:16 UTC
From: Drunk
Topic: 473 Message: 475

Any L and C values?

Tom <tgleeman@...> wrote:Hi skywire fans,

Here is the schematic of my horizontal loop using an Icom AH-4 automatic antenna tuner:

Is anyone out there using an AH-4 in their horizontal loop? I am getting good results on 6M and general
shortwave listening. Yes, the tuner(coupler) is outside on the mast up about 30 feet and the loop is
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on the radio. The only limitation is that the power must be less than 100 watts(Icom tuner). With a larger
loop the AH-4 can tune down to 160M. My next modification is to make the loop square and larger.

Good listening to all.

Tom
KE6YNH, 73

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To visit your group on the web, go to:
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SkyWires-unsubscribe@yahoogroups.com

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476. Re: [SkyWires] AH-4 loop.....Correction, 1 more switched capacitor in the schematic

Yahoo group: SkyWires
Date: 2004-05-01 11:26:33 UTC
From: Tom
Topic: 476 Message: 476
Attachments: 1 described; binary payloads are missing from this source WARC

Hi Drunk and the Skywire group,
>Drunk asked, in reference to the AH-4 tuner:

>Any L and C values?

My schematic is a simplified one, just showing the tuner and RF paths.
The inductors are in the right form, but the capacitors in the AH-4 had to be built up from parallel caps for more capacitance and in some cases capacitors were built up from series networks to withstand the high voltages at 100 watts.

Here is what I gathered from the schematic and parts list:

L1=50uH L1=.0012uF
L2=60uH L2=500pF
L3=70uH L3=300pF
L4=80uH L4=150pF
L5=90uH L5=75pF
L6=100uH L6=38pF
L7=110uH L7=19pF
L8=120uH L8=9pF
L9=130uH L9=14pF
L10=100pF

The inductor values may be incorrect as they were not given in the schematic, but referred to in the parts list as L1=6110002750, L2=6110002760, L3=6110002770, etc. I would highly recommend buying a copy of the AH-4 Service Manual for a full schematic and theory. My part numbering is a little different than Icom's for simplicity sake.

It may be possible to increase the size of the L's and C's for more power handling. The circuit can provide 1,040,000 LC combinations to achieve the lowest SWR, according to Icom.

Have fun with loops.

Tom,
KE6YNH, 73

477. Re: [SkyWires] AH-4 loop.....Correction, 1 more switched capacitor in the schematic.....Whooops I goofed again I meant C1-C10

Yahoo group: SkyWires
Date: 2004-05-02 05:43:02 UTC
From: Tom
Topic: 477 Message: 477
Attachments: 1 described; binary payloads are missing from this source WARC

Hi Drunk.

I goofed again, I meant C1-C10 values for the capacitors.

Tom
----- Original Message -----
From: Tom
To: SkyWires@yahoogroups.com
Sent: Saturday, May 01, 2004 4:26 AM
Subject: Re: [SkyWires] AH-4 loop.....Correction, 1 more switched capacitor in the schematic

Hi Drunk and the Skywire group,
>Drunk asked, in reference to the AH-4 tuner:

>Any L and C values?

My schematic is a simplified one, just showing the tuner and RF paths.
The inductors are in the right form, but the capacitors in the AH-4 had to be built up from parallel caps for more capacitance and in some cases capacitors were built up from series networks to withstand the high voltages at 100 watts.

Here is what I gathered from the schematic and parts list:

L1=50uH C1=.0012uF
L2=60uH C2=500pF
L3=70uH C3=300pF
L4=80uH C4=150pF
L5=90uH C5=75pF
L6=100uH C6=38pF
L7=110uH C7=19pF
L8=120uH C8=9pF
L9=130uH C9=14pF
C10=100pF

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It may be possible to increase the size of the L's and C's for more power handling. The circuit can provide 1,040,000 LC combinations to achieve the lowest SWR, according to Icom.

Have fun with loops.

Tom,
KE6YNH, 73

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478. Re: An AM antenna

Yahoo group: SkyWires
Date: 2004-05-02 19:55:20 UTC
From: Bill Krause
Topic: 478 Message: 478

I know almost nothing about AM radio reception and while I am not fixed on becoming a BCB DXer I would like to get enhanced AM radio reception if possible. Using a variety of shortwave antennas ranging from dipoles with traps to long wires I get very little AM reception, day or night, on any of my various Hallicrafters boat anchors or modern SWL rigs. I have concluded that probably some, to maybe most of the issue, is related to my geographic situation with nearby mountains, but I would like to see if I can mitigate that and get some kind of reception. Would my best bet be to try and work with one of my old Hallicrafters or should I concentrate on one of the modern SWL rigs. How about antenna?? I have won one of Radio Shack's discontinued loop antennas and it should be her this week. Any other thoughts on an antenna. I don't want to spend a fortune on this, the budget is tentatively $100-$200. Shortwave reception is certainly impacted but I am still hearing plenty of stations, now I would like to hear a few AM ones.

Bill Krause

479. Re: An AM antenna

Yahoo group: SkyWires
Date: 2004-05-03 01:46:09 UTC
From: Bill Krause
Topic: 478 Message: 479

Good points. I am refering to the traditional American (Medium?) Wave band of 540 KCs to 1,600 KCs (Now expanded just a bit??) My longest wire right now is around 85-90 feet. Conceivably could get it to 150'. Getting it above the terrain N, S, and E of me is not remotely feasable. The Pacific Ocean in the form of Puget Sound is 50 miles West of me. At this point my unscientific belief, based on very casual observation would seem to sugest that the better boat anchors, in my case a Hallicrafters SX-71 and a Hallicrafters SX-42 are pretty competive when it comes to sensativeity on the shortwave bands with some the moderate to higher end SWL orientated receivers.

Bill Krause

Edward B Richards wrote:

>Hi Bill;
>
>I am not sure what you mean by AM. AM is a mode not a frequency band. Do
>you mean the MF broadcast band or AM for short wave AM stations? For the
>MF, AM broadcast band a long wire as high and as long as possible is best
>unless you are trying to get a particular station. I find the boat
>anchors do as well as the newer rice boxes. Even better when it comes to
>quality. Use a good ground and you should find a multitude of stations at
>night. I get Sacramento, Reno and Denver good here in southern CA after
>dark on a R/S $20 portable, no external antenna.
>
>73, Ed Richards K6UUZ
>
>
>On Sun, 02 May 2004 12:55:20 -0700 Bill Krause <bkrause@...> writes:
>
>
>>I know almost nothing about AM radio reception and while I am not
>>fixed
>>on becoming a BCB DXer I would like to get enhanced AM radio
>>reception
>>if possible. Using a variety of shortwave antennas ranging from
>>dipoles
>>with traps to long wires I get very little AM reception, day or
>>night,
>>on any of my various Hallicrafters boat anchors or modern SWL rigs.
>>I
>>have concluded that probably some, to maybe most of the issue, is
>>related to my geographic situation with nearby mountains, but I
>>would
>>like to see if I can mitigate that and get some kind of reception.

>>Would
>>my best bet be to try and work with one of my old Hallicrafters or
>>should I concentrate on one of the modern SWL rigs. How about
>>antenna??
>>I have won one of Radio Shack's discontinued loop antennas and it
>>should
>>be her this week. Any other thoughts on an antenna. I don't want to
>>spend a fortune on this, the budget is tentatively $100-$200.
>>Shortwave
>>reception is certainly impacted but I am still hearing plenty of
>>stations, now I would like to hear a few AM ones.
>>
>> Bill Krause
>>
>>
>>
>
>

480. Re: An AM antenna

Yahoo group: SkyWires
Date: 2004-05-03 02:25:48 UTC
From: Bill Krause
Topic: 478 Message: 480

Dan,
Thanks, I thought I saw an ad in either Monitoring Times or
Pop Com last night for an AM antenna from Crane. Crane looks better than
Universal in this area.

Bill

DAN COTSIRILOS wrote:

>Bill I forgot Crane makes some nice loop ant too!
>
>http://www.ccrane.com/am-antenna.asp
>
>
>
>----- Original Message -----
>From: "Bill Krause" <bkrause@...>
>To: <SkyWires@yahoogroups.com>
>Cc: <swl@...>; "hallicrafters-mailman.qth.net"
><hallicrafters@...>; <ShortWaveRadio@yahoogroups.com>;
><SCADS@yahoogroups.com>; <ASWLC@yahoogroups.com>
>Sent: Sunday, May 02, 2004 12:55 PM
>Subject: [Hallicrafters] Re: An AM antenna
>
>
>
>
>>I know almost nothing about AM radio reception and while I am not fixed
>>on becoming a BCB DXer I would like to get enhanced AM radio reception
>>if possible. Using a variety of shortwave antennas ranging from dipoles
>>with traps to long wires I get very little AM reception, day or night,
>>on any of my various Hallicrafters boat anchors or modern SWL rigs. I
>>have concluded that probably some, to maybe most of the issue, is
>>related to my geographic situation with nearby mountains, but I would
>>like to see if I can mitigate that and get some kind of reception. Would
>>my best bet be to try and work with one of my old Hallicrafters or
>>should I concentrate on one of the modern SWL rigs. How about antenna??
>>I have won one of Radio Shack's discontinued loop antennas and it should
>>be her this week. Any other thoughts on an antenna. I don't want to
>>spend a fortune on this, the budget is tentatively $100-$200. Shortwave
>>reception is certainly impacted but I am still hearing plenty of
>>stations, now I would like to hear a few AM ones.
>>
>> Bill Krause
>>
>>

>>_____
>>List Administrator: Duane Fischer, W8DBF **for assistance**
>>dfischer@...
>>----
>>Hallicrafters Collectors International: http://www.w9wze.org
>>----
>>http://mailman.qth.net/mailman/listinfo/hallicrafters
>>
>>
>
>
>
>

481. Re: [SkyWires] Re: An AM antenna

Yahoo group: SkyWires
Date: 2004-05-03 17:26:59 UTC
From: Jim Dunstan
Topic: 478 Message: 481

At 06:46 PM 5/2/2004 -0700, you wrote:
>Good points. I am refering to the traditional American (Medium?) Wave
>band of 540 KCs to 1,600 KCs (Now expanded just a bit??) My longest wire
>right now is around 85-90 feet. Conceivably could get it to 150'.
>Getting it above the terrain N, S, and E of me is not remotely
>feasable. The Pacific Ocean in the form of Puget Sound is 50 miles West
>of me. At this point my unscientific belief, based on very casual
>observation would seem to sugest that the better boat anchors, in my
>case a Hallicrafters SX-71 and a Hallicrafters SX-42 are pretty
>competive when it comes to sensativeity on the shortwave bands with some
>the moderate to higher end SWL orientated receivers.
>
> Bill Krause
>
>
>
>Edward B Richards wrote:
>
> >Hi Bill;
> >
> >I am not sure what you mean by AM. AM is a mode not a frequency band. Do
> >you mean the MF broadcast band or AM for short wave AM stations? For the
> >MF,

Hi Bill:

Here is how I managed to improve AM reception with an external antenna. By the way .... the colloquial term for MW here in North America is "AM". I have 8 two band receivers in the house including 2 Hi-Fi models that refer to the 540-1600 Khz band as "AM" and the the 88-108 Mhz band as "FM". Even my single band "TRF Long Range", and RCA "Globe Trotter" 1930's vintage receiver refer to 540 - 1500 Khz as the AM band. So go figure.

I have a little cabin out in the woods and like to receive AM stations from Northern Wisconsin and Minnesota during the day (200-400 miles away). I have an 85' doublet fed with open wire line that I use for ham radio. The receiver I use for local broadcast out there is a simple battery operated AM/FM radio from RadioShack. On its own it is not a bad AM receiver as it has a decent size ferrite rod antenna, but no RF amplifier or provision for an external antenna.

My first attempt at improving AM reception was to open the receiver and put a 2 turn link around the far end of the loop stick and bring the ends out through a little hole I drilled in the plastic case. Using a jumper wire with alligator clips I clipped one wire from the receiver to the antenna feedline using it as a long wire. Signals definitely came up a bit. Next

I place some wire on the ground as a kind of ground/counter poise and connected this to the other wire from the receiver link. Signals improved again but with side effects.

At some frequencies it worked perfectly. At other places on the dial I got oscillations, while at others I actually received shortwave broadcasts !!! It seemed to be over loaded to some degree. It was clear to me it needed some kind of an improved front end.

My second attempt at using an external antenna came later as a result of building a small tuned loop 15'x15'. I built the loop with hook-up wire and an old 365 pfd tuning capacitor. I then tuned the loop to a desired station and coupled it to the receiver by just orienting them for best reception. This system was better than my first attempt using the long wire and link to the ferrite rod.

Then, out of curiosity I connected the long wire with a test lead to one side of the loop !!!!! the signals just jumped up to the loudest I have ever heard them. I readjusted the loop/receiver orientation again for best reception. Next I dug out my ground/ground plane wire and connected it to the other side of the tuned loop and the signals jumped up again another quantum leap. With this arrangement it seems the tuned loop in conjunction with the antenna and ground acts like an antenna tuner. The coupling is easily accomplished by orienting the relationship between the receiver and the tuned loop. This arrangement allows me solid reliable reception of many AM stations in the Wisconsin/Minnesota area during the day .... at least a couple of dozen using my old plain Jane RadioShack AM/FM receiver.

If you use a receiver without an internal ferrite rod antenna which has an external antenna connector it will be just a bit more complicated. The method I use is to connect the antenna to such a receiver is to use a coupling loop. So you have a tuned loop antenna, you have the long wire connected to one side and the ground to the other. To couple this to your receiver you need a second untuned coupling loop. The kind of coupling loop I use (for my hi-fi receiver) is 3 turns of hookup wire on a light 8" dia plastic form (looks like one of those embroidery hoops). The loop is connected to about 3' of twisted pair wires with spade lugs on the end. I connect the spade lugs to the antenna input screws on my Hi-Fi receiver. I select the frequency on the receiver, bring the coupling loop close to the tuned loop with the external long wire and ground connected to it, and tune the loop for best reception. The system works like a charm and is much much better than trying to connect the long wire and ground directly to the receiver input.

Jim Dunstan, Thunder Bay, ON

482. Re: An AM antenna

Yahoo group: SkyWires
Date: 2004-05-03 19:43:36 UTC
From: Jim Dunstan
Topic: 478 Message: 482

>Date: Mon, 03 May 2004 13:26:59 -0400
>To: SkyWires@yahoogroups.com
>From: Jim Dunstan <jimdunstan@...>
>Subject: Re: An AM antenna
>
>At 06:46 PM 5/2/2004 -0700, you wrote:
>>Good points. I am refering to the traditional American (Medium?) Wave
>>band of 540 KCs to 1,600 KCs (Now expanded just a bit??) My longest wire
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>> >Hi Bill;
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>battery operated AM/FM radio from RadioShack. On its own it is not a bad
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>
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>out through a little hole I drilled in the plastic case. Using a jumper
>wire with alligator clips I clipped one wire from the receiver to the
>antenna feedline using it as a long wire. Signals definitely came up a
>bit. Next I place some wire on the ground as a kind of ground/counter
>poise and connected this to the other wire from the receiver
>link. Signals improved again but with side effects.
>
>At some frequencies it worked perfectly. At other places on the dial I
>got oscillations, while at others I actually received shortwave broadcasts
>!!! It seemed to be over loaded to some degree. It was clear to me it
>needed some kind of an improved front end.
>
>My second attempt at using an external antenna came later as a result of
>building a small tuned loop 15"x15". I built the loop with hook-up wire
>and an old 365 pfd tuning capacitor. I then tuned the loop to a desired
>station and coupled it to the receiver by just orienting them for best
>reception. This system was better than my first attempt using the long
>wire and link to the ferrite rod.
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>Then, out of curiosity I connected the long wire with a test lead to one
>side of the loop !!!!! the signals just jumped up to the loudest I have
>ever heard them. I readjusted the loop/receiver orientation again for
>best reception. Next I dug out my ground/ground plane wire and connected
>it to the other side of the tuned loop and the signals jumped up again
>another quantum leap. With this arrangement it seems the tuned loop in
>conjunction with the antenna and ground acts like an antenna tuner. The
>coupling is easily accomplished by orienting the relationship between the
>receiver and the tuned loop. This arrangement allows me solid reliable
>reception of many AM stations in the Wisconsin/Minnesota area during the
>day .... at least a couple of dozen using my old plain Jane RadioShack
>AM/FM receiver.
>
>If you use a receiver without an internal ferrite rod antenna which has an
>external antenna connector it will be just a bit more complicated. The
>method I use is to connect the antenna to such a receiver is to use a
>coupling loop. So you have a tuned loop antenna, you have the long wire
>connected to one side and the ground to the other. To couple this to your
>receiver you need a second untuned coupling loop. The kind of coupling
>loop I use (for my hi-fi receiver) is 3 turns of hookup wire on a light 8"
>dia plastic form (looks like one of those embroidery hoops). The loop is
>connected to about 3' of twisted pair wires with spade lugs on the end. I
>connect the spade lugs to the antenna input screws on my Hi-Fi
>receiver. I select the frequency on the receiver, bring the coupling loop
>close to the tuned loop with the external long wire and ground connected
>to it, and tune the loop for best reception. The system works like a
>charm and is much much better than trying to connect the long wire and
>ground directly to the receiver input.

>
>
>
>Jim Dunstan, Thunder Bay, ON

Jim Dunstan
Thunder Bay, ON

483. One Metre AM/MW Loop Antenna [Was: An AM antenna]

Yahoo group: SkyWires
Date: 2004-05-03 23:27:08 UTC
From: R H F
Topic: 478 Message: 483

BK,

Take a Look at the AUSTRALIAN ONE METER SQUARE Loop Antenna
for a AM/MW Loop Antenna that will "Improve" 'weak' AM/MW
Reception in 'poor' AM/MW Signal Locations/Areas.

A larger Loop Antenna has a greater Signal Capture Area
and usually this results in a higher Signal Output.

* The Australian 1 Metre Loop from Hard-Core-DX.Com
- by Werner Funkenhauser
http://www.hard-core-dx.com/nordicdx/antenna/loop/1mloop.html

* Bigger Image of the "Australian 1 Metre Loop"
http://www.hard-core-dx.com/nordicdx/antenna/loop/rnloop1.gif

* The One Meter (3-4Ft) Loop Antennas all perform really
good, but they are big and need a lot of space to position
them and operate them.

READ: Australian One Meter Loop Antenna
-=V=- Select-A-Tenna Loop Antenna
http://groups.yahoo.com/group/loopantennas/message/1615

READ: Back-of-the-Door as a "Super Loop" Antenna
http://groups.yahoo.com/group/loopantennas/message/1314

AM/MW LOOP ANTENNA HELP:
"Loop Antenna Information Forum" eGroup on YAHOO !
LOOPS=> http://groups.yahoo.com/group/loopantennas/

For other AM/MW and Shortwave "SWL" Antenna Questions
AM-SWL=> http://groups.yahoo.com/group/Shortwave-SWL-Antenna/

iane ~ RHF
.
.
= = = In SkyWires@yahoogroups.com,
= = = Bill Krause <bkrause@s...> wrote:
> I know almost nothing about AM radio reception and while I am not
fixed
> on becoming a BCB DXer I would like to get enhanced AM radio
reception
> if possible. Using a variety of shortwave antennas ranging from
dipoles
> with traps to long wires I get very little AM reception, day or
night,

> on any of my various Hallicrafters boat anchors or modern SWL
rigs. I
> have concluded that probably some, to maybe most of the issue, is
> related to my geographic situation with nearby mountains, but I
would
> like to see if I can mitigate that and get some kind of reception.
Would
> my best bet be to try and work with one of my old Hallicrafters or
> should I concentrate on one of the modern SWL rigs. How about
antenna??
> I have won one of Radio Shack's discontinued loop antennas and it
should
> be her this week. Any other thoughts on an antenna. I don't want
to
> spend a fortune on this, the budget is tentatively $100-$200.
Shortwave
> reception is certainly impacted but I am still hearing plenty of
> stations, now I would like to hear a few AM ones.
>
> Bill Krause
>
.

484. Re:One Metre AM/MW Loop Antenna [Was: An AM antenna]

Yahoo group: SkyWires
Date: 2004-05-05 06:28:02 UTC
From: Bill Krause
Topic: 478 Message: 484

I am going to take a serious look at that this Summer when I have some
free time.

Bill

R H F wrote:

>BK,
>
>Take a Look at the AUSTRALIAN ONE METER SQUARE Loop Antenna
>for a AM/MW Loop Antenna that will "Improve" 'weak' AM/MW
>Reception in 'poor' AM/MW Signal Locations/Areas.
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>A larger Loop Antenna has a greater Signal Capture Area
>and usually this results in a higher Signal Output.
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>* The Australian 1 Metre Loop from Hard-Core-DX.Com
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>http://www.hard-core-dx.com/nordicdx/antenna/loop/1mloop.html
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>AM/MW LOOP ANTENNA HELP:
>"Loop Antenna Information Forum" eGroup on YAHOO !
>LOOPS=> http://groups.yahoo.com/group/loopantennas/
>
>For other AM/MW and Shortwave "SWL" Antenna Questions
>AM-SWL=> http://groups.yahoo.com/group/Shortwave-SWL-Antenna/
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>iane ~ RHF
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>>should I concentrate on one of the modern SWL rigs. How about
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>antenna??
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>>
>Shortwave
>
>
>>reception is certainly impacted but I am still hearing plenty of
>>stations, now I would like to hear a few AM ones.
>>
>>Bill Krause
>>
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>>
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>
>

485. Re: [SkyWires] Re: An AM antenna

Yahoo group: SkyWires
Date: 2004-05-05 06:29:31 UTC
From: Bill Krause
Topic: 478 Message: 485

It sounds like some sort of loop is the way to go.

Bill

Jim Dunstan wrote:

>>Date: Mon, 03 May 2004 13:26:59 -0400
>>To: SkyWires@yahoogroups.com
>>From: Jim Dunstan <jimdunstan@...>
>>Subject: Re: An AM antenna
>>
>>At 06:46 PM 5/2/2004 -0700, you wrote:
>>
>>
>>>Good points. I am refering to the traditional American (Medium?) Wave
>>>band of 540 KCs to 1,600 KCs (Now expanded just a bit??) My longest wire
>>>right now is around 85-90 feet. Conceivably could get it to 150'.
>>>Getting it above the terrain N, S, and E of me is not remotely
>>>feasable. The Pacific Ocean in the form of Puget Sound is 50 miles West
>>>of me. At this point my unscientific belief, based on very casual
>>>observation would seem to sugest that the better boat anchors, in my
>>>case a Hallicrafters SX-71 and a Hallicrafters SX-42 are pretty
>>>competive when it comes to sensativeity on the shortwave bands with some
>>>the moderate to higher end SWL orientated receivers.
>>>
>>> Bill Krause
>>>
>>>
>>>
>>>Edward B Richards wrote:
>>>
>>>
>>>
>>>>Hi Bill;
>>>>
>>>>I am not sure what you mean by AM. AM is a mode not a frequency band. Do
>>>>you mean the MF broadcast band or AM for short wave AM stations? For the
>>>>MF,
>>>>
>>>>
>>Hi Bill:
>>
>>Here is how I managed to improve AM reception with an external antenna. By
>>the way .... the colloquial term for MW here in North America is "AM". I
>>have 8 two band receivers in the house including 2 Hi-Fi models that
>>refer to the 540-1600 Khz band as "AM" and the the 88-108 Mhz band as

>>"FM". Even my single band "TRF Long Range", and RCA "Globe Trotter"
>>1930's vintage receiver refer to 540 - 1500 Khz as the AM band. So go figure.
>>
>>I have a little cabin out in the woods and like to receive AM stations
>>
>>
>>from Northern Wisconsin and Minnesota during the day (200-400 miles
>
>
>>away). I have an 85' doublet fed with open wire line that I use for ham
>>radio. The receiver I use for local broadcast out there is a simple
>>battery operated AM/FM radio from RadioShack. On its own it is not a bad
>>AM receiver as it has a decent size ferrite rod antenna, but no RF
>>amplifier or provision for an external antenna.
>>
>>My first attempt at improving AM reception was to open the receiver and
>>put a 2 turn link around the far end of the loop stick and bring the ends
>>out through a little hole I drilled in the plastic case. Using a jumper
>>wire with alligator clips I clipped one wire from the receiver to the
>>antenna feedline using it as a long wire. Signals definitely came up a
>>bit. Next I place some wire on the ground as a kind of ground/counter
>>poise and connected this to the other wire from the receiver
>>link. Signals improved again but with side effects.
>>
>>At some frequencies it worked perfectly. At other places on the dial I
>>got oscillations, while at others I actually received shortwave broadcasts
>>!!! It seemed to be over loaded to some degree. It was clear to me it
>>needed some kind of an improved front end.
>>
>>My second attempt at using an external antenna came later as a result of
>>building a small tuned loop 15"x15". I built the loop with hook-up wire
>>and an old 365 pfd tuning capacitor. I then tuned the loop to a desired
>>station and coupled it to the receiver by just orienting them for best
>>reception. This system was better than my first attempt using the long
>>wire and link to the ferrite rod.
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>>Then, out of curiosity I connected the long wire with a test lead to one
>>side of the loop !!!!! the signals just jumped up to the loudest I have
>>ever heard them. I readjusted the loop/receiver orientation again for
>>best reception. Next I dug out my ground/ground plane wire and connected
>>it to the other side of the tuned loop and the signals jumped up again
>>another quantum leap. With this arrangement it seems the tuned loop in
>>conjunction with the antenna and ground acts like an antenna tuner. The
>>coupling is easily accomplished by orienting the relationship between the
>>receiver and the tuned loop. This arrangement allows me solid reliable
>>reception of many AM stations in the Wisconsin/Minnesota area during the
>>day .... at least a couple of dozen using my old plain Jane RadioShack
>>AM/FM receiver.
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>>external antenna connector it will be just a bit more complicated. The
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>>
>>
>>
>>Jim Dunstan, Thunder Bay, ON
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>Jim Dunstan
>Thunder Bay, ON
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>Yahoo! Groups Links
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486. Re: [SkyWires] Digest Number 151

Yahoo group: SkyWires
Date: 2004-05-05 16:20:17 UTC
From: Bryan Burrma
Topic: 486 Message: 486

HI GROUP,

since we are on the subject of "AM" radio.. which
stands for Amplitude Modulation btw.

Here In Kalamazoo Michigan "south west Michigan" we
have an AM station 590KHZ callsign WKZO

you all may want to see if you can here it. it was the
very first PHASED VERTICAL station put on the air in
the USA. 4 towers feed in and out of phase in order
to get a directive pattern for our city at night!

I would be Curious if JIM in Thunder Bay could hear
it..
it comes in real well on my skywire of 500ft, yet
again.. im only 3 miles from the transmitter site. LOL

tell me what you hear..

Bryan Kc8hps
--- SkyWires@yahoogroups.com wrote:
> ------------------------ Yahoo! Groups Sponsor
>
> There are 2 messages in this issue.
>
> Topics in this digest:
>
> 1. Re:One Metre AM/MW Loop Antenna [Was: An AM
> antenna]
> From: Bill Krause <bkrause@...>
> 2. Re: Re: An AM antenna
> From: Bill Krause <bkrause@...>
>
>
>

_____
>

_____
>
> Message: 1
> Date: Tue, 04 May 2004 23:28:02 -0700
> From: Bill Krause <bkrause@...>
> Subject: Re:One Metre AM/MW Loop Antenna [Was: An AM
> antenna]
>

> I am going to take a serious look at that this
> Summer when I have some
> free time.
>
>
> Bill
>
> R H F wrote:
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> >BK,
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> >Take a Look at the AUSTRALIAN ONE METER SQUARE Loop
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> >* The Australian 1 Metre Loop from Hard-Core-DX.Com
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>
>http://www.hard-core-dx.com/nordicdx/antenna/loop/1mloop.html
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> >* Bigger Image of the "Australian 1 Metre Loop"
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> >* The One Meter (3-4Ft) Loop Antennas all perform
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> >
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> >READ: Back-of-the-Door as a "Super Loop" Antenna
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>http://groups.yahoo.com/group/loopantennas/message/1314
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> >AM/MW LOOP ANTENNA HELP:

> >"Loop Antenna Information Forum" eGroup on YAHOO !
> >LOOPS=> http://groups.yahoo.com/group/loopantennas/
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> >Shortwave
> >
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> >>reception is certainly impacted but I am still
> hearing plenty of
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> >>
> >>Bill Krause
> >>
> >>
> >>
> >
> >
> >
>
>
> [This message contained attachments]
>
>
>
>

>

>
> Message: 2
> Date: Tue, 04 May 2004 23:29:31 -0700
> From: Bill Krause <bkrause@...>
> Subject: Re: Re: An AM antenna
>
> It sounds like some sort of loop is the way to go.
>
> Bill
>
=== message truncated ===

Do you Yahoo!?
Win a $20,000 Career Makeover at Yahoo! HotJobs
http://hotjobs.sweepstakes.yahoo.com/careermakeover

487. Trying to match to coax...

Yahoo group: SkyWires
Date: 2004-05-05 17:16:01 UTC
From: jdh7521
Topic: 487 Message: 487

For no good reason other than "because I could", I've restrung my 300 +/- foot random wire antenna into a 100 +/- foot loop (triangle strung horizontally).

Although the antenna is fairly level, it's over sloping ground, from about 10' at the feed-point to a bit over 30 feet at one of the other corners.

So, I have about 100 feet of #14 stranded-insulated copper in a flat-horizontal configuration fed with 75ohm coax. At the feedpoint, I have a 9:1 matching xformer. I have both sides of the antenna connected to both sides of the primary and both sides of the coax connected to both sides of the secondary. The coax goes to a ground block before entering the house.

Now, right now, it appears to be performing fine. Not as much signal as the prior random-wire, but the noise level appears to have been cut noticeably.

I have no way of determining the actual impedance of the antenna, so I'm not sure 9:1 is the best match. Also, the way I've attached the antenna to the xformer removes the direct path to DC Ground.

Is there a rule of thumb for impedance with a loop like this and any ideas on how to take into account the terrain sloping away from the antenna?

Should I connect the primary and secondary to ground off the shield?

I'm asking because I glued the xformer case (it's PVC fittings) and before I start cutting it open, I'd like to have some idea of what (if anything) I might want to try.

Thanks all!

-=JD=-

488. Re: [SkyWires] Trying to match to coax...

Yahoo group: SkyWires
Date: 2004-05-05 19:25:37 UTC
From: Tom
Topic: 487 Message: 488
Attachments: 1 described; binary payloads are missing from this source WARC

Hi JD and the Skywire Fans,

JD asked:

>I have no way of determining the actual impedance of the antenna, so
>I'm not sure 9:1 is the best match. Also, the way I've attached the
>antenna to the xformer removes the direct path to DC Ground.

Have you seen my loop using an Icom AH-4 automatic antenna tuner?
It does a very good job of matching a horizontal wire loop to a coax without any strange transformers or baluns:

The tuner would be happier with 50 ohm coax, but 75 ohm coax would probably be OK.
The AH-4 will work with ANY transceiver with a simple mod circuit, but favors Icom transceivers. On receive it can boost the signal
1 or 2 S units. For receiving only, I would use a manual antenna tuner unless you only listen to one frequency.

On transmit it can match the loop to the coax with an SWR of 1.5 to 1 or less. With my 126 foot loop,
the frequency range is 3 MHz to 50 MHz. With bigger loops it would go as low as the normal broadcast band. Is anyone running an AH-4 or ANY variable antenna tuner??????????????????

Good listening out there.

Tom
KE6YNH, 73

489. Re: [SkyWires] Digest Number 151

Yahoo group: SkyWires
Date: 2004-05-05 19:49:15 UTC
From: Jim Dunstan
Topic: 486 Message: 489

At 09:20 AM 5/5/2004 -0700, you wrote:
>HI GROUP,
>
>since we are on the subject of "AM" radio.. which
>stands for Amplitude Modulation btw.
>
>Here In Kalamazoo Michigan "south west Michigan" we
>have an AM station 590KHZ callsign WKZO
>
>you all may want to see if you can here it. it was the
>very first PHASED VERTICAL station put on the air in
>the USA. 4 towers feed in and out of phase in order
>to get a directive pattern for our city at night!
>
>I would be Curious if JIM in Thunder Bay could hear
>it..
>it comes in real well on my skywire of 500ft, yet
>again.. im only 3 miles from the transmitter site. LOL
>
>tell me what you hear..
>
>Bryan Kc8hps

Hi Bryan:

Interesting about your station on 590 Khz., WKZO. I will have to give it a listen. My "AM" listening post out at the farm is soon coming to an end. I am selling the property this spring .... with mixed feelings. However it provides new challenges. I plan some new wire antennas here in town. I have a fairly good size garden in town and I am planning to put in a double terminated loop antenna for MW. This is the antenna invented by K9AY I believe. From what I have read it is supposed to outperform most long wire antennas. My summer project includes building a small Ham shack out in the garden as well as some new antennas.

Listening for WKZO will be a good test because the only AM station in Thunder Bay happens to be CKPR on 580 Khz !!! It only runs about 5000 watts but It booms in here .... but then it is only about 3 miles away Hi. If I hear WKZO I'll be sure to let you know ... I have a note on my bulletin board !!

73

Jim Dunstan
Thunder Bay, ON

490. Tom and the Gang

Yahoo group: SkyWires
Date: 2004-05-06 14:52:40 UTC
From: Bryan
Topic: 490 Message: 490

HI Tom,

you had asked if others of us use tuners... and YES I use an MFJ 934 with artificial ground capabilities.. this comes in real handy when you want to run a long wire thrown up in a tree while camping and have no room to pack extended ground rods and other gear.

I used this tuner with my FT 840 yeasu on 20 meters last summer from Mackinaw Michigan near the Mackinaw Bridge and talked to cape hatteras Islands near the carolinas on ten watts. and "NO GROUND".

tuners do help out alot.. I know the www.mjfenterprises.com site has download of their manuals for tuners.. maybe they would shed some light on what your seeking.

to the guy with the 9:1 balun.. yes I think 50 ohm coax might help a bit..

ive heard tell while talking to guys about copper loops that the loop resistance if "COPPER" not stainless steel is about 2 ohms.. copper loops should produce a very low resistance factor. conversely my stainless steel 500ft loop witn thin vinyl coating has a resistance of about 158 ohms. hope that helps.

Bryan Kc8hps south west michigan usa.

491. Re: Trying to match to coax...

Yahoo group: SkyWires
Date: 2004-05-06 17:01:15 UTC
From: jdh7521
Topic: 487 Message: 491

--- In SkyWires@yahoogroups.com, "Tom" <tgleeman@a...> wrote:
> Hi JD and the Skywire Fans,
>
>> JD asked:
>>
>> I have no way of determining the actual impedance of the antenna,
>> so I'm not sure 9:1 is the best match. Also, the way I've
>> attached the antenna to the xformer removes the direct path to DC
>> Ground.
>
> Have you seen my loop using an Icom AH-4 automatic antenna tuner?
> It does a very good job of matching a horizontal wire loop to a
> coax without any strange transformers or baluns:
>

Hi Tom,

The transformer is a simple toroid design and is quite
easy to construct -plus- I probably have less than $10 in it. Also,
I'm only using the antenna for SWL so I don't have to take TX into
consideration.

-=JD=-

492. Re: Trying to match to coax...

Yahoo group: SkyWires
Date: 2004-05-07 00:02:34 UTC
From: kl7r
Topic: 487 Message: 492

--- In SkyWires@yahoogroups.com, "jdh7521" <jd770@p...> wrote:
> For no good reason other than "because I could", I've restrung my
> 300 +/- foot random wire antenna into a 100 +/- foot loop (triangle
> strung horizontally).
>

So it should be resonant at roughly 3.3,6.6,13.2,26.4 mhz
signals should peak around those frequencies.
signal

> as the prior random-wire, but the noise level appears to have been
> cut noticeably.
>
> I have no way of determining the actual impedance of the antenna,
so
> I'm not sure 9:1 is the best match. Also, the way I've attached the
> antenna to the xformer removes the direct path to DC Ground.
>

A loop at it its fundamental will have an impedance of something
like 100 ohms rising thousands of ohms impedance. Your 9:1 and
75 ohm coax will give you an impedance around 700 ohms so the
SWR would be something like 700/100 = 7:1 at a low impedance
point and something like 5000/700 = 7.14 :1 at a high impedance
point. Using the 9:1 balun keeps the impedance mismatch down
to something relatively close to what your receiver likes.

> Is there a rule of thumb for impedance with a loop like this and
any
> ideas on how to take into account the terrain sloping away from the
> antenna?
>

The lower the average height of your antenna, the lower its
impedance.

> Should I connect the primary and secondary to ground off the shield?
>
> I'm asking because I glued the xformer case (it's PVC fittings) and
> before I start cutting it open, I'd like to have some idea of what
> (if anything) I might want to try.
>

I would think you would want the primary and secondary isolated...
Dont know how you wired your balun.

I wonder what the input impedance is of your receiver?

If it is a high impedance like direct into a FET then maybe
that explains why you have a drop in signal strength when
you connect the loop ends since the loop might have
a lower impedance than an end fed wire.

You might try building a little antenna tuner out
of a wound toroid with multiple taps and an old tuning cap
from a transistor radio.

Check this out:
http://www.qsl.net/wb3gck/tuner.htm

The cool thing with an L network is that you can turn it around
backwards to match low impedances instead of high impedances.

I built one and use it with my qrp rig.
I bet it would help with your SWL signal level on receive.

Mike KL7R
(speak up and remove all doubt)

493. Re: Trying to match to coax...

Yahoo group: SkyWires
Date: 2004-05-07 16:21:04 UTC
From: jdh7521
Topic: 487 Message: 493

--- In SkyWires@yahoogroups.com, "kl7r" <kl7r@y...> wrote:

> > Is there a rule of thumb for impedance with a loop like this and
> > any ideas on how to take into account the terrain sloping away
> > from the antenna?
> >
>
> The lower the average height of your antenna, the lower its
> impedance.

Ahhh - Thanks!

> > Should I connect the primary and secondary to ground off the
> > shield?
> >
> > I'm asking because I glued the xformer case (it's PVC fittings)
> > and before I start cutting it open, I'd like to have some idea
> > of what (if anything) I might want to try.
> >
>
> I would think you would want the primary and secondary isolated...
> Dont know how you wired your balun.

The ends of the loop are connected to both sides of the primary -
the shield and center conductor of the coax are connected to either
side of the secondary. I use opposite side windings. The shield hits
a ground-block on the way to the receiver.

I was wondering if I should provide a path to ground for one side of
the loop. I have a static bleeder on the receiver end, but this is
the first antenna that I've strung that did not have a direct path
to ground at the feed-point. Since I've always had end-fed randoms,
I've consistently connected one side of the transformer primary to
ground. I'm presuming that with a loop, it sort of acts as it's own
counter-poise? I'm just guessing here...

> I wonder what the input impedance is of your receiver?

Icom PCR1000 - 50 Ohms, I believe?

>
> If it is a high impedance like direct into a FET then maybe
> that explains why you have a drop in signal strength when
> you connect the loop ends since the loop might have
> a lower impedance than an end fed wire.
>
> You might try building a little antenna tuner out

> of a wound toroid with multiple taps and an old tuning cap
> from a transistor radio.
>
> Check this out:
> http://www.qsl.net/wb3gck/tuner.htm

I've been itching to build one, but I lack the capacitor. As soon as
I can scare one up, I intend to - Thanks for the link to the design.

Thanks again,
-=JD=-

494. Re: Trying to match to coax...

Yahoo group: SkyWires
Date: 2004-05-07 22:38:55 UTC
From: kl7r
Topic: 487 Message: 494

> to ground at the feed-point. Since I've always had end-fed randoms,
> I've consistently connected one side of the transformer primary to
> ground. I'm presuming that with a loop, it sort of acts as it's own
> counter-poise?

yes. A loop (like a dipole) has its own counterpoise.

I have heard of guys DC grounding thier loops to earth
through high value chokes for electrostatic protection
but I have no experience with this.

I have fed loops directly with coax from the unbalanced output
of a rig so that means that the loop in this case is at DC ground
since the shield of the rig (which is attached to one end of
the loop) is at DC ground.

Mike KL7R

498. Spam

Yahoo group: SkyWires
Date: 2004-05-09 22:21:52 UTC
From: Rick
Topic: 498 Message: 498

According to our membership list, the spammer just joined today.
Maybe they should be removed from the membership?

500. spam

Yahoo group: SkyWires
Date: 2004-05-10 09:38:08 UTC
From: Rick
Topic: 500 Message: 500

Who is acting moderator of this group?
I know Yahoo doesn't take kindly to anyone hacking into its groups,
can we get help on that end?
Otherwise we'll be subjected to this garbage every day.

502. Optimum length for 160m full wave loop.

Yahoo group: SkyWires
Date: 2004-05-10 20:16:09 UTC
From: Bill Ort
Topic: 502 Message: 502

I am planning 5 masts for an irregular pentagon to be fed with ladder line to a Johnson Matchbox (275W). The available perimeter is somewhere between <520 - >560++ feet (there is a bit of adjustment available on the exact placement of one of the masts, the other masts are fixed. I want to use this antenna for multi-band use and am not sure yet exactly what precise frequencies I might be on. Since I will hoist up each point with a pulley and dacron rope the excess between the total wire length and the actual perimeter (call it "D") will allow a certain distance away from the metal masts which I assume is desirable. My question is: what would be a good precise antenna length to shoot for given the intended multi-band use AND taking into consideration that I can utilize "D" for spacing the antenna wire away from the metal masts a few feet at each facet?

(1005/3.8)x2 = 529 feet, ok, but is (are) there other length(s) that might have some obscure magical mystery properties I may be overlooking. Obviously I am more interested in 75-80m band than 160m per se.

I though I heard somewhere that calculating for the "lower" part of the 80m band had some advantage, but I cannot find that reference. Also, once I determine what part of 75-80m to calculate for, do I just double it to be in the ballpark of my available perimeter?

Bill K6TAJ

503. RE: [SkyWires] spam

Yahoo group: SkyWires
Date: 2004-05-10 21:36:03 UTC
From: David Shrum
Topic: 500 Message: 503

"Exemptfromlife" is listed as the only moderator/list owner.

Dave N8PU

-----Original Message-----
From: Rick [mailto:w1hen@...]
Sent: Monday, May 10, 2004 5:38 AM
To: SkyWires@yahoogroups.com
Subject: [SkyWires] spam

Who is acting moderator of this group?
I know Yahoo doesn't take kindly to anyone hacking into its groups,
can we get help on that end?
Otherwise we'll be subjected to this garbage every day.

504. Re: Optimum length for 160m full wave loop.

Yahoo group: SkyWires
Date: 2004-05-10 22:35:39 UTC
From: kl7r
Topic: 502 Message: 504

If you are going to use a tunner and ladder line, dont worry
about the length. The bigger the better.

But...

1004/1.8 = 558 feet
1004/3.8 = 264 * 2 = 528 feet
1004/7 = 144 * 4 = 574 feet
1004/14.0 = 72 feet * 8 = 576 feet

I might try for 576 feet but I know of guys with 500 and 800
footers and they work great even though they are not perfect
lengths.

I did notice when I cut my 80 meter loop for 20 meters
(1004/14.060) * 4 = 285 feet that resonance was non linear
by band. What I mean is that the loop (cut for resonance on
14.060) resonated something like this:

3.2 6.9 14.1 21.5 and 29.5 mHz.

(my loop is at about 35 feet average height)

Go for big and high.
Experiment with shapes with MMANA or an other antenna modelling tool.
Think rhombic on the higher bands.

KL7R

505. Re: [SkyWires] Re: Optimum length for 160m full wave loop.

Yahoo group: SkyWires
Date: 2004-05-10 23:58:03 UTC
From: keith currie
Topic: 502 Message: 505
Attachments: 2 described; binary payloads are missing from this source WARC

Mine is 1080' Resonant at 1.86 and 0.93 I guess really, but fed with 450ohm ladder line it tunes great every where that I can go with my old Kenwood 440, and it works well for me, I dont even use my beam much any more.

VE5HKC

kl7r wrote:

> If you are going to use a tunner and ladder line, dont worry
> about the length. The bigger the better.
>
> But...
>
> 1004/1.8 = 558 feet
> 1004/3.8 = 264 * 2 = 528 feet
> 1004/7 = 144 * 4 = 574 feet
> 1004/14.0 = 72 feet * 8 = 576 feet
>
> I might try for 576 feet but I know of guys with 500 and 800
> footers and they work great even though they are not perfect
> lengths.
>
> I did notice when I cut my 80 meter loop for 20 meters
> (1004/14.060) * 4 = 285 feet that resonance was non linear
> by band. What I mean is that the loop (cut for resonance on
> 14.060) resonated something like this:
>
> 3.2 6.9 14.1 21.5 and 29.5 mHz.
>
> (my loop is at about 35 feet average height)
>
> Go for big and high.
> Experiment with shapes with MMANA or an other antenna modelling tool.
> Think rhombic on the higher bands.
>
> KL7R
>
>
>
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>
> ---
> Yahoo! Groups Links
>
> * To visit your group on the web, go to:
> http://groups.yahoo.com/group/SkyWires/
>
> * To unsubscribe from this group, send an email to:
> SkyWires-unsubscribe@yahoogroups.com
>
> * Your use of Yahoo! Groups is subject to the Yahoo! Terms of
> Service.
>

506. RE: [SkyWires] Re: Optimum length for 160m full wave loop.

Yahoo group: SkyWires
Date: 2004-05-10 23:46:08 UTC
From: Mark Banks
Topic: 502 Message: 506

I ordered 600' of wire and couldn't see cutting it so I just put up the whole 600' fed with 450 ohm ladder line. Tunes all bands I have tried. It's resonant at some goofy freq's but who cares if your using a tuner...

BTW, when other stations talk about noise and not being able to hear weak stations I seem to do better than most. These closed loops listen very well...

de,

Mark, W6SPT

-----Original Message-----
From: kl7r [mailto:kl7r@...]
Sent: Monday, May 10, 2004 3:36 PM
To: SkyWires@yahoogroups.com
Subject: [SkyWires] Re: Optimum length for 160m full wave loop.

If you are going to use a tunner and ladder line, dont worry about the length. The bigger the better.

But...

1004/1.8 = 558 feet
1004/3.8 = 264 * 2 = 528 feet
1004/7 = 144 * 4 = 574 feet
1004/14.0 = 72 feet * 8 = 576 feet

I might try for 576 feet but I know of guys with 500 and 800 footers and they work great even though they are not perfect lengths.

I did notice when I cut my 80 meter loop for 20 meters (1004/14.060) * 4 = 285 feet that resonance was non linear by band. What I mean is that the loop (cut for resonance on 14.060) resonated something like this:

3.2 6.9 14.1 21.5 and 29.5 mHz.

(my loop is at about 35 feet average height)

Go for big and high.
Experiment with shapes with MMANA or an other antenna modelling tool.
Think rhombic on the higher bands.

KL7R

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<http://rd.yahoo.com/SIG=1297bbsvh/M=295196.4901138.6071305.3001176/D=groups/S=1705063108:HM/EXP=1084314996/A=2128215/R=0/SIG=10se96mf6/*http://companion.yahoo.com> click here

<http://us.adserver.yahoo.com/l?M=295196.4901138.6071305.3001176/D=groups/S=:HM/A=2128215/rand=968565264>

Yahoo! Groups Links

* To visit your group on the web, go to:
http://groups.yahoo.com/group/SkyWires/

* To unsubscribe from this group, send an email to:
SkyWires-unsubscribe@yahoogroups.com
<mailto:SkyWires-unsubscribe@yahoogroups.com?subject=Unsubscribe>

* Your use of Yahoo! Groups is subject to the Yahoo! Terms of
Service <http://docs.yahoo.com/info/terms/> .

Incoming mail is certified Virus Free.
Checked by AVG anti-virus system (http://www.grisoft.com).
Version: 6.0.677 / Virus Database: 439 - Release Date: 5/4/2004

507. skywire by any other name?

Yahoo group: SkyWires
Date: 2004-05-11 03:12:41 UTC
From: Bill Ort
Topic: 507 Message: 507

I just noticed there is another yahoo group called "skywire":
(The SkyWire coordination and communication Group)

Just curious, what is that about? Nothing to do with loop
antennas I assume.

Bill K6TAJ

509. member enlargement for lazy guys?

Yahoo group: SkyWires
Date: 2004-05-12 16:15:53 UTC
From: marisa
Topic: 509 Message: 509

Hey guys, check this site out; this thing makes your member larger by you just sitting around...

(seriously, check it out)

http://www.opejsn.com

I posted this on skywires, if you dont want to be a member anymore just email skywires-unsubscribe@yahoogroups.com

510. Re: [SkyWires] member enlargement for lazy guys?

Yahoo group: SkyWires
Date: 2004-05-12 16:23:01 UTC
From: Eirinn_0
Topic: 509 Message: 510

X => First - Ban the Author
X => Second - Delete the Message
X => Third - File an Abuse Report with YAHOO!

marisa <profile_has_paris_hilton_xuj@...> wrote:Hey guys, check this site out; this thing makes your member larger by you just sitting around...

(seriously, check it out)

http://www.opejsn.com

I posted this on skywires, if you dont want to be a member anymore just email skywires-unsubscribe@yahoogroups.com

Yahoo! Groups Links

Yahoo! Messenger - Communicate instantly..."Ping" your friends today! Download Messenger Now

511. loop running paralell to power lines

Yahoo group: SkyWires
Date: 2004-05-15 04:22:05 UTC
From: desmoines_2000
Topic: 511 Message: 511

one leg of my loop will be running paralell to the power lines in front of my house the leg is 50ft long and about 40 feet from the lines i heard this could be a problem any advice would be great
tank you
my loop is in my back yard

512. Re: [SkyWires] loop running paralell to power lines

Yahoo group: SkyWires
Date: 2004-05-15 22:05:12 UTC
From: JimMcSkate@aol.com
Topic: 511 Message: 512

And you've hit upon one of the loop's strengths... the loop is much more (though not totally) immune to power line interference. Compared to a dipole, it's the winner, hands down.

Congrats on selecting the very best right antenna for your backyard!

73, and wishing you success,
Jim
WA2LGN
Blue Point, NY

In a message dated 5/15/2004 12:31:39 AM Eastern Standard Time, desmoines_2000@... writes:

> one leg of my loop will be running paralell to the power lines in
> front of my house the leg is 50ft long and about 40 feet from the
> lines i heard this could be a problem any advice would be great
> tank you
> my loop is in my back yard
>

513. my bills are gone!

Yahoo group: SkyWires
Date: 2004-05-16 03:29:12 UTC
From: marisa
Topic: 513 Message: 513

hey hey, just thought id tell you guys about this free debt consolidation site that reduced my monthly payments by damn near half, no more worries about bills!

http://lrbycrjhr.xs3.com

I posted this on SkyWires, if you dont want to be a member anymore just email SkyWires-unsubscribe@yahoogroups.com

516. Re: [SkyWires] my bills are gone!

Yahoo group: SkyWires
Date: 2004-05-16 20:05:34 UTC
From: Eirinn_0
Topic: 513 Message: 516

If your bills are gone, be happy and stop spamming

marisa <profile_has_paris_hilton_xqs@...> wrote:hey hey, just thought id tell you guys about this free debt consolidation site that reduced my monthly payments by damn near half, no more worries about bills!

http://lrbycrjhr.xs3.com

I posted this on SkyWires, if you dont want to be a member anymore just email SkyWires-unsubscribe@yahoogroups.com

Yahoo! Groups Links

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518. RE: [SkyWires] Re: SPAM >> Foot note

Yahoo group: SkyWires
Date: 2004-05-16 22:48:45 UTC
From: David Shrum
Topic: 517 Message: 518

Ace,
Here is a switch, I didn't see this one until I looked into my Spam folder, and here is what I am talking about. One of the network administrators is using my email account and my sons' account as guinea pigs - so to speak. That particular email was labeled by the server's anti-spam software as just that, spam. I am glad it is working.

Dave N8PU

-----Original Message-----
From: Dr.Ace Ratliff [mailto:wh2t@...]
Sent: Sunday, May 16, 2004 6:01 PM
To: SkyWires@yahoogroups.com
Subject: [SkyWires] Re: SPAM

Hi,
I noticed that all these SPAM messages have unsubscribe instructions,
See Samples Below.
I don't intend to unsubscribe, But I would like to know how to report these relentless spammers.
Ace - WH2T

"I posted this on SkyWires, if you dont want to be a member anymore just email
skywires-unsubscribe@yahoogroups.com "
OR
"This email was sent because you joined our group.
If you do not wish to recieve any emails, unsubscribe.
by sending a mail here skywires-unsubscribe@yahoogroups.com "

519. Re: [SkyWires] Re: SPAM >> Foot note

Yahoo group: SkyWires
Date: 2004-05-16 23:49:42 UTC
From: Dr.Ace Ratliff
Topic: 517 Message: 519

Hi Dave,
Thanks for the info.
Ace
----- Original Message -----
From: David Shrum
To: SkyWires@yahoogroups.com
Sent: Sunday, May 16, 2004 5:48 PM
Subject: RE: [SkyWires] Re: SPAM >> Foot note

Ace,

Here is a switch, I didn't see this one until I looked into my Spam folder, and here is what I am talking about. One of the network administrators is using my email account and my sons' account as guinea pigs - so to speak. That particular email was labeled by the server's anti-spam software as just that, spam. I am glad it is working.

Dave N8PU

-----Original Message-----
From: Dr.Ace Ratliff [mailto:wh2t@...]
Sent: Sunday, May 16, 2004 6:01 PM
To: SkyWires@yahoogroups.com
Subject: [SkyWires] Re: SPAM

Hi,

I noticed that all these SPAM messages have unsubscribe instructions,

See Samples Below.

I don't intend to unsubscribe, But I would like to know how to report these relentless spammers.

Ace - WH2T

"I posted this on SkyWires, if you dont want to be a member anymore just email

skywires-unsubscribe@yahoogroups.com "

OR

"This email was sent because you joined our group.
If you do not wish to recieve any emails, unsubscribe.
by sending a mail here skywires-unsubscribe@yahoogroups.com "

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a.. To visit your group on the web, go to:
http://groups.yahoo.com/group/SkyWires/

b.. To unsubscribe from this group, send an email to:
SkyWires-unsubscribe@yahoogroups.com

c.. Your use of Yahoo! Groups is subject to the Yahoo! Terms of Service.

Outgoing mail is certified Virus Free by Dr.Ace .
Checked by AVG anti-virus system (http://www.grisoft.com).
Version: 6.0.686 / Virus Database: 447 - Release Date: 5/14/2004

520. LOOP vs Powerline

Yahoo group: SkyWires
Date: 2004-05-17 02:47:21 UTC
From: Bryan
Topic: 520 Message: 520

HI to the Group,

I have a 500 +/- ft loop two sides of it are paralell to
power/phone/cable lines etc.

they range from 30 to 40 ft away. and I have little to NO NOISE level
from them. I have found the loop to be a very good listener. the
noise level is low and I hear stations that the Dipole just can not
hear.

hope that helps. a LOOP is a GOOD choice for almost anyone.

73s Bryan Kc8hps

521. Re: [SkyWires] Digest Number 161

Yahoo group: SkyWires
Date: 2004-05-17 09:49:01 UTC
From: Ron Winters
Topic: 521 Message: 521

>
> Hi,
>
> I noticed that all these SPAM messages have unsubscribe instructions,
>
> See Samples Below.
>
> I don't intend to unsubscribe, But I would like to know how to report these relentless spammers.
>
> Ace - WH2T

Here are the best ways to actively do something about spam, report to
Federal Trade Commission;
uce@...
use Spamcop service which is free and reports them to the originating isp;
http://www.spamcop.net/anonsignup.shtml

be sure to forward the spam with full headers, Ron, ag4lh.

522. Hoist-rope to Antenna-wire junction?

Yahoo group: SkyWires
Date: 2004-05-19 15:03:08 UTC
From: Mike Valentine
Topic: 522 Message: 522

Hi All,

I've been a full-wave loop user for about a dozen years.

Now, I'm expanding from a 270' loop to a 540' loop, and to cut down on the weight, I'll be using some small diameter (jacketed #18) copper-clad steel wire. The steel core should eliminate the dreaded stretching as well as provide the necessary strength (250#).

I occurred to me to ask what other people do when joining the hoisting rope to the antenna wire. I've read of plastic pulleys, but I worry about the antenna wire getting jammed between the pulley and the frame unless I use very large diameter wire.

The medium diameter wire I have up now uses 2"-long pieces of PVC tubing that have been slit length-wise and have two holes drilled adjacent to the slit. The wire can be slipped through the slit and then the support line can be fished through the two holes and then tied in one's favorite knot. This allows the support point to be adjusted during installation in a convenient manner and allows the stress on the antenna wire to be spread out a little bit.

What are others' favorite little tricks for attaching the rope to the wire on a SkyWireLoop?

Cheers,

Mike - W8MM

523. RE: [SkyWires] Hoist-rope to Antenna-wire junction?

Yahoo group: SkyWires
Date: 2004-05-19 15:32:13 UTC
From: Mark Banks
Topic: 522 Message: 523

Mike,

I used common electric fence insulators and tied the dacron rope to the insulator. The rope then goes to a pulley attached at the top of my composite aluminum/pvc poles. (2" 32' long irragation pipe with 5' of schedule 80 x 1 1/2" at the top to minimize coupling to the aluminum). After I had hoisted each of the corners I was still able to drag the 600' of 14 gauge bare copper through the insulators to center up the 450 ohm feed line between two trees. Also, the semi flexible nature of the pvc allows the masts to bend in the wind without putting undo pressure on the wire or other components. Next move might include putting the 2" aluminum pipe inside some 3" I have in a sort of push up arrangement if I can figure out a decent guying arrangement...

Mark, W6SPT

-----Original Message-----
From: Mike Valentine [mailto:mike@...]
Sent: Wednesday, May 19, 2004 8:03 AM
To: SkyWires@yahoogroups.com
Subject: [SkyWires] Hoist-rope to Antenna-wire junction?

Hi All,

I've been a full-wave loop user for about a dozen years.

Now, I'm expanding from a 270' loop to a 540' loop, and to cut down on the weight, I'll be using some small diameter (jacketed #18) copper-clad steel wire. The steel core should eliminate the dreaded stretching as well as provide the necessary strength (250#).

I occurred to me to ask what other people do when joining the hoisting rope to the antenna wire. I've read of plastic pulleys, but I worry about the antenna wire getting jammed between the pulley and the frame unless I use very large diameter wire.

The medium diameter wire I have up now uses 2"-long pieces of PVC tubing that have been slit length-wise and have two holes drilled adjacent to the slit. The wire can be slipped through the slit and then the support line can be fished through the two holes and then tied in one's favorite knot. This allows the support point to be adjusted during installation in a convenient manner and allows the stress on the antenna wire to be spread out a little bit.

What are others' favorite little tricks for attaching the rope to the wire on a SkyWireLoop?

Cheers,

Mike - W8MM

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oups/S=1705063108:HM/EXP=1085065505/A=2128215/R=0/SIG=10se96mf6/*http://
companion.yahoo.com> click here

<http://us.adserver.yahoo.com/l?M=295196.4901138.6071305.3001176/D=group
s/S=:HM/A=2128215/rand=238169533>

_____

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* To visit your group on the web, go to:
http://groups.yahoo.com/group/SkyWires/

* To unsubscribe from this group, send an email to:
SkyWires-unsubscribe@yahoogroups.com
<mailto:SkyWires-unsubscribe@yahoogroups.com?subject=Unsubscribe>

* Your use of Yahoo! Groups is subject to the Yahoo! Terms of
Service <http://docs.yahoo.com/info/terms/> .

Incoming mail is certified Virus Free.
Checked by AVG anti-virus system (http://www.grisoft.com).
Version: 6.0.677 / Virus Database: 439 - Release Date: 5/4/2004

524. Re: Hoist-rope to Antenna-wire junction?

Yahoo group: SkyWires
Date: 2004-05-20 15:42:21 UTC
From: nc9k
Topic: 522 Message: 524

Hello Mike,

I am using #12 AWG stranded plastic coated copper wire for my 40M loop. It is in a square configuration. The #12 wire is suspended at each corner via 36 inch long UV resistant bungee cords with metal hooks on each end. The antenna wire end of the bungee has its metal hook passing through the center of a plastic electric fence corner insulator to form a slip joint for the antenna wire. Also used is a piece of 14 AWG solid wire formed as a loop passing through the center of the insulator to "trap" the antenna wire so that it cannot jump out of the corner insulator groove.

The other end of each bungee is attached to UGV resistant rope and positioned over the crotch of a tree about 40ft. up. The rope is pulled down the tree far enough so that the bungee is what passes over the tree crotch, not the rope. Each rope is then tied off lower down the tree.

So far this arrangement has survived multiple severe thunderstorms with high winds without failing.

Hope this helps.

73's Leland NC9K

525. novice's hoist rope

Yahoo group: SkyWires
Date: 2004-05-21 03:57:44 UTC
From: teb602003
Topic: 525 Message: 525

FWIW I've been using relatively inexpensive .080"inch "weed whipper" trimmer string as hoist rope,quite strong,somewhat elastic,& almost transparent.At some point it's probably succeptable to UV damage,but I'm at year 5 in an area with lots of sun,wind & heavy snow load & going strong.Try it,you'll like it.

527. Re: [SkyWires] novice's hoist rope

Yahoo group: SkyWires
Date: 2004-05-21 16:48:42 UTC
From: keith currie
Topic: 525 Message: 527

I use recoil rope for lawn mowers or chainsaws, and snowmobiles. It has been ok so far and you can get different sizess. I found the real small a little tough on the hands with the weight I have on this large loop.
VE5HKC

teb602003 wrote:

> FWIW I've been using relatively inexpensive .080"inch "weed whipper"
> trimmer string as hoist rope,quite strong,somewhat elastic,& almost
> transparent.At some point it's probably succeptable to UV damage,but
> I'm at year 5 in an area with lots of sun,wind & heavy snow load &
> going strong.Try it,you'll like it.
>
>
> ---
> Yahoo! Groups Links
>
> * To visit your group on the web, go to:
> http://groups.yahoo.com/group/SkyWires/
>
> * To unsubscribe from this group, send an email to:
> SkyWires-unsubscribe@yahoogroups.com
>
> * Your use of Yahoo! Groups is subject to the Yahoo! Terms of
> Service.
>

529. Who wants to moderate this website?

Yahoo group: SkyWires
Date: 2004-05-23 07:27:59 UTC
From: exemptfromlife
Topic: 529 Message: 529

I started this group last year but lately have been way too busy to check it.

This is the first time I've been on here since March or so. I apologize in that it seems spammers have been clogging it up, and I haven't been here to take care of it.

If anybody else would like to moderate this site, please nominate yourself, and every most everybody (including me agrees), then the site is yours.

Just reply to this message, and in two paragraphs or less, plead your case as to why you believe you would make a good moderator.

Thanks.
Walter

530. RE: [SkyWires] Who wants to moderate this website?

Yahoo group: SkyWires
Date: 2004-05-23 10:33:06 UTC
From: David Shrum
Topic: 529 Message: 530

Walter & the Group,
With this group currently having 255 members and hopefully growing, I would suggest that it not have 'A' moderator but several because as you stated your schedule sometimes gets busy and can't devote the time you want to, here is my suggestion, Walter don't give up this group a moderator, but add several say around 5 or so if you can get that many replies offering to help. That way the chances are someone would be around to moderate new members for their first few messages until it is determined that they are some one interested in this group instead of just spamming the group with junk and posting in-appropriate links as well.

I offer to help, but NOT by myself because of my job I could only do it most evening for a few hours, which would not be enough (I my opinion) to do this fine group justice. So that is my suggestion and case.

Dave N8PU

-----Original Message-----
From: exemptfromlife [mailto:junkmail@...]
Sent: Sunday, May 23, 2004 3:28 AM
To: SkyWires@yahoogroups.com
Subject: [SkyWires] Who wants to moderate this website?

I started this group last year but lately have been way too busy to check it.

This is the first time I've been on here since March or so. I apologize in that it seems spammers have been clogging it up, and I haven't been here to take care of it.

If anybody else would like to moderate this site, please nominate yourself, and every most everybody (including me agrees), then the site is yours.

Just reply to this message, and in two paragraphs or less, plead your case as to why you believe you would make a good moderator.

Thanks.
Walter

531. Re: [SkyWires] Who wants to moderate this website?

Yahoo group: SkyWires
Date: 2004-05-23 11:01:40 UTC
From: KQ8RP
Topic: 529 Message: 531

We would be glad to help out..

Scott
http://www.kq8rp.com

----- Original Message -----
From: David Shrum
To: SkyWires@yahoogroups.com
Sent: Sunday, May 23, 2004 6:33 AM
Subject: RE: [SkyWires] Who wants to moderate this website?

Walter & the Group,
With this group currently having 255 members and hopefully growing, I would suggest that it not have 'A' moderator but several because as you stated your schedule sometimes gets busy and can't devote the time you want to, here is my suggestion, Walter don't give up this group a moderator, but add several say around 5 or so if you can get that many replies offering to help. That way the chances are someone would be around to moderate new members for their first few messages until it is determined that they are some one interested in this group instead of just spamming the group with junk and posting in-appropriate links as well.

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Sent: Sunday, May 23, 2004 3:28 AM
To: SkyWires@yahoogroups.com
Subject: [SkyWires] Who wants to moderate this website?

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Just reply to this message, and in two paragraphs or less, plead your case as to why you believe you would make a good moderator.

Thanks.
Walter

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http://groups.yahoo.com/group/SkyWires/

b.. To unsubscribe from this group, send an email to:
SkyWires-unsubscribe@yahoogroups.com

c.. Your use of Yahoo! Groups is subject to the Yahoo! Terms of Service.

532. Re: [SkyWires] Who wants to moderate this website?

Yahoo group: SkyWires
Date: 2004-05-24 01:06:07 UTC
From: Dr.Ace Ratliff
Topic: 529 Message: 532

Walter,
I would be glad to help out.
I spend lots of time on-line.
Ace - WH2T
----- Original Message -----
From: David Shrum
To: SkyWires@yahoogroups.com
Sent: Sunday, May 23, 2004 5:33 AM
Subject: RE: [SkyWires] Who wants to moderate this website?

Walter & the Group,
With this group currently having 255 members and hopefully growing, I would suggest that it not have 'A' moderator but several because as you stated your schedule sometimes gets busy and can't devote the time you want to, here is my suggestion, Walter don't give up this group a moderator, but add several say around 5 or so if you can get that many replies offering to help. That way the chances are someone would be around to moderate new members for their first few messages until it is determined that they are some one interested in this group instead of just spamming the group with junk and posting in-appropriate links as well.

I offer to help, but NOT by myself because of my job I could only do it most evening for a few hours, which would not be enough (I my opinion) to do this fine group justice. So that is my suggestion and case.

Dave N8PU

-----Original Message-----
From: exemptfromlife [mailto:junkmail@...]
Sent: Sunday, May 23, 2004 3:28 AM
To: SkyWires@yahoogroups.com
Subject: [SkyWires] Who wants to moderate this website?

I started this group last year but lately have been way too busy to check it.

This is the first time I've been on here since March or so. I apologize in that it seems spammers have been clogging it up, and I haven't been here to take care of it.

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Just reply to this message, and in two paragraphs or less, plead your case as to why you believe you would make a good moderator.

Thanks.
Walter

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a.. To visit your group on the web, go to:
http://groups.yahoo.com/group/SkyWires/

b.. To unsubscribe from this group, send an email to:
SkyWires-unsubscribe@yahoogroups.com

c.. Your use of Yahoo! Groups is subject to the Yahoo! Terms of Service.

Outgoing mail is certified Virus Free by Dr.Ace .
Checked by AVG anti-virus system (http://www.grisoft.com).
Version: 6.0.689 / Virus Database: 450 - Release Date: 5/21/2004

533. Re: [SkyWires] Digest Number 167

Yahoo group: SkyWires
Date: 2004-05-25 13:57:36 UTC
From: Hulen Smith
Topic: 533 Message: 533
Attachments: 2 described; binary payloads are missing from this source WARC

Subject: RE: Who wants to moderate this website?

"Walter & the Group,
With this group currently having 255 members and hopefully growing, I would suggest that it not have 'A' moderator but several because as you stated your schedule sometimes gets busy and can't devote the time you want to, here is my suggestion, Walter don't give up this group a moderator, but add several say around 5 or so if you can get that many replies offering to help. That way the chances are someone would be around to moderate new members for their first few messages until it is determined that they are some one interested in this group instead of just spamming the group with junk and posting in-appropriate links as well.

I offer to help, but NOT by myself because of my job I could only do it most evening for a few hours, which would not be enough (I my opinion) to do this fine group justice. So that is my suggestion and case."

"Dave N8PU"

Walter, I agree with Dave, makes perfect since to keep it. You started it now
take a break and choose a few people to help you out. I also would be glad to
help in any way, just please consider 5-7 moderators to be effective to carry
on this fine group.
Regards
WB5UOI
Hulen
USAF Msgt Retired
.

534. Re: Who wants to moderate this website?

Yahoo group: SkyWires
Date: 2004-05-25 04:01:10 UTC
From: exemptfromlife
Topic: 529 Message: 534

Hi,

I didn't want anyone to think I was going to delete the group or something. I was just letting everyone know that I haven't been as attentive as I should be and I was hoping someone else would like to step up to the plate.

It looks like we have at least 4 or 5 people who would like to c-moderate. Thats sounds great. Does anybody know if the yahoo software will allow more than one moderator at a time?

If so, I'll make the changes.

thanks.

535. RE: [SkyWires] Re: Who wants to moderate this website?

Yahoo group: SkyWires
Date: 2004-05-25 09:35:51 UTC
From: David Shrum
Topic: 529 Message: 535

Walter,
Yes, when I had a group I had several moderators (deleted the group from lack of activity), you can have as many as you like.

Dave N8PU

-----Original Message-----
From: exemptfromlife [mailto:junkmail@...]
Sent: Tuesday, May 25, 2004 12:01 AM
To: SkyWires@yahoogroups.com
Subject: [SkyWires] Re: Who wants to moderate this website?

Hi,

I didn't want anyone to think I was going to delete the group or something. I was just letting everyone know that I haven't been as attentive as I should be and I was hoping someone else would like to step up to the plate.

It looks like we have at least 4 or 5 people who would like to c-moderate. Thats sounds great. Does anybody know if the yahoo software will allow more than one moderator at a time?

If so, I'll make the changes.

thanks.

536. re: Hoist-rope to Antenna-wire junction?

Yahoo group: SkyWires
Date: 2004-06-01 02:52:14 UTC
From: Robert
Topic: 522 Message: 536

My "trick" is those el-cheapo multi-colored clip-hooks you can get at Home Depot or Lowes for a buck or less. I just tie the rope to the clip and snap the wire on (open the hinge and pass the wire through the clip-hook. My loops all "float" in this fashion and I have not had one come down yet. FYI, I use 3/16 double braided dacron (black outside/white inside) rope. My supports are two telescoping masts with pulleys on top, and several treetops (just throw the rope over the tree,pull tight and tie off conveniently).

73,
Robert W5IUA
Parker, TX

--- In SkyWires@yahoogroups.com, "Mike Valentine" <mike@v...> wrote:

> What are others' favorite little tricks for attaching the rope to
> the wire on a SkyWireLoop?
>
> Cheers,
>
> Mike - W8MM

537. Re: Optimum length for 160m full wave loop

Yahoo group: SkyWires
Date: 2004-06-01 03:45:01 UTC
From: Robert
Topic: 537 Message: 537

Loop length does matter on the lower bands in particular. It is true that tuners compensate for non-reasonance, but while sometimes loops will "tune", they can be difficult to tune and have very narrow resulting bandwidth.

I experimented with the length for my loop and finally decided to build a relay-based version of W5DKP's "no-tuner" system. My version switches in an extra 2-64' of ladder line in any 2' increment using five 10A 4PDT relays. This allows my loop to be fed at current maximum point for each band/frequency. I have used this system for a few months now and it works great. I can tune the loop without my Johnson Matchbox on most frequencies, but still use the tuner to tweak SWR completely flat every time. My Icom 746Pro's SWR protection circuitry is pretty stingy. Even though in theory full power may be delivered to the antenna with some SWR, the protection circuitry will roll it back. Probably a good thing..... :-)

73...Robert W5IUA
reference: http://www.qsl.net/w5dxp/notuner.htm

--- In SkyWires@yahoogroups.com, "Bill Ort" <zeno@s...> wrote:
>
> I am planning 5 masts for an irregular pentagon to be fed
> with ladder line to a Johnson Matchbox (275W). The available
> perimeter is somewhere between <520 - >560++ feet (there is a
> bit of adjustment available on the exact placement of one of
> the masts, the other masts are fixed. I want to use this
> antenna for multi-band use and am not sure yet exactly what
> precise frequencies I might be on. Since I will hoist up each
> point with a pulley and dacron rope the excess between the
> total wire length and the actual perimeter (call it "D") will
> allow a certain distance away from the metal masts which I
> assume is desirable. My question is: what would be a good
> precise antenna length to shoot for given the intended
> multi-band use AND taking into consideration that I can
> utilize "D" for spacing the antenna wire away from the metal
> masts a few feet at each facet?
>
> (1005/3.8)x2 = 529 feet, ok, but is (are) there other
> length(s) that might have some obscure magical mystery
> properties I may be overlooking. Obviously I am more
> interested in 75-80m band than 160m per se.
>
> I though I heard somewhere that calculating for the "lower"
> part of the 80m band had some advantage, but I cannot find
> that reference. Also, once I determine what part of 75-80m to

> calculate for, do I just double it to be in the ballpark of
> my available perimeter?
>
>
> Bill K6TAJ

538. Re: [SkyWires] Digest Number 169

Yahoo group: SkyWires
Date: 2004-06-02 00:29:28 UTC
From: Ron Winters
Topic: 538 Message: 538

S>
> I experimented with the length for my loop and finally decided to build
> a relay-based version of W5DKP's "no-tuner" system. My version switches
> in an extra 2-64' of ladder line in any 2' increment using five 10A
> 4PDT relays. This allows my loop to be fed at current maximum point for
> each band/frequency. I have used this system for a few months now and
> it works great. I can tune the loop without my Johnson Matchbox on most
> frequencies, but still use the tuner to tweak SWR completely flat every
> time. My Icom 746Pro's SWR protection circuitry is pretty stingy. Even
> though in theory full power may be delivered to the antenna with some
> SWR, the protection circuitry will roll it back. Probably a good
> thing..... :-)
>
> 73...Robert W5IUA
> reference: http://www.qsl.net/w5dxp/notuner.htm
>
Hi Robert, the above link didn't work, do you have another? Thanks, Ron
ag4lh.

539. Re: [SkyWires] Digest Number 170

Yahoo group: SkyWires
Date: 2004-06-02 09:54:24 UTC
From: Ron Winters
Topic: 539 Message: 539

Sk>>though in theory full power may be delivered to the antenna with some
>>SWR, the protection circuitry will roll it back. Probably a good
>>thing..... :-)
>>
>>73...Robert W5IUA
>>reference: http://www.qsl.net/w5dxp/notuner.htm
>>
>
> Hi Robert, the above link didn't work, do you have another? Thanks, Ron
> ag4lh.
>
> Hi again, this morning it does work, thanks, Ron.

540. Re: [SkyWires] Digest Number 170

Yahoo group: SkyWires
Date: 2004-06-02 16:59:02 UTC
From: Bryan Burrma
Topic: 539 Message: 540

this style loop sounds interesting to me as well.. so
are you adding a lenght of ladderline to your FEEDline
or in the loop itself? if so does it hang down or is
it suspended at a right angle or coiled up? tell us
more..

Bryan kc8hps
--- SkyWires@yahoogroups.com wrote:
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http://us.click.yahoo.com/L5YrjA/eSIIAA/yQLSAA/ELTolB/TM
>
---~->
>
>
> There is 1 message in this issue.
>
> Topics in this digest:
>
> 1. Re: Digest Number 169
> From: Ron Winters
> <cntrline@...>
>
>
>

____
>

____
>
> Message: 1
> Date: Tue, 01 Jun 2004 20:29:28 -0400
> From: Ron Winters <cntrline@...>
> Subject: Re: Digest Number 169
>
> S>
> > I experimented with the length for my loop and
> finally decided to build
> > a relay-based version of W5DKP's "no-tuner"
> system. My version switches
> > in an extra 2-64' of ladder line in any 2'
> increment using five 10A

> > 4PDT relays. This allows my loop to be fed at
> current maximum point for
> > each band/frequency. I have used this system for
> a few months now and
> > it works great. I can tune the loop without my
> Johnson Matchbox on most
> > frequencies, but still use the tuner to tweak SWR
> completely flat every
> > time. My Icom 746Pro's SWR protection circuitry
> is pretty stingy. Even
> > though in theory full power may be delivered to
> the antenna with some
> > SWR, the protection circuitry will roll it back.
> Probably a good
> > thing..... :-)
> >
> > 73...Robert W5IUA
> > reference: http://www.qsl.net/w5dxp/notuner.htm
> >
> Hi Robert, the above link didn't work, do you have
> another? Thanks, Ron
> ag4lh.
>
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>

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541. No Trees

Yahoo group: SkyWires
Date: 2004-06-03 11:03:59 UTC
From: cfsimm2004
Topic: 541 Message: 541

Can anyone suggest what are where I can look for pole or something to use for pole to erect a skywire? I have no trees on the property of any usful height, I can use a push up pole on my shack for a height of about 50 feet. Was looking at the local co-op and they can get telephone pole-like poles that are about 45 feet. The problem is after you rent an auger to dig the hole how do you set the 45' pole in the hole. Of course if I was rich I would just have a crane come and set them. I can get use of a large Back-hoe will this and a sling work to lift them to set them??? Thanks and any ideas would be great!! 73's PS the reason I did no mention more push up pole is the wife hates all the guy wires (The current push up poles-4 ea.) is why she is willing for me to put up 2 towers instead.

542. No-Tuner Feedline info

Yahoo group: SkyWires
Date: 2004-06-03 14:50:40 UTC
From: Robert
Topic: 538 Message: 542

Try the link again, I think QSL.NET was down for a time....Robert

Ron Winters wrote:

> S>
> > I experimented with the length for my loop and finally decided to build
> > a relay-based version of W5DKP's "no-tuner" system. My version
> switches
> > in an extra 2-64' of ladder line in any 2' increment using five 10A
> > 4PDT relays. This allows my loop to be fed at current maximum point
> for
> > each band/frequency. I have used this system for a few months now and
> > it works great. I can tune the loop without my Johnson Matchbox on
> most
> > frequencies, but still use the tuner to tweak SWR completely flat every
> > time. My Icom 746Pro's SWR protection circuitry is pretty stingy.
> Even
> > though in theory full power may be delivered to the antenna with some
> > SWR, the protection circuitry will roll it back. Probably a good
> > thing..... :-)
> >
> > 73...Robert W5IUA
> > reference: http://www.qsl.net/w5dxp/notuner.htm
> >
> Hi Robert, the above link didn't work, do you have another? Thanks, Ron
> ag4lh.

543. Variable Feedline System

Yahoo group: SkyWires
Date: 2004-06-03 16:22:53 UTC
From: Robert
Topic: 543 Message: 543

I am changing feedline length by adding in sections of 450 ohm line with relays. I can switch in 2, 4,8,16,or 32' with five switches/relays. This moves the current maximum point on the feedline for a given band/frequency. It also avoids the "bad length" problem that hams run into sometimes when they cut the feedline to specific length. The ARRL Antenna Book in the past at least had a chart that showed optimum feedline lengths and lengths to avoid for a given band.

The extra sections of ladder line come out of a plastic box with the relays inside mounted on my wooden patio cover. I do not recommend trying to roll up the extra line lengths, you need to find a place for them to hang or be supported. I use my patio cover for this.

I will be putting pictures of the setup on my website soon, will post a message when this is done.

73...Robert W5IUA
http://iua2.net

Bryan Burrma wrote:

> this style loop sounds interesting to me as well.. so
> are you adding a lenght of ladderline to your FEEDline
> or in the loop itself? if so does it hang down or is
> it suspended at a right angle or coiled up? tell us
> more..
>
> Bryan kc8hps

544. Re: [SkyWires] No Trees

Yahoo group: SkyWires
Date: 2004-06-03 18:37:57 UTC
From: Jim Dunstan
Topic: 541 Message: 544
Attachments: 1 described; binary payloads are missing from this source WARC

At 11:03 AM 6/3/04 +0000, you wrote:
>Can anyone suggest what are where I can look for pole or something to
>use for pole to erect a skywire? I have no trees on the property of
>any usful height, I can use a push up pole on my shack for a height
>of about 50 feet. Was looking at the local co-op and they can get
>telephone pole-like poles that are about 45 feet. The problem is
>after you rent an auger to dig the hole how do you set the 45' pole
>in the hole. Of course if I was rich I would just have a crane come
>and set them. I can get use of a large Back-hoe will this and a sling
>work to lift them to set them??? Thanks and any ideas would be great!!
>73's PS the reason I did no mention more push up pole is the wife
>hates all the guy wires (The current push up poles-4 ea.) is why she
>is willing for me to put up 2 towers instead.

Well, as they say, you can't always get what you want. A horizontal loop may not be what you put up for the time being. I use an inverted vee .... end fed, not a dipole. I have a self supporting pipe mast (45') in the front yard with a 2 el 20M beam on it. I wanted some kind of antenna I could use on all the other bands from 80M-10M as well.

What I ended up with was an inverted Vee end fed from the ground. I have 25' from the base of the mast to the front. I put #12 copper wire from the ground to the top of the mast, approximately 50'. I then have approximately 90' from the top to the garage at the rear of the lot, (a total of about 140'). At the front of the lot where the wire comes to the ground I have a sturdy 6"x6" post 3' above ground. The end of the wire comes to an insulator at the post. Mounted on the post I have a bird feeder, and under it a 1' square box in which I mount a SGC auto tuner. Beside the post I have copper ground rod with 8 buried radials converging on it. I feed the auto tuner with RG-8 coax which is also buried in the lawn as well.

It works beautifully! I have done side by side checks with the 20M beam .... and I can usually hear and work just about everything with the long wire. In the crunch of course the beam works the weak dx a lot better. The point is that if I didn't have the beam it wouldn't cramp my operating at all. The auto tuner is wonderful, and having it located out of the operating location directly under the long wire really improves the quietness of the antenna. I find this antenna is also with no doubt the best SW reception antenna as well.

You might want to experiment with just one pole first..... Another suggestion ..... one I have on my mind for the future is a delta loop ..... also with one pole. Good luck.
>3866bec.jpg

Jim Dunstan VE3CI
Thunder Bay, ON

545. Re: [SkyWires] No Trees

Yahoo group: SkyWires
Date: 2004-06-03 19:02:37 UTC
From: Jim Dunstan
Topic: 541 Message: 545

At 11:03 AM 6/3/04 +0000, you wrote:

> Was looking at the local co-op and they can get
>telephone pole-like poles that are about 45 feet. The problem is
>after you rent an auger to dig the hole how do you set the 45' pole
>in the hole. Of course if I was rich I would just have a crane come
>and set them. I can get use of a large Back-hoe will this and a sling
>work to lift them to set them???
'

PS .... my second post! I forgot to address your question about putting the poles up. The one self supporting steel mast I have at the front of the house is about 45' high constructed of steel pipe about 6 or 8 in in dia. at the base .... like those steel flag poles. However mine is a tilt over with the hinge about 18 ft up. I just undo the bolt at the base, attach my simple rope block and tackle and lower the top right down into my drive way. The base of the fixed portion has 3/4' steel plate with 4 bolt holes. I dug a hole and carefully arranged 4 bolts in a kind of frame in the ground before filling it with concrete. The next step was to lift the whole thing and set the base and the 4 holes down over the 4 bolts! The black smith who welded the thing for me assured me he would be able to do the job. I was a bit skeptical at first when he came with a normal sized tractor with a front-end loader.

What he did was to fasten on to the mast at the balance point ..... like the "scales of justice". Then he lifted it up and with a couple of ropes a friend of mine and I rotated it when he lifted it up. It was literally vertical hanging with a cable from the bucket of the loader. A jiggle here and a jiggle there and it fell right on to the bolts I had cemented into the concrete!

I did this twice. I loved the tower so much that when I moved to another location ..... about 15 blocks away ..... I took the tower with me. I reversed the process and my black smith friend hauled it ..... a full 45' in one piece lashed to side of his truck! We chose to do this about 2am to avoid traffic. It looked like Sir Lancelot coming down the street hi hi. I put it up again in front of this house in the same way.

Now if you're going to put a pole into the ground the only thing you need is to be sure of is that the bucket can lift the pole .... eg weight wise. Dropping it into the hole won't be rocket science .... just have ropes tied near the top so you can secure it in a vertical position while you back fill and tamp it all down.

Jim Dunstan VE3CI
Thunder Bay, ON

546. Re: [SkyWires] No Trees

Yahoo group: SkyWires
Date: 2004-06-03 21:30:48 UTC
From: keith currie
Topic: 541 Message: 546
Attachments: 2 described; binary payloads are missing from this source WARC

I did some of them with my Bobcat but it is a little scarry if they sre
long. I have a friend who does sign work with a bucket truck so I auger
the holes and he stands up the poles. Mine are about 45' out fo the
ground.
hope this helps, Keith VE5HKC

cfsimm2004 wrote:

> Can anyone suggest what are where I can look for pole or something to
>
> use for pole to erect a skywire? I have no trees on the property of
> any usful height, I can use a push up pole on my shack for a height
> of about 50 feet. Was looking at the local co-op and they can get
> telephone pole-like poles that are about 45 feet. The problem is
> after you rent an auger to dig the hole how do you set the 45' pole
> in the hole. Of course if I was rich I would just have a crane come
> and set them. I can get use of a large Back-hoe will this and a sling
> work to lift them to set them??? Thanks and any ideas would be great!!
>
> 73's PS the reason I did no mention more push up pole is the wife
> hates all the guy wires (The current push up poles-4 ea.) is why she
> is willing for me to put up 2 towers instead.
>
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>
> ~---~
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> Service.
>

547. Variable Feedline System

Yahoo group: SkyWires
Date: 2004-06-03 21:21:02 UTC
From: Robert
Topic: 543 Message: 547

For those interested and per my previous post, I have uploaded a new web page with details on the variable feedline system used with my 540' loop antenna.

http://iua2.net/notuner.html

73...Robert W5IUA
w5@...

548. New guy.

Yahoo group: SkyWires
Date: 2004-06-04 05:19:01 UTC
From: Jim
Topic: 548 Message: 548

What is it?

549. Re: [SkyWires] No Trees

Yahoo group: SkyWires
Date: 2004-06-04 10:51:35 UTC
From: Craig Simmons
Topic: 541 Message: 549

Thanks aloy--Where did you get you poles!

keith currie <kecurrie@...> wrote:I did some of them with my Bobcat but it is a little scarry if they sre
long. I have a friend who does sign work with a bucket truck so I auger the holes and he stands up the poles. Mine are about 45' out fo the ground.
hope this helps, Keith VE5HKC

cfsimm2004 wrote:

> Can anyone suggest what are where I can look for pole or something to
>
> use for pole to erect a skywire? I have no trees on the property of
> any usful height, I can use a push up pole on my shack for a height
> of about 50 feet. Was looking at the local co-op and they can get
> telephone pole-like poles that are about 45 feet. The problem is
> after you rent an auger to dig the hole how do you set the 45' pole
> in the hole. Of course if I was rich I would just have a crane come
> and set them. I can get use of a large Back-hoe will this and a sling
> work to lift them to set them??? Thanks and any ideas would be great!!
>
> 73's PS the reason I did no mention more push up pole is the wife
> hates all the guy wires (The current push up poles-4 ea.) is why she
> is willing for me to put up 2 towers instead.
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> ---
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550. Re: Variable Feedline System

Yahoo group: SkyWires
Date: 2004-06-04 16:01:58 UTC
From: Robert
Topic: 543 Message: 550

Ron:

I appreciate your constructive input. My web page sentence now reads:

"One characteristic of feedlines is that as length changes, the
impedance characteristics at a given frequency also change."

Thanks & 73...Robert W5IUA
w5@...

Ron McConnell wrote:

>One very minor quibble with a sentence on your page:
> "...One characteristic of _balanced_ line
>is that as its length changes, the impedance characteristics
>at a given frequency also change..."
>
>That is also true of _unbalanced_ transmission lines.
>The input impedance seen at the transceiver end
>varies as the line length to the antenna changes.
>_If_ one could ignore losses, the input SWR
>would stay the same, but with coax losses
>would/do make the SWR and impedance look "better" :)
>as the line is made longer/lossier.
>A "notuner tuner" _could_ be built for coax,
>but doing it with low loss balanced line
>seems like a much better idea most of the time.
>Has anybody done an unbalanced version?
>

551. Wire for antenna ?

Yahoo group: SkyWires
Date: 2004-06-04 18:00:19 UTC
From: Michael
Topic: 551 Message: 551

I am moving to a new location and have the chance to buy new wire for the sky loop. At this time I am not sure of the "land size" available yet.

Still looking at rental properties in the Salem oregon area! (Hint, Hint . . . If anyone is from that area)

I have been using Green 14 AWG "Thhn" Stranded Wire, with good success, and it blends in very well with the trees.

I have been toying with the idea of zip cord or 450 ohm open ladder line and making a two turn loop.

I have also been thinking of using 450 ohm open ladder line as the wire.

I work mostly 80 ☐ 40 Meters with a little 160 tossed in.
So, I am looking at something that would be around 400-500 foot loop.

Anyone have personal experiences or any ideas they were thinking of trying? This would be a good chance for me to "Play" HI HI

73
Michael (N7RDV)

552. RE: Variable Feedline System

Yahoo group: SkyWires
Date: 2004-06-04 13:49:43 UTC
From: Ron McConnell
Topic: 543 Message: 552

Robert,

Very nice implementation of Cecil's notuner tuner.
Nice simple, easy to understand text, drawings
and photo... On your website

<http://iua2.net/notuner.html> you say,

"I have admired for years the fine example
provided by Cecil, W5DXP and his
'No-Tuner, All-HF-Band, Horizontal, Center-Fed Antenna'."

Yep, I've been _thinking_ about throwing up a big loop
for some time with a notuner tuner,
but non-ham concerns have taken
my time and energy for the last few years.
Now those seem to be passing and those
two small trees in the front yard are getting bigger
and closer to getting a big stealth loop attached
- finally. :)

Congrats to someone who actually did it!

One very minor quibble with a sentence on your page:
"...One characteristic of _balanced_ line
is that as its length changes, the impedance characteristics
at a given frequency also change..."

That is also true of _unbalanced_ transmission lines.
The input impedance seen at the transceiver end
varies as the line length to the antenna changes.
_If_ one could ignore losses, the input SWR
would stay the same, but with coax losses
would/do make the SWR and impedance look "better" :)
as the line is made longer/lossier.
A "notuner tuner" _could_ be built for coax,
but doing it with low loss balanced line
seems like a much better idea most of the time.
Has anybody done an unbalanced version?

Reg Edwards, G4GFQ,
has a nice set of small antenna
and transmission line freeware programs at

http://www.btinternet.com/~g4fgq.regp/

that are fun to play with and very educational
in how antennas in general terms
as one varies length, wire gauge, height,
transmission line type and length...
He has small (<0.1 wavelength) loop models,
but not big loops - yet.
I find myself using DIPOLE3 often.
Real life antennas in real life environments
are a bit more complex, but one can get
a feel for what happens with the models
faster than building all the variations,
but that could be fun :).

Cheers, 73,

Ron McConnell
w2iol@...

WGS-84: N 40° 46' 57.5" +/-0.2"
W 74° 41' 22.1" +/-0.2"
FN20ps.77GU58 +/-

http://home.earthlink.net/~rcmcc

There are two secrets to success:
(1) Don't tell all you know.

553. New SkyWires Group Moderators.

Yahoo group: SkyWires
Date: 2004-06-05 21:56:50 UTC
From: exemptfromlife
Topic: 553 Message: 553

New SkyWires Group Moderators.

sgordon1
n8pu
dr_ace1

Have all volunteered to be moderators of the group. Please welcome them in their new roles. They should have privileges to ban members for spamming and to clean up spam too.

thanks to all.

Walter.

554. Re: New guy.

Yahoo group: SkyWires
Date: 2004-06-05 21:57:58 UTC
From: exemptfromlife
Topic: 548 Message: 554

--- In SkyWires@yahoogroups.com, "Jim" <jimemack2000@y...> wrote:
> What is it?

A very cheap way of running an a very powerful antenna.

thanks.

555. Re: [SkyWires] No Trees

Yahoo group: SkyWires
Date: 2004-06-06 20:11:19 UTC
From: keith currie
Topic: 541 Message: 555
Attachments: 2 described; binary payloads are missing from this source WARC

I was able to find some very tall thin spruce trees about 55' long,
growing close by so I used them. Keith

Craig Simmons wrote:

> Thanks aloy--Where did you get you poles!
>
> keith currie <kecurrie@...> wrote:
>
> I did some of them with my Bobcat but it is a little scarry
> if they sre
> long. I have a friend who does sign work with a bucket truck
> so I auger
> the holes and he stands up the poles. Mine are about 45' out
> fo the
> ground.
> hope this helps, Keith VE5HKC
>
> cfsimm2004 wrote:
>
> > Can anyone suggest what are where I can look for pole or
> something to
> >
> > use for pole to erect a skywire? I have no trees on the
> property of
> > any usful height, I can use a push up pole on my shack for
> a height
> > of about 50 feet. Was looking at the local co-op and they
> can get
> > telephone pole-like poles that are about 45 feet. The
> problem is
> > after you rent an auger to dig the hole how do you set the
> 45' pole
> > in the hole. Of course if I was rich I would just have a
> crane come
> > and set them. I can get use of a large Back-hoe will this
> and a sling
> > work to lift them to set them??? Thanks and any ideas
> would be great!!
> >
> > 73's PS the reason I did no mention more push up pole is
> the wife
> > hates all the guy wires (The current push up poles-4 ea.)
> is why she

> > is willing for me to put up 2 towers instead.
> >
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556. Source for more 450 ohm ladderline?

Yahoo group: SkyWires
Date: 2004-06-07 13:20:58 UTC
From: nc9k
Topic: 556 Message: 556

Hello all,

My stock of commercial 450 ohm ladderline I bought in 1990 at LAMARSFEST is down to 15 feet. I now live in the middle of nowhere on 40 acres and want to order more commercial (not TV) ladderline online so I can connect to the 1080 foot loop I am putting up for 160 through 40M (I am keeping my 40M loop up for 20 through 10M - it really gets out!). If you know of good sources to order new commercial ladderline from please advise by posting on this Skywires site - others need to know as well.

Thanks,

Leland NC9K

558. Re: [SkyWires] Source for more 450 ohm ladderline?

Yahoo group: SkyWires
Date: 2004-06-07 13:30:11 UTC
From: KQ8RP
Topic: 556 Message: 558

Leland,

I bought my ladderline through R&L there in Cincy last time around.

http://www.randl.com/cart/

73's
Scott

----- Original Message -----
From: nc9k
To: SkyWires@yahoogroups.com
Sent: Monday, June 07, 2004 9:20 AM
Subject: [SkyWires] Source for more 450 ohm ladderline?

Hello all,

My stock of commercial 450 ohm ladderline I bought in 1990 at
LAMARSFEST is down to 15 feet. I now live in the middle of nowhere
on 40 acres and want to order more commercial (not TV) ladderline
online so I can connect to the 1080 foot loop I am putting up for 160
through 40M (I am keeping my 40M loop up for 20 through 10M - it
really gets out!). If you know of good sources to order new
commercial ladderline from please advise by posting on this Skywires
site - others need to know as well.

Thanks,

Leland NC9K

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559. Re: [SkyWires] Source for more 450 ohm ladderline?

Yahoo group: SkyWires
Date: 2004-06-07 16:29:08 UTC
From: keith currie
Topic: 556 Message: 559
Attachments: 2 described; binary payloads are missing from this source WARC

Hi Leland
I got my 1080 loop up a couple weeks ago and love it , even though I was told my many it would be no better then one wl would be. It hears great and tunes all the way to 10m with a tuner of corse. Wish I had a balanced tuner like we talked about before on it.
I get my ladder line here in Canada so it wouldnt help you much I guess .
Take care Keith VE5HKC

nc9k wrote:

> Hello all,
>
> My stock of commercial 450 ohm ladderline I bought in 1990 at
> LAMARSFEST is down to 15 feet. I now live in the middle of nowhere
> on 40 acres and want to order more commercial (not TV) ladderline
> online so I can connect to the 1080 foot loop I am putting up for 160
> through 40M (I am keeping my 40M loop up for 20 through 10M - it
> really gets out!). If you know of good sources to order new
> commercial ladderline from please advise by posting on this Skywires
> site - others need to know as well.
>
> Thanks,
>
> Leland NC9K
>
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>

560. Re: [SkyWires] Cool and Interesting !

Yahoo group: SkyWires
Date: 2004-06-07 19:33:58 UTC
From: Dr.Ace Ratliff
Topic: 560 Message: 560

I Banned mila from the group.
Ace
----- Original Message -----
From: mila5675
To: SkyWires@yahoogroups.com
Sent: Monday, June 07, 2004 8:21 AM
Subject: [SkyWires] Cool and Interesting !

I found a very cool and interesting web site. If u sigh up in this
web site you will get money for clicking the ads banner.
I am sure that u have received the same emails before but there is
some thing different with this web site
Go to:
http://www.earnings2all.com/pages/index.php?refid=mila110

Make sure you tell all your friends about this revolutionary service
because the more people we sign up, the greater our income will be.

Yours
mila110

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http://groups.yahoo.com/group/SkyWires/

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Checked by AVG anti-virus system (http://www.grisoft.com).
Version: 6.0.699 / Virus Database: 456 - Release Date: 6/4/2004

561. RE: [SkyWires] Cool and Interesting !

Yahoo group: SkyWires
Date: 2004-06-07 19:58:27 UTC
From: David Shrum
Topic: 560 Message: 561

I deleted the original message from the archive.
Dave N8PU

-----Original Message-----
From: Dr.Ace Ratliff [mailto:wh2t@...]
Sent: Monday, June 07, 2004 3:34 PM
To: SkyWires@yahoogroups.com
Subject: Re: [SkyWires] Cool and Interesting !

I Banned mila from the group.
Ace

562. Re: [SkyWires] Cool and Interesting !

Yahoo group: SkyWires
Date: 2004-06-07 22:57:09 UTC
From: keith currie
Topic: 560 Message: 562
Attachments: 2 described; binary payloads are missing from this source WARC

Good stuff guys, way to go.
Keith
David Shrum wrote:

> I deleted the original message from the archive.
>
> Dave N8PU
>
> -----Original Message-----
> From: Dr.Ace Ratliff [mailto:wh2t@...]
> Sent: Monday, June 07, 2004 3:34 PM
> To: SkyWires@yahoogroups.com
> Subject: Re: [SkyWires] Cool and Interesting !
>
> I Banned mila from the group.
> Ace
>
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>

563. RE: [SkyWires] Cool and Interesting !

Yahoo group: SkyWires
Date: 2004-06-07 21:52:07 UTC
From: Mark Banks
Topic: 560 Message: 563

Yup,

New sheriff(s) in town,,, and not a moment too soon ! ;-)

Mark, W6SPT

-----Original Message-----
From: keith currie [mailto:kecurrie@...]
Sent: Monday, June 07, 2004 3:57 PM
To: SkyWires@yahoogroups.com
Subject: Re: [SkyWires] Cool and Interesting !

Good stuff guys, way to go.
Keith
David Shrum wrote:
I deleted the original message from the archive.
Dave N8PU
-----Original Message-----
From: Dr.Ace Ratliff [mailto:wh2t@...]
Sent: Monday, June 07, 2004 3:34 PM
To: SkyWires@yahoogroups.com
Subject: Re: [SkyWires] Cool and Interesting !
I Banned mila from the group.
Ace

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Version: 6.0.698 / Virus Database: 455 - Release Date: 6/2/2004

565. [Fwd: Re: [SkyWires] Source for more 450 ohm ladderline?]

Yahoo group: SkyWires
Date: 2004-06-08 02:38:45 UTC
From: Robert
Topic: 565 Message: 565

Having trouble understanding this question - do you want commercial 450 ohm ladder line (not homemade)? There are many vendors for this.

<>
http://coaxman.com/webstore/Ladder_Line.html
http://www.wb0w.com/wb0winc/Cable.htm
http://www.radiobooks.com/products/ll4510.htm
http://www.universal-radio.com/catalog/cable/3028.html
http://www.davisrf.com/ham1/ladder.htm
many others....

Not sure what "not TV" means, unless you are saying you do not want 300 ohm TV twinlead.

73...Robert W5IUA

nc9k wrote:

> I now live in the middle of nowhere on 40 acres and want to order more
> commercial (not TV) ladderline
> online so I can connect to the 1080 foot loop I am putting up for 160
> through 40M (I am keeping my 40M loop up for 20 through 10M - it
> really gets out!).
>
>

566. Thanks for sources for 450 ohm ladderline.

Yahoo group: SkyWires
Date: 2004-06-10 14:30:38 UTC
From: nc9k
Topic: 566 Message: 566

Hello Robert,

Thanks for the links to the sources of commercially manufactured 450
ohm ladderline. That's what I was looking for. 300 ohm TV twinlead
will not work for my application.

73's Leland NC9K

From: Robert <w5@i...>
Date: Mon Jun 7, 2004 9:38 pm
Subject: [Fwd: Re: [SkyWires] Source for more 450 ohm ladderline?]

Having trouble understanding this question - do you want commercial
450
ohm ladder line (not homemade)? There are many vendors for this.

<>
http://coaxman.com/webstore/Ladder_Line.html
http://www.wb0w.com/wb0winc/Cable.htm
http://www.radiobooks.com/products/ll4510.htm
http://www.universal-radio.com/catalog/cable/3028.html
http://www.davisrf.com/ham1/ladder.htm
many others....

Not sure what "not TV" means, unless you are saying you do not want
300
ohm TV twinlead.

73...Robert W5IUA

567. Glad to hear of 1080 ft. loop success

Yahoo group: SkyWires
Date: 2004-06-10 15:01:38 UTC
From: nc9k
Topic: 567 Message: 567

Hello Keith,

I'm glad you got your 1080 ft. loop up. I've been gathering materials for mine. I've got the footprint measured out with tall trees as corner supports.

I've been using my 40M loop for 160 through 10M with my homemade coupler but, as to be expected with sub-harmonic operation of the loop, bandwidth is narrow and feed impedance is extremely high on 160 and 80M. A 1080 ft. loop will give me a much lower feed impedance, a lower angle of radiation and broader bandwidth on 160 and 80M.

I've been using a SB-220 for 80 through 10M when bands are weak. I've got a second SB-220 on the way that I will be setting up for 160M.

I have been involved with a daily upper Wisconsin, Minnesota and Michigan net on 3947KC at 4PM central daily. My 40M loop matches and/or out performs the other stations for reception and transmission on the 3847 net. You are welcome to join in. I'd like to hear your 1080 ft loop there! There is also an upper midwestern net on 3948KC 9:30AM central. I've just been listening to it so far.

Hopefully I'll be running full power into a 1080 ft loop on 160 and 80M this summer.

73's Leland NC9K

From: keith currie <kecurrie@s...>
Date: Mon Jun 7, 2004 11:29 am
Subject: Re: [SkyWires] Source for more 450 ohm ladderline?

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Hi Leland
I got my 1080 loop up a couple weeks ago and love it , even though I was told my many it would be no better then one wl would be. It hears great and tunes all the way to 10m with a tuner of corse. Wish I had a balanced tuner like we talked about before on it.
I get my ladder line here in Canada so it wouldnt help you much I guess .
Take care Keith VE5HKC

568. Balanced Tuner

Yahoo group: SkyWires
Date: 2004-06-16 22:52:52 UTC
From: Dr.Ace Ratliff
Topic: 568 Message: 568

Hi all,
I know a couple of the guys have been talking about balanced tuners.
I thought this might be of interest.
Ace - WH2T

http://kj9t.150m.com/Construction_Projects_Pics/img00005.gif

Outgoing mail is certified Virus Free by Dr.Ace .
Checked by AVG anti-virus system (http://www.grisoft.com).
Version: 6.0.707 / Virus Database: 463 - Release Date: 6/15/2004

570. Re: [SkyWires] Important News for SkyWires Members

Yahoo group: SkyWires
Date: 2004-06-17 03:49:12 UTC
From: Dr.Ace Ratliff
Topic: 570 Message: 570

I banned this Spamming member, and deleted his message.
Ace - WH2T
P.S.
Does anyone have a link to report these spammers to yahoo groups?

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a.. To visit your group on the web, go to:
http://groups.yahoo.com/group/SkyWires/

b.. To unsubscribe from this group, send an email to:
SkyWires-unsubscribe@yahoogroups.com

c.. Your use of Yahoo! Groups is subject to the Yahoo! Terms of Service.

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Version: 6.0.707 / Virus Database: 463 - Release Date: 6/15/2004

571. Abuse - Inappropriate Material

Yahoo group: SkyWires
Date: 2004-06-17 05:02:11 UTC
From: wh2t@bloomington.in.us
Topic: 571 Message: 571

##

Auth Yahoo! ID:
NOT LOGGED IN

Email Address
dr_ace1@...

Who Are You Writing About
onpmfmdb204

Subject:
Inappropriate Material

What Group Are You Reporting
SkyWires@yahoogroups.com

Type Your Feedback Here:
SPAM

Return-Path:
Received: from n16.grp.scd.yahoo.com
(n16.grp.scd.yahoo.com [66.218.66.71])
by kirkwood.hoosier.net
(8.11.6/8.11.6) with SMTP id
i5H1JLY21566
for ;
Wed, 16 Jun 2004 20:19:22 -0500
X-eGroups-Return: sentto-10946119-568-
1087435155-
wh2t=bloomington.in.us@...
hoo.com
Received: from [66.218.67.199] by
n16.grp.scd.yahoo.com with NNFMP; 17
Jun 2004 01:19:15 -0000
X-Sender: onpmfmdb204@...
X-Apparently-To:
SkyWires@yahoogroups.com
Received: (qmail 52622 invoked from
network); 17 Jun 2004 01:19:14 -0000
Received: from unknown (66.218.66.172)
by m6.grp.scd.yahoo.com with QMQP; 17
Jun 2004 01:19:14 -0000
Received: from unknown (HELO
n11.grp.scd.yahoo.com) (66.218.66.66)
by mta4.grp.scd.yahoo.com with SMTP;
17 Jun 2004 01:19:13 -0000

Received: from [66.218.67.163] by
n11.grp.scd.yahoo.com with NNFMP; 17
Jun 2004 01:19:13 -0000
To: SkyWires@yahoogroups.com
Message-ID:
User-Agent: eGroups-EW/0.82
X-Mailer: Yahoo Groups Message Poster
X-eGroups-Remote-IP: 66.218.66.66
From: "onpmfmdb204"

X-Originating-IP: 205.188.116.71
X-Yahoo-Profile: onpmfmdb204
MIME-Version: 1.0
Mailing-List: list
SkyWires@yahoogroups.com; contact
SkyWires-owner@yahoogroups.com
Delivered-To: mailing list
SkyWires@yahoogroups.com
Precedence: bulk
List-Unsubscribe:
Date: Thu, 17 Jun 2004 01:19:13 -0000
Subject: [SkyWires] Important News for
SkyWires Members
Reply-To: SkyWires@yahoogroups.com
Content-Type: text/html; charset=ISO-
8859-1
Content-Transfer-Encoding: 7bit
X-Spam-Checker-Version: SpamAssassin
2.61 (1.212.2.1-2003-12-09-exp) on
cgi.hoosier.net
X-Spam-Level: *
X-Spam-Status: No, hits=1.1
required=8.0 tests=BAYES_30,CLICK_BELOW,
FROM_ENDS_IN_NUMS,HTML_50_60,HTM
L_FONTCOLOR_BLUE,HTML_IMAGE_RATIO_10,
HTML_MESSAGE,MIME_HTML_ONLY
autolearn=no version=2.61
Status:

I was really far into debt.
Like Most I was in Financial
dispair.
I could not seem to get ahead no matter
how hard I tried.
Untill I found this place.
http://h
elplive.4ever.cc
If you are in debt they can help you
out.
Check them out today I did.
This email was sent because you joined

our group.
If you do not wish to recieve any
emails, unsubscribe.
by sending a mail here SkyWires-
unsubscribe@yahoogroups.com
Any information reguarding Remove
Information can be sent to.
Rua da Imprense,
4347, R/C Bloco 1-33
Maputo, Mozambique
Thank You

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To visit your group on the web, go
to: http://groups.yahoo.com/group/Sky
Wires/
To unsubscribe from this group,
send an email to: SkyWires-
unsubscribe@yahoogroups.com
;
Your use of Yahoo! Groups is
subject to the Yahoo! Terms of Service .

While Viewing:
Browser: Mozilla/4.0 (compatible; MSIE 6.0; Windows NT 5.1)
Remote Address: 4.224.219.185
Remote Host: dialup-4.224.219.185.Dial1.Cincinnati1.Level3.net
Date Originated: Wednesday 16th of June 2004 09:01:56 PM
Amt Link: https://amt.yahoo.com/

572. Re: [SkyWires] Abuse - Inappropriate Material

Yahoo group: SkyWires
Date: 2004-06-17 07:46:49 UTC
From: Eirinn_0
Topic: 571 Message: 572

That is a bot, report that for abuse

wh2t@... wrote:##

Auth Yahoo! ID:
NOT LOGGED IN

Email Address
dr_ace1@...

Who Are You Writing About
onpmfmdb204

Subject:
Inappropriate Material

What Group Are You Reporting
SkyWires@yahoogroups.com

Type Your Feedback Here:
SPAM

Return-Path:
Received: from n16.grp.scd.yahoo.com
(n16.grp.scd.yahoo.com [66.218.66.71])
by kirkwood.hoosier.net
(8.11.6/8.11.6) with SMTP id
i5H1JLY21566
for ;
Wed, 16 Jun 2004 20:19:22 -0500
X-eGroups-Return: sentto-10946119-568-
1087435155-
wh2t=bloomington.in.us@...
hoo.com
Received: from [66.218.67.199] by
n16.grp.scd.yahoo.com with NNFMP; 17
Jun 2004 01:19:15 -0000
X-Sender: onpmfmdb204@...
X-Apparently-To:
SkyWires@yahoogroups.com
Received: (qmail 52622 invoked from
network); 17 Jun 2004 01:19:14 -0000
Received: from unknown (66.218.66.172)
by m6.grp.scd.yahoo.com with QMQP; 17
Jun 2004 01:19:14 -0000
Received: from unknown (HELO
n11.grp.scd.yahoo.com) (66.218.66.66)

by mta4.grp.scd.yahoo.com with SMTP;
17 Jun 2004 01:19:13 -0000
Received: from [66.218.67.163] by
n11.grp.scd.yahoo.com with NNFMP; 17
Jun 2004 01:19:13 -0000
To: SkyWires@yahoogroups.com
Message-ID:
User-Agent: eGroups-EW/0.82
X-Mailer: Yahoo Groups Message Poster
X-eGroups-Remote-IP: 66.218.66.66
From: "onpmfmdb204"

X-Originating-IP: 205.188.116.71
X-Yahoo-Profile: onpmfmdb204
MIME-Version: 1.0
Mailing-List: list
SkyWires@yahoogroups.com; contact
SkyWires-owner@yahoogroups.com
Delivered-To: mailing list
SkyWires@yahoogroups.com
Precedence: bulk
List-Unsubscribe:
Date: Thu, 17 Jun 2004 01:19:13 -0000
Subject: [SkyWires] Important News for
SkyWires Members
Reply-To: SkyWires@yahoogroups.com
Content-Type: text/html; charset=ISO-
8859-1
Content-Transfer-Encoding: 7bit
X-Spam-Checker-Version: SpamAssassin
2.61 (1.212.2.1-2003-12-09-exp) on
cgi.hoosier.net
X-Spam-Level: *
X-Spam-Status: No, hits=1.1
required=8.0 tests=BAYES_30,CLICK_BELOW,
FROM_ENDS_IN_NUMS,HTML_50_60,HTM
L_FONTCOLOR_BLUE,HTML_IMAGE_RATIO_10,
HTML_MESSAGE,MIME_HTML_ONLY
autolearn=no version=2.61
Status:

I was really far into debt.
Like Most I was in Financial
dispair.
I could not seem to get ahead no matter
how hard I tried.
Untill I found this place.
http://h
elplive.4ever.cc
If you are in debt they can help you
out.

Check them out today I did.
This email was sent because you joined
our group.
If you do not wish to recieve any
emails, unsubscribe.
by sending a mail here SkyWires-
unsubscribe@yahoogroups.com
Any information reguarding Remove
Information can be sent to.
Rua da Imprense,
4347, R/C Bloco 1-33
Maputo, Mozambique
Thank You

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To visit your group on the web, go
to: http://groups.yahoo.com/group/Sky
Wires/
To unsubscribe from this group,
send an email to: SkyWires-
unsubscribe@yahoogroups.com
;
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subject to the Yahoo! Terms of Service .

While Viewing:
Browser: Mozilla/4.0 (compatible; MSIE 6.0; Windows NT 5.1)
Remote Address: 4.224.219.185
Remote Host: dialup-4.224.219.185.Dial1.Cincinnati1.Level3.net
Date Originated: Wednesday 16th of June 2004 09:01:56 PM
Amt Link: https://amt.yahoo.com/

ALL-NEW Yahoo! Messenger - sooooo many all-new ways to express yourself

573. Re: [SkyWires] Important News for SkyWires Members

Yahoo group: SkyWires
Date: 2004-06-17 14:57:43 UTC
From: ron trotto
Topic: 570 Message: 573

theres a button on your incoming messages labled spam.if you push it it is supposed to delete the sender from your email box no matter if its from the group or not,and send a report to yahoo.if you do not see the spam button you have to turn your spam filters on.you can do this by following the link in your email box when you first open it up to check your mail.hope this helps ron trotto

"Dr.Ace Ratliff" <wh2t@...> wrote:
I banned this Spamming member, and deleted his message.
Ace - WH2T
P.S.
Does anyone have a link to report these spammers to yahoo groups?

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Yahoo! Groups Links

To visit your group on the web, go to:
http://groups.yahoo.com/group/SkyWires/

To unsubscribe from this group, send an email to:
SkyWires-unsubscribe@yahoogroups.com

Your use of Yahoo! Groups is subject to the Yahoo! Terms of Service.

RON TROTTO WDX-4KWI

IMAGINE ALL THE PEAPLE,SHARING ALL THE WORLD -JOHN LENNON

Do you Yahoo!?
New and Improved Yahoo! Mail - Send 10MB messages!

574. Re: [SkyWires] Digest Number 179

Yahoo group: SkyWires
Date: 2004-06-18 10:11:46 UTC
From: Ron Winters
Topic: 574 Message: 574

> P.S.
> Does anyone have a link to report these spammers to yahoo groups?
>
spamcop.net is the best anti spam free service I have seen, sign up here;
http://www.spamcop.net/anonsignup.shtml

575. Re: [SkyWires] Digest Number 179

Yahoo group: SkyWires
Date: 2004-06-18 12:01:05 UTC
From: Eirinn_0
Topic: 574 Message: 575

Yes, and report as much as you can!

http://add.yahoo.com/fast/help/us/mail/cgi_spam

Ron Winters <cntrline@...> wrote:
> P.S.
> Does anyone have a link to report these spammers to yahoo groups?
>
spamcop.net is the best anti spam free service I have seen, sign up here;
http://www.spamcop.net/anonsignup.shtml

Yahoo! Groups Links

ALL-NEW Yahoo! Messenger - sooooo many all-new ways to express yourself

576. Re: [SkyWires] Digest Number 179

Yahoo group: SkyWires
Date: 2004-06-18 15:05:04 UTC
From: Scott Erwin
Topic: 574 Message: 576

```
Just hit the "SPAM" button and that will send a spam
report to Yahoo.
--- Ron Winters <cntrline@...> wrote:
> > P.S.
> > Does anyone have a link to report these spammers
> to yahoo groups?
> >
> spamcop.net is the best anti spam free service I
> have seen, sign up here;
> http://www.spamcop.net/anonsignup.shtml
>

_________________________________
Do you Yahoo!?
Yahoo! Mail - You care about security. So do we.
http://promotions.yahoo.com/new_mail
```

578. RE: [SkyWires] Digest Number 179 (trying to reporting spammers)

Yahoo group: SkyWires
Date: 2004-06-18 22:14:09 UTC
From: David Shrum
Topic: 574 Message: 578

I have been trying to get to that address and I keep getting a message
that says the connection is refused; maybe dr_ace1 or sgordon1 can have
better luck than me.

Dave N8PU

-----Original Message-----
From: Eirinn_0 [mailto:eirinn_0@...]
Sent: Friday, June 18, 2004 8:01 AM
To: SkyWires@yahoogroups.com
Subject: Re: [SkyWires] Digest Number 179

Yes, and report as much as you can!

http://add.yahoo.com/fast/help/us/mail/cgi_spam

Ron Winters <cntrline@...> wrote:
> P.S.
> Does anyone have a link to report these spammers to yahoo groups?

579. Best way to put up a skywire only at 15-20 foot above ground??

Yahoo group: SkyWires
Date: 2004-06-25 05:39:14 UTC
From: kd@cox-internet.com
Topic: 579 Message: 579

I like the loop antenna, but haven't been able to get it up high enough. 15-20 foot level is it. I would like to have an 80-10m version, or is it better to have a different version. All suggestions or comments greatly welcomed.

Thank you

73

Kenny

KG5KS

580. Re: [SkyWires] Best way to put up a skywire only at 15-20 foot above ground??

Yahoo group: SkyWires
Date: 2004-06-25 12:24:21 UTC
From: Erik Weaver, n0ew
Topic: 579 Message: 580

>
> I like the loop antenna, but haven't been able to get it up high
> enough. 15-20 foot level is it. I would like to have an 80-10m
> version, or is it better to have a different version. All suggestions
> or comments greatly welcomed.
> Kenny KG5KS
>

Hello Kenny,

I've had a skywire of sorts up for 2 1/2 years now. I've given your question some thought myself as I've considered what I might do to improve my installation. I'm not in a great rush (obviously) because it does work, and it works very well actually as a NVIS antenna. When I'm active on HF the two nets I most frequently am active with are state nets (MO), so it serves me well as a regional antenna, which is sometimes a challenge due to the hilly terrain of the Ozarks.

I currently have what I call a _slooper_ ...3-sided, supported at trees, heights roughly 50 (east), 40 (north), and 15 feet (west & the feed point), fed right out the window with ladder line. It also has about 15 foot of vertical radiation because of two reasons: (1) I split the window line several feet after it exits the window with the ends anchored to wooden blocks in the earth (preexisting treated 4x4's I found pounded into the earth nearly at grade level, 4 foot separation) and rising to the "antenna;" and (2) I wasn't overly concerned about the window treatment: I have a towel wrapped in plastic and this is sandwiched between the closed window, along with the 450-Ohm ladder line. Not the best condition for maintaining proper current balance! (I suspect the line becomes unbalanced at this point and begins radiating RF. This was my first HF antenna by the way.)

For field day last year a friend and I deployed a full sized 80-meter loop at roughly 30 feet. We are going to deploy the same antenna this year, but at 40 foot height. It works very well, so I've thought about what I might do to offer a similar home solution.

I am considering this solution:

Push-up poles on the order of 60 to 75 feet in height may be purchased (with pipe to extend your height, you have the ability to enter the cross-over point between NVIS and DX heights (1/4 wavelength)). It should be pretty simple to set these safely, guy as needed, and install each with a simple rope + eye hook at the top of the mast. (Some will argue for pulleys. If you go that route I'd recommend well made ones, perhaps marine

grade (ACE Hardware is said to carry good ones too). An eye hook is a lot more affordable and I don't think it'll destroy the rope leading through it. I plan to use _Silky_ wire (insulated # 26 copper clad stranded steel: cablexperts.com (best) or davisrf.com (2nd best)), 1000-feet<1 lb. (Has supported nearly an inch of ice buildup over a 400-foot run: good stuff!) Check your power handling capacity if you run an amplifier.)

Seems very easy to adjust height for regional work, or raise it for DX work. Easy to maintain as needed. Can be dropped with just step ladders (with due care for the fingers, etc.) This is my favorite idea. I'd like to hear what others offer.

Four towers is of course another solution. Big expense, a lot of labor. Not my preferred solution.

Trees are another obvious choice. If you have them in your yard of suitable height and climbability (mine are pretty easy to climb). It can be challenging working the antenna line over-and-around various branches. If you go this route give another yell here. I'm sure I'm not the only one that has come up with a tip or two along those lines.

Tuners are another question, off topic, but you may consider a balanced-z.

Take a look at your lobes too, to be certain you like the multiple lobes on the higher frequencies.

That is my 2-cents, good luck, good question!

Erik E. Weaver
erik@...
www.n0ew.org

581. Re: [SkyWires] Best way to put up a skywire only at 15-20 foot above ground??

Yahoo group: SkyWires
Date: 2004-06-25 13:10:27 UTC
From: JimMcSkate@aol.com
Topic: 579 Message: 581

Kenny,
My 40m loop is up 18 feet... it's the only configuration that my yard (and my spouse ;-) will support. I have "masts" (actually springy 3/4" square pine sticks) on my house and on a shed at the corner of my yard, one corner attaches to a maple tree, the fourth corner is thrown over the top of a pine tree and is counterweighted.

The wire "floats" in the insulators, and the tension is maintained by the counterweight at one corner - which is a 5 pound iron weight pulling down through a pulley. I drive mine with 300-ohm twin lead - and it gets out on 160 through 10 with my modest Kenwood AT-200 tuner. The longest contact on the fundamental 40m band has been near 1000 miles - that's where it's truly a NVIS source. On the higher bands it's gotten me everywhere I could hear - Europe, Africa, Argentina, Pacific islands. Also: NVIS is not too shabby - it enables you to make short-haul contacts in a wider range of propagation conditions.

73 and good luck!
WA2LGN
Jim
Blue Point, NY

www.qsl.net/wa2lgn

In a message dated 6/25/2004 1:39:14 AM Eastern Daylight Time, kd@... writes:

> I like the loop antenna, but haven't been able to get it up high
> enough. 15-20 foot level is it. I would like to have an 80-10m
> version, or is it better to have a different version. All
> suggestions
> or comments greatly welcomed.
>
> Thank you

582. Re: Best way to put up a skywire only at 15-20 foot above ground??

Yahoo group: SkyWires
Date: 2004-06-25 13:47:00 UTC
From: bambazonke01
Topic: 579 Message: 582

--- In SkyWires@yahoogroups.com, JimMcSkate@a... wrote:
> Kenny,
> My 40m loop is up 18 feet... it's the only configuration that my yard (and my spouse ;-) will support. I have "masts" (actually springy 3/4" square pine sticks) on my house and on a shed at the corner of my yard, one corner attaches

Hi Jim,
At one time I also had a low loop and improved it's ability significantly by putting a second loop directly under the first one but buried in the ground by about 2 inches. My feed was between the two loops. For further info research Direct Discontinuity Ring Radiator or DDDR loops as the method of feed is quite different. I have had 80 meter loops as low as 6 ft which would knock my hat off when I walked under it. Because one method of feed has a grounded loop the noise level goes AWAY down. In fact you will think that your antenna is disconnected till you tune a signal. These low loops can be really big boomers.
Jim VE3DDY

583. Link-coupled Z match tuner For Sale - Perefct for loops

Yahoo group: SkyWires
Date: 2004-06-25 15:03:22 UTC
From: cpa2000
Topic: 583 Message: 583

KW Electronics - Rare KW-107 killowatt antenna tuner with built-in dummy load.This is a link-coupled Z match. Perfect for balanced lines. Built-in meter SWR and wattmeter and KW antenna switch. 9/10 - works great. With Manual. See Manual here:
http://www.g4nsj.co.uk/pdf/kw-107.pdf
$185 + shipping

584. Trees, a sappy Question

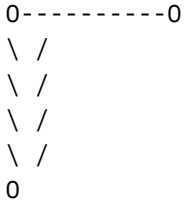
Yahoo group: SkyWires
Date: 2004-06-25 22:56:24 UTC
From: David Shrum
Topic: 584 Message: 584

My question is about trees, how do they affect the way the loop matches (SWR wise) at the radio?

Here is what I did during last winter; since it was cold my son and I put up the 530-ish feet of wire, now I know if we would have taken the time to support the wire away from the tree; that would be a lot better. But since it was cold and we were walking in knee deep snow, we used the outside of the trunk of the tree as our corner and used limbs as supports to hold the rest of the wire up. The wire was purchased in a 500 foot spool, #12 romax and we had to solder it together, we did make sure we had a good connection.

The main reason I am asking this question is the best SWR I can get is about a 3 to 1 match (without the tuner). Where I wanted to use it, 160 and 80, I can't even get my SWR meter to go to the set line, I have to use my tuner to 'tweak' the setting, then adjust it with the tuner to protect the radio; 40, 20 17, 15, 12, and 10 meter bands I can check the SWR then use the tuner to 'adjust' the SWR into a useable area for the radio.

Dave N8PU



585. Re: [SkyWires] Re: Best way to put up a skywire only at 15-20 foot above grou...

Yahoo group: SkyWires
Date: 2004-06-25 23:02:04 UTC
From: JimMcSkate@aol.com
Topic: 585 Message: 585

Interesting concept! I am not sure how it would go in my yard, as it would involve chiseling up part of a patio.

Maybe if I present the choice: wrecked patio? twin towers?? she'll choose the towers ;-)

73 - and thanks for being a great group!
Jim\WA2LGN
Blue Point, NY

In a message dated 6/25/2004 10:19:03 AM Eastern Standard Time, bambazonke@... writes:

> Because one method of feed has a grounded
> loop the noise level goes AWAY down. In fact you will think that
> your antenna is disconnected till you tune a signal. These low loops
> can be really big boomers.
> Jim VE3DDY
>

586. Re: [SkyWires] Best way to put up a skywire only at 15-20 foot above ground??

Yahoo group: SkyWires
Date: 2004-06-26 15:43:42 UTC
From: Dr.Ace Ratliff
Topic: 579 Message: 586

Hi Kenny,
I would put up a 260 ft loop.
15 - 20 feet high will work fine on 80-10 mtrs.
Ace - WH2T
----- Original Message -----
From: kd@cox-internet.com
To: SkyWires@yahoogroups.com
Sent: Friday, June 25, 2004 12:39 AM
Subject: [SkyWires] Best way to put up a skywire only at 15-20 foot above ground??

I like the loop antenna, but haven't been able to get it up high
enough. 15-20 foot level is it. I would like to have an 80-10m
version, or is it better to have a different version. All suggestions
or comments greatly welcomed.

Thank you

73

Kenny

KG5KS

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a.. To visit your group on the web, go to:
http://groups.yahoo.com/group/SkyWires/

b.. To unsubscribe from this group, send an email to:
SkyWires-unsubscribe@yahoogroups.com

c.. Your use of Yahoo! Groups is subject to the Yahoo! Terms of Service.

Outgoing mail is certified Virus Free by Dr.Ace .
Checked by AVG anti-virus system (http://www.grisoft.com).
Version: 6.0.710 / Virus Database: 466 - Release Date: 6/23/2004

587. Re: Best way to put up a skywire only at 15-20 foot above ground??

Yahoo group: SkyWires
Date: 2004-06-27 11:25:21 UTC
From: bambazonke01
Topic: 579 Message: 587

Hi Kenny,
Why not try a DDDR loop (Direct disconuity ring radiator).
I think for 40 M it is only 9 ft in diameter and about 6 ft high.
On 80 M it is maybe 15 ft in dia and 15 ft high Research it and if
you cant find anything get back to me and I'll give dimensions as I
have them on file.
Jim VE3DDY

589. 530 foot loop up!

Yahoo group: SkyWires
Date: 2004-07-01 05:18:42 UTC
From: nc9k
Topic: 589 Message: 589

Well, I got the 530 foot loop (160M) up yesterday at 35 foot height. It is oval shaped with 6 supports. It is constructed with 12ga. stranded plastic covered housewire and fed with 450 ohm ladderline at the south end of the oval. It tunes nicely with my homemade link coupler 160 through 10M. Corner supports are double 3 foot UV-resistant bungie cords with 60 inch long 1/4 nylon safety ropes alongside the bungies in case they break. I am using plastic electric fence corner insulators as the interface between the bungie cords and the antenna wire, with a single turn of 14ga copper wire trapping the antenna wire in the corner insulator slot. The entire antenna free-floats in the support system.

I ran 80M air tests yesterday afternoon. I linked up with K9RON on 3900 khz. He is located 45 miles northeast of me near Bergland MI. I ran the power going into my coupler down to 2.5 watts. He copied me at S9.

I ran additional tests with KC9DVO on the same freq. He is located 90 miles from me in Rhinelander WI. I had to turn the power up to 5 watts to get an S9 level there. I then kicked the SB-220 into the 530 foot loop and literally "jumped out of their speakers".

I compared receive signal strength levels on 20M between my existing 135 ft. loop (40M) and the new 530 foot loop. Both tuned flat. As expected, the 40M loop gave receive signal strength levels about 2 S units higher on my radio.

I ran the 530 foot loop on the 3973 khz breakfast club at 4am this morning. I easily copied mobile stations in Pennsylvania and Iowa that the other stations could not copy, including the net control station 1 hour away from me.

I think loops perform best when used on their second through forth harmonics. Hence I am keeping both loops up and applying them accordingly.

73's Leland NC9K

590. Re: [SkyWires] 530 foot loop up!

Yahoo group: SkyWires
Date: 2004-07-01 13:26:41 UTC
From: Erik Weaver, n0ew
Topic: 589 Message: 590

Hello Leland,

Sounds like a good loop!
Would you happen to have SWR/Rs/Xs measurements made on each band limit?

-Erik, n0ew

>
>
>
>
> Well, I got the 530 foot loop (160M) up yesterday at 35 foot height.
> It is oval shaped with 6 supports. It is constructed with 12ga.
> stranded plastic covered housewire and fed with 450 ohm ladderline at
> the south end of the oval. It tunes nicely with my homemade link
> coupler 160 through 10M. Corner supports are double 3 foot UV-
> resistant bungie cords with 60 inch long 1/4 nylon safety ropes
> alongside the bungies in case they break. I am using plastic
> electric fence corner insulators as the interface between the bungie
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>
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> 90 miles from me in Rhinelander WI. I had to turn the power up to 5
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> 530 foot loop and literally "jumped out of their speakers".
>
> I compared receive signal strength levels on 20M between my existing
> 135 ft. loop (40M) and the new 530 foot loop. Both tuned flat. As
> expected, the 40M loop gave receive signal strength levels about 2 S
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>
> I ran the 530 foot loop on the 3973 khz breakfast club at 4am this
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> that the other stations could not copy, including the net control
> station 1 hour away from me.
>
> I think loops perform best when used on their second through forth
> harmonics. Hence I am keeping both loops up and applying them
> accordingly.

> 73's Leland NC9K
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> To visit your group on the web, go
> to:http://groups.yahoo.com/group/SkyWires/
> To unsubscribe from this group, send an email
> to:SkyWires-unsubscribe@yahoogroups.com
> Your use of Yahoo! Groups is subject to the Yahoo! Terms of Service.

Erik E. Weaver
erik@...
www.n0ew.org

591. Loop questions

Yahoo group: SkyWires
Date: 2004-07-01 15:42:18 UTC
From: nc9k
Topic: 591 Message: 591

Hello Jim,

After carefully reviewing the numerous links and computer files on analysis of loops posted on Skywires it became apparent that horizontal loops re-develop high-angle radiation lobes if applied above their forth harmonic. They also have high-angle radiation on their fundamental freq.

I've been comparing receive signal strength on 20M by comparing the 2 loops (both tuning through my link coupler at almost identical settings) monitoring the Maritime Mobile Net on 14.300 as well as using both loops in the 14.340 net I check into Mon-Fri 8:30am CST. The 135 ft. loop consistently gives 2 S units higher receive signal on both my Atlas 350XL as well as my Icom 706MKIIG on all 20M signals. Both antennas are at the same height without any metal or other items to cause significant pattern disruption. These numbers are in agreement with the predicted angles of radiation for both loops.

The static chokes are a good idea. I've been pressing old SB-220 30K 5W power supply bleeder resistors into servive as loop static discharge resistors. I also use 3/16 inch sparkgaps (made from #12 solid copper wire) on my antenna selection knife switch on each leg of each 450 ohm ladderline. The resistors and spark gaps discharge through 3 feet of #4 solid copper wire into two 8ft. copper clad ground rods. I also intentionally use coated wire to help reduce precipitation static on the antenna wire itself.

Thanks for the questions.

73's Leland NC9K

>From: "bambazonke01" <bambazonke@...>
>To: jasminemeese@...
>Subject: Loop
>Date: Thu, 01 Jul 2004 12:08:55 -0000
>
>Leland,
>I read your post on the BIG loop.
>Question.
>Why would the 40 M loop give 2 S units better performance than the
>530 ft loop?
>On my 272 ft loop, I pick up a lot of static charge that makes a lot
>of noise in my receiver. I decoupled the loop to ground with a RF
>choke and that bled the static away.
>Jim VE3DDY

>

592. Re: 530 foot loop up!

Yahoo group: SkyWires
Date: 2004-07-01 15:50:52 UTC
From: nc9k
Topic: 589 Message: 592

Hello Erik,

The SWR on the 535 ft loop (using my homemade link coupler) is less than 1.4:1 across 160, 80, 40, 20 and 10M (except 160M, where it rises to about 1.9:1 below 1900 khz). I will be mapping the new antenna with my General Radio Impedance Bridge once I another free day in my work schedule. I will post the results here afterward. Thanks for asking.

73's Leland NC9K

--- In SkyWires@yahoogroups.com, "Erik Weaver, n0ew" <erik@n...> wrote:
> Hello Leland,
>
> Sounds like a good loop!
> Would you happen to have SWR/Rs/Xs measurements made on each band limit?
>
> -Erik, n0ew
>

594. NET?

Yahoo group: SkyWires
Date: 2004-07-05 15:40:25 UTC
From: wb5pnz
Topic: 594 Message: 594

Greeting all
New to the group here.... i was wondering if there is a specific frequency that everybody might hang out at... time ...date etc..and also i would be curious to know what the group thinks is a good tuner... i am in the need for one and havent started my research into that yet,,, any comments or ideas would b appreciated.... hope to see ya on the bands....73's
Roger
WB5PNZ

595. Re: NET?

Yahoo group: SkyWires
Date: 2004-07-05 21:11:22 UTC
From: oldlongbeard
Topic: 594 Message: 595

Roger-
not aware of a NET, but it's a good thought. I can tell you about the tuner I use. It is an old Dentron unit, and will match about anything you throw at it, with or without 1.5KW! It is a model MT-2000a. I've owned others, too. The old Murch is a beauty, but the early ones won't cover 160M. The Heathkit SA-2060A is good, also. I use an external meter, so the lack of one doesn't bother me. If you buy one of the aforementioned (I am sure there are others!) you should have no need for another in the shack for the rest of your ham career. PS-- I bought my old Dentron (used) for the same price as a new MFJ-949E. My guess is the old Dentron will still be happily working when today's MFJ is filling a landfill somewhere. Don't get me wrong, I have an MFJ, too, but the loop can present some real extreme impedances, and a less expensive tuner may have problems with that. Just my experience, and always "your mileage may vary"! 73- Greg Schippers, KC8HXO

--- In SkyWires@yahoogroups.com, "wb5pnz" <wb5pnz@y...> wrote:
> Greeting all
> New to the group here.... i was wondering if there is a specific
> frequency that everybody might hang out at... time ...date etc..and
> also i would be curious to know what the group thinks is a good
> tuner... i am in the need for one and havent started my research
into
> that yet,,, any comments or ideas would b appreciated.... hope to
see
> ya on the bands....73's
> Roger
> WB5PNZ

596. Re: [SkyWires] NET?

Yahoo group: SkyWires
Date: 2004-07-05 23:28:37 UTC
From: Rick
Topic: 594 Message: 596

Hi Roger,
Haven't heard of any net or anything like that, but it
is an interesting thought.
I use an old Heathkit SA-2060A, 2kw tuner that I got
used from a swap net on 40 meters. It will tune
anything and handles my SB-220 without batting an eye.
Good luck finding one though!
Check out the "product reviews" at Eham.net....lots of
info about all kinds of tuners there.
73,
Rick
W1HEN

--- wb5pnz <wb5pnz@...> wrote:
> Greeting all
> New to the group here.... i was wondering if there
> is a specific
> frequency that everybody might hang out at... time
> ...date etc..and
> also i would be curious to know what the group
> thinks is a good
> tuner... i am in the need for one and havent started
> my research into
> that yet,,, any comments or ideas would b
> appreciated.... hope to see
> ya on the bands....73's
> Roger
> WB5PNZ
>
>

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597. Re: [SkyWires] NET?

Yahoo group: SkyWires
Date: 2004-07-06 01:34:32 UTC
From: Erik Weaver, n0ew
Topic: 594 Message: 597

I have used/owned three different MFJ tuners successfully. Two models have a variable inductor and one a tapped inductor. They are OK. Not great, but OK. The quality of construction leaves something to be desired.

I would recommend getting the larger components (1.5kw vs. 300w), it is far easier to achieve a tune and potential arcing will be less of a concern. I also like roller inductors because they always enable me to find a very good match. But if the tuner is properly matched to your antenna (with regard to its tuning range) you should find the tapped coils work well enough.

You might also consider Ten-Tec's tuner. Or purchasing their air variable capacitor kit and 28 uH roller inductor and making your own (mine is laying in pieces awaiting me to set aside time to assemble it, so I can't push on that front too hard, hi-hi).

If memory serves, a pair of Ten-Tec's capacitor kits is $100 ($50 each) and the roller indictor is about $80 or $85. $200 is a fair bit of change, and you don't even have an enclosure or hardware yet, but it will be a solid transmatch once you finish it!

Erik E. Weaver
erik@...
www.n0ew.org

598. Re: [SkyWires] NET?

Yahoo group: SkyWires
Date: 2004-07-06 03:08:08 UTC
From: Jim Dunstan
Topic: 594 Message: 598

At 03:40 PM 7/5/2004 +0000, you wrote:

>Greeting all
>New to the group here.... i was wondering if there is a specific
>frequency that everybody might hang out at... time ...date etc..and
>also i would be curious to know what the group thinks is a good
>tuner... i am in the need for one and havent started my research into
>that yet,,, any comments or ideas would b appreciated.... hope to see
>ya on the bands....73's
>Roger
>WB5PNZ

Hi Roger:

Since you are at the research stage vis-a-vis a tuner and you may be looking at a loop (balanced) type antenna (although you didn't specifically mention that) I would suggest looking into a tuner designed with a balanced feed objective. In early days balanced feed systems were predominant and transmitter/antenna matching systems were designed with this in mind.

Since the 60's the transmitter/antenna systems have been dominated by unbalanced feed systems using coax feed lines. It is possible to feed balanced antennae such as dipoles and loops directly with coax using various tricks. However, multi-band operation is difficult.

In more recent times there is renewed interest in feeding balanced antennae with balanced feedline and some of the old advantages are being realized. However, no balanced antenna tuners were still being made. The solution has been an add-on solution; without exception all the major manufacturers simply added a balun on the output side of the unbalanced tuner. This add-on solution does not always work very well since the balun by nature does not work well at high and complicated impedances ..... especially with high power.

At this time a couple of manufacturers are starting to produce antenna tuners designed primarily for balanced feed systems. Palstar makes a beautiful model made to handle high power..... and MFJ I believe has one as well. In both units they place the balun between the transmitter and the tuning unit instead of between the tuning unit and the antenna feedline.

In early days a common approach to designing a tuner was to use the link system rather than a balun ..... but as far as I know there is no commercial manufacturer (except for the QRP Z-match) using this approach. I use a link type balanced tuner designed and manufactured back in the 50's and early 60's that tunes all amateur bands with no switching! It is however limited to handling about 100 watts or so. It is called the KW E-ZEE match and uses the same principles of design as the QRP

Z-match.

I expect to see more commercial development along these lines ..... good old ideas always have a way of re-emerging.

Jim Dunstan
Thunder Bay, ON

599. Re: NET?

Yahoo group: SkyWires
Date: 2004-07-06 09:29:30 UTC
From: R H F
Topic: 594 Message: 599

ROGER,

Read "Loopers" Message # 265 and the replies.
http://groups.yahoo.com/group/SkyWires/message/265

~ RHF
.
.
= = = In SkyWires@yahoogroups.com,
= = = "wb5pnz" <wb5pnz@y...> wrote:
>
> Greeting all
> New to the group here.... i was wondering if there is a specific
> frequency that everybody might hang out at... time ...date
etc..and
> also i would be curious to know what the group thinks is a good
> tuner... i am in the need for one and havent started my research
into
> that yet,,, any comments or ideas would b appreciated.... hope to
see
> ya on the bands....73's
> Roger
> WB5PNZ
.

600. Re: [SkyWires] Digest Number 189

Yahoo group: SkyWires
Date: 2004-07-06 09:48:54 UTC
From: Ron Winters
Topic: 600 Message: 600

Here's a site with details on building a balanced tuner, mine is 3/4
done, Ron, ag4lh.
http://www.somis.org/bbat.html

601. Re: [SkyWires] Digest Number 189

Yahoo group: SkyWires
Date: 2004-07-06 16:35:08 UTC
From: Jim Dunstan
Topic: 600 Message: 601

At 05:48 AM 7/6/2004 -0400, you wrote:
>Here's a site with details on building a balanced tuner, mine is 3/4
>done, Ron, ag4lh.

Hi Ron:

The approach to designing a balanced tuner using a balun between the transmitter and a kind of double L tuned circuit is not the easiest way. You might want to look at the venerable Z-match approach that uses a special kind of L circuit with an inductive link. The greatest advantage is that it avoids the complications of a variable inductor (roller type or switched). If you look on the internet for "KW E-ZEE match" you will find plenty of details; this approach uses 2 inductors and links and tunes all bands with no switching. A single coil version is demonstrated at the following site:

http://www4.tpgi.com.au/users/ldbutler/SingleCoilZMatch.htm

Jim Dunstan, VE3CI
Thunder Bay, ON

602. Re: Hoist-rope to Antenna-wire junction?

Yahoo group: SkyWires
Date: 2004-07-09 23:31:35 UTC
From: kl7r
Topic: 522 Message: 602

I use a 2 foot piece of bungee attached to a little pulley that
the 18 copperclad goes through

> What are others' favorite little tricks for attaching the rope to
> the wire on a SkyWireLoop?
>
> Cheers,
>
> Mike - W8MM

603. 1200 foot loop for field day

Yahoo group: SkyWires
Date: 2004-07-09 23:44:16 UTC
From: kl7r
Topic: 603 Message: 603

we put up a big-un for field day

2 500 foot legs and a 200 foot connecting leg
up 75 feet. Sort of like a half-rhombic pointed
down to the states.

Worked like gang busters

605. RE: [SkyWires] Enjoy

Yahoo group: SkyWires
Date: 2004-07-11 20:10:56 UTC
From: David Shrum
Topic: 605 Message: 605

The original message is deleted from group and "willbeback_9" has been banned.

Dave N8PU

-----Original Message-----
From: willbeback_9 [mailto:willbeback@...]
Sent: Sunday, July 11, 2004 2:22 PM
To: SkyWires@yahoogroups.com
Subject: [SkyWires] Enjoy

Are you looking for porn this evening

606. RE: [SkyWires] Enjoy

Yahoo group: SkyWires
Date: 2004-07-12 01:44:20 UTC
From: Brian H
Topic: 605 Message: 606

Thanks Dave,
Quick responce. I am sick of spam.
I belong to 25 groups so I expect the idiot to show up
in my mailbox 24 more times but some groups take along
time to react.
Brian ka2cxg
--- David Shrum <aq392@...> wrote:
> The original message is deleted from group and
> "willbeback_9" has been
> banned.
>
> Dave N8PU
>
> -----Original Message-----
> From: willbeback_9 [mailto:willbeback@...]
> Sent: Sunday, July 11, 2004 2:22 PM
> To: SkyWires@yahoogroups.com
> Subject: [SkyWires] Enjoy
>
> Are you looking for porn this evening
>
>

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607. Re: Hoist-rope to Antenna-wire junction?

Yahoo group: SkyWires
Date: 2004-07-12 18:03:41 UTC
From: Mike Valentine
Topic: 522 Message: 607

Thanks for the info.

How do you keep the #18 from getting jammed between the side of the pulley roller and the pulley frame?

Do you use a special type of pulley?

Best wishes,

Mike - W8MM

--- In SkyWires@yahoogroups.com, "kl7r" <kl7r@y...> wrote:
> I use a 2 foot piece of bungee attached to a little pulley that
> the 18 copperclad goes through
>
> > What are others' favorite little tricks for attaching the rope
to
> > the wire on a SkyWireLoop?
> >
> > Cheers,
> >
> > Mike - W8MM

608. Re: Hoist-rope to Antenna-wire junction?

Yahoo group: SkyWires
Date: 2004-07-13 16:07:44 UTC
From: oldlongbeard
Topic: 522 Message: 608

Mike- just another Idea.... I also use a rubber bungee, but I use a nylon wire-tie through the end of the bungee where the S-hook would be. (remove the s-hook). I have had great success with this set up. Sure, after a few years the ny-tie will give in and break, but by then the rope is about shot, too. PS- I use mason line for rope. I am sure it's not the best, but it works for me. Best to you--
Greg, KC8HXO

--- In SkyWires@yahoogroups.com, "Mike Valentine" <mike@v...> wrote:
> Thanks for the info.
>
> How do you keep the #18 from getting jammed between the side of the
> pulley roller and the pulley frame?
>
> Do you use a special type of pulley?
>
> Best wishes,
>
> Mike - W8MM
>
>
> --- In SkyWires@yahoogroups.com, "kl7r" <kl7r@y...> wrote:
> > I use a 2 foot piece of bungee attached to a little pulley that
> > the 18 copperclad goes through
> >
> > > What are others' favorite little tricks for attaching the rope
> to
> > > the wire on a SkyWireLoop?
> > >
> > > Cheers,
> > >
> > > Mike - W8MM

609. Re: Hoist-rope to Antenna-wire junction?

Yahoo group: SkyWires
Date: 2004-07-14 17:05:10 UTC
From: kl7r
Topic: 522 Message: 609

--- In SkyWires@yahoogroups.com, "Mike Valentine" <mike@v...> wrote:
> Thanks for the info.
>
> How do you keep the #18 from getting jammed between the side of the
> pulley roller and the pulley frame?
>
> Do you use a special type of pulley?
>
> Best wishes,
>
> Mike - W8MM

I am using small enough pullies that it hasnt been a problem.
I put up the pulleys to experiment with "rotating" my loop by
sliding the feedpoint to different positions. I didnt see any
useful difference in directionality by moving the feedpoint. Ill
try it again later with some good reference antennas and see how
that works again before I give up on that idea.

You really dont need the pulleys at all. I used plastic insulators
that you get in the SWL antenna kits from radioshack for a long time
before I switched to the pulleys.

The bungees are a good idea though.

Mike - KL7R

616. RE: [SkyWires] I AM >>EDITED<

Yahoo group: SkyWires
Date: 2004-07-16 21:25:52 UTC
From: David Shrum
Topic: 616 Message: 616

I found these 6 messages not only off topic but offensive,
(trickreed2003...) those messages were deleted form archive and that
person was banned.

If I ban and or delete something or someone that you disagree with me
please email me off the list and let me know.

Thanks,
Dave N8PU

-----Original Message-----
From: President of the United Studs [mailto:trickreed2003@...]
Sent: Friday, July 16, 2004 4:18 PM
To: SkyWires@yahoogroups.com
Subject: [SkyWires] I AM

Every time a butterfly

617. Need information please...baluns....loops for a 746/756 internal tuner

Yahoo group: SkyWires
Date: 2004-07-18 04:34:41 UTC
From: Tom
Topic: 617 Message: 617
Attachments: 1 described; binary payloads are missing from this source WARC

Hi Loop fans around the world,

I have 2 questions:

1. Has anyone out there ever tried to build a multiband loop antenna that the 746 Pro, 756 Pro
or Pro2 could tune with *only* the built in antenna tuner?

2. Has anyone ever used a 3:1, yes 3:1, balun from http://www.antennasmore.com/baluns.htm, made specifically for matching coax to single turn loops?

I have seen many multiband loop antennas that use external antenna tuners, but I have never seen one
that uses just the internal antenna tuner of the 746/756 Pro or Pro2. I am interested in 100 watt
peak power only.

Thanks in advance.

Tom
KE6YNH, 73

618. Re: [SkyWires] Need information please...baluns....loops for a 746/756 internal tuner

Yahoo group: SkyWires
Date: 2004-07-18 13:57:44 UTC
From: Dr.Ace Ratliff
Topic: 617 Message: 618

Hi Tom,

I have 2 answers:

#1
I am using a 75 meter Full Wave Delta Loop.
It will tune from 6 - 75 meters using only the built in antenna tuner in my Yaesu FT-920.
I am using 54' of 75 ohm RG 11 coax from the loop to a PL 258 connector , Then I finish the run to the shack using 50 ohm coax, I chose LMR 400.
I use a 1/4 wave inverted L antenna for 160 meters.

#2
This is the first time I have ever seen any reference to a 3:1 balun.

NOTE: With (Matching) Transformers “Baluns” it is the "Ratio" of the Squares
of the Number of Turns that 'defines' the "Ratio" of the Matching Transformer.

Here are some straight math common examples:

* One to One "1:1" = (1X1) : (1X1) = 1 Turn to 1 Turn

* Four to One "4:1" = (2X2) : (1X1) = 2 Turns to 1 Turn

* Nine to One "9:1" = (3X3) : (1X1) = 3 Turns to 1 Turn

* Sixteen to One "16:1" = (4X4) : (1X1) = 4 Turns to 1 Turn

* Twenty-Five to One "25:1" = (5X5) : (1X1) = 5 Turns to 1 Turn

* Thirty-Six "36:1" = (6X6) : (1X1) = 6 Turns to 1 Turn

So a 3:1 balun would have a Turns Ratio of 1.7320508 Turns to 1 Turn - Very Interesting!

Ace - WH2T

----- Original Message -----
From: Tom
To: SkyWires@yahoogroups.com
Sent: Saturday, July 17, 2004 11:34 PM
Subject: [SkyWires] Need information please...baluns....loops for a 746/756 internal tuner

Hi Loop fans around the world,

I have 2 questions:

1. Has anyone out there ever tried to build a multiband loop antenna that the 746 Pro, 756 Pro
or Pro2 could tune with *only* the built in antenna tuner?

2. Has anyone ever used a 3:1, yes 3:1, balun from http://www.antennasmore.com/baluns.htm, made specifically for matching coax to single turn loops?

I have seen many multiband loop antennas that use external antenna tuners, but I have never seen one
that uses just the internal antenna tuner of the 746/756 Pro or Pro2. I am interested in 100 watt
peak power only.

Thanks in advance.

Tom
KE6YNH, 73

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Version: 6.0.721 / Virus Database: 477 - Release Date: 7/16/2004

619. Re: [SkyWires] Need information please...baluns....loops for a 746/756 internal tuner

Yahoo group: SkyWires
Date: 2004-07-18 15:02:29 UTC
From: Rick
Topic: 617 Message: 619

Tom,
I have been using my 280 foot loop for over a year
with the internal tuner of my 746 Pro. I have used two
different 4:1 current baluns and both worked very well
(note: I am also able to use the loop/internal tuner
on 6 meters, but only at about 50 watts).
The tuner works just fine on 80-10 meters for full 100
watt output and 1:1 swr.
My first balun was a W2AU cheapie and it worked fine,
but I also like to be able to run a linear so I picked
up a High power balun from DX Engineers and it works
great with just the internal tuner and with the high
power amp/tuner.
My feed is simple: 67 feet of 450 ohm balanced line
(quarter wave of the antenna resonant freq.) to the
balun and then 50 feet of RG8 to the rig.
It's awesome to be able to change frequency and bands
and not worry about the antenna/tuning!
73's
Rick
W1HEN

--- Tom <tgleeman@...> wrote:
> Hi Loop fans around the world,
>
> I have 2 questions:
>
> 1. Has anyone out there ever tried to build a
> multiband loop antenna that the 746 Pro, 756 Pro
> or Pro2 could tune with *only* the built in antenna
> tuner?
>
> 2. Has anyone ever used a 3:1, yes 3:1, balun from
> http://www.antennasmore.com/baluns.htm,
> made specifically for matching coax to single turn
> loops?
>
> I have seen many multiband loop antennas that use
> external antenna tuners, but I have never seen one
> that uses just the internal antenna tuner of the
> 746/756 Pro or Pro2. I am interested in 100 watt
> peak power only.
>
> Thanks in advance.

>
> Tom
> KE6YNH, 73

> ATTACHMENT part 2 image/jpeg name=Current Forcing
Balun.jpg

_____
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620. Re: [SkyWires] Need information please...baluns....loops for a 746/756 internal tuner

Yahoo group: SkyWires
Date: 2004-07-18 16:43:40 UTC
From: Tom
Topic: 617 Message: 620

Hi Rick and the skywire group,

Rick wrote:
>I have been using my 280 foot loop for over a year
>with the internal tuner of my 746 Pro.
>My feed is simple: 67 feet of 450 ohm balanced line
>(quarter wave of the antenna resonant freq.) to the
>balun and then 50 feet of RG8 to the rig.

I'll try something similar. I'm running out of space for a single turn loop so I may have to try
2 turns of 140 foot square loop. Any Idea how that would effect the L=1005/MHz formula?

Thanks Rick

Tom
KE6YNH, 73

621. Re: [SkyWires] Need information please...baluns....loops for a 746/756 internal tuner

Yahoo group: SkyWires
Date: 2004-07-18 17:01:59 UTC
From: Tom
Topic: 617 Message: 621

Hi Ace and the Skywire group,

Ace wrote:

>It will tune from 6 - 75 meters using only the built in antenna tuner in my Yaesu FT-920.
>I am using 54' of 75 ohm RG 11 coax from the loop to a PL 258 connector , Then I finish the run
>to the shack using 50 ohm coax, I chose LMR 400.

>So a 3:1 balun would have a Turns Ratio of 1.7320508 Turns to 1 Turn - Very Interesting!

Wow, seek and ye shall find. Thanks for your very informative and detailed response.
I've been scanning articles on the Internet, but couldn't find any that tuned into my situation so well.

Tom
KE6YNH, 73

622. Re: [SkyWires] Need information please...baluns....loops for a 746/756 internal tuner

Yahoo group: SkyWires
Date: 2004-07-19 01:15:55 UTC
From: Scott Erwin
Topic: 617 Message: 622

I have been using a 160 meter loop skywire with 530 feet of wire and 200 feet of 450 ohm ladder line connected to a Air-Dux #2B009 BALUN setup for 4:1. From there 6 feet of RG-8X connects to the ANT-1 connector on the rear of my PRO II and allows 1 to 1 SWR match on all HF bands and the low end of 6 meters. When I use my Heathkit SB-1000 and Heathkit SA-2060A tuner I use the Internal 4:1 BALUN and 2 feet of 450 ohm ladder line from the window feed through to the tuner rear connector. No problems encountered with 1K power levels on 160 to 10 meters.

--- Tom <tgleeman@...> wrote:

> Hi Loop fans around the world,
>
> I have 2 questions:
>
> 1. Has anyone out there ever tried to build a
> multiband loop antenna that the 746 Pro, 756 Pro
> or Pro2 could tune with *only* the built in antenna
> tuner?
>
> 2. Has anyone ever used a 3:1, yes 3:1, balun from
> http://www.antennasmore.com/baluns.htm,
> made specifically for matching coax to single turn
> loops?
>
> I have seen many multiband loop antennas that use
> external antenna tuners, but I have never seen one
> that uses just the internal antenna tuner of the
> 746/756 Pro or Pro2. I am interested in 100 watt
> peak power only.
>
> Thanks in advance.
>
> Tom
> KE6YNH, 73

> ATTACHMENT part 2 image/jpeg name=Current Forcing Balun.jpg

---
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623. Re: [SkyWires] Need information please...baluns....loops for a 746/756 internal tuner

Yahoo group: SkyWires
Date: 2004-07-19 03:09:11 UTC
From: Tom
Topic: 617 Message: 623

Hi Scott and skywire fans,

Scott wrote;

>I have been using a 160 meter loop skywire with 530
>feet of wire and 200 feet of 450 ohm ladder line
>connected to a Air-Dux #2B009 BALUN setup for 4:1.
>From there 6 feet of RG-8X connects to the ANT-1
>connector on the rear of my PRO II and allows 1 to 1
>SWR match on all HF bands and the low end of 6 meters.

Nice arrangement, Scott. I have never bought ladder line,
but I'm about to take a trip to HRO(Ham Radio Outlet). It's
about time I learned what low loss is all about.

Thanks.

Tom
KE6YNH, 73

624. Re: Need information please...baluns....loops for a 746/756 internal tuner

Yahoo group: SkyWires
Date: 2004-07-19 12:26:47 UTC
From: nc9k
Topic: 617 Message: 624

Hello Tom,

When I was still doing military design work at Northrop I developed a 2.25:1 ratio twisted-wire line balun by combining a 9:1 (3 to 1 turns ratio) with a 4:1 (2 to 1 turns ratio) on the same core for a 30 Mhz to 500 Mhz broadband power amplifier design of mine.

Leland NC9K

--- In SkyWires@yahoogroups.com, "Tom" <tgleeman@a...> wrote:
> Hi Loop fans around the world,
>
> I have 2 questions:
>
> 1. Has anyone out there ever tried to build a multiband loop antenna that the 746 Pro, 756 Pro
> or Pro2 could tune with *only* the built in antenna tuner?
>
> 2. Has anyone ever used a 3:1, yes 3:1, balun from http://www.antennasmore.com/baluns.htm,
> made specifically for matching coax to single turn loops?
>
> I have seen many multiband loop antennas that use external antenna tuners, but I have never seen one
> that uses just the internal antenna tuner of the 746/756 Pro or Pro2. I am interested in 100 watt
> peak power only.
>
> Thanks in advance.
>
> Tom
> KE6YNH, 73

625. Skywires and trees

Yahoo group: SkyWires
Date: 2004-07-24 12:46:28 UTC
From: lochnessguide
Topic: 625 Message: 625

Hi all, fine group.

My question is about how the skywire antenna reacts (or not) with trees.

There has been a lot of valuable information posted here about insulators, bungee cords, pulleys, ropes etc. but what if it is not possible to use such attachments? I appreciate that if you have a regular lot and four towers this is probably fairly easy and the best way to go, but what if you are experimenting with various lengths in woodland?

For example I have an area of birch woodland in my garden backing onto more woodland. The rear woodland, off my lot, is crofting land and no-one minds a wire in the trees (or at least I can get away with that) but not attachments complete with insulators. But since I plan to use conduit wire which has plastic insulation, are the insulators and attachments really necessary? Has anyone tried just putting the wire over the trees, creating the best loop you can with a given length and attaching it only at the feedpoint? That is, just passing the wire through forked branches in a rough circle as high as possible round and back to the feedpoint which can be attached to a tree near to the shack.

Do any of you do this and what are the results?

My trees are birch trees that are around 40 feet or so but wave about a bit near the tops so I was planning to just pass the wire around and back to the feedpoint where I could use some elastic rope or bungee cord to keep some tension. I could do this, but being up a ladder for long may be risky at my age :) and firing arrows/slings usually is not very successful as it just lodges on other trees - the woodland is fairly thick.

Does the antenna react with the trees even using insulated wire? Has anyone any ideas or experience on this?

Keep up the excellent work.

Ray
GM6JJN

626. Re: [SkyWires] Skywires and trees

Yahoo group: SkyWires
Date: 2004-07-24 14:57:12 UTC
From: Scott Erwin
Topic: 625 Message: 626

I have a 160 meter loop with 530 feet of insulated
wire and there are points along the wire run where the
wire runs through trees and is in contact with the
limbs and foliage. I have found that as long as the
wire is insulated this has no effect on performance.
Also at a few points where it was required to pull the
wire out from under limbs in order to get the wire
above them I used a long rope across the wire with no
insulator and left them in place with no effect even
when wet. I have a roll of wire 1590 feet long I have
ready to put up for a 3 X 160 loop, which will be put
up as you describe in your project. I had planed on
putting it up last fall after the leaves had fallen
but I had medical problems that canceled the project
and I am still recovering from the required surgery.
Hopefully I will be able to do it late this fall or
early winter.
--- lochnessguide <ray@...> wrote:
> Hi all, fine group.
>
> My question is about how the skywire antenna reacts
> (or not) with
> trees.

_____
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627. Re: [SkyWires] Skywires and trees

Yahoo group: SkyWires
Date: 2004-07-24 15:20:10 UTC
From: Brian H
Topic: 625 Message: 627

Hi Ray,
over the years I've used insulated wire thrown over
branches for antennas many times. It's better than
nothing and it does work but remember that a live tree
is a waterpump pumping water from the ground to the
leaves. It tends to be lossy. Also if you run much
power into a high impedance antenna the voltage on the
wire can burn thru the insulation effectivly shorting
it to ground.
Higher freqs are more effected by this than low ones.
If you don't use a lot of power and use the lower
bands it should work fine. The main problem I had was
the wind bending the trees, tearing my wire. You might
try a large rubber band where the wire connect to the
tree to allow movement without letting the wire sag.
I hope this helps.
73 Brian ka2cxg.
ps I've seen soom people here sign with "72" what does
that mean?
--- lochnessguide <ray@...> wrote:
> Hi all, fine group.
>
> My question is about how the skywire antenna reacts
> (or not) with
> trees.
>
>
> Ray
> GM6JJN
>
>
>

____
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628. Re: [SkyWires] Skywires and trees

Yahoo group: SkyWires
Date: 2004-07-24 16:26:05 UTC
From: Erik Weaver, n0ew
Topic: 625 Message: 628

My main concern would be the health of the trees. A wire around a tree with tension on it will cut into the bark and this will harm the tree. I would anticipate there is some absorption of the RF signal, but at HF I don't know if that would be a measurable amount or not.

So far as I know one is better off placing a screw into the tree. Anything encircling the tree will either cut into, or impede future growth of the limb/trunk.

A local arborist (SP? - tree specialist) should be able to provide you detailed information about anchoring to a tree properly.
-Erik n0ew

> Hi all, fine group.
>
> My question is about how the skywire antenna reacts (or not) with
> trees.
>
> There has been a lot of valuable information posted here about
> insulators, bungee cords, pulleys, ropes etc. but what if it is not
> possible to use such attachments? I appreciate that if you have a
> regular lot and four towers this is probably fairly easy and the
> best way to go, but what if you are experimenting with various
> lengths in woodland?
>
> For example I have an area of birch woodland in my garden backing
> onto more woodland. The rear woodland, off my lot, is crofting land
> and no-one minds a wire in the trees (or at least I can get away
> with that) but not attachments complete with insulators. But since I
> plan to use conduit wire which has plastic insulation, are the
> insulators and attachments really necessary? Has anyone tried just
> putting the wire over the trees, creating the best loop you can with
> a given length and attaching it only at the feedpoint? That is, just
> passing the wire through forked branches in a rough circle as high
> as possible round and back to the feedpoint which can be attached to
> a tree near to the shack.
>
> Do any of you do this and what are the results?
>
> My trees are birch trees that are around 40 feet or so but wave
> about a bit near the tops so I was planning to just pass the wire
> around and back to the feedpoint where I could use some elastic rope
> or bungee cord to keep some tension. I could do this, but being up a
> ladder for long may be risky at my age :) and firing arrows/slings
> usually is not very successful as it just lodges on other trees -
> the woodland is fairly thick.

>
> Does the antenna react with the trees even using insulated wire? Has
> anyone any ideas or experience on this?
>
> Keep up the excellent work.
>
> Ray
> GM6JJN
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Erik E. Weaver
erik@...
www.n0ew.org

629. Re: [SkyWires] Skywires and trees

Yahoo group: SkyWires
Date: 2004-07-24 17:42:38 UTC
From: Dr.Ace Ratliff
Topic: 625 Message: 629

Hi Ray,
My 75 mtr full wave Delta loop is bare solid 8 awg copper wire.
It contacts tree limbs in multiple places, I have seen no ill effects.
Ace - WH2T
----- Original Message -----
From: lochnessguide
To: SkyWires@yahoogroups.com
Sent: Saturday, July 24, 2004 7:46 AM
Subject: [SkyWires] Skywires and trees

Hi all, fine group.

My question is about how the skywire antenna reacts (or not) with trees.

There has been a lot of valuable information posted here about insulators, bungee cords, pulleys, ropes etc. but what if it is not possible to use such attachments? I appreciate that if you have a regular lot and four towers this is probably fairly easy and the best way to go, but what if you are experimenting with various lengths in woodland?

For example I have an area of birch woodland in my garden backing onto more woodland. The rear woodland, off my lot, is crofting land and no-one minds a wire in the trees (or at least I can get away with that) but not attachments complete with insulators. But since I plan to use conduit wire which has plastic insulation, are the insulators and attachments really necessary? Has anyone tried just putting the wire over the trees, creating the best loop you can with a given length and attaching it only at the feedpoint? That is, just passing the wire through forked branches in a rough circle as high as possible round and back to the feedpoint which can be attached to a tree near to the shack.

Do any of you do this and what are the results?

My trees are birch trees that are around 40 feet or so but wave about a bit near the tops so I was planning to just pass the wire around and back to the feedpoint where I could use some elastic rope or bungee cord to keep some tension. I could do this, but being up a ladder for long may be risky at my age :) and firing arrows/slings usually is not very successful as it just lodges on other trees - the woodland is fairly thick.

Does the antenna react with the trees even using insulated wire? Has anyone any ideas or experience on this?

Keep up the excellent work.

Ray
GM6JJN

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630. Again, feeding the loop directly by coax

Yahoo group: SkyWires
Date: 2004-07-24 20:26:31 UTC
From: spninesoy
Topic: 630 Message: 630

Hi

I would like to exchange experience about feeding the loop directly with the coax, and using a balun or an ATU at the other end.
Did somebody try this also for harmonic bands?

Currently I'm using a 40m loop fed with 75ohm coax and next by 50om coax, and I get the SWR less than 2:1 at 7 and 14MHz. On 21MHz I have to put (with a switch) a coil in series at the point where the two coax join. So there is no need to use an ATU. This design is very succesful.

I hope to get the same result with the new 80m loop, which I intend to set up. The feeding point will be very close to my shack (loft) so there would be not enough distance to use 1/4WL 75ohm coax transformer, since for 80m it should be 20m (65ft)long. I can arrange maximum 7-8m (25ft). Anyway that design wouldn't probably work properly on all bands.

I plan to feed the loop with 50ohm coax and use a 1:4 or 1:6 balun at the end, which would theoreticaly match the high impedence of the loop (at the higher harmonics) to the standard 50ohm. (Except if there is too much reactance...?)

I definitely won't use the ladder line. I had bad experience with in the past, due to the lack of the appropriate inductively-coupled balanced tuner.

Did anybody tried the coax feed for multiband use? What are SWRs on the harmonic bands? Or should I use 75ohm coax instead of 50ohm and an ATU at the end?

Thanks for help and sharing your experience.
Alex sp9soy

631. Balun placement

Yahoo group: SkyWires
Date: 2004-07-24 23:56:30 UTC
From: Jeff - N3YEA
Topic: 631 Message: 631

Greetings All,
I'd like to pose a question.. where would the best place to locate the balun be ? close to the antenna or close to the rig ?
I have an 80 meter loop up at about 30 feet. Fed with 100 ft. of 450 Ohm ladderline. I get no rf in the shack except on 40 meters.
On 40 meters I swamp everything in the vicinity, 2 meter rigs, power supplies, tnc's etc..etc.. So - I am planning on putting a 4:1
balun in line. Should I get a balun and place it outside below the loop and run coax into the shack ? or would it be better to by a
tuner with a built in 4:1 balun in it ?

Thanks es 73,
Jeff - N3YEA

632. Re: [SkyWires] Again, feeding the loop directly by coax

Yahoo group: SkyWires
Date: 2004-07-25 00:05:14 UTC
From: Dr.Ace Ratliff
Topic: 630 Message: 632

Hi Alex,
I am using a 75 meter Full Wave Horizontal Delta Loop.
I was in a hurry when I put it up and I accidentaly used the velocity factor of the 50 ohm coax instead of the 75 ohm coax to figure the length of the quarter wave matching "Q" section. Since it was ready to go when I discovered my mistake , I thought I might as well try it instead of cutting the length of 75 ohm coax down to the 42 feet as given by the correct formula.

I have 54 feet of RG-11, 75 ohm coax that runs from the loop to a PL258 connector then I am using 50 ohm coax into the shack.
My Loop antenna is flat 1:1 VSWR around 3.875 Mhz and rises to about 2:1 SWR at 3.75 and 4 Mhz . So I cover the entire 75 meter phone band without using a tuner.

I can tune 6 thru 75 meters using a manual or built in automatic antenna tuner.

The following Info is taken from
http://www.bloomington.in.us/~wh2t/loop.html

The length of the 75 ohm coax is most important. It will be used as a Q section.
To determine the length to use, Use this formula "Length in feet = 246 x VF / Freq in Mhz"
VF = the Velocity Factor of the coax. So multiply 246 by the Velocity Factor of the coax , Then divide by the frequency .

If you use RG59 or RG11 with a Velocity Factor of 0.66 , For the 75 meter band the Piece of 75 ohm coax should be about 42 feet long , It doesn't need to be exact . RG59 and RG11 coax usually have a Velocity Factor of 0.66 , Foam dielectric coax such as RG6 might have a Velocity Factor of 0.81 or more.

Put a PL259 coax connector on the unused end of the 75 ohm coax, Screw a PL258 double female coax connector onto this PL259 coax connector. Then connect 50 ohm coax to the other side of the PL258 double female coax connector, Use any length 50 ohm coax needed to reach your Transceiver.

Ace - WH2T

----- Original Message -----
From: spninesoy
To: SkyWires@yahoogroups.com
Sent: Saturday, July 24, 2004 3:26 PM
Subject: [SkyWires] Again, feeding the loop directly by coax

Hi

I would like to exchange experience about feeding the loop directly
with the coax, and using a balun or an ATU at the other end.
Did somebody try this also for harmonic bands?

Currently I'm using a 40m loop fed with 75ohm coax and next by 50om coax, and I get the SWR less than 2:1 at 7 and 14MHz. On 21MHz I have to put (with a switch) a coil in series at the point where the two coax join. So there is no need to use an ATU. This design is very succesful.

I hope to get the same result with the new 80m loop, which I intend to set up. The feeding point will be very close to my shack (loft) so there would be not enough distance to use 1/4WL 75ohm coax transformer, since for 80m it should be 20m (65ft)long. I can arrange maximum 7-8m (25ft). Anyway that design wouldn't probably work properly on all bands.

I plan to feed the loop with 50ohm coax and use a 1:4 or 1:6 balun at the end, which would theoreticaly match the high impedence of the loop (at the higher harmonics) to the standard 50ohm. (Except if there is too much reactance...?)

I definitely won't use the ladder line. I had bad experience with in the past, due to the lack of the appropriate inductively-coupled balanced tuner.

Did anybody tried the coax feed for multiband use? What are SWRs on the harmonic bands? Or should I use 75ohm coax instead of 50ohm and an ATU at the end?

Thanks for help and sharing your experience.
Alex sp9soy

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633. Re: [SkyWires] Balun placement

Yahoo group: SkyWires
Date: 2004-07-25 00:24:39 UTC
From: Dr.Ace Ratliff
Topic: 631 Message: 633

Hi Jeff,
I think the best solution to the RF in the shack is to place the balun outside at the bottom end of the 450 ohm line then run a piece of coax from the balun into the shack.
I have tried it with a 75 meter double extended Zepp antenna and it worked well.
Ace - WH2T
----- Original Message -----
From: Jeff - N3YEA
To: SkyWires@yahoogroups.com
Sent: Saturday, July 24, 2004 6:56 PM
Subject: [SkyWires] Balun placement

Greetings All,
I'd like to pose a question.. where would the best place to locate the balun be ? close to the antenna or close to the rig ?
I have an 80 meter loop up at about 30 feet. Fed with 100 ft. of 450 Ohm ladderline. I get no rf in the shack except on 40 meters.
On 40 meters I swamp everything in the vicinity, 2 meter rigs, power supplies, tnc's etc..etc.. So - I am planning on putting a 4:1
balun in line. Should I get a balun and place it outside below the loop and run coax into the shack ? or would it be better to by a
tuner with a built in 4:1 balun in it ?

Thanks es 73,
Jeff - N3YEA

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634. Re: [SkyWires] Again, feeding the loop directly by coax

Yahoo group: SkyWires
Date: 2004-07-25 01:56:43 UTC
From: Dave
Topic: 630 Message: 634

I wish I could be that lucky on SWR, on 160 and 75/80 with my tuner I can get a match that won't fry my radio but if I dial about 30 ish kc either way, I HAVE to retune, it does get better the higher the frequency gets; my loop [about 530 feet] is using the tree trunks and limbs to keep it up, and I do believe that is why I am having a problem with SWR. It does work, but I have to believe if/when I move it so I have some of the wire away from trees, I expect to see improvement, but for now that is just speculation.

Dave N8PU

On Sat, 2004-07-24 at 20:05, Dr.Ace Ratliff wrote:
> Hi Alex,
> I am using a 75 meter Full Wave Horizontal Delta Loop.
> I was in a hurry when I put it up and I accidentaly used the
> velocity factor of the 50 ohm coax instead of the 75 ohm coax to
> figure the length of the quarter wave matching "Q" section. Since it
> was ready to go when I discovered my mistake , I thought I might as
> well try it instead of cutting the length of 75 ohm coax down to the
> 42 feet as given by the correct formula.
>
> I have 54 feet of RG-11, 75 ohm coax that runs from the loop to a
> PL258 connector then I am using 50 ohm coax into the shack.
> My Loop antenna is flat 1:1 VSWR around 3.875 Mhz and rises to about
> 2:1 SWR at 3.75 and 4 Mhz . So I cover the entire 75 meter phone band
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> I can tune 6 thru 75 meters using a manual or built in automatic
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>
> The following Info is taken from
> http://www.bloomington.in.us/~wh2t/loop.html
>
> The length of the 75 ohm coax is most important. It will be used as a
> Q section.
> To determine the length to use, Use this formula "Length in feet = 246
> x VF / Freq in Mhz" VF = the Velocity Factor of the coax. So multiply
> 246 by the Velocity Factor of the coax , Then divide by the frequency
> .
>
> If you use RG59 or RG11 with a Velocity Factor of 0.66 , For the 75
> meter band the Piece of 75 ohm coax should be about 42 feet long , It
> doesn't need to be exact . RG59 and RG11 coax usually have a Velocity
> Factor of 0.66 , Foam dielectric coax such as RG6 might have a
> Velocity Factor of 0.81 or more.

> Put a PL259 coax connector on the unused end of the 75 ohm coax, Screw
> a PL258 double female coax connector onto this PL259 coax connector.
> Then connect 50 ohm coax to the other side of the PL258 double female
> coax connector, Use any length 50 ohm coax needed to reach your
> Transceiver.
>
> Ace - WH2T
>
>
>
> ----- Original Message -----
> From: spninesoy
> To: SkyWires@yahoogroups.com
> Sent: Saturday, July 24, 2004 3:26 PM
> Subject: [SkyWires] Again, feeding the loop directly by coax
>
> Hi
>
> I would like to exchange experience about feeding the loop
> directly
> with the coax, and using a balun or an ATU at the other end.
> Did somebody try this also for harmonic bands?
>
> Currently I'm using a 40m loop fed with 75ohm coax and next by
> 50om
> coax, and I get the SWR less than 2:1 at 7 and 14MHz. On 21MHz
> I have
> to put (with a switch) a coil in series at the point where the
> two
> coax join. So there is no need to use an ATU. This design is
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> succesful.
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> I hope to get the same result with the new 80m loop, which I
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> (loft) so
> there would be not enough distance to use 1/4WL 75ohm coax
> transformer, since for 80m it should be 20m (65ft)long. I can
> arrange
> maximum 7-8m (25ft). Anyway that design wouldn't probably work
> properly on all bands.
>
> I plan to feed the loop with 50ohm coax and use a 1:4 or 1:6
> balun at
> the end, which would theoreticaly match the high impedence of
> the
> loop (at the higher harmonics) to the standard 50ohm. (Except
> if

> there is too much reactance...?)
>
> I definitely won't use the ladder line. I had bad experience
> with in
> the past, due to the lack of the appropriate
> inductively-coupled
> balanced tuner.
>
> Did anybody tried the coax feed for multiband use? What are
> SWRs on
> the harmonic bands? Or should I use 75ohm coax instead of
> 50ohm and
> an ATU at the end?
>
> Thanks for help and sharing your experience.
> Alex sp9soy
>
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635. Re: [SkyWires] Balun placement

Yahoo group: SkyWires
Date: 2004-07-25 03:35:11 UTC
From: Jim Dunstan
Topic: 631 Message: 635

At 07:56 PM 7/24/04 -0400, you wrote:
>Greetings All,
> I'd like to pose a question.. where would the best place to locate
> the balun be ? close to the antenna or close to the rig ?
>I have an 80 meter loop up at about 30 feet. Fed with 100 ft. of 450 Ohm
>ladderline. I get no rf in the shack except on 40 meters.
>On 40 meters I swamp everything in the vicinity, 2 meter rigs, power
>supplies, tnc's etc..etc.. So - I am planning on putting a 4:1
>balun in line. Should I get a balun and place it outside below the loop
>and run coax into the shack ? or would it be better to by a
>tuner with a built in 4:1 balun in it ?
>
>Thanks es 73,
> Jeff - N3YEA

Hi Jeff. Your question/statement begs the question, what are you using now to couple the 450 ohm ladder line to your transceiver? It doesn't sound like you are presently using a tuner or a balun!

If the intention is to operate a balanced antenna such as a loop or dipole on more than one band the general practice is as follows:

- use low loss balanced feed line to minimize power loss and feed line radiation.
- bring the balanced line as close to the operating position as possible.
- couple the balanced feed line with an antenna tuner to the 50 ohm unbalanced output of your transceiver.
- if you're going to use a balun between the balanced line and the tuner keep it as close to the tuner as possible.

The majority of present day antenna tuners are unbalanced circuits designed to match an unbalanced load to the transceiver. They use a balun on the output side to accommodate balanced feed (an after thought). There are now a few tuners on the market designed primarily to couple balanced feed lines (rather expensive). These tuners use balanced tuning circuits followed by a balun on the low impedance side (where it works best) to feed the transceiver.

Although the preceding is the general practice it is not the ultimate. The ultimate system would be to locate the balanced tuner as close to the antenna as possible. The tuner would then be connected by good quality coax back to the operating position (ideally bury the coax). Of course, the tuner would have to be one of the modern automatic antenna tuners. This system would provide minimum loss, minimum antenna/feed line interaction, minimum RF in the shack, Minimum noise pick-up, and minimum fuss in operation. I use such a system with a 40M delta loop (vertical)

which loads all bands, 10-80M, using an SGC automatic antenna tuner. No fuss, no muss; it is as simple as operating into a dummy load and it works great.

Jim Dunstan, VE3CI
Thunder Bay, ON

636. Re: [SkyWires] Again, feeding the loop directly by coax

Yahoo group: SkyWires
Date: 2004-07-25 17:02:55 UTC
From: Dr.Ace Ratliff
Topic: 630 Message: 636

Dave,
How many feet of 75 ohm coax are you using now?
Ace - WH2T
----- Original Message -----
From: Dave
To: SkyWires@yahoogroups.com
Sent: Saturday, July 24, 2004 8:56 PM
Subject: Re: [SkyWires] Again, feeding the loop directly by coax

I wish I could be that lucky on SWR, on 160 and 75/80 with my tuner I
can get a match that won't fry my radio but if I dial about 30 ish kc
either way, I HAVE to retune, it does get better the higher the
frequency gets; my loop [about 530 feet] is using the tree trunks and
limbs to keep it up, and I do believe that is why I am having a problem
with SWR. It does work, but I have to believe if/when I move it so I
have some of the wire away from trees, I expect to see improvement, but
for now that is just speculation.

Dave N8PU

On Sat, 2004-07-24 at 20:05, Dr.Ace Ratliff wrote:
> Hi Alex,
> I am using a 75 meter Full Wave Horizontal Delta Loop.
> I was in a hurry when I put it up and I accidentaly used the
> velocity factor of the 50 ohm coax instead of the 75 ohm coax to
> figure the length of the quarter wave matching "Q" section. Since it
> was ready to go when I discovered my mistake , I thought I might as
> well try it instead of cutting the length of 75 ohm coax down to the
> 42 feet as given by the correct formula.
>
> I have 54 feet of RG-11, 75 ohm coax that runs from the loop to a
> PL258 connector then I am using 50 ohm coax into the shack.
> My Loop antenna is flat 1:1 VSWR around 3.875 Mhz and rises to about
> 2:1 SWR at 3.75 and 4 Mhz . So I cover the entire 75 meter phone band
> without using a tuner.
>
> I can tune 6 thru 75 meters using a manual or built in automatic
> antenna tuner.
>
> The following Info is taken from
> http://www.bloomington.in.us/~wh2t/loop.html
>
> The length of the 75 ohm coax is most important. It will be used as a
> Q section.
> To determine the length to use, Use this formula "Length in feet = 246
> x VF / Freq in Mhz" VF = the Velocity Factor of the coax. So multiply

> 246 by the Velocity Factor of the coax , Then divide by the frequency
> .
>
> If you use RG59 or RG11 with a Velocity Factor of 0.66 , For the 75
> meter band the Piece of 75 ohm coax should be about 42 feet long , It
> doesn't need to be exact . RG59 and RG11 coax usually have a Velocity
> Factor of 0.66 , Foam dielectric coax such as RG6 might have a
> Velocity Factor of 0.81 or more.
>
> Put a PL259 coax connector on the unused end of the 75 ohm coax, Screw
> a PL258 double female coax connector onto this PL259 coax connector.
> Then connect 50 ohm coax to the other side of the PL258 double female
> coax connector, Use any length 50 ohm coax needed to reach your
> Transceiver.
>
> Ace - WH2T
>
>
>
> ----- Original Message -----
> From: spninesoy
> To: SkyWires@yahoogroups.com
> Sent: Saturday, July 24, 2004 3:26 PM
> Subject: [SkyWires] Again, feeding the loop directly by coax
>
> Hi
>
> I would like to exchange experience about feeding the loop
> directly
> with the coax, and using a balun or an ATU at the other end.
> Did somebody try this also for harmonic bands?
>
> Currently I'm using a 40m loop fed with 75ohm coax and next by
> 50om
> coax, and I get the SWR less than 2:1 at 7 and 14MHz. On 21MHz
> I have
> to put (with a switch) a coil in series at the point where the
> two
> coax join. So there is no need to use an ATU. This design is
> very
> succesful.
>
> I hope to get the same result with the new 80m loop, which I
> intend
> to set up. The feeding point will be very close to my shack
> (loft) so
> there would be not enough distance to use 1/4WL 75ohm coax
> transformer, since for 80m it should be 20m (65ft)long. I can
> arrange
> maximum 7-8m (25ft). Anyway that design wouldn't probably work

> properly on all bands.
>
> I plan to feed the loop with 50ohm coax and use a 1:4 or 1:6
> balun at
> the end, which would theoreticaly match the high impedence of
> the
> loop (at the higher harmonics) to the standard 50ohm. (Except
> if
> there is too much reactance...?)
>
> I definitely won't use the ladder line. I had bad experience
> with in
> the past, due to the lack of the appropriate
> inductively-coupled
> balanced tuner.
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> Did anybody tried the coax feed for multiband use? What are
> SWRs on
> the harmonic bands? Or should I use 75ohm coax instead of
> 50ohm and
> an ATU at the end?
>
> Thanks for help and sharing your experience.
> Alex sp9soy
>
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Version: 6.0.726 / Virus Database: 481 - Release Date: 7/22/2004

637. Re: [SkyWires] Again, feeding the loop directly by coax

Yahoo group: SkyWires
Date: 2004-07-25 17:53:32 UTC
From: Scott Erwin
Topic: 630 Message: 637

Try adding a few more feet of feed line. It sounds
like you have a feed line length where the high
current is right at the end of the length you have
now. With an antenna that that has a feed point not
matched to the feed line there will be high and low
SWR points along the line depending on the frequency.
adding and removing a few feet of the feed line will
move the high SWR point away from the feed point of
the antenna (or feed line) tuner.
--- Dave <aq392@...> wrote:
> I wish I could be that lucky on SWR, on 160 and
> 75/80 with my tuner I
> can get a match that won't fry my radio but if I
> dial about 30 ish kc
> either way, I HAVE to retune, it does get better the
> higher the
> frequency gets; my loop [about 530 feet] is using
> the tree trunks and
> limbs to keep it up, and I do believe that is why I
> am having a problem
> with SWR. It does work, but I have to believe
> if/when I move it so I
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> see improvement, but
> for now that is just speculation.
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> Dave N8PU
>
>
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> > a PL258 double female coax connector onto this
> PL259 coax connector.
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> PL258 double female
> > coax connector, Use any length 50 ohm coax needed
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> > Transceiver.
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> > Ace - WH2T
> >

> >
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> > I have
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> 1/4WL 75ohm coax
> > transformer, since for 80m it should be
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> > arrange
> > maximum 7-8m (25ft). Anyway that design
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> > properly on all bands.
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> > I plan to feed the loop with 50ohm coax
> and use a 1:4 or 1:6

> > balun at
> > the end, which would theoreticaly match
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> > the
> > loop (at the higher harmonics) to the
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> > if
> > there is too much reactance...?)
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> > I definitely won't use the ladder line. I
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> > with in
> > the past, due to the lack of the
> appropriate
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> > 50ohm and
> > an ATU at the end?
> >
> > Thanks for help and sharing your
> experience.
> > Alex sp9soy
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638. RE: [SkyWires] Again, feeding the loop directly by coax

Yahoo group: SkyWires
Date: 2004-07-25 19:23:25 UTC
From: David Shrum
Topic: 630 Message: 638

Dr.Ace and Scott Erwin,
Dr.Ace I guess I miss lead you by not saying that I am using 50 ohm, RG8 coax and not 75 ohm like the post I was replying to.

Scott I am using about 49 feet, it was a length that I had laying around, I didn't measure it just used it, and most of it was wadded up on the floor, I'm guessing about 30 ish feet, it was not coiled up in a loop, I learned better from my CB days, trying not to make a choke out of the coax.

Dave N8PU

-----Original Message-----
From: Dr.Ace Ratliff [mailto:wh2t@bloomington.in.us]
Sent: Sunday, July 25, 2004 1:03 PM
To: SkyWires@yahoogroups.com
Subject: Re: [SkyWires] Again, feeding the loop directly by coax

Dave,
How many feet of 75 ohm coax are you using now?
  Ace - WH2T

639. RE: [SkyWires] Feeding the loop directly by coax- Addition

Yahoo group: SkyWires
Date: 2004-07-25 23:08:07 UTC
From: David Shrum
Topic: 630 Message: 639

Looks like I am answering myself, but I'm not, just additional info; I cut off about 3 feet, about all that did was to change the setting on my tuner, about the only band I couldn't 'tune' a 1:1 match now is 17.

Dave N8PU

-----Original Message-----
From: David Shrum [mailto:aq392@...]
Sent: Sunday, July 25, 2004 3:23 PM
To: SkyWires@yahoogroups.com
Subject: RE: [SkyWires] Again, feeding the loop directly by coax

Dr.Ace and Scott Erwin,
Dr.Ace I guess I miss lead you by not saying that I am using 50 ohm, RG8 coax and not 75 ohm like the post I was replying to.

Scott I am using about 49 feet, it was a length that I had laying around, I didn't measure it just used it, and most of it was wadded up on the floor, I'm guessing about 30 ish feet, it was not coiled up in a loop, I learned better from my CB days, trying not to make a choke out of the coax.

Dave N8PU

640. antenna tuners

Yahoo group: SkyWires
Date: 2004-07-26 15:31:33 UTC
From: wb5pnz
Topic: 640 Message: 640

Hello all
I was curious what everybody maybe using for antenna tuners, I am wanting to buy one .. but just not sure about what is out there.... i am not to happy with the tuner in my ts2000 ..... i want to build a loop... and do some antenna playin.. but i dont want to waste money on something that i will regret..... any thoughts on the MFJ 969... or maybe something like that, I appreciate all answeres
73's
Roger

641. Re: [SkyWires] antenna tuners

Yahoo group: SkyWires
Date: 2004-07-26 16:51:13 UTC
From: keith currie
Topic: 640 Message: 641
Attachments: 2 described; binary payloads are missing from this source WARC

Hi Roger
I am using a 989c MFJ with my 1080' loop and it works fine but a lot of folks say there atr not that good, and Iam sure there are better ones out there.
I some times use a home made balun and some times the one in the tuner, they both work from 10 to 160 m and I only have a 100w out so no problim there. Hope this helps.
Keith VE5HKC

wb5pnz wrote:

> Hello all
> I was curious what everybody maybe using for antenna tuners, I am
> wanting to buy one .. but just not sure about what is out there....
> i am not to happy with the tuner in my ts2000 ..... i want to build
> a loop... and do some antenna playin.. but i dont want to waste
> money on something that i will regret..... any thoughts on the
> MFJ 969... or maybe something like that, I appreciate all answeres
> 73's
> Roger
>
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642. Re: Need information please...baluns....loops for a 746/756 internal tuner

Yahoo group: SkyWires
Date: 2004-07-26 20:45:05 UTC
From: bambazonke01
Topic: 617 Message: 642

--- In SkyWires@yahoogroups.com, "nc9k" <jasminemeese@h...> wrote:
>It seeme to me that a balun wound with 8 or 9 turns on the
secondary and 5 turns on the primary would be pretty close to a 3:1
Jim VE3DDY

643. Re: [SkyWires] antenna tuners

Yahoo group: SkyWires
Date: 2004-07-27 00:08:55 UTC
From: Erik Weaver, n0ew
Topic: 640 Message: 643

I've used a SGC-237 but with only limited success. It did not tune my loop. I've not tried it on much else since then.

I have used MFJ manual tuners with great success. I find I prefer the ones with roller inductors as opposed to the ones with a tapped coil, because the roller inductor is fully variable.

I have only used "T" configurations, in the C-L-C pattern (Capacitor-Inductor-Capacitor). These have the inductor (coil) going to ground and attached between the two capacitors. One of the capacitors is connected to the antenna and the other to the transceiver. You can think of this as a more or less straight line connection between the transceiver and the antenna with the inductor going to ground between the two capacitors.

Works great. Some like the L-C-L design better (Inductor-Capacitor-Inductor) because it has better harmonic supression. I feel that since the newer rigs have such great harmonic supression in their base design I'd rather have the somewhat greater tuning range of the C-L-C vs. the L-C-L design.

Get the largest value capacitors you can and an inductor on the order or 28uH or so. Capacitors on the order of 400 to 500 pF should work very well.

Of the MFJ tuners (more properly called a 'transmatch' because it transforms the impedance of the antenna to match the transceiver) I have used I so far prefer the 962-D. However, that is the largest component tuner I have used. That may be why I have liked it best.

I have bought all mine used and the turn counters for the roller inductors ahve all been broken. They are still quite easy to use even without the turns counter.

Hopes that helps a little.
-Erik n0ew

> Hello all
> I was curious what everybody maybe using for antenna tuners, I am
> wanting to buy one .. but just not sure about what is out there....
> i am not to happy with the tuner in my ts2000 ..... i want to build
> a loop... and do some antenna playin.. but i dont want to waste
> money on something that i will regret..... any thoughts on the
> MFJ 969... or maybe something like that, I appreciate all answeres
> 73's
> Roger
>

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Erik E. Weaver
erik@...
www.n0ew.org

644. Re: antenna tuners

Yahoo group: SkyWires
Date: 2004-07-27 00:36:39 UTC
From: Dr.Ace
Topic: 640 Message: 644

--- In SkyWires@yahoogroups.com, "wb5pnz" <wb5pnz@y...> wrote:
> Hello all
> I was curious what everybody maybe using for antenna tuners, I am
> wanting to buy one .. but just not sure about what is out there....
> i am not to happy with the tuner in my ts2000 ..... i want to build
> a loop... and do some antenna playin.. but i dont want to waste
> money on something that i will regret..... any thoughts on the
> MFJ 969... or maybe something like that, I appreciate all answeres
> 73's
> Roger

Hi Roger,
I use a MFJ-989C the main reason I chose it over most of the other brands is it uses 6KV variable capacitors, many other brands use 4.5KV variable capacitors. I would still like to have a heavier duty antenna tuner.
Also MFJ calls the 989C a 3 Kilo Watt Antenna Tuner, thats a joke. It will only handle about 900 watts on the 160 meter band before it arcs the variable capacitors.
F.Y.I. I bought this unit brand new, not used.
73, Ace - WH2T

645. Re: [SkyWires] antenna tuners

Yahoo group: SkyWires
Date: 2004-07-27 00:51:01 UTC
From: Jim Dunstan
Topic: 640 Message: 645

At 03:31 PM 7/26/04 +0000, you wrote:
>Hello all
>I was curious what everybody maybe using for antenna tuners, I am
>wanting to buy one .. but just not sure about what is out there....
>i am not to happy with the tuner in my ts2000 ..... i want to build
>a loop... and do some antenna playin.. but i dont want to waste
>money on something that i will regret..... any thoughts on the
>MFJ 969... or maybe something like that, I appreciate all answeres
>73's
>Roger

Hi Roger:

I use an old tuner which is no longer made, the KW-EEZE Match. You will find descriptions of it if you search it on the internet. It uses a design called Z-Match which was more common back in the 50's and 60's. Unlike most present day tuners it is inductively coupled which makes it ideal for feeding balanced antennas such as loops and dipoles fed by lines like 450 ohm ladder line. It does away with the need for a balun .... which by the way does not work at its best at impedances above 100 ohms.

The only commercially made tuner using the Z-Match circuit is a QRP unit .... again if you search the internet I am sure you will see it. They are very easy to construct if one wishes to homebrew. The Z-Match circuit is simply an L network (a T network is basically 2 L networks). The network is simply a series variable capacitor and a fixed inductor connected between the transceiver output and ground. The antenna is connected to the L network by an inductive link coiled around the inductor. The ingenious method of varying the inductance (no mechanical switch or roller inductor!!) is to place a second capacitor in parallel with the inductor. The capacitive reactance cancels the inductive reactance thus varying the inductance of the fixed coil!! It works like a charm ..... 2 controls and it tunes all bands 80-10M with no switching or mechanical roller inductor!

If you want to use coax input you simply have to ground one end of the link. I have had this unit for at least 20 years and it still works like a charm and is totally reliable.

Jim Dunstan, VE3CI
Thunder Bay, ON

646. Re: [SkyWires] Re: Need information please...baluns....loops for a 746/756 internal tuner

Yahoo group: SkyWires
Date: 2004-07-27 00:57:32 UTC
From: Dr.Ace Ratliff
Topic: 617 Message: 646

Hi,

A 3:1 balun would have a Turns Ratio of 1.7320508 Turns to 1 Turn

Three-to-One (3:1) Balun.
Primary (Antenna) Turns to Secondary (FeedLine) Turns.
12 Turns to 7 Turns

OR 17 Turns to 10 Turns
OR 24 Turns to 14 Turns

will give an impedance transformation ratio of about 3:1

If you are winding it on a Toroid core
First: Use large enough wire for the Primary (Antenna) Windings to
cover 85%-99% of the Toroid's Area. Or, "Space Evenly" the Primary
(Antenna) Windings 'far enough apart' to cover 85%-99% of the
Toroid's Area.

Second: Wind the Secondary (FeedLine) Windings over the Primary
(Antenna) Windings. Use the same size wire "Spaced Evenly" to wrap
the Secondary (FeedLine) Windings to cover 85%-99% of the Toroid's
Area.

Ace - WH2T

----- Original Message -----
From: bambazonke01
To: SkyWires@yahoogroups.com
Sent: Monday, July 26, 2004 3:45 PM
Subject: [SkyWires] Re: Need information please...baluns....loops for a 746/756 internal
tuner

--- In SkyWires@yahoogroups.com, "nc9k" <jasminemeese@h...> wrote:
>It seeme to me that a balun wound with 8 or 9 turns on the
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Jim VE3DDY

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647. RE: [SkyWires] Feeding the loop directly by coax- Addition

Yahoo group: SkyWires
Date: 2004-07-27 01:37:35 UTC
From: Scott Erwin
Topic: 630 Message: 647

You might want to build a simple device to install different lengths of feed line to be switched in and out according to band/frequency as required. You will need some switches and feed line cut to different lengths. The following link will give you the information on making one.
http://www.qsl.net/w5dxp/notuner.htm
Go down the page a little and find the "Ladder-Line Length Selector for our all-band dipole. It shows using ladder line but coax will work just the same. With coax you wont need the relays as you can have it in a box right at your desk. Just don't make the coax coils to small.

--- David Shrum <aq392@...> wrote:
> Looks like I am answering myself, but I'm not, just
> additional info; I
> cut off about 3 feet, about all that did was to
> change the setting on my
> tuner, about the only band I couldn't 'tune' a 1:1
> match now is 17.
>
> Dave N8PU
>
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> From: David Shrum [mailto:aq392@...]
> Sent: Sunday, July 25, 2004 3:23 PM
> To: SkyWires@yahoogroups.com
> Subject: RE: [SkyWires] Again, feeding the loop
> directly by coax
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> Dr.Ace and Scott Erwin,
> Dr.Ace I guess I miss lead you by not saying that I
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> Scott I am using about 49 feet, it was a length that
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> on the floor, I'm guessing about 30 ish feet, it was
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> Dave N8PU
>
>
>
>

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648. Re: Skywires and trees

Yahoo group: SkyWires
Date: 2004-07-28 18:55:25 UTC
From: kl7r
Topic: 625 Message: 648

> ps I've seen soompeople here sign with "72" what does
> that mean?

Some folks who use QRP (low power) sign off with 72 instead
of 73. (Sort of a "Best Reguards fellow QRP enthusiast")

I have used wires through the trees.

It doesnt seem to have a noticiable effect on how the antenna
performs as long as you have insulated wire.

If you have un-insulated wire however and a tree branch
touches your antenna, it will seriously un-balance your
antenna and you will get "rf in the shack" which is a
bad thing if you are into psk or other sound card modes.

(RF in the shack is also a bad thing if you dont like having your
family yell at you about their electronics going blatzo or having
your lips get burned on the microphone when you transmit)

649. 2/3 sized loop calculations

Yahoo group: SkyWires
Date: 2004-08-02 19:56:47 UTC
From: bambazonke01
Topic: 649 Message: 649

Dirk,
Here is how I calculated the loop size for my small lot.
This loop is available commercially as a "Super Loop" from ? but I never buy when I can build an antenna.
The loop is a vertical triangle with the base along the top and the apex hanging down. It could be flat or even a horizontal square.
The feedpoint at the bottom has a 3:1 or 4:1 balun and is fed with 50 ohm coax.
The top center is broken with an insulator and has a 29 ft length of 450 ohm twinlead shorted at the bottom end connected across the insulator.
This antenna works as a loop on 80 M but works as 2 one wave lengths fed in phase on 40 M.
What are the dimensions?
1 wavelength at say 7.1 Mhz=984/7.1 =138.59 ft
If this length is doubled and used on 80 meters as a loop
Then Freq(for a loop) =1005/(2 x 138.59) =3.626mHz.
The 1/4 wave stub = 234/7.1 and multiply by .88 (vf of twin lead) =29 ft.
The perimeter of the 80 meter loop for 3.626mHz =277.18 - (2 x 29)[2 x 29 = the length of wire in the twinlead]
= 219.18. Say 219 ft.
If the top span is made 101 ft and the legs 59 ft
Then the balun wil hang 30.5 ft below the top center insulator.
The 29 ft shorted twin lead can have it's end tied to the top of the balun with a short length of string.
Any thing tuned for 80 will also work on 20 and 10 meters
On 40 meters the stub automatically acts as a switch and opens the connection across the insulator so the antenna works differently.
If it works on 40 it will work on 15 as well. A tuner will take care of 10 18 and 24Mhz.
I'll put one together in the next few weeks and try it out. I think this will also work as a 55 ft square on a horizontal plane. The 219 ft loop can be pulled into almost any shape but the bigger the enclosed area the better it will work.
I hope my calculations are correct.
Jim VE3DDY

650. Odd ball loop

Yahoo group: SkyWires
Date: 2004-08-06 21:15:51 UTC
From: radioham48082
Topic: 650 Message: 650

Just wanted to say how much I enjoy all of the posts. I threw up a piece of insulated 12 ga. wire about 300' long in kind of a delta configuration loop fed by an AH3 Icom coupler. Coupler is 6 feet off ground. Wire goes up about 40 feet, and over from tree to tree to form the delta and back down to the coupler. It works unbelievably fantastic on 160, 80 and 40. For DX, my ground mounted, well counterpoised Butternut vertical works better. Understandable! On 160-40, I consistently get 3 S-units (18 Db) over the vert. Fantastic! Someday I will get one up even squarer and higher. The Loop-Our best kept secret! Great group, keep up the good info exchange.

651. New member new loop

Yahoo group: SkyWires
Date: 2004-08-07 17:47:53 UTC
From: tukatuk4
Topic: 651 Message: 651

Hello All
I am new to the group and have just put up another loop. I have been experimenting with loops for a while and I am so pleased to find SO much information here. My old loop was 530 foot #14 wire Ran through the trees up about 45 feet feed with 450 ohm ladder line into a palstar 1500cv (new palstar at4k on order) New loop is 405 feet long #14 Grey (good color by the way almost invisible)..
The shorter loop is in the clear not touching any limbs. I am having trouble tuning it on 160.. 1500 watt tuner flashing at caps with 500 watts! Possible high impedance or what?? Now it should be 3/4 wave on 160 1 1/2 wave on 75 and 3 waves on 40. Some signals seem to be stronger on 75
but it is hard to tell due to solar storms etc last week or so.
has anyone tried a 3/4 wave loop and had the same problem??

Mark Ka6fej

652. Re: New member new loop

Yahoo group: SkyWires
Date: 2004-08-09 02:30:37 UTC
From: tukatuk4
Topic: 651 Message: 652

--- In SkyWires@yahoogroups.com, "tukatuk4" <markthemover@c...>
wrote:
> Hello All
> I am new to the group and have just put up another loop. I have
been
> experimenting with loops for a while and I am so pleased to find
SO
> much information here. My old loop was 530 foot #14 wire Ran
through
> the trees up about 45 feet feed with 450 ohm ladder line into a
> palstar 1500cv (new palstar at4k on order) New loop is 405 feet
> long #14 Grey (good color by the way almost invisible)..
> The shorter loop is in the clear not touching any limbs. I am
having
> trouble tuning it on 160.. 1500 watt tuner flashing at caps with
500
> watts! Possible high impedance or what?? Now it should be 3/4
wave
> on 160 1 1/2 wave on 75 and 3 waves on 40. Some signals seem to be
> stronger on 75
> but it is hard to tell due to solar storms etc last week or so.
> has anyone tried a 3/4 wave loop and had the same problem??
>
> Mark Ka6fej

Thanks for the input Keith
your 1080 foot loop sounds great.. My next project is to build one
that size. I have 2 oak trees on open space next to my house the
land is not used at all. If I run the loop up to the trees and back
I would gain an additional 65 feet in height also. However the loop
needs to have a low profile. The field is covered in dry grass..Does
anyone know if the loop breaks can my 600 watts start a fire????

Mark

653. static bleed off

Yahoo group: SkyWires
Date: 2004-08-10 19:38:36 UTC
From: wildcard9002
Topic: 653 Message: 653

Hello every one,I'm new to your group. Here's my problem, I have a 450 ft. horizontal loop, 45 feet high fed with 450 ohm ladder line. I live near Spokane Wash. I have a problem with static bleed off, When it accurs, I can hold a ground a half inch away and see a blue ark. I've herd of some sort of in line ground to prevent this, can any one help? Mike

654. Re: [SkyWires] static bleed off

Yahoo group: SkyWires
Date: 2004-08-10 20:03:30 UTC
From: Dr.Ace Ratliff
Topic: 653 Message: 654

Hi Mike,
Connect a 100K ohm resistor from each side of the ladder line to ground.
Ace - WH2T
----- Original Message -----
From: wildcard9002
To: SkyWires@yahoogroups.com
Sent: Tuesday, August 10, 2004 2:38 PM
Subject: [SkyWires] static bleed off

Hello every one,I'm new to your group. Here's my problem, I have a
450 ft. horizontal loop, 45 feet high fed with 450 ohm ladder line.
I live near Spokane Wash. I have a problem with static bleed off,
When it accurs, I can hold a ground a half inch away and see a blue
ark. I've herd of some sort of in line ground to prevent this, can
any one help? Mike

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Version: 6.0.736 / Virus Database: 490 - Release Date: 8/9/2004

655. Re: [SkyWires] static bleed off

Yahoo group: SkyWires
Date: 2004-08-11 03:16:49 UTC
From: Jim Dunstan
Topic: 653 Message: 655

At 07:38 PM 8/10/04 +0000, you wrote:
>Hello every one,I'm new to your group. Here's my problem, I have a
>450 ft. horizontal loop, 45 feet high fed with 450 ohm ladder line.
>I live near Spokane Wash. I have a problem with static bleed off,
>When it accurs, I can hold a ground a half inch away and see a blue
>ark. I've herd of some sort of in line ground to prevent this, can
>any one help? Mike

Hi Mike:

Interesting that your wire antenna will build up all the static electricity! Well I think an easy way to deal with that would be to place a high value carbon resistor from each side of the 450 ohm line to a ground. The high value resistors .... say 100K or more ... should drain static build up without affecting the operation of the antenna/tuner/feedline. Some will advise a spark gap arrangement .... but it makes noise .... and requires a voltage build up sufficient to jump the gap. They are better arrangements for lightning protection. A good solid spark gap arrangement in parallel with high value resistors to bleed static should do the job.

Jim Dunstan, VE3CI
Thunder Bay, ON

656. Tuner Required ??

Yahoo group: SkyWires
Date: 2004-08-11 12:51:33 UTC
From: ve6drw
Topic: 656 Message: 656

I am new to loop antennas and have the space to install one. If I create a 530 ft loop (resonant on 160M), will I need a tuner to match the antenna on the other HF bands? I have space for a larger loop (upwards of 1000 ft). Is there any advantage to making a larger loop? If so, what length should I make it?

I assume most loops are fed with 450 ohm ladder line. Should I use a 4 to 1 or 9 to 1 balun to match my radio?

Any advice would be appreciated.

Thanks

Dave
VE6DRW

657. Re: [SkyWires] static bleed off

Yahoo group: SkyWires
Date: 2004-08-11 13:34:16 UTC
From: Scott Erwin
Topic: 653 Message: 657

You really do not have a problem as long as you're feeding your loop with a 4:1 Balun and you have a proper station ground. Using a Balun one or the other leads will be connected to ground providing a static drain for the antenna to the station ground. You can check this by hooking up a volt/ohm meter to a Balun and reading a direct DC short between all leads. This is not a RF short however. When you disconnect your antenna when not in use you should provide a large jumper wire between the antenna and the station ground so the static can drain off to prevent the static buildup. With my station setup I have two ceramic feed through insulators from the window for 450 ohm ladder line from the antenna to the back of my antenna tuner. I use the internal 4:1 Balun. I also have a ceramic feed through insulator for the ground connection to a 10 foot solid copper rod which is also connected to another ground rod below the power meter several feet away by bare solid 10 gage copper wire buried several inches below the soil. When I disconnect my antenna and unplug my equipment I also simply hook my shorting jumper between the ceramic feed through insulators for the antenna and the ceramic feed through insulator for the ground connection. There will only be a very short time that the loop will not be connected to ground as you disconnect the feed line and install the jumper.
--- wildcard9002 <wildcard9002@...> wrote:

> Hello every one,I'm new to your group. Here's my
> problem, I have a
> 450 ft. horizontal loop, 45 feet high fed with 450
> ohm ladder line.
> I live near Spokane Wash. I have a problem with
> static bleed off,
> When it accurs, I can hold a ground a half inch away
> and see a blue
> ark. I've herd of some sort of in line ground to
> prevent this, can
> any one help? Mike
>
>

_____
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658. Re: [SkyWires] Tuner Required ??

Yahoo group: SkyWires
Date: 2004-08-11 14:06:00 UTC
From: Scott Erwin
Topic: 656 Message: 658

You will need an antenna tuner if you want full coverage of all HF amateur bands. If your transceiver has an internal antenna tuner you will need A Balun and as 4:1 Balun are easy to build or buy and come in most antenna tuners that should be your choice. Some internal antenna tuners will not be able to handle the mismatch (more than 3 to 1 SWR) on some frequencies. If you do not have an external antenna tuner now is the time to build or buy one! Also do not waste money on a flimsy 300-watt tuner. Sooner or later you will want an amplifier, which will require obtaining the larger tuner anyway. Something else about antenna tuners you should know. The cheap 300-watt or less tuners are not built very well and have loss through them. Large tuners must stand up to high power levels and so have silver plated inductors and proper sliding contacts on the capacitors. Even if you never plan on using high power the low loss through the large tuner makes it worthwhile to go ahead and get one, even if your only running QRP power!
If your going to the larger loop unless you can go with a full 3 times 160 loop at 1590 feet of wire your wasting your time and effort. The only reason to go larger than a full 160-meter loop is to improve operation on 80 meters. On a 160 meter loop the 80-meter band will be an even wavelength and so there will be losses on that band and places where tuning it will be difficult. You will not see any gain on 160 meters, as the antenna is simply to close to the ground, even if you could get it up to 200 feet.
--- ve6drw <dwds@...> wrote:

> I am new to loop antennas and have the space to
> install one. If I
> create a 530 ft loop (resonant on 160M), will I need
> a tuner to match
> the antenna on the other HF bands? I have space for
> a larger loop
> (upwards of 1000 ft). Is there any advantage to
> making a larger
> loop? If so, what length should I make it?
>
> I assume most loops are fed with 450 ohm ladder
> line. Should I use a
> 4 to 1 or 9 to 1 balun to match my radio?

>
> Any advice would be appreciated.
>
> Thanks
>
> Dave
> VE6DRW
>
>

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659. Re: [SkyWires] Tuner Required ??

Yahoo group: SkyWires
Date: 2004-08-11 17:47:23 UTC
From: Sean Goldberg
Topic: 656 Message: 659

ve6drw <dwds@...> wrote: I am new to loop antennas and have the space to install one. If I create a 530 ft loop (resonant on 160M), will I need a tuner to match the antenna on the other HF bands? I have space for a larger loop (upwards of 1000 ft). Is there any advantage to making a larger loop? If so, what length should I make it?

I assume most loops are fed with 450 ohm ladder line. Should I use a 4 to 1 or 9 to 1 balun to match my radio?

Any advice would be appreciated.

Thanks

Dave
VE6DRW

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Dave, I've been told theres no use for makeing the loop larger, so in my case I wont go to the extra work. You will need a tuner to tune and transmit on the other HF bands, but its worth it. I run my icom 718 and an mfj 962 d tuner which has an internal 4.1 balun, and use an ameritron al-811h 800 watt amp.So when getting a tuner, get one thats heavy enough for an amp if you decide you want more power some day, I wasted my money on a 300 watt tuner and it was good but I had to get a heavy one when I bought my amp. This is a learning experence for me every time I do something new, hope this helps, 73's Mike w7kol

---

Do you Yahoo!?
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660. Re: Tuner Required ??

Yahoo group: SkyWires
Date: 2004-08-11 19:42:00 UTC
From: tukatuk4
Topic: 656 Message: 660

Hi Dave
There is an advantage to a larger loop..When the loop is 2 times resonate frequency the Angle of radiation decreases. So in other words a 160 loop is a cloud burner. A loop 1060 feet on 160 should have a better radiation angle and be better for dx.

Mark Ka6fej

--- In SkyWires@yahoogroups.com, "ve6drw" <dwds@t...> wrote:
> I am new to loop antennas and have the space to install one. If I
> create a 530 ft loop (resonant on 160M), will I need a tuner to
match
> the antenna on the other HF bands? I have space for a larger loop
> (upwards of 1000 ft). Is there any advantage to making a larger
> loop? If so, what length should I make it?
>
> I assume most loops are fed with 450 ohm ladder line. Should I use
a
> 4 to 1 or 9 to 1 balun to match my radio?
>
> Any advice would be appreciated.
>
> Thanks
>
> Dave
> VE6DRW

661. Re: [SkyWires] Tuner Required ??

Yahoo group: SkyWires
Date: 2004-08-11 21:47:16 UTC
From: Dr.Ace Ratliff
Topic: 656 Message: 661

Hi Dave,
I have used a 1 wavelength 160 meter loop, a 2 wavelength 160 meter loop, and a 3 wavelength 160 meter loop antennas. I never intend to again put up any loop antenna larger than 530 feet. I have experimented on other frequencies with up to a 10 wavelength loop antenna.

I know what the antenna modeling software predicts and I also know how the antennas behave in the real world. Also, If you are a big DXer, I believe there are better choices than a loop antenna for the 160 meter band.I am a rag chewer and the loop antenna serves my purpose ideally.

I know there are people in this group who might disagree with this next statement But, experience is a good teacher. A loop antenna should be an odd multiple of wavelengths i.e. 1 , 3 , 5 , etc...
An even number of wavelengths causes the loop to be a higher impedance and more difficult to match. I don't care what the antenna modeling software predicts, I have been there and done that, I speak from real experience.

P.S.
I have personally used a 160 meter band Horizontal Full Wave Loop antenna with very good success. I worked all 50 states and several countries with 100 Watts using the antenna on the 160 meter band. With a good antenna tuner the antenna will work 6 thru 160 meters.
I currently use a 75 Meter Full Wave Delta Loop on the 6 thru 75 Meter bands with a tuner, and I use a 1/4 wavelength inverted L antenna for 160 meters.
I hope this info is helpful.
73, WH2T - Ace
http://www.wh2t.com

----- Original Message -----
From: ve6drw
To: SkyWires@yahoogroups.com
Sent: Wednesday, August 11, 2004 7:51 AM
Subject: [SkyWires] Tuner Required ??

I am new to loop antennas and have the space to install one. If I
create a 530 ft loop (resonant on 160M), will I need a tuner to match
the antenna on the other HF bands? I have space for a larger loop
(upwards of 1000 ft). Is there any advantage to making a larger
loop? If so, what length should I make it?

I assume most loops are fed with 450 ohm ladder line. Should I use a
4 to 1 or 9 to 1 balun to match my radio?

Any advice would be appreciated.

Thanks

Dave
VE6DRW

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662. double loop

Yahoo group: SkyWires
Date: 2004-08-12 02:09:36 UTC
From: Mike
Topic: 662 Message: 662

Now that my editing and email is correct for this, here goes.My 450 ft. loop. Would I gain enough to add a second wire of 450 feet, five or six feet below the existing wire to make this a double loop? Or would I be getting myself into a lot of extra work? Mike

663. Re: [SkyWires] double loop

Yahoo group: SkyWires
Date: 2004-08-12 16:08:54 UTC
From: Erik Weaver, n0ew
Topic: 662 Message: 663

Hello,

The answer depends upon where you wish to strengthen your RF signal. I'm assuming you are talking about a horizontal loop. The following will not apply if you are talking about a vertical loop...

Your double loop sounds to me like a NVIS design (Near Vertical Incidence Skywave). I'd change the 5 to 6 feet distance to 10% of one full wavelength, however. (Your optimum height for the primary antenna is close to 20% (+/- 5%) of one full wavelength.) What you will do is increase the effective radiation upwards. If you are operating at a suitable frequency much of this RF will be reflected downwards providing very good regional coverage. This is a good plan for regional communications, but it would not be expected to increase performance for DX communications.

Certainly adding a second wire below the primary antenna (several % longer than the primary and one full piece) is known to increase signal strength. Some people debate as to the cost vs. dB increase. That part is somewhat subjective, I think. I think of this as a 2-element beam: driven and reflector, which is essentially what is going on.

Cebik has a section on NVIS antennas somewhere on his web site (www.cebik.com) which was informative. As I recall his designs were discussing dipoles, but the general theory would remain the same.

-Erik n0ew

> Now that my editing and email is correct for this, here goes.My 450
> ft. loop. Would I gain enough to add a second wire of 450 feet, five
> or six feet below the existing wire to make this a double loop? Or
> would I be getting myself into a lot of extra work? Mike
>
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Erik E. Weaver
erik@...
www.n0ew.org

664. Hi everybody-new member from Greece

Yahoo group: SkyWires
Date: 2004-08-15 15:06:25 UTC
From: nikin22000
Topic: 664 Message: 664

Dear friends,

I am new member to your group and i am here because of my interest on antennas.
I want to erect an end fed wire dipole for topband so i think we have a lot to discuss.
Thank you
Nikos
Athens - Greece

665. Re: [SkyWires] Hi everybody-new member from Greece

Yahoo group: SkyWires
Date: 2004-08-15 16:35:24 UTC
From: Dr.Ace Ratliff
Topic: 664 Message: 665

Hi Nikos,
I suggest an inverted L antenna.
See this web page.

http://www.bloomington.in.us/~wh2t/invertedl.html

Ace
----- Original Message -----
From: nikin22000
To: SkyWires@yahoogroups.com
Sent: Sunday, August 15, 2004 10:06 AM
Subject: [SkyWires] Hi everybody-new member from Greece

Dear friends,

I am new member to your group and i am here because of my interest on
antennas.
I want to erect an end fed wire dipole for topband so i think we have
a lot to discuss.
Thank you
Nikos
Athens - Greece

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Version: 6.0.737 / Virus Database: 491 - Release Date: 8/11/2004

666. Re: [SkyWires] Hi everybody-new member from Greece

Yahoo group: SkyWires
Date: 2004-08-15 23:29:33 UTC
From: Jim Dunstan
Topic: 664 Message: 666
Attachments: 1 described; binary payloads are missing from this source WARC

At 03:06 PM 8/15/04 +0000, you wrote:
>Dear friends,
>
>I am new member to your group and i am here because of my interest on
>antennas.
>I want to erect an end fed wire dipole for topband so i think we have
>a lot to discuss.
>Thank you
>Nikos
>Athens - Greece

Hi Nikos:

Your statement, "erect and end fed wire dipole" is a contradiction in terms. A dipole by definition is fed in the middle with one side working against the other. This kind of antenna is a 'balanced' antenna. A loop antenna is another kind of balanced antenna. All other antennas are what are termed 'unbalanced' antennas; they require a ground against which the antenna will work.

An end fed wire antenna is an unbalanced antenna. A common way to configure such an antenna is to choose a convenient location on the ground where the antenna wire will start. This point will also be where your 'antenna ground' starts. Ideally an antenna tuner is placed at this location between the start of the antenna and the start of the 'antenna ground' . If it is not possible to place the tuner at this location then a feed line will have to be provided to connect to the operating position.

Next, the antenna wire is raised vertically from this point as high as possible. The remaining wire is then suspended horizontally. This configuration is called an 'Inverted L' antenna. The length of such an antenna is usually either 1/2 or 1/4 wavelength long. Which one you choose will have implications re: wire length and ground requirements. If you choose 1/2 wavelength then the impedance of the wire at the ground will be quite 'high' ... eg at least several hundred ohms, the antenna current will be low. This means that you can get away with fewer ground radials. If you make the antenna 1/4 wave length long then it will be only 1/2 as long but the impedance will be low and the current higher at the feed point. The good news is that the lower impedance will be easier to couple to a coax feed line, but the bad news is that you will need a more effective radial ground system .... eg more radials.

In your case for top band, the length is usually a deciding factor ... unless of course you have unlimited room. A 1/4 wave end fed wire (inverted L) would be approx. 130' while a 1/2 wave would be almost

270'!! As a consequence many operators use the 130' length with result that they have a 1/2 wave on 80M and 1/4 wave on 160M. Such an antenna is very effective on both bands .... but the ground is critical for 160 effectiveness and coupling is touchy on 80.

If you search the internet for 'Inverted L antenna' and 'antenna ground systems' you will find lots of interesting information RE: ground systems and matching.

>1da9b9.jpg

Jim Dunstan, ve3ci
Thunder Bay, ON

667. Re: Hi everybody-new member from Greece

Yahoo group: SkyWires
Date: 2004-08-16 06:08:20 UTC
From: nikin22000
Topic: 664 Message: 667

Hi Jim,

First,I want to thank you for your reply.
Then i want to mention that when i write for dipole i had in mind the total length of the antenna (L/2) and not the feed point of this antenna (middle,end etc).
My other choice for this antenna (except the inverted L) i think is the windom antenna.
Having in mind that this antenna will be only for topband and not multiband ,and that the TX will be homemade tube linear(with high output impedance)the high impedance of the windom is not problem.
I think i can match the system without a 4:1 balun or something.
For feeder line i think i can use single wire direct to the linear output .
I think for this windom antenna the rf ground or radial system is not critical.
Waiting for your valuable help.
Nikos
--- In SkyWires@yahoogroups.com, Jim Dunstan <jimdunstan@r...> wrote:
> At 03:06 PM 8/15/04 +0000, you wrote:
> >Dear friends,
> >
> >I am new member to your group and i am here because of my interest on
> >antennas.
> >I want to erect an end fed wire dipole for topband so i think we have
> >a lot to discuss.
> >Thank you
> >Nikos
> >Athens - Greece
>
> Hi Nikos:
>
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> terms. A dipole by definition is fed in the middle with one side working
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location then a
> feed line will have to be provided to connect to the operating
position.
>
> Next, the antenna wire is raised vertically from this point as high
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> possible. The remaining wire is then suspended horizontally. This
> configuration is called an 'Inverted L' antenna. The length of
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> antenna is usually either 1/2 or 1/4 wavelength long. Which one
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> choose 1/2 wavelength then the impedance of the wire at the ground
will be
> quite 'high' ... eg at least several hundred ohms, the antenna
current will
> be low. This means that you can get away with fewer ground
radials. If
> you make the antenna 1/4 wave length long then it will be only 1/2
as long
> but the impedance will be low and the current higher at the feed
> point. The good news is that the lower impedance will be easier to
couple
> to a coax feed line, but the bad news is that you will need a more
> effective radial ground system .... eg more radials.
>
> In your case for top band, the length is usually a deciding
factor ...
> unless of course you have unlimited room. A 1/4 wave end fed wire
> (inverted L) would be approx. 130' while a 1/2 wave would be almost
> 270'!! As a consequence many operators use the 130' length with
result
> that they have a 1/2 wave on 80M and 1/4 wave on 160M. Such an
antenna is
> very effective on both bands .... but the ground is critical for
160
> effectiveness and coupling is touchy on 80.
>

> If you search the internet for 'Inverted L antenna' and 'antenna
ground
> systems' you will find lots of interesting information RE: ground
systems
> and matching.
>
> >1da9b9.jpg
>
> Jim Dunstan, ve3ci
> Thunder Bay, ON

668. 4/1 or 1/1 balun

Yahoo group: SkyWires
Date: 2004-08-16 21:27:21 UTC
From: charles allison
Topic: 668 Message: 668

Hi folks,

I have been subscribed to the list for a while and have up an 80 m loop at the moment along with a pair of g5rv antennas up as inverted vees at 33 ft apex. The primary use of the these antennas is 80 and 40 meter regional traffic net work. The 80 m loop is up about 12-15 feet. It is using a 4/1 voltage balun and is a little bit too long. The wire is 12 awg insulated. At present, the 80m loop is being used only as a receive antenna where it performs at a lower noise than either of the g5rvs, however, the g5rv antennas provide significantly better output signals on both 80 and 40m. An antenna tuner is used. Playing with my new toy, an mfj269, I find the resonance to be in the mid 3mhz area but also, I'm getting resistive component readings of 10-18 ohms inside the shack when near resonance on the various ham bands. The balun is located on one corner of the diamond shaped loop which is slightly longer than wide.

I would like to get this antenna working better for 80/40 m transmission output as well as maintaining the nice quiet receiver input. It would seem that it shouldn't be that hard to outdo a g5rv at 33ft for 80/40/20m. And, if I can't, it would be nice to compliment the g5rv with something that gives us a real alternative for a different pattern.

I currently have a 1/1 current balun I'm thinking of substituting for the 4/1 along with and I also have 450 ladder line which could be used for feedline. With resistance of 10 ohms on 80m, it would seem that things are such that the 1/1 would be better than the 450 ladder line.

I have also been collecting the materials for something like a 160m loop, perhaps in addition to the 80m. I have 33ft pushup poles for doing such a loop but there is a horrific amount of work to clear the brush out of the way to gain access to the area. Besides, I'm not sure how much NVIS propagation I can get from such a loop on 40 or 80m. I've also considered the possibility of keeping the 80m loop at 15 ft and having it towards 1 corner and below the 160m loop at 33 ft.

Anyway, I could use a bit of advice along with some suggestions as to how best to proceed, especially beyond possibly just switching out the baluns.

best regards,

charles
wb5izd

669. Re: 4/1 or 1/1 balun

Yahoo group: SkyWires
Date: 2004-08-19 11:29:38 UTC
From: cpa2000
Topic: 668 Message: 669

Charles

My advice would be to feed it directly with the ladder line & forget the balun. Use a link coupled tuner like an old Johnson Matchbox. You can homebrew a link coupled tuner for very little $ if you can't find one. I see them on e-bay regularly for around $100. Mine handles 700 watts PEP.

This system will afford you the lowest feedline loss & the widest operating range.

As you know, coax feed has much higher loss than ladder line as SWR on the line increases. This amounts to attenuation of your transmitted signal.

The impedance of the loop will change with operating frequency which makes the effect of your balun a wild card. Get it out of the circuit. The link coupled tuner eliminates the balun from the circuit. They have the added benefit of acting as a bandpass filter on receive.

Regards

Terry
W8EJO

. It is using a 4/1
> voltage balun and is a little bit too long. The wire is 12 awg insulated.
> At present, the 80m loop is being used only as a receive antenna where it
> performs at a lower noise than either of the g5rvs, however, the g5rv
> antennas provide significantly better output signals on both 80 and 40m. An
> antenna tuner is used. Playing with my new toy, an mfj269, I find the
> resonance to be in the mid 3mhz area but also, I'm getting resistive
> component readings of 10-18 ohms inside the shack when near resonance on the
> various ham bands. The balun is located on one corner of the diamond shaped
> loop which is slightly longer than wide.
>
> I would like to get this antenna working better for 80/40 m transmission
> output as well as maintaining the nice quiet receiver input. It

would seem
> that it shouldn't be that hard to outdo a g5rv at 33ft for
80/40/20m. And,
> if I can't, it would be nice to compliment the g5rv with something
that
> gives us a real alternative for a different pattern.
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> I currently have a 1/1 current balun I'm thinking of substituting
for the
> 4/1 along with and I also have 450 ladder line which could be
used for
> feedline. With resistance of 10 ohms on 80m, it would seem that
things are
> such that the 1/1 would be better than the 450 ladder line.
>
> I have also been collecting the materials for something like a 160m
loop,
> perhaps in addition to the 80m. I have 33ft pushup poles for doing
such a
> loop but there is a horrific amount of work to clear the brush out
of the
> way to gain access to the area. Besides, I'm not sure how much NVIS
> propagation I can get from such a loop on 40 or 80m. I've also
considered
> the possibility of keeping the 80m loop at 15 ft and having it
towards 1
> corner and below the 160m loop at 33 ft.
>
> Anyway, I could use a bit of advice along with some suggestions as
to how
> best to proceed, especially beyond possibly just switching out the
baluns.
>
> best regards,
>
> charles
> wb5izd

670. Further to the Coax - Balun problem

Yahoo group: SkyWires
Date: 2004-08-19 11:44:02 UTC
From: cpa2000
Topic: 670 Message: 670

Good Article on the Coax - Balun problem

http://www2.arrl.org/qst/2004/04/DanzerNEW.pdf

671. SIMPLE ALL BAND HOMEBREW LINK COUPLED TUNER

Yahoo group: SkyWires
Date: 2004-08-19 12:21:35 UTC
From: cpa2000
Topic: 671 Message: 671

This is K1JJ's tuner - his idea & design!

"50 Ohm Unbalanced to Balanced (any impedance) Super Tuner:

It has no balun and power limit is limited only by the diameter of the copper tubing in the main coil.

Circuit is as shown in figure 4 of the PDF file named Open Wire in the Files section of this group.

Use a single capacitor in the output, preferably a >350pf vacuum variable (a vacuum variable cap is nice but any single section 350pf or greater, 4kv or greater bread slicer cap will do. The more power the bigger spacing needed).

Clip tap the capacitor across a 40 turn 3/8" copper tubing, 5" diameter coil. (Home Depot tubing) Mount BOTH capacitor and coil floating above ground.

Then wind five turns of (#14 or greater) teflon wire on the outside of the center of this big coil as an input link. Tie wrap it into place. One end of this link goes to the coax inner conductor and the other end to ground.

The balanced open wire gets tapped on each side of the big coil with BIG clip ons.. Big copper alligator clips work fine...file the openings rounded so that contact with the coil is maximum.

By changing the open wire taps, the capacitor taps and the capacitor tuning you can cover about any impedance or band situation. No switches needed. Use colored tape for each band to pre-mark the tap positions for quick band changes.

A ~1400 pf input tuning cap (large 4 section broadcast receiver type) in series with the link to ground is sometimes used, but I've found it is seldom needed and usually leave it out.

The tuner is simple and effective...and needs only one standard (unbalanced) cap. The rest is easily made."

672. Re: double loop

Yahoo group: SkyWires
Date: 2004-08-19 19:33:07 UTC
From: craig_mohn
Topic: 662 Message: 672

How about a Second Loop, 10% Shorter in length, and above the main loop?
Or longer and below?

Be neat to try - let us know!

ka3icj

673. Re: [SkyWires] 4/1 or 1/1 balun

Yahoo group: SkyWires
Date: 2004-08-19 21:07:09 UTC
From: Erik Weaver, n0ew
Topic: 668 Message: 673

I think you'll find the loop works well as a NVIS antenna, and more so at the greater height of 33-feet vs. 15-feet. 40 to 50 feet heights have worked very well for me in Missouri.

-Erik n0ew

> Hi folks,
>
> I have been subscribed to the list for a while and have up an 80 m loop at
> the moment along with a pair of g5rv antennas up as inverted vees at 33 ft
> apex. The primary use of the these antennas is 80 and 40 meter regional
> traffic net work. The 80 m loop is up about 12-15 feet. It is using a
> 4/1
> voltage balun and is a little bit too long. The wire is 12 awg insulated.
> At present, the 80m loop is being used only as a receive antenna where it
> performs at a lower noise than either of the g5rvs, however, the g5rv
> antennas provide significantly better output signals on both 80 and 40m.
> An
> antenna tuner is used. Playing with my new toy, an mfj269, I find the
> resonance to be in the mid 3mhz area but also, I'm getting resistive
> component readings of 10-18 ohms inside the shack when near resonance on
> the
> various ham bands. The balun is located on one corner of the diamond
> shaped
> loop which is slightly longer than wide.
>
> I would like to get this antenna working better for 80/40 m transmission
> output as well as maintaining the nice quiet receiver input. It would
> seem
> that it shouldn't be that hard to outdo a g5rv at 33ft for 80/40/20m.
> And,
> if I can't, it would be nice to compliment the g5rv with something that
> gives us a real alternative for a different pattern.
>
> I currently have a 1/1 current balun I'm thinking of substituting for the
> 4/1 along with and I also have 450 ladder line which could be used for
> feedline. With resistance of 10 ohms on 80m, it would seem that things
> are
> such that the 1/1 would be better than the 450 ladder line.
>
> I have also been collecting the materials for something like a 160m loop,
> perhaps in addition to the 80m. I have 33ft pushup poles for doing such a
> loop but there is a horrific amount of work to clear the brush out of the
> way to gain access to the area. Besides, I'm not sure how much NVIS
> propagation I can get from such a loop on 40 or 80m. I've also considered

> the possibility of keeping the 80m loop at 15 ft and having it towards 1
> corner and below the 160m loop at 33 ft.
>
> Anyway, I could use a bit of advice along with some suggestions as to how
> best to proceed, especially beyond possibly just switching out the baluns.
>
> best regards,
>
> charles
> wb5izd
>
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>
> Yahoo! Groups Links
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>

Erik E. Weaver
erik@...
www.n0ew.org

674. Re: Further to the Coax - Balun problem

Yahoo group: SkyWires
Date: 2004-08-24 05:36:44 UTC
From: Bryan
Topic: 670 Message: 674

HI All,

after viewing this PDF file I would say this is the most common sense way to approach feeding an antenna of this type.

I have also seen this approach taken for matching antennas of odd impedances on 6M vhf and UP. it works well as there is no balun to choke out signal/ and output power.. even at vhf frequencies where most HF tunner are not capable of going.

There is a copy of such a tuner in the ARRL Antenna Book from 1964 on page 223 << this artical specifically outlines making a tuner for 6meters and one for 2 meters.

73s Bryan Kc8hps

--- In SkyWires@yahoogroups.com, "cpa2000" <cpa2000@y...> wrote:
> Good Article on the Coax - Balun problem
>
> http://www2.arrl.org/qst/2004/04/DanzerNEW.pdf

675. Re: [SkyWires] Re: Further to the Coax - Balun problem

Yahoo group: SkyWires
Date: 2004-08-24 18:22:38 UTC
From: Jim Dunstan
Topic: 670 Message: 675

At 05:36 AM 8/24/04 +0000, you wrote:
>HI All,
>
>after viewing this PDF file I would say this is the most common sense
>way to approach feeding an antenna of this type.
>
>I have also seen this approach taken for matching antennas of odd
>impedances on 6M vhf and UP. it works well as there is no balun to
>choke out signal/ and output power.. even at vhf frequencies where
>most HF tunner are not capable of going.
>
>There is a copy of such a tuner in the ARRL Antenna Book from 1964 on
>page 223 << this artical specifically outlines making a tuner for
>6meters and one for 2 meters.
>
>73s Bryan Kc8hps
>
>--- In SkyWires@yahoogroups.com, "cpa2000" <cpa2000@y...> wrote:
> > Good Article on the Coax - Balun problem
> >
> >
> <http://www2.arrl.org/qst/2004/04/DanzerNEW.pdf>http://www2.arrl.org/qst/2004/04/DanzerNEW.pdf
>

Hi ....

I have been using such an antenna as this for ages .... 100 ft long fed with 450 ohm ladder line .... wonderful antenna 80m-10m. On a few occasions I operated on 160m by simply shorting the feed line and feeding the whole thing as a vertical against ground ... again worked just great.

The key to reliable operation with this antenna .... especially if you run any power (100 watts and up) is the antenna tuner .... If you use one of the common unbalanced tuners with a balun on the end I defy you to operate on all bands with a KW. Baluns are simply not the way to go with when dealing with high SWR. In the article a balanced tuner with a link coil is shown. They work well. However they get complicated when you want to quickly switch bands.

I want to put a plug in for another balanced tuner that gets very little press but works wonderfully with this kind of antenna/feed-line system. It is the venerable Z-Match. Do a search on the internet for Z-Match and you will find some excellent articles on how to construct such a device. The only commercial version of this tuner is the KW EZEE-Match .... I see them advertised from time to time on E-Bay. They were made to handle the 100

watt rigs. It would be easy to construct one to handle a KW.

Jim Dunstan, VE3CI
Thunder Bay, ON

677. Re: [SkyWires] :-)

Yahoo group: SkyWires
Date: 2004-08-26 03:51:13 UTC
From: Dr.Ace Ratliff
Topic: 677 Message: 677

URGENT

To All Sywires Members:
Don't Open The Last Email from dwds@trinustech.com
Delete it immediately , The attachment is the Bagel VIRUS !!!

Ace - WH2T
----- Original Message -----
From: dwds@...
To: SkyWires@yahoogroups.com
Sent: Wednesday, August 25, 2004 9:39 PM
Subject: [SkyWires] :-)

I don't bite, weah!

..btw, "87205" is a password for archive

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Outgoing mail is certified Virus Free by Dr.Ace .
Checked by AVG anti-virus system (http://www.grisoft.com).
Version: 6.0.744 / Virus Database: 496 - Release Date: 8/24/2004

678. RE: Attached VIRUS

Yahoo group: SkyWires
Date: 2004-08-26 12:08:05 UTC
From: ve6drw
Topic: 678 Message: 678

Last posted e-mail from dwds@... did not originate from
me. I only post to the group through the Yahoo website, not directly
and NEVER include attachments.

Dave White
VE6DRW
dwds@...

679. 160 meter loop on 40

Yahoo group: SkyWires
Date: 2004-08-26 18:33:27 UTC
From: Marc Chappelle
Topic: 679 Message: 679

Just wondering..... Could I expect improved performance DX-wise on 40 meters if I threw up a 160 meter loop as opposed to one cut for 40 meters.

Thanks
Marc - KA3ARF

680. Re: 160 meter loop on 40

Yahoo group: SkyWires
Date: 2004-08-26 22:53:54 UTC
From: cpa2000
Topic: 679 Message: 680

This is a "yes but" type situation.

The 40 meter pattern of a 160 meter loop depends on the loop height, the loop shape, where you feed it and ground conductivity.

I'll make a few assumptions in my answer:
Loop Shape: Square
Loop Height: 60'
Corner fed
Average ground

You should get a pattern of 4 lobes and 4 nulls (think of a 4 leaf clover). Lobes should be off the corners of the loop & nulls should be off the sides. Expect about 10-11 dbi gain off the lobes with nulls down as much as 20dbi.

If the DX station you wish to work is off one of the corners of the loop, you should have a good signal, but, if the station is off a side, a dipole will be much stronger. Take-off angle off the corners will favor DX (ie., low angle radiation).

A low antenna (say 20 feet) will be much less directional & a much poorer DX antenna. Max radiation will go straight up & you'll be left with a cloud warmer.

--- In SkyWires@yahoogroups.com, "Marc Chappelle"
<marc.chappelle@v...> wrote:
> Just wondering..... Could I expect improved performance DX-wise on
> 40 meters if I threw up a 160 meter loop as opposed to one cut for
40
> meters.
>
> Thanks
> Marc - KA3ARF

681. Re: 160 meter loop on 40

Yahoo group: SkyWires
Date: 2004-08-28 00:46:37 UTC
From: Marc Chappelle
Topic: 679 Message: 681

OK,

I think I should be able to get it about 40 feet up in square or hexagonal configuration.

With all the talk about 160 meter loops, I was wondering if I might want to throw up a loop cut for this band instead of 40 where I plan to spend most of my time.

BTW, I am currently using a 40 meter, ladder-line fed delta loop. I get 1:1 SWR on 40, 20 and 1.3:1 on 17 without a tuner - all the other bands can be tuned with the ATU in my Kenwood TS-2000. Get very good sig reports on 40 from EU and SA, but have yet to work any ZLs, VKs or JAs with it.

Thanks
Marc - KA3ARF

--- In SkyWires@yahoogroups.com, "cpa2000" <cpa2000@y...> wrote:
> This is a "yes but" type situation.
>
> The 40 meter pattern of a 160 meter loop depends on the loop height,
> the loop shape, where you feed it and ground conductivity.
>
> I'll make a few assumptions in my answer:
> Loop Shape: Square
> Loop Height: 60'
> Corner fed
> Average ground
>
> You should get a pattern of 4 lobes and 4 nulls (think of a 4 leaf
> clover). Lobes should be off the corners of the loop & nulls should
> be off the sides. Expect about 10-11 dbi gain off the lobes with
> nulls down as much as 20dbi.
>
> If the DX station you wish to work is off one of the corners of the
> loop, you should have a good signal, but, if the station is off a
> side, a dipole will be much stronger. Take-off angle off the corners
> will favor DX (ie., low angle radiation).
>
> A low antenna (say 20 feet) will be much less directional & a much
> poorer DX antenna. Max radiation will go straight up & you'll be left
> with a cloud warmer.

>
>
>
>
>
> --- In SkyWires@yahoogroups.com, "Marc Chappelle"
> <marc.chappelle@v...> wrote:
> > Just wondering..... Could I expect improved performance DX-wise
on
> > 40 meters if I threw up a 160 meter loop as opposed to one cut
for
> 40
> > meters.
> >
> > Thanks
> > Marc - KA3ARF

682. 40M loop at QTH

Yahoo group: SkyWires
Date: 2004-08-28 12:44:10 UTC
From: drizzel153
Topic: 682 Message: 682

Hello all. This weekend I plan on constructing a 40M loop at my QTH. Based on my site it will have the following configuration.
Height: 20ft
Perimeter: 120 ft
Shape: rectangle (24x36), actually a diamond with feedpoint and top of diamond along E-W axis. Long segments along N-S axis.
Feedline: 40ft of 450ohm LL to 1:1 Balun to 12' RG-8x (to ATU) as an alternate could use 50ft of RG-8x.

I would like to get some feedback from the group concerning the design. Thanks for your time.

NM4S

683. Re: 40M loop at QTH

Yahoo group: SkyWires
Date: 2004-08-28 14:56:49 UTC
From: drizzel153
Topic: 682 Message: 683

I actually only plan to use this for 20-10m. Thanks again.

--- In SkyWires@yahoogroups.com, drizzel153 <no_reply@y...> wrote:
> Hello all. This weekend I plan on constructing a 40M loop at my
> QTH. Based on my site it will have the following configuration.
> Height: 20ft
> Perimeter: 120 ft
> Shape: rectangle (24x36), actually a diamond with feedpoint and
top
> of diamond along E-W axis. Long segments along N-S axis.
> Feedline: 40ft of 450ohm LL to 1:1 Balun to 12' RG-8x (to ATU)
> as an alternate could use 50ft of RG-8x.
>
> I would like to get some feedback from the group concerning the
> design. Thanks for your time.
>
> NM4S

684. Re: [SkyWires] Re: 40M loop at QTH

Yahoo group: SkyWires
Date: 2004-08-28 18:25:51 UTC
From: Dr.Ace Ratliff
Topic: 682 Message: 684

It sounds good to me!
Ace - WH2T
----- Original Message -----
From: drizzel153
To: SkyWires@yahoogroups.com
Sent: Saturday, August 28, 2004 9:56 AM
Subject: [SkyWires] Re: 40M loop at QTH

I actually only plan to use this for 20-10m. Thanks again.

--- In SkyWires@...m, drizzel153 <no_reply@y...> wrote:
> Hello all. This weekend I plan on constructing a 40M loop at my
> QTH. Based on my site it will have the following configuration.
> Height: 20ft
> Perimeter: 120 ft
> Shape: rectangle (24x36), actually a diamond with feedpoint and
top
> of diamond along E-W axis. Long segments along N-S axis.
> Feedline: 40ft of 450ohm LL to 1:1 Balun to 12' RG-8x (to ATU)
> as an alternate could use 50ft of RG-8x.
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> I would like to get some feedback from the group concerning the
> design. Thanks for your time.
>
> NM4S

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Outgoing mail is certified Virus Free by Dr.Ace .
Checked by AVG anti-virus system (http://www.grisoft.com).
Version: 6.0.745 / Virus Database: 497 - Release Date: 8/27/2004

685. Re: 40M loop at QTH

Yahoo group: SkyWires
Date: 2004-08-28 21:05:06 UTC
From: bambazonke01
Topic: 682 Message: 685

I think you need a 4:1 balun.Or better still a 3:1 balun.
Why not use a matching 1/4 wave section of 75 ohm coax connected to
the 50 ohm line?
What say anyone else??
Jim VE3DDY

686. 40M loop at QTH

Yahoo group: SkyWires
Date: 2004-08-29 12:54:03 UTC
From: K0PYK
Topic: 682 Message: 686

Give this a try. I built this for 7.070 Mhz and it
works 1-1 on 40 and 2-1 on 20 w/o a tuner. I tried to
put it up as a delta loop, but I could not get the
bottom high enough. It is now just a vertical loop
with 5 sides. I have not noticed any difference in
performance.
Hope this helps.
Tom, K0PYK

Do You Yahoo!?
Tired of spam? Yahoo! Mail has the best spam protection around
http://mail.yahoo.com

687. Re: 40M loop at QTH

Yahoo group: SkyWires
Date: 2004-08-29 22:54:26 UTC
From: drizzel153
Topic: 682 Message: 687

Thanks for the advise. My rectangle turned out to be more of a parallelogram. However, it works with some RFI. I turn on a touch lamp every time I key down. The ATU makes it work on 20-10m. I seem to have 50% efficiency (as expected) on 15m. Perhaps replacing the 450 ohm LL with 75 ohm coax (23') will keep me from blinking the lamp. Thanks to all.

--- In SkyWires@yahoogroups.com, K0PYK <k0pyk@y...> wrote:
> Give this a try. I built this for 7.070 Mhz and it
> works 1-1 on 40 and 2-1 on 20 w/o a tuner. I tried to
> put it up as a delta loop, but I could not get the
> bottom high enough. It is now just a vertical loop
> with 5 sides. I have not noticed any difference in
> performance.
> Hope this helps.
> Tom, K0PYK
>
> _____
> Do You Yahoo!?
> Tired of spam? Yahoo! Mail has the best spam protection around
> http://mail.yahoo.com

688. Re: [SkyWires] Re: 40M loop at QTH

Yahoo group: SkyWires
Date: 2004-08-30 02:02:31 UTC
From: Scott Erwin
Topic: 682 Message: 688

450-ohm ladder line will not cause RFI if properly installed. Coax is easy to install but will also cause RFI if you do manage to screw the installation up. Ladder line is self-shielding when RF is present because of the balanced RF producing a field around the feed line. This is double the width of the balanced feed line. For 450 ohm Ladder line at 1-inch width means that you should keep any object away from the line by 2 inches at least. When going through a wall the feed line should be 90 degrees to the wall or case with proper feed through insulators. This will ensure a balanced condition on the feed line. It makes no difference if the object near the feed line is a conductor or and insulator. Either one will cause an unbalanced condition. When using balanced feed line both ends of that feed line must have a balanced supply/load condition. This means you must use a Balun between the ladder line and the unbalanced feed line equipment in the shack and the antenna needs to also be balanced. With coax an RF problem is caused by cold soldered joints in the connectors and/or RF traveling down the outside of the coax and the equipment hooked up to it in the shack. Balanced antennas used with unbalanced feed line like coax will have this problem. I personally do not use Balun when running this way at the antenna and coil the coax about 6 inches in diameter with 6 turns to choke off the RF on the outside of the coax to keep it out of the shack. The reason I do this is I might be able to work some one off the coax instead of the antenna where the other station might be in a deep null area of the pattern for that antenna. Keeping the coax, as vertical as possible and at least 1/4 wavelength on the lowest band used will allow your horizontal loop or dipole to also be a vertical for DX contacts as well. This is only for fixed antennas and not for a ratable Yagi or some other type directional antenna. In this case a Balun or some other balanced to unbalanced matching device must be used.
--- drizzel153 <no_reply@yahoogroups.com> wrote:

> Thanks for the advise. My rectangle turned out to
> be more of a
> parallelogram. However, it works with some RFI. I
> turn on a touch

> lamp every time I key down. The ATU makes it work
> on 20-10m. I
> seem to have 50% efficiency (as expected) on 15m.
> Perhaps
> replacing the 450 ohm LL with 75 ohm coax (23') will
> keep me from
> blinking the lamp. Thanks to all.
>
> --- In SkyWires@yahoogroups.com, K0PYK <k0pyk@y...>
> wrote:
> > Give this a try. I built this for 7.070 Mhz and it
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> > Hope this helps.
> > Tom, K0PYK
> >
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> > Do You Yahoo!?
> > Tired of spam? Yahoo! Mail has the best spam
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>
>

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http://promotions.yahoo.com/new_mail

689. 40 meter delta loop

Yahoo group: SkyWires
Date: 2004-08-31 00:04:01 UTC
From: K0PYK
Topic: 689 Message: 689

Here is the link for the 40 meter delta loop that I built.
It did not show up in my original post. Sorry.
http://bvarc.freeshell.org/w5rh/delta.htm
Hope this helps.
Tom, K0PYK

My original message...

Message: 1
Date: Sun, 29 Aug 2004 05:54:03 -0700 (PDT)
From: K0PYK
Subject: 40M loop at QTH

Give this a try. I built this for 7.070 Mhz and it
works 1-1 on 40 and 2-1 on 20 w/o a tuner. I tried to
put it up as a delta loop, but I could not get the
bottom high enough. It is now just a vertical loop
with 5 sides. I have not noticed any difference in
performance.
Hope this helps.
Tom, K0PYK

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690. Re: 40M loop at QTH

Yahoo group: SkyWires
Date: 2004-08-31 01:22:10 UTC
From: Marc Chappelle
Topic: 682 Message: 690

My 40 meter delta is fed with 450 ohm ladder line that enters the shack via my window. About 2 to 3 inches of the feedline is sandwiched between the aluminum window seal and frame. Is this enough to upset the line's overall balance and adversely affecting the loop's performance? Another 10 feet of feedline actually rests on the tarpaper (nonmetalic) roof. Will this also afect balance?

~Rallo

--- In SkyWires@yahoogroups.com, Scott Erwin <n4zou@y...> wrote:
> 450-ohm ladder line will not cause RFI if properly
> installed. Coax is easy to install but will also cause
> RFI if you do manage to screw the installation up.
> Ladder line is self-shielding when RF is present
> because of the balanced RF producing a field around
> the feed line. This is double the width of the
> balanced feed line. For 450 ohm Ladder line at 1-inch
> width means that you should keep any object away from
> the line by 2 inches at least. When going through a
> wall the feed line should be 90 degrees to the wall or
> case with proper feed through insulators. This will
> ensure a balanced condition on the feed line. It makes
> no difference if the object near the feed line is a
> conductor or and insulator. Either one will cause an
> unbalanced condition. When using balanced feed line
> both ends of that feed line must have a balanced
> supply/load condition. This means you must use a Balun
> between the ladder line and the unbalanced feed line
> equipment in the shack and the antenna needs to also
> be balanced. With coax an RF problem is caused by cold
> soldered joints in the connectors and/or RF traveling
> down the outside of the coax and the equipment hooked
> up to it in the shack. Balanced antennas used with
> unbalanced feed line like coax will have this problem.
> I personally do not use Balun when running this way at
> the antenna and coil the coax about 6 inches in
> diameter with 6 turns to choke off the RF on the
> outside of the coax to keep it out of the shack. The
> reason I do this is I might be able to work some one
> off the coax instead of the antenna where the other
> station might be in a deep null area of the pattern
> for that antenna. Keeping the coax, as vertical as
> possible and at least 1/4 wavelength on the lowest
> band used will allow your horizontal loop or dipole to
> also be a vertical for DX contacts as well. This is

> only for fixed antennas and not for a ratable Yagi or
> some other type directional antenna. In this case a
> Balun or some other balanced to unbalanced matching
> device must be used.
> --- drizzel153 <no_reply@yahoogroups.com> wrote:
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> > Thanks for the advise. My rectangle turned out to
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> > lamp every time I key down. The ATU makes it work
> > on 20-10m. I
> > seem to have 50% efficiency (as expected) on 15m.
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> > replacing the 450 ohm LL with 75 ohm coax (23') will
> > keep me from
> > blinking the lamp. Thanks to all.
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691. Re: [SkyWires] Re: 40M loop at QTH

Yahoo group: SkyWires
Date: 2004-08-31 02:02:15 UTC
From: Scott Erwin
Topic: 682 Message: 691

If the feed line is exactly 90 degrees to the window seal then the balance is ok but you should not have the window seal right on the ladder line! This will attenuate both the received signal and the transmit signal. Same thing with the ladder line laying on the roof material. The window problem is an easy fix. Simply cut a length of wood about 1 inch + or - thick and use some feed through insulators and connect the ladder line to each side. For the roof you can simply use some weights with some fiberglass rods to support the ladder line so it is no closer than 2 inches to the top of the weights. This prevents screwing feed line standoffs into the roof. Just remember, nothing should be closer than 2 inches to the 1-inch wide 450-ohm ladder line. You can also use insulators attached to points of the ladder line to support it with rope. Just make everything balanced. After you fix the ladder line installation you will notice a big improvement.
--- Marc Chappelle <marc.chappelle@...> wrote:

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> shack via my window. About 2 to 3 inches of the
> feedline is
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> to upset the line's overall balance and adversely
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> ~Rallo
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> <n4zou@y...> wrote:
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http://messenger.yahoo.com

692. Re: 40M loop at QTH

Yahoo group: SkyWires
Date: 2004-08-31 08:08:59 UTC
From: Marc Chappelle
Topic: 682 Message: 692

OK.

I'll get to work on that right away. I had thought about cutting a 2X4 to fit in the bottom of window seal, dril a series of parallel holes in it, run the ladder line through them and seal it all up with silicone sealant. I'll also reposition the loop's apex so that the feedline won't come to rest on the roof, or maybe I'll follow your suggestion and prop it up with sticks or something.

I had no idea that ladder line was so sensitive to object proximity. You say I should hear a noticeable improvement in received and transmitted signal strength? Cool!

Thanks for all your advice Scott
Marc - KA3ARF

--- In SkyWires@yahoogroups.com, Scott Erwin <n4zou@y...> wrote:
> If the feed line is exactly 90 degrees to the window
> seal then the balance is ok but you should not have
> the window seal right on the ladder line! This will
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> signal. Same thing with the ladder line laying on the
> roof material. The window problem is an easy fix.
> Simply cut a length of wood about 1 inch + or - thick
> and use some feed through insulators and connect the
> ladder line to each side. For the roof you can simply
> use some weights with some fiberglass rods to support
> the ladder line so it is no closer than 2 inches to
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> --- Marc Chappelle <marc.chappelle@v...> wrote:
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693. Re: [SkyWires] Re: 40M loop at QTH

Yahoo group: SkyWires
Date: 2004-08-31 13:01:41 UTC
From: Scott Erwin
Topic: 682 Message: 693

A 2X4 will work fine but its a little on the thick
side and will be a bit of a problem mounting feed
through insulators. If your not going to run an
amplifier you can cut a peace of Plexiglas and get
some banana jacks from Radio Shack to install in it.
Then just cut a large hole in the 2X4 and attach the
Plexiglas and jacks to that. It would be better to get
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If your going to run power ceramic feed through
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=== message truncated ===

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694. Re: 40M loop at QTH

Yahoo group: SkyWires
Date: 2004-09-01 06:12:05 UTC
From: Marc Chappelle
Topic: 682 Message: 694

I thought I might try this:

Drill a suitable hole through the wall directly behind the rig, run a length of coax to the otherside, attach a LDG 4:1 balun to it, then attach the carefully routed feedline to the balun.

Will this method work?
Marc - KA3ARF

--- In SkyWires@yahoogroups.com, Scott Erwin <n4zou@y...> wrote:
> A 2X4 will work fine but its a little on the thick
> side and will be a bit of a problem mounting feed
> through insulators. If your not going to run an
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695. Re: 40M loop at QTH

Yahoo group: SkyWires
Date: 2004-09-01 12:04:48 UTC
From: bambazonke01
Topic: 682 Message: 695

Hi Guys, I've been reading the thread and have something to
contribute.
Don't use steel nuts or bolts anywhere along the feedline. Use BRASS
instead. When RF passes THROUGH a steel circle(nut) it heats the
nut up and power is severly attenuated.
I had a steel nut on a Banana jack and the heat melted the plastic
panel. This heating effect is only apparent at higher power levels
but at QRP levels the RF power is just absorbed by the steel.
Jim VE3DDY

--- In SkyWires@yahoogroups.com, Scott Erwin <n4zou@y...> wrote:
> A 2X4 will work fine but its a little on the thick
> side and will be a bit of a problem mounting feed
> through insulators. If your not going to run an
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696. Re: [SkyWires] Re: 40M loop at QTH

Yahoo group: SkyWires
Date: 2004-09-01 19:11:19 UTC
From: Scott Erwin
Topic: 682 Message: 696

That will work just fine! I bring my 450 ohm ladder line in through my window as I want a choice on how I want to operate with my equipment. When the amplifier is not going to be used I have a short coax jumper between my transceiver and a 4:1 Balun mounted just below the window. When switching to the amplifier I connect the short coax jumper that is normally connected to the "window " Balun to the input of the amplifier and then connect the short peace of 450 ohm ladder line from the back of my 2 Kw tuner internal 4:1 Balun to the feed through insulators in the window and in the process disconnecting the 4:1 Balun under the window.
--- Marc Chappelle <marc.chappelle@...> wrote:

> I thought I might try this:
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> Drill a suitable hole through the wall directly
> behind the rig, run a
> length of coax to the otherside, attach a LDG 4:1
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> attach the carefully routed feedline to the balun.
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> Will this method work?
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http://promotions.yahoo.com/goldrush

697. Re: [SkyWires] Re: 40M loop at QTH

Yahoo group: SkyWires
Date: 2004-09-01 19:17:58 UTC
From: Dr.Ace Ratliff
Topic: 682 Message: 697

Hi Marc,
I have used that method and it worked quite well.
The only difference was, I made my own homebrew balun.
Ace - WH2T

http://www.bloomington.in.us/~wh2t/balun.html

----- Original Message -----
From: Marc Chappelle
To: SkyWires@yahoogroups.com
Sent: Wednesday, September 01, 2004 1:12 AM
Subject: [SkyWires] Re: 40M loop at QTH

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> > line
> > > > that enters the
> > > > shack via my window. About 2 to 3 inches of the
> > > > feedline is
> > > > sandwiched between the aluminum window seal and
> > > > frame. Is this enough
> > > > to upset the line's overall balance and
> > adversely
> > > > affecting the
> > > > loop's performance? Another 10 feet of feedline
> > > > actually rests on the
> > > > tarpaper (nonmetalic) roof. Will this also afect
> > > > balance?
> > > >
> > > > ~Rallo
> > > >
> > > >
> > > > --- In SkyWires@yahoogroups.com, Scott Erwin
> > > > <n4zou@y...> wrote:
> > > > > 450-ohm ladder line will not cause RFI if
> > > > properly
> > > > > installed. Coax is easy to install but will
> > also
> > > > cause
> > > > > RFI if you do manage to screw the installation
> > up.
> > > > > Ladder line is self-shielding when RF is
> > present
> > > > > because of the balanced RF producing a field
> > > > around
> > > > > the feed line. This is double the width of the
> > > > > balanced feed line. For 450 ohm Ladder line at
> > > > 1-inch
> > > > > width means that you should keep any object
> > away
> > > > from
> > > > > the line by 2 inches at least. When going
> > through
> > > > a
> > > > > wall the feed line should be 90 degrees to the
> > > > wall or
> > > > > case with proper feed through insulators. This

> > > > will
> > > > > ensure a balanced condition on the feed line.
> > It
> > > > makes
> > > > > no difference if the object near the feed line
> > is
> > > > a
> > > > > conductor or and insulator. Either one will
> > cause
> > > > an
> > > > > unbalanced condition. When using balanced feed
> > > > line
> > > > > both ends of that feed line must have a
> > balanced
> > > > > supply/load condition. This means you must use
> > a
> > > > Balun
> > > > > between the ladder line and the unbalanced
> > feed
> > > > line
> > > > > equipment in the shack and the antenna needs
> > to
> > > > also
> > > > > be balanced. With coax an RF problem is caused
> > by
> > > > cold
> > > > > soldered joints in the connectors and/or RF
> > > > traveling
> > > > > down the outside of the coax and the equipment
> > > > hooked
> > > > > up to it in the shack. Balanced antennas used
> > with
> > > > > unbalanced feed line like coax will have this
> > > > problem.
> > > > > I personally do not use Balun when running
> > this
> > > > way at
> > > > > the antenna and coil the coax about 6 inches
> > in
> > > > > diameter with 6 turns to choke off the RF on
> > the
> > > > > outside of the coax to keep it out of the
> > shack.
> > > > The
> > > > > reason I do this is I might be able to work
> > some
> > > > one
> > > > > off the coax instead of the antenna where the
> > > > other
> > > > > station might be in a deep null area of the

> > > > pattern
> > > > > for that antenna. Keeping the coax, as
> > vertical as
> > > > > possible and at least 1/4 wavelength on the
> > lowest
> > > > > band used will allow your horizontal loop or
> > > > dipole to
> > > > > also be a vertical for DX contacts as well.
> > This
> > > > is
> > > > > only for fixed antennas and not for a ratable
> > Yagi
> > > > or
> > > > > some other type directional antenna. In this
> > case
> > > > a
> > > > > Balun or some other balanced to unbalanced
> > > > matching
> > > > > device must be used.
> > > > > --- drizzel153 <no_reply@yahoogroups.com>
> > wrote:
> > > > >
> > > > > > Thanks for the advise. My rectangle turned
> > out
> > > > to
> > > > > > be more of a
> > > > > > parallelogram. However, it works with some
> > RFI.
> > > > I
> > > > > > turn on a touch
> > > > > > lamp every time I key down. The ATU makes
> > it
> > > > work
> > > > > > on 20-10m. I
> > > > > > seem to have 50% efficiency (as expected) on
> > > > 15m.
> > > > > > Perhaps
> > > > > > replacing the 450 ohm LL with 75 ohm coax
> > (23')
> > > > will
> > > > > > keep me from
> >
> === message truncated ===
>
>
>
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698. Re: [SkyWires] Re: 40M loop at QTH

Yahoo group: SkyWires
Date: 2004-09-02 03:39:41 UTC
From: Jim Dunstan
Topic: 682 Message: 698

At 08:08 AM 8/31/04 +0000, you wrote:
>OK.
>
>I'll get to work on that right away. I had thought about cutting a
>2X4 to fit in the bottom of window seal, dril a series of parallel
>holes in it, run the ladder line through them and seal it all up with
>silicone sealant. I'll also reposition the loop's apex so that the
>feedline won't come to rest on the roof, or maybe I'll follow your
>suggestion and prop it up with sticks or something.
>
>I had no idea that ladder line was so sensitive to object proximity.
>You say I should hear a noticeable improvement in received and
>transmitted signal strength? Cool!
>
>Thanks for all your advice Scott
>Marc - KA3ARF

I have been following the discussion re: routing a balanced 450 ohm ladder line into the operating room.

There are all kinds of balanced lines; 600 ohm open wire line, 450 ohm open ladder line, 300 ohm TV twin lead, 72 ohm line (no longer manufactured ??), zip cord (2 wire extension cord, impedance 100 ohm approximately), telephone outside cable, etc. etc.. They may have different impedance, loss factor, and power handling capabilities, but they all will work as balanced feed lines.

It is possible to splice several pieces of different kind of balanced line between the antenna and the tuner and the performance of the antenna will be virtually the same. For example, if the distance between your antenna and tuner is 75' and you have 40' of 450 ohm line and 35' of 300 ohm TV twin lead, it is possible to splice them end to end. The difference in performance will be negligible. As long as you are not running high power, the 300 ohm line will work fine and the added loss is negligible.

Now if you were to take the same example of a 75' feed line length and you were to make it 74' of 450 ohm ladder line and 1' of zip cord, the result will be the same; there will be negligible loss. So, if your 450 ohm ladder line comes from the antenna to the window of your operating room you can terminate the 450 ohm line at the window, splice in a foot or two of zip cord, pass the zip cord through a 1/4" hole in the window frame etc. and either connect the zip cord to your tuner or to another length of 450 ohm line. I guarantee it will work fine and you will not be able to notice a difference in performance. You may notice that the tuner settings are not exactly the same, but the loss will be negligible and balance will be maintained.

I have used this system for years.

Jim Dunstan, VE3CI
Thunder Bay, ON

699. Re: Art Bell's SkyWire Loop Antenna Generating electricity?

Yahoo group: SkyWires
Date: 2004-09-02 04:49:19 UTC
From: josuha1954
Topic: 9 Message: 699

--- In SkyWires@yahoogroups.com, "exemptfromlife" <junkmail@a...>
wrote:
Hi..Just joined the group. I've been looking at the skyloop and
looks like a good candidate for DX.
Was looking at the photos of Art Bell's setup. Is the 350 volts AC
or DC? I assume DC?
I see there is a wind turbine close to the wire. Could that
possiably set a static charge and transfer it to the wire by some
means?? Or possiably the tower is somewhere shorted to the turbine
and or battery storage unit??
Josh

> This is a odd statement in this article about Art Bell's Skywire
Loop
> Antenna.
>
> He claims it generating 350 volts, and shocks him. I would assume
in
> that dry desert that its a due to blowing sand particles, but I
have
> no idea. I'm sure its not Little green men or some cosmic force,
does
> anybody want to take a guess?
>
> thanks.
>
> http://www.ccrane.com/news/whatsinthenews11.19.02.htm

700. Re: [SkyWires] Re: Art Bell's SkyWire Loop Antenna Generating electricity?

Yahoo group: SkyWires
Date: 2004-09-02 14:06:54 UTC
From: Scott Erwin
Topic: 9 Message: 700

All the HF loop Sky wire antennas I have ever put up
when left ungrounded would build up a large static
electric charge after only a few hours. If your
standing on the ground and touch the feed line you
will get a good jolt from it. On my 160-meter loop
after about two hours the end of the feed line brought
close to the ground rod for the shack will produce a
nice blue spark with about a 1-inch gap! My 4:1 Balun
for the antenna provides a nice direct DC ground to my
ground rod just under the window out side and when the
ladder line is disconnected for lighting safety when I
am not operating the station a large jumper wire is
connected to the ceramic feed through insulators where
the 4:1 Balun was connected and the other end of the
jumper wire is connected directly to the ground rod so
the static charge is continually drained off the loop.

--- josuha1954 <josuha1954@...> wrote:

> --- In SkyWires@yahoogroups.com, "exemptfromlife"
> <junkmail@a...>
> wrote:
> Hi..Just joined the group. I've been looking at the
> skyloop and
> looks like a good candidate for DX.
> Was looking at the photos of Art Bell's setup. Is
> the 350 volts AC
> or DC? I assume DC?
> I see there is a wind turbine close to the wire.
> Could that
> possiably set a static charge and transfer it to the
> wire by some
> means?? Or possiably the tower is somewhere shorted
> to the turbine
> and or battery storage unit??
> Josh
>
>
> > This is a odd statement in this article about Art
> Bell's Skywire
> Loop
> > Antenna.
> >
> > He claims it generating 350 volts, and shocks him.
> I would assume

> in
> > that dry desert that its a due to blowing sand
> particles, but I
> have
> > no idea. I'm sure its not Little green men or some
> cosmic force,
> does
> > anybody want to take a guess?
> >
> > thanks.
> >
> >
>
http://www.ccrane.com/news/whatsinthenews11.19.02.htm
>
>

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701. Re: [SkyWires] Re: 40M loop at QTH

Yahoo group: SkyWires
Date: 2004-09-02 14:13:27 UTC
From: Village Idiot
Topic: 682 Message: 701

Thanks for a bit of practicality regarding antenna
lead-in's.
There are a lot of witches-brew and just plain
pain-in-the-neck stuff regarding antennas in general
and lead-in's in particular.
There is Theory in and for Theory's sake, and then
there is practical implementation... and the two may
never meet.
I've even used TREES as antennas very successfully!!!
A length of random stranded wire ending up with a
brass Eye-Lag-Screw screwed into a tree trunk works
very well as long as your xmitting pwr. isn't too
much. The tree's lattice-work within it's living
cells seem to adapt and resonate together as a cluster
of mini-antennas connected within a 3-dimensional
lattice... much like a large xtal does.
It's just plain fund to push the envelop against
so-called accepted theory, and discover things are not
always as they seem.

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702. Re: Art Bell's SkyWire Loop Antenna Generating electricity?

Yahoo group: SkyWires
Date: 2004-09-02 15:49:59 UTC
From: josuha1954
Topic: 9 Message: 702

--- In SkyWires@yahoogroups.com, Scott Erwin <n4zou@y...> wrote:

Hi Scott..
Well..perhaps you solved the 'mystery'..
Static electricity..
Just built the coax and antenna connector out of 1 1/2" PVC ('T')
Now to find a couple of trees to hang it from. Josh

> All the HF loop Sky wire antennas I have ever put up
> when left ungrounded would build up a large static
> electric charge after only a few hours. If your
> standing on the ground and touch the feed line you
> will get a good jolt from it. On my 160-meter loop
> after about two hours the end of the feed line brought
> close to the ground rod for the shack will produce a
> nice blue spark with about a 1-inch gap! My 4:1 Balun
> for the antenna provides a nice direct DC ground to my
> ground rod just under the window out side and when the
> ladder line is disconnected for lighting safety when I
> am not operating the station a large jumper wire is
> connected to the ceramic feed through insulators where
> the 4:1 Balun was connected and the other end of the
> jumper wire is connected directly to the ground rod so
> the static charge is continually drained off the loop.
>
> --- josuha1954 <josuha1954@y...> wrote:
>
> > --- In SkyWires@yahoogroups.com, "exemptfromlife"
> > <junkmail@a...>
> > wrote:
> > Hi..Just joined the group. I've been looking at the
> > skyloop and
> > looks like a good candidate for DX.
> > Was looking at the photos of Art Bell's setup. Is
> > the 350 volts AC
> > or DC? I assume DC?
> > I see there is a wind turbine close to the wire.
> > Could that
> > possiably set a static charge and transfer it to the
> > wire by some
> > means?? Or possiably the tower is somewhere shorted
> > to the turbine
> > and or battery storage unit??
> > Josh
> >

> >
> > > This is a odd statement in this article about Art
> > Bell's Skywire
> > Loop
> > > Antenna.
> > >
> > > He claims it generating 350 volts, and shocks him.
> > I would assume
> > in
> > > that dry desert that its a due to blowing sand
> > particles, but I
> > have
> > > no idea. I'm sure its not Little green men or some
> > cosmic force,
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> > > anybody want to take a guess?
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703. feeding a 160meter skywire with 450 ohm open

Yahoo group: SkyWires
Date: 2004-09-06 13:14:07 UTC
From: campingfreak2002
Topic: 703 Message: 703

Hello all, I am new to the group here. I am seriously considering putting up a 160 meter skywire myself feeding with 450 ohm ladder line. The information about static build-up that I have been reading on this group was good information but also suspected. Am I to assume that I will gain some vertical component if I keep the feed line straight vertical? Has anyone used a knife switch inline with the feeder to switch between earth ground and the rig? Any ideas would be very helpful.
Eric
KG4CYB

704. Building a Magnetic loop.

Yahoo group: SkyWires
Date: 2004-09-06 13:19:11 UTC
From: n4zou
Topic: 704 Message: 704

I have a small camper and truck set up as a portable emergency HF station and the biggest headache is antenna setup. I tried mobile antennas first thing with poor results. A 40-meter loop Sky wire worked great except for 80 meters which is required and yes, I did try opening up the loop at the far end and the size is still too big and requires at least three supports. Same thing with a trap dipole, too long and requires three supports even when configured as an inverted "V" antenna. I even tried a Butternut HF6V vertical but I just cant get a proper ground under it using the truck and camper as the ground plane and running radials is out of the question. Most of the time the set up is used in a parking lot and the radial wires will get destroyed in short order. After looking around an old ARRL antenna book and checking the net for information on Magnetic loop's I have decided to build one and try it out. Before I get started on it I would like to have comments from anyone that has built one of these small loop antennas. I already have a nice Jennings Vacuum capacitor rated for 5 to 500 pF and checking it found it to be about 15 to 477 pF. I already have a stepper motor drive system on it, which turns it very slow, and in single steps. It's rated at 5 Kv, which should allow 100 watts without arcing. I have read that the capacitor is the most important part of this antenna. Looking at designs and figuring out the math it looks like I will need 20 feet of 1inch plumbing copper and eight 45-degree fittings to form the loop. This should give me 80 through 20 meter coverage with the loop about 6 feet in diameter which would allow it to lay flat in the truck bed for transport. I also have the ability to install a self supporting 15 foot pole for the loop which should get it in the clear and away from people that could get a nasty burn from the high voltage associated with these type antennas. A site with good information about Magnetic loop antennas is
http://www.iri.tudelft.nl/~geurink/magnloop.htm
.

705. Re: [SkyWires] feeding a 160meter skywire with 450 ohm open

Yahoo group: SkyWires
Date: 2004-09-06 13:48:28 UTC
From: Scott Erwin
Topic: 703 Message: 705

With a loop using ladder line the ladder line will
become a part of the radiating element when there is a
high current condition at the feed point. This happens
on 80 meters with a 160-meter loop where the length of
the loop is an even harmonic. The feed line becomes a
folded part of the radiating element. If most of that
area of the feed line is vertical then you will have a
distorted pattern with a small vertical pattern as a
part of that distortion.
I would not use a knife switch to disconnect the loop
and ground it. If you did get a direct strike the
lighting would jump the small gap and destroy your
equipment. I remove the ladder line/coax from the wood
board with feed through connectors installed in my
window and then ground them all with a heavy jumper to
the station ground rod and ground system for the house
as per the local code.
"All ground rods for the dwelling shall be
interconnected with at least #10 solid copper wire."

--- campingfreak2002 <ebooth1@...> wrote:

> Hello all, I am new to the group here. I am
> seriously considering
> putting up a 160 meter skywire myself feeding with
> 450 ohm ladder
> line. The information about static build-up that I
> have been reading
> on this group was good information but also
> suspected. Am I to assume
> that I will gain some vertical component if I keep
> the feed line
> straight vertical? Has anyone used a knife switch
> inline with the
> feeder to switch between earth ground and the rig?
> Any ideas would be
> very helpful.
> Eric
> KG4CYB
>
>

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706. tunners

Yahoo group: SkyWires
Date: 2004-09-06 19:22:53 UTC
From: keith currie
Topic: 706 Message: 706

Could some one tell me if a johnson kilowatt matchbox with a missing relay and rear terminal strip will still work ok on my loop antenna?

707. Re: Building a Magnetic loop.(How about a "D")

Yahoo group: SkyWires
Date: 2004-09-07 01:56:47 UTC
From: bambazonke01
Topic: 704 Message: 707

I had a similar setup of a military truck/trailer at one time in the past when I was in uniform. The antenna was a large whip that was mounted on the back bumper and bent over in a "loop" and had the tip connected to the front bumper of the truck through a series variable capacitor. from the ground of the front bumper, a heavy braid ran back to the back bumper where the antenna was mounted. The antenna was connected to the transmitter via a "tuner" that consisted of a parallel tuned circuit with a 2 or 3 turn link coupling to the transmitter output.
In effect this type of antenna is a large 1/2 loop like a "D" on it's back.
You could easily set something similar up and check it's resonance with an antennalizer. That antenna laid down a solid signal all over the continent and the transmitter was only 10 watts AM.
I've been thinking of making something smilar to install in a tent using the fold over tent poles.
Jim VE3DDY

--- In SkyWires@yahoogroups.com, "n4zou" <n4zou@y...> wrote:
> I have a small camper and truck set up as a portable emergency HF
> station and the biggest headache is antenna setup. I tried mobile
> antennas first thing with poor results. A 40-meter loop Sky wire
> worked great except for 80 meters which is required and yes, I did
> try opening up the loop at the far end and the size is still too
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> and requires at least three supports. Same thing with a trap
dipole,
> too long and requires three supports even when configured as an
> inverted "V" antenna. I even tried a Butternut HF6V vertical but I
> just cant get a proper ground under it using the truck and camper
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> the ground plane and running radials is out of the question. Most
of
> the time the set up is used in a parking lot and the radial wires
> will get destroyed in short order. After looking around an old
ARRL
> antenna book and checking the net for information on Magnetic
loop's
> I have decided to build one and try it out. Before I get started
on
> it I would like to have comments from anyone that has built one of
> these small loop antennas. I already have a nice Jennings Vacuum
> capacitor rated for 5 to 500 pF and checking it found it to be
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> 15 to 477 pF. I already have a stepper motor drive system on it,

> which turns it very slow, and in single steps. It's rated at 5 Kv,
> which should allow 100 watts without arcing. I have read that the
> capacitor is the most important part of this antenna. Looking at
> designs and figuring out the math it looks like I will need 20
feet
> of 1inch plumbing copper and eight 45-degree fittings to form the
> loop. This should give me 80 through 20 meter coverage with the
loop
> about 6 feet in diameter which would allow it to lay flat in the
> truck bed for transport. I also have the ability to install a self
> supporting 15 foot pole for the loop which should get it in the
clear
> and away from people that could get a nasty burn from the high
> voltage associated with these type antennas. A site with good
> information about Magnetic loop antennas is
> http://www.iri.tudelft.nl/~geurink/magnloop.htm
> .

708. Re: 40M loop at QTH

Yahoo group: SkyWires
Date: 2004-09-07 09:47:34 UTC
From: Marc Chappelle
Topic: 682 Message: 708

I have several feet of RG58 coax on hand - will this suffice or
should I use a heavier grade?

Marc - KA3ARF

--- In SkyWires@yahoogroups.com, Scott Erwin <n4zou@y...> wrote:
> That will work just fine! I bring my 450 ohm ladder
> line in through my window as I want a choice on how I
> want to operate with my equipment. When the amplifier
> is not going to be used I have a short coax jumper
> between my transceiver and a 4:1 Balun mounted just
> below the window. When switching to the amplifier I
> connect the short coax jumper that is normally
> connected to the "window " Balun to the input of the
> amplifier and then connect the short peace of 450 ohm
> ladder line from the back of my 2 Kw tuner internal
> 4:1 Balun to the feed through insulators in the window
> and in the process disconnecting the 4:1 Balun under
> the window.
> --- Marc Chappelle <marc.chappelle@v...> wrote:
>
> > I thought I might try this:
> > >
> > Drill a suitable hole through the wall directly
> > behind the rig, run a
> > length of coax to the otherside, attach a LDG 4:1
> > balun to it, then
> > attach the carefully routed feedline to the balun.
> > >
> > Will this method work?
> > Marc - KA3ARF
> > >
> > >
> > --- In SkyWires@yahoogroups.com, Scott Erwin
> > <n4zou@y...> wrote:
> > > A 2X4 will work fine but its a little on the thick
> > > side and will be a bit of a problem mounting feed
> > > through insulators. If your not going to run an
> > > amplifier you can cut a peace of Plexiglas and get
> > > some banana jacks from Radio Shack to install in
> > it.
> > > Then just cut a large hole in the 2X4 and attach
> > the
> > > Plexiglas and jacks to that. It would be better to
> > get

> > > the Apex of the antenna higher or moved a little
> > so
> > > the feed line is in the air well away from the
> > roof.
> > > If your going to run power ceramic feed through
> > > insulators are a must!
> > > --- Marc Chappelle <marc.chappelle@v...> wrote:
> > >
> > > > OK.
> > > >
> > > > I'll get to work on that right away. I had
> > thought
> > > > about cutting a
> > > > 2X4 to fit in the bottom of window seal, dril a
> > > > series of parallel
> > > > holes in it, run the ladder line through them
> > and
> > > > seal it all up with
> > > > silicone sealant. I'll also reposition the
> > loop's
> > > > apex so that the
> > > > feedline won't come to rest on the roof, or
> > maybe
> > > > I'll follow your
> > > > suggestion and prop it up with sticks or
> > something.
> > > >
> > > > I had no idea that ladder line was so sensitive
> > to
> > > > object proximity.
> > > > You say I should hear a noticeable improvement
> > in
> > > > received and
> > > > transmitted signal strength? Cool!
> > > >
> > > > Thanks for all your advice Scott
> > > > Marc - KA3ARF
> > > >
> > > >
> > > >
> > > >
> > > >
> > > >
> > > >
> > > >
> > > > --- In SkyWires@yahoogroups.com, Scott Erwin
> > > > <n4zou@y...> wrote:
> > > > > If the feed line is exactly 90 degrees to the
> > > > window
> > > > > seal then the balance is ok but you should not
> > > > have

> > > > > the window seal right on the ladder line! This
> > > > will
> > > > > attenuate both the received signal and the
> > > > transmit
> > > > > signal. Same thing with the ladder line laying
> > on
> > > > the
> > > > > roof material. The window problem is an easy
> > fix.
> > > > > Simply cut a length of wood about 1 inch + or
> > -
> > > > thick
> > > > > and use some feed through insulators and
> > connect
> > > > the
> > > > > ladder line to each side. For the roof you can
> > > > simply
> > > > > use some weights with some fiberglass rods to
> > > > support
> > > > > the ladder line so it is no closer than 2
> > inches
> > > > to
> > > > > the top of the weights. This prevents screwing
> > > > feed
> > > > > line standoffs into the roof. Just remember,
> > > > nothing
> > > > > should be closer than 2 inches to the 1-inch
> > wide
> > > > > 450-ohm ladder line. You can also use
> > insulators
> > > > > attached to points of the ladder line to
> > support
> > > > it
> > > > > with rope. Just make everything balanced.
> > After
> > > > you
> > > > > fix the ladder line installation you will
> > notice a
> > > > big
> > > > > improvement.
> > > > > --- Marc Chappelle <marc.chappelle@v...>
> > wrote:
> > > > >
> > > > > My 40 meter delta is fed with 450 ohm ladder
> > > > line
> > > > > that enters the
> > > > > shack via my window. About 2 to 3 inches of
> > the
> > > > > feedline is
> > > > > sandwiched between the aluminum window seal

> > and
> > > > > > frame. Is this enough
> > > > > > to upset the line's overall balance and
> > > > > adversely
> > > > > > affecting the
> > > > > > loop's performance? Another 10 feet of
> > feedline
> > > > > > actually rests on the
> > > > > > tarpaper (nonmetalic) roof. Will this also
> > afect
> > > > > > balance?
> > > > > > >
> > > > > > ~Rallo
> > > > > > >
> > > > > > >
> > > > > > --- In SkyWires@yahoogroups.com, Scott Erwin
> > > > > > <n4zou@y...> wrote:
> > > > > > > 450-ohm ladder line will not cause RFI if
> > > > > > properly
> > > > > > > installed. Coax is easy to install but
> > will
> > > > > also
> > > > > > cause
> > > > > > > RFI if you do manage to screw the
> > installation
> > > > > up.
> > > > > > > Ladder line is self-shielding when RF is
> > > > > present
> > > > > > > because of the balanced RF producing a
> > field
> > > > > > around
> > > > > > > the feed line. This is double the width of
> > the
> > > > > > balanced feed line. For 450 ohm Ladder
> > line at
> > > > > > 1-inch
> > > > > > > width means that you should keep any
> > object
> > > > > away
> > > > > > from
> > > > > > > the line by 2 inches at least. When going
> > > > > through
> > > > > > a
> > > > > > > wall the feed line should be 90 degrees to
> > the
> > > > > > wall or
> > > > > > > case with proper feed through insulators.
> > This
> > > > > > will
> > > > > > > ensure a balanced condition on the feed

> > line.
> > > > It
> > > > > > makes
> > > > > > > no difference if the object near the feed
> > line
> > > > is
> > > > > > a
> > > > > > > conductor or and insulator. Either one
> > will
> > > > cause
> > > > > > an
> > > > > > > unbalanced condition. When using balanced
> > feed
> > > > > > line
> > > > > > > both ends of that feed line must have a
> > > > balanced
> > > > > > > supply/load condition. This means you must
> > use
> > > > a
> > > > > > Balun
> > > > > > > between the ladder line and the unbalanced
> > > > feed
> > > > > > line
> > > > > > > equipment in the shack and the antenna
> > needs
> > > > to
> > > > > > also
> > >
> === message truncated ===
>
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>
>
> _____
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709. Hurricane, Loop skywire

Yahoo group: SkyWires
Date: 2004-09-07 11:50:04 UTC
From: rsb3332002
Topic: 709 Message: 709

My 540 foot loop has survived Frances! It is the only antenna left operational right now. Receiving loops, GAP challenger, big homebrew vertical, all down, some in pieces. The beams/ quads were down, and will go back up. The loop is at 60 feet in pecan trees. The trees moved a lot; I estimate gusts at 70 mph. It blew pretty hard for 20-25 hours. This loop skywire is made of stranded copperweld with black tough plastic insulation. I think it is 13#, I bought it from the WIREMAN. There were tons of branches tearing out and onto that wire. Those trees, supporting that wire thrashed around for all that time; did not break it! I supported the loop with five pulleys on flagpole style loops of 1/8" dacron rope, all from the WIREMAN. I might have used cheaper material, but I don't see how it would have held up. Thanks to a generator and this antenna, I never lost communication. Oh, yeah, a big limb,6" or so fell on it and dragged the feed point down on my roof. The feed line is 300 ohm window line, also copperweld stranded same source. I am a happy customer of the WIREMAN, but have no interest in their biz.
Since I have to rebuild all that bigger and better than before, I shall be busy. Fall in Florida is the nicest time for working outdoors, anyway. Nice and breezy!
Shannon Boal K4GLM

710. Re: [SkyWires] Re: 40M loop at QTH

Yahoo group: SkyWires
Date: 2004-09-07 13:13:04 UTC
From: Scott Erwin
Topic: 682 Message: 710

RG-58 will do fine. On the HF bands the loss in that small coax is so low as to not be noticed even with 100 or more foot runs. If you run an amplifier I would go to a heaver coax as there can be a high voltage or current developed in parts of the feed line and if you just happen to have one right there in your small coax it could burn it. If your running 100 watts or lower you will have no problems.
--- Marc Chappelle <marc.chappelle@...> wrote:

> I have several feet of RG58 coax on hand - will this
> suffice or
> should I use a heavier grade?
>
> Marc - KA3ARF
>
>
>
> --- In SkyWires@yahoogroups.com, Scott Erwin
> <n4zou@y...> wrote:
> > That will work just fine! I bring my 450 ohm
> ladder
> > line in through my window as I want a choice on
> how I
> > want to operate with my equipment. When the
> amplifier
> > is not going to be used I have a short coax jumper
> > between my transceiver and a 4:1 Balun mounted
> just
> > below the window. When switching to the amplifier
> I
> > connect the short coax jumper that is normally
> > connected to the "window " Balun to the input of
> the
> > amplifier and then connect the short peace of 450
> ohm
> > ladder line from the back of my 2 Kw tuner
> internal
> > 4:1 Balun to the feed through insulators in the
> window
> > and in the process disconnecting the 4:1 Balun
> under
> > the window.
> > --- Marc Chappelle <marc.chappelle@v...> wrote:
> >

> > > I thought I might try this:
> > >
> > > Drill a suitable hole through the wall directly
> > > behind the rig, run a
> > > length of coax to the otherside, attach a LDG
> 4:1
> > > balun to it, then
> > > attach the carefully routed feedline to the
> balun.
> > >
> > > Will this method work?
> > > Marc - KA3ARF
> > >
> > >
> > > --- In SkyWires@yahoogroups.com, Scott Erwin
> > > <n4zou@y...> wrote:
> > > > A 2X4 will work fine but its a little on the
> thick
> > > > side and will be a bit of a problem mounting
> feed
> > > > through insulators. If your not going to run
> an
> > > > amplifier you can cut a peace of Plexiglas and
> get
> > > > some banana jacks from Radio Shack to install
> in
> > > it.
> > > > Then just cut a large hole in the 2X4 and
> attach
> > > the
> > > > Plexiglas and jacks to that. It would be
> better to
> > > get
> > > > the Apex of the antenna higher or moved a
> little
> > > so
> > > > the feed line is in the air well away from the
> > > roof.
> > > > If your going to run power ceramic feed
> through
> > > > insulators are a must!
> > > > --- Marc Chappelle <marc.chappelle@v...>
> wrote:
> > > >
> > > > > OK.
> > > > >
> > > > > I'll get to work on that right away. I had
> > > thought
> > > > > about cutting a
> > > > > 2X4 to fit in the bottom of window seal,

> dril a
> > > > > series of parallel
> > > > > holes in it, run the ladder line through
> them
> > > and
> > > > > seal it all up with
> > > > > silicone sealant. I'll also reposition the
> > > loop's
> > > > > apex so that the
> > > > > feedline won't come to rest on the roof, or
> > > maybe
> > > > > I'll follow your
> > > > > suggestion and prop it up with sticks or
> > > something.
> > > > > >
> > > > > I had no idea that ladder line was so
> sensitive
> > > to
> > > > > object proximity.
> > > > > You say I should hear a noticeable
> improvement
> > > in
> > > > > received and
> > > > > transmitted signal strength? Cool!
> > > > > >
> > > > > Thanks for all your advice Scott
> > > > > Marc - KA3ARF
> > > > > >
> > > > > >
> > > > > >
> > > > > >
> > > > > >
> > > > > >
> > > > > >
> > > > > --- In SkyWires@yahoogroups.com, Scott
> Erwin
> > > > > <n4zou@y...> wrote:
> > > > > > If the feed line is exactly 90 degrees to
> the
> > > > > window
> > > > > > seal then the balance is ok but you should
> not
> > > > > have
> > > > > > the window seal right on the ladder line!
> This
> > > > > will
> > > > > > attenuate both the received signal and the
> > > > > transmit
> > > > > > signal. Same thing with the ladder line
> laying

> > > on
> > > > > the
> > > > > > roof material. The window problem is an
> easy
> > > fix.
> > > > > > Simply cut a length of wood about 1 inch +
> or
> > > -
> > > > > thick
> > > > > > and use some feed through insulators and
> > > connect
> > > > > the
> > > > > > ladder line to each side. For the roof you
> can
> > > > > simply
> > > > > > use some weights with some fiberglass rods
> to
> > > > > support
> > > > > > the ladder line so it is no closer than 2
> > > inches
> > > > > to
> > > > > > the top of the weights. This prevents
> screwing
> > > > > feed
> > > > > > line standoffs into the roof. Just
> remember,
> > > > > nothing
> > > > > > should be closer than 2 inches to the
> 1-inch
> > > wide
> > > > > > 450-ohm ladder line. You can also use
> > > insulators
> > > > > > attached to points of the ladder line to
> > > support
> > > > > it
> > > > > > with rope. Just make everything balanced.
> > > After
> > > > > you
> > > > > > fix the ladder line installation you will
> > > notice a
> > > > > big
> > > > > > improvement.
> > > > > > --- Marc Chappelle <marc.chappelle@v...>
> > > wrote:
> > > > > >
> > > > > > My 40 meter delta is fed with 450 ohm
> ladder
> > > > > line
> > > > > > that enters the
> > > > > > shack via my window. About 2 to 3 inches

> of
> > > the
> > > > > > > feedline is
> > > > > > > sandwiched between the aluminum window
> seal
> > > and
> > > > > > > frame. Is this enough
> > > > > > > to upset the line's overall balance and
> > > > > adversely
> > > > > > > affecting the
> > > > > > > loop's performance? Another 10 feet of
> > > feedline
> > > > > > > actually rests on the
> > > > > > > tarpaper (nonmetalic) roof. Will this
> also
> > > afect
>
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711. Re: Hurricane, Loop skywire

Yahoo group: SkyWires
Date: 2004-09-08 16:28:45 UTC
From: Tim
Topic: 709 Message: 711

Shannon:

Glad to hear your loop survived the hurricane. Mine came down during a severe thunderstorm in May (a tree that served as one of the anchors came down) along with five other yagis, quads and wires. I've spent the summer rebuilding them and I'm finally going to get them back up next week. A new tower is replacing the tree as the anchor for that corner, and I'm chomping at the bit to get back on HF on something other than a hamstick or an 10 meter ground plane!

Good luck on your reconstruction project.

73
Tim
W9THD
Indiana

--- In SkyWires@yahoogroups.com, "rsb3332002" <kingsautomotive1@a...>
wrote:
> My 540 foot loop has survived Frances! It is the only antenna left
> operational right now. Receiving loops, GAP challenger, big homebrew
> vertical, all down, some in pieces.

712. 4:1 balun great stuff

Yahoo group: SkyWires
Date: 2004-09-08 20:09:47 UTC
From: Bryan
Topic: 712 Message: 712

HI All,

I just finished building the 4:1 balun in the antenna section at:
http://www.wh2t.com/

it cost me zero$ as I had scraps..im sure it would be only a buck
fifty if you had to pay for it..

I actually built two.. one for my loop and one for a future dipole
arangement.

the one on the loop performs great. I was 5x9 in San Antonio Tx on 20
meters sending 50watts.

This device has made all the world of diffrence in how the full wave
160 meter loop couples and performs.

give it a shot and tell me what you think.

Bryan Kc8hps

713. Re: Building a Magnetic loop.

Yahoo group: SkyWires
Date: 2004-09-10 01:09:08 UTC
From: n4zou
Topic: 704 Message: 713

I have found the solution! Check the following link.
http://www.qmac.com/Downloads/ML-90%20Brochure%20Web.pdf
This is a PDF file but it's not very big so it downloads well. After doing some research I found that a low loss aluminum or copper ground plane under the loop would improve performance. My small camper has an aluminum roof! A square loop with a circumference of 20 feet with 3/4 copper plumbing pipe would only be 5 feet on each of the four sides and can be mounted on the top of the camper permanently. Simply swing it up vertical for operation. A one-minute job! This would cover 3.5 to 14.35 MHz. No antenna tuner required and just 1 to 2 S-units down from a full size dipole 1/2 wave above ground. I don't think it gets better than this for portable operation. Also the loop bandwidth is very narrow and quiet. Just what you need when operating around other stations transmitting on other bands.

--- In SkyWires@yahoogroups.com, "n4zou" <n4zou@y...> wrote:
> I have a small camper and truck set up as a portable emergency HF
> station and the biggest headache is antenna setup. I tried mobile
> antennas first thing with poor results. A 40-meter loop Sky wire
> worked great except for 80 meters which is required and yes, I did
> try opening up the loop at the far end and the size is still too
big
> and requires at least three supports. Same thing with a trap
dipole,
> too long and requires three supports even when configured as an
> inverted "V" antenna. I even tried a Butternut HF6V vertical but I
> just cant get a proper ground under it using the truck and camper
as
> the ground plane and running radials is out of the question. Most
of
> the time the set up is used in a parking lot and the radial wires
> will get destroyed in short order. After looking around an old ARRL
> antenna book and checking the net for information on Magnetic
loop's
> I have decided to build one and try it out. Before I get started on
> it I would like to have comments from anyone that has built one of
> these small loop antennas. I already have a nice Jennings Vacuum
> capacitor rated for 5 to 500 pF and checking it found it to be
about
> 15 to 477 pF. I already have a stepper motor drive system on it,
> which turns it very slow, and in single steps. It's rated at 5 Kv,
> which should allow 100 watts without arcing. I have read that the
> capacitor is the most important part of this antenna. Looking at
> designs and figuring out the math it looks like I will need 20 feet
> of 1inch plumbing copper and eight 45-degree fittings to form the

> loop. This should give me 80 through 20 meter coverage with the
loop
> about 6 feet in diameter which would allow it to lay flat in the
> truck bed for transport. I also have the ability to install a self
> supporting 15 foot pole for the loop which should get it in the
clear
> and away from people that could get a nasty burn from the high
> voltage associated with these type antennas. A site with good
> information about Magnetic loop antennas is
> http://www.iri.tudelft.nl/~geurink/magnloop.htm
> .

714. Re: Building a Magnetic loop.

Yahoo group: SkyWires
Date: 2004-09-10 12:11:38 UTC
From: bambazonke01
Topic: 704 Message: 714

Are you thinking of a DDRR antenna for the camper rooftop?
Jim VE3DDY

--- In SkyWires@yahoogroups.com, "n4zou" <n4zou@y...> wrote:
> I have found the solution! Check the following link.
> http://www.qmac.com/Downloads/ML-90%20Brochure%20Web.pdf
> This is a PDF file but it's not very big so it downloads well.
After
> doing some research I found that a low loss aluminum or copper
ground
> plane under the loop would improve performance. My small camper
has
> an aluminum roof! A square loop with a circumference of 20 feet
with
> 3/4 copper plumbing pipe would only be 5 feet on each of the four
> sides and can be mounted on the top of the camper permanently.
Simply
> swing it up vertical for operation. A one-minute job! This would
> cover 3.5 to 14.35 MHz. No antenna tuner required and just 1 to 2
S-
> units down from a full size dipole 1/2 wave above ground. I don't
> think it gets better than this for portable operation. Also the
loop
> bandwidth is very narrow and quiet. Just what you need when
operating
> around other stations transmitting on other bands.
>
> --- In SkyWires@yahoogroups.com, "n4zou" <n4zou@y...> wrote:
> > I have a small camper and truck set up as a portable emergency
HF
> > station and the biggest headache is antenna setup. I tried
mobile
> > antennas first thing with poor results. A 40-meter loop Sky wire
> > worked great except for 80 meters which is required and yes, I
did
> > try opening up the loop at the far end and the size is still too
> big
> > and requires at least three supports. Same thing with a trap
> dipole,
> > too long and requires three supports even when configured as an
> > inverted "V" antenna. I even tried a Butternut HF6V vertical but
I
> > just cant get a proper ground under it using the truck and
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> as

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Most
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> > voltage associated with these type antennas. A site with good
> > information about Magnetic loop antennas is
> > http://www.iri.tudelft.nl/~geurink/magnloop.htm
> > .

715. Re: [SkyWires] Re: Building a Magnetic loop.

Yahoo group: SkyWires
Date: 2004-09-10 13:34:18 UTC
From: Scott Erwin
Topic: 704 Message: 715

A DDRR is quite different than a Magnetic loop. The DDRR requires a ground plane under it and connected to it for tuning across a single band. I looked at this design and found it not suitable for my use. It would require large diameter tubing and muffler pipe is suggested as the material to use. It would also mean drilling mounting holes in the top of my camper?.not good! Then the steel muffler pipe flange used for mounting is going to cause a corrosion problem where it's contacting the aluminum roof. The Magnetic loop has the advantage of not needing a ground under it so it could be removed from the top of my camper and used somewhere else. The aluminum ground plane shields the loop from earth losses under it and so performance is improved while operating it close to the ground. Also the square shape is used so it will capacitive couple to the aluminum roof on one side of the loop. The MAG loop can't be used mobile while lying down in the transport position. I plan on using some 2 X 2 pine boards for the mount and looking around the electric fence supplies I found some stand off insulators that clamp to fence posts. These are rated for the high voltages used on an electric fence and will be perfect for use with the MAG loop. I will use two on the bottom side which will allow a hinge type of movement so the MAG loop can swing up and down between transport and operation position and a third one insulating some PVC pipe from the loop holding it up in the operation position.
--- bambazonke01 <bambazonke@...> wrote:

>
>
> Are you thinking of a DDRR antenna for the camper
> rooftop?
> Jim VE3DDY
>
> --- In SkyWires@yahoogroups.com, "n4zou"
> <n4zou@y...> wrote:
> > I have found the solution! Check the following
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http://www.qmac.com/Downloads/ML-90%20Brochure%20Web.pdf
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> > --- In SkyWires@yahoogroups.com, "n4zou"
> <n4zou@y...> wrote:
> > > I have a small camper and truck set up as a
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> > > antennas first thing with poor results. A
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> required and yes, I
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> > > try opening up the loop at the far end and the
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> > big
> > > and requires at least three supports. Same thing
> with a trap
> > dipole,

> > > too long and requires three supports even when
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> > > inverted "V" antenna. I even tried a Butternut
> HF6V vertical but
> I
> > > just cant get a proper ground under it using the
> truck and
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> > as
> > > the ground plane and running radials is out of
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> Most
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> > > the time the set up is used in a parking lot and
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> > > will get destroyed in short order. After looking
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> > > antenna book and checking the net for
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> > about
> > > 15 to 477 pF. I already have a stepper motor
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> It's rated at 5
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>
>

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716. Re: Building a Magnetic loop.

Yahoo group: SkyWires
Date: 2004-09-10 21:49:28 UTC
From: bambazonke01
Topic: 704 Message: 716

You are right about the groundplane. The DDRR has to be circular, well not really , it can be oblong. I have seen DDRR's made from RG8 coax that seemed to work well enough but as compared to a 2" diameter pipe it may not have been as great a radiator.
I posted about a "D" bent-over grounded whip recently that also worked extremely well.
From the border between Zambia and Congo I had a great signal into the southern part of South Africa and as far north as Somalia with only 10 watts. Frequency was 8 mhz.The date was about 1961. Check it out. I still have a tuner from that setup in my "use it someday" box. The tuner consists of a roller coil and a single 200 pf variable capacitor. I've seen them quite often at Ham fleamarkets so they may have been used in other equipment as well.
Jim VE3DDY

--- In SkyWires@yahoogroups.com, Scott Erwin <n4zou@y...> wrote:
> A DDRR is quite different than a Magnetic loop. The
> DDRR requires a ground plane under it and connected to
> it for tuning across a single band. I looked at this
> design and found it not suitable for my use. It would
> require large diameter tubing and muffler pipe is
> suggested as the material to use. It would also mean
> drilling mounting holes in the top of my camper .not
> good! Then the steel muffler pipe flange used for
> mounting is going to cause a corrosion problem where
> it's contacting the aluminum roof. The Magnetic loop
> has the advantage of not needing a ground under it so
> it could be removed from the top of my camper and used
> somewhere else. The aluminum ground plane shields the
> loop from earth losses under it and so performance is
> improved while operating it close to the ground. Also
> the square shape is used so it will capacitive couple
> to the aluminum roof on one side of the loop. The MAG
> loop can't be used mobile while lying down in the
> transport position. I plan on using some 2 X 2 pine
> boards for the mount and looking around the electric
> fence supplies I found some stand off insulators that
> clamp to fence posts. These are rated for the high
> voltages used on an electric fence and will be perfect
> for use with the MAG loop. I will use two on the
> bottom side which will allow a hinge type of movement
> so the MAG loop can swing up and down between
> transport and operation position and a third one
> insulating some PVC pipe from the loop holding it up

> in the operation position.
> --- bambazonke01 <bambazonke@h...> wrote:
>
> >
> >
> > Are you thinking of a DDRR antenna for the camper
> > rooftop?
> > Jim VE3DDY
> >
> > --- In SkyWires@yahoogroups.com, "n4zou"
> > <n4zou@y...> wrote:
> > > I have found the solution! Check the following
> > link.
> > > >
> >
> http://www.qmac.com/Downloads/ML-90%20Brochure%20Web.pdf
> > > This is a PDF file but it's not very big so it
> > downloads well.
> > After
> > > doing some research I found that a low loss
> > aluminum or copper
> > ground
> > > plane under the loop would improve performance. My
> > small camper
> > has
> > > an aluminum roof! A square loop with a
> > circumference of 20 feet
> > with
> > > 3/4 copper plumbing pipe would only be 5 feet on
> > each of the four
> > > sides and can be mounted on the top of the camper
> > permanently.
> > Simply
> > > swing it up vertical for operation. A one-minute
> > job! This would
> > > cover 3.5 to 14.35 MHz. No antenna tuner required
> > and just 1 to 2
> > S-
> > > units down from a full size dipole 1/2 wave above
> > ground. I don't
> > > think it gets better than this for portable
> > operation. Also the
> > loop
> > > bandwidth is very narrow and quiet. Just what you
> > need when
> > operating
> > > around other stations transmitting on other bands.
> > >
> > > --- In SkyWires@yahoogroups.com, "n4zou"

> > <n4zou@y...> wrote:
> > > > I have a small camper and truck set up as a
> > portable emergency
> > HF
> > > > station and the biggest headache is antenna
> > setup. I tried
> > mobile
> > > > antennas first thing with poor results. A
> > 40-meter loop Sky wire
> > > > worked great except for 80 meters which is
> > required and yes, I
> > did
> > > > try opening up the loop at the far end and the
> > size is still too
> > > big
> > > > and requires at least three supports. Same thing
> > with a trap
> > > dipole,
> > > > too long and requires three supports even when
> > configured as an
> > > > inverted "V" antenna. I even tried a Butternut
> > HF6V vertical but
> > I
> > > > just cant get a proper ground under it using the
> > truck and
> > camper
> > > as
> > > > the ground plane and running radials is out of
> > the question.
> > Most
> > > of
> > > > the time the set up is used in a parking lot and
> > the radial
> > wires
> > > > will get destroyed in short order. After looking
> > around an old
> > ARRL
> > > > antenna book and checking the net for
> > information on Magnetic
> > > loop's
> > > > I have decided to build one and try it out.
> > Before I get started
> > on
> > > > it I would like to have comments from anyone
> > that has built one
> > of
> > > > these small loop antennas. I already have a nice
> > Jennings Vacuum
> > > > capacitor rated for 5 to 500 pF and checking it

> > found it to be
> > > about
> > > > 15 to 477 pF. I already have a stepper motor
> > drive system on it,
> > > > which turns it very slow, and in single steps.
> > It's rated at 5
> > Kv,
> > > > which should allow 100 watts without arcing. I
> > have read that
> > the
> > > > capacitor is the most important part of this
> > antenna. Looking at
> > > > designs and figuring out the math it looks like
> > I will need 20
> > feet
> > > > of 1inch plumbing copper and eight 45-degree
> > fittings to form
> > the
> > > > loop. This should give me 80 through 20 meter
> > coverage with the
> > > loop
> > > > about 6 feet in diameter which would allow it to
> > lay flat in the
> > > > truck bed for transport. I also have the ability
> > to install a
> > self
> > > > supporting 15 foot pole for the loop which
> > should get it in the
> > > clear
> > > > and away from people that could get a nasty burn
> > from the high
> > > > voltage associated with these type antennas. A
> > site with good
> > > > information about Magnetic loop antennas is
> > > > http://www.iri.tudelft.nl/~geurink/magnloop.htm
> > > > .
> >
> >
>
>
>
>
> _____
> Do you Yahoo!?
> Read only the mail you want - Yahoo! Mail SpamGuard.
> http://promotions.yahoo.com/new_mail

717. Re: [SkyWires] Re: Building a Magnetic loop.

Yahoo group: SkyWires
Date: 2004-09-10 22:53:06 UTC
From: Scott Erwin
Topic: 704 Message: 717

I read your mail to me about that whip turned "D" loop setup. That is what got me to looking around for an easy way to do the same thing and found the site with the luggage rack/MAG loop setup. I almost fell out of my chair when the PDF file finished loading! If I were rich I would just buy one! Being medically retired prevents that and I don't even want to know how much it costs hi hi!
I am about to build a "cheap" loop using RG-8 coax as the main loop element and a stub capacitor made from the same coax instead of a variable capacitor. I will only be able to use the frequency that the stub capacitor will be tuned to and so I will make up several for different bands. This is just to find out if this type antenna will be suitable for use with my setup. If everything works out I will jump in with both feet and build a real MAG loop. Also I am thinking of using copper sheet metal instead of the 3/4-inch plumbing pipe. I have been told that using a flat surface for the loop will improve efficiency on the lower bands. While I was at the sheet metal shop I noticed a machine cutting out shapes in aluminum sheet. It was driven by a CAD program and did a very nice job. I might look into designing a large high voltage butterfly type all copper capacitor for use with MAG loop antennas. I will just need to figure out the cost. Being a machinist many years ago I already know how to build one. I just need to draw up the shapes and get an estimate of the cost of material and machine work.

--- bambazonke01 <bambazonke@...> wrote:

> You are right about the groundplane. The DDRR has to
> be circular,
> well not really , it can be oblong. I have seen
> DDRR's made from RG8
> coax that seemed to work well enough but as compared
> to a 2"
> diameter pipe it may not have been as great a
> radiator.
> I posted about a "D" bent-over grounded whip
> recently that also
> worked extremely well.
> From the border between Zambia and Congo I had a

> great signal into
> the southern part of South Africa and as far north
> as Somalia with
> only 10 watts. Frequency was 8 mhz.The date was
> about 1961. Check it
> out. I still have a tuner from that setup in my "use
> it someday"
> box. The tuner consists of a roller coil and a
> single 200 pf
> variable capacitor. I've seen them quite often at
> Ham fleamarkets so
> they may have been used in other equipment as well.
> Jim VE3DDY
>
>
>
> --- In SkyWires@yahoogroups.com, Scott Erwin
> <n4zou@y...> wrote:
> > A DDRR is quite different than a Magnetic loop.
> The
> > DDRR requires a ground plane under it and
> connected to
> > it for tuning across a single band. I looked at
> this
> > design and found it not suitable for my use. It
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> > good! Then the steel muffler pipe flange used for
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> > it's contacting the aluminum roof. The Magnetic
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> > has the advantage of not needing a ground under it
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> > it could be removed from the top of my camper and
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> > somewhere else. The aluminum ground plane shields
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> > loop from earth losses under it and so performance
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> > improved while operating it close to the ground.
> Also
> > the square shape is used so it will capacitive
> couple
> > to the aluminum roof on one side of the loop. The
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> > loop can't be used mobile while lying down in the
> > transport position. I plan on using some 2 X 2
> pine
> > boards for the mount and looking around the
> electric
> > fence supplies I found some stand off insulators
> that
> > clamp to fence posts. These are rated for the high
> > voltages used on an electric fence and will be
> perfect
> > for use with the MAG loop. I will use two on the
> > bottom side which will allow a hinge type of
> movement
> > so the MAG loop can swing up and down between
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> > insulating some PVC pipe from the loop holding it
> up
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> > --- bambazonke01 <bambazonke@h...> wrote:
> >
> > >
> > >
> > > Are you thinking of a DDRR antenna for the
> camper
> > > rooftop?
> > > Jim VE3DDY
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> > > --- In SkyWires@yahoogroups.com, "n4zou"
> > > <n4zou@y...> wrote:
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>
http://www.qmac.com/Downloads/ML-90%20Brochure%20Web.pdf
> > > > This is a PDF file but it's not very big so it
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> > > > doing some research I found that a low loss
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> > > > plane under the loop would improve
> performance. My
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> > > > 3/4 copper plumbing pipe would only be 5 feet

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> > > each of the four
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> > > permanently.
> > > Simply
> > > > swing it up vertical for operation. A
> one-minute
> > > job! This would
> > > > cover 3.5 to 14.35 MHz. No antenna tuner
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> > > and just 1 to 2
> > > S-
> > > > units down from a full size dipole 1/2 wave
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> > > ground. I don't
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> > > loop
> > > > bandwidth is very narrow and quiet. Just what
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> > > need when
> > > operating
> > > > around other stations transmitting on other
> bands.
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> > > > --- In SkyWires@yahoogroups.com, "n4zou"
> > > <n4zou@y...> wrote:
> > > > > I have a small camper and truck set up as a
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> > > > > station and the biggest headache is antenna
> > > setup. I tried
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> > > > > antennas first thing with poor results. A
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> > > > > worked great except for 80 meters which is
> > > required and yes, I
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> > > > > try opening up the loop at the far end and
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> > > size is still too
> > > > big
> > > > > and requires at least three supports. Same
> thing
> > > with a trap
> > > > dipole,
> > > > > too long and requires three supports even
> when
> > > configured as an

> > > > > inverted "V" antenna. I even tried a
> Butternut
> > > HF6V vertical but
> > > I
> > > > > just cant get a proper ground under it using
> the
> > > truck and
> > > camper
> > > > as
> > > > > the ground plane and running radials is out
> of
> > > the question.
> > > Most
> > > > of
> > > > > the time the set up is used in a parking lot
> and
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> > > wires
> > > > > will get destroyed in short order. After
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> > > around an old
> > > ARRL
> > > > > antenna book and checking the net for
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> > > > loop's
> > > > > I have decided to build one and try it out.
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> > > Jennings Vacuum
> > > > > capacitor rated for 5 to 500 pF and checking
> it
> > > found it to be
> > > > about
> > > > > 15 to 477 pF. I already have a stepper motor
> > > drive system on it,
>
=== message truncated ===

_____
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718. Commercial Balanced Antenna Tuner

Yahoo group: SkyWires
Date: 2004-09-11 08:16:15 UTC
From: Dr.Ace Ratliff
Topic: 718 Message: 718

Hi All,
FYI ,
Palstar is now offering a Commercial Balanced Antenna Tuner BT1500A rated for up to 1500 watts PEP.
At a quick glance the only thing I dislike about it is the variable capacitors rated @ 4.5Kv , I prefer a higher voltage rating.
See it at :

http://www.palstar.com/palmain.htm

Ace , WH2T.com

Outgoing mail is certified Virus Free by Dr.Ace .
Checked by AVG anti-virus system (http://www.grisoft.com).
Version: 6.0.760 / Virus Database: 509 - Release Date: 9/10/2004

720. RE: [SkyWires] Newsletter For SkyWires Members

Yahoo group: SkyWires
Date: 2004-09-11 10:55:08 UTC
From: David Shrum
Topic: 720 Message: 720

wprohof189@... has been banned and the original message has been deleted.

Dave N8PU

-----Original Message-----
From: wprohof189 [mailto:wprohof189@...]
Sent: Saturday, September 11, 2004 5:12 AM
To: SkyWires@yahoogroups.com
Subject: [SkyWires] Newsletter For SkyWires Members

Are you far into debt?
I was in the hole over $50,000.00

721. Re: [SkyWires] Commercial Balanced Antenna Tuner

Yahoo group: SkyWires
Date: 2004-09-11 14:47:00 UTC
From: Scott Erwin
Topic: 718 Message: 721

It is rated at 1500 watts PEP so the 4.5 Kv cap is
suitable for the size of the enclosure it's in. A
higher rated capacitor in the same size box would
require a very expensive vacuum variable unit. Also
the inductors are in line. This allows coupling
between them, which degrades performance. They should
be separated on each side of the enclosure.
Considering this is a commercial built tuner with
price a major factor this design is a good compromise.
What I would like to see in tuners with roller
inductors is an optional motor drive. I have arthritis
and I have a serious problem turning knobs. It really
hurts to crank the inductor from 160 to 80 meters on
my Heathkit SA-2060A tuner! I solved the problem with
one of the cheap battery type screwdrivers. I made a
small plastic funnel into a knob adaptor and attached
it to the end of the screwdriver. Now I simply hold
the electric knob turner on the inductor knob and let
it do the work!
--- "Dr.Ace Ratliff" <wh2t@...> wrote:

> Hi All,
> FYI ,
> Palstar is now offering a Commercial Balanced
> Antenna Tuner BT1500A rated for up to 1500 watts
> PEP.
> At a quick glance the only thing I dislike about it
> is the variable capacitors rated @ 4.5Kv , I prefer
> a higher voltage rating.
> See it at :
>
> http://www.palstar.com/palmain.htm
>
> Ace , WH2T.com
>
>
> ---
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> (http://www.grisoft.com).
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> Date: 9/10/2004

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722. Re: [SkyWires] Commercial Balanced Antenna Tuner

Yahoo group: SkyWires
Date: 2004-09-11 17:56:24 UTC
From: keith currie
Topic: 718 Message: 722

I wasnt real pleased with the price here in Canada also.

Dr.Ace Ratliff wrote:

> Hi All,
> FYI ,
> Palstar is now offering a Commercial Balanced Antenna Tuner BT1500A
> rated for up to 1500 watts PEP.
> At a quick glance the only thing I dislike about it is the variable
> capacitors rated @ 4.5Kv , I prefer a higher voltage rating.
> See it at :
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> http://www.palstar.com/palmain.htm
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> ---
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> Version: 6.0.760 / Virus Database: 509 - Release Date: 9/10/2004
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> <http://us.ard.yahoo.com/SIG=129n5epp6/M=295196.4901138.6071305.3001176/D=groups/S=17050
63108:HM/EXP=1094976961/A=2128215/R=0/SIG=10se96mf6/*http://companion.yahoo.com>
>
>
>
> --
> Yahoo! Groups Links
>
> * To visit your group on the web, go to:
> http://groups.yahoo.com/group/SkyWires/
>
> * To unsubscribe from this group, send an email to:
> SkyWires-unsubscribe@yahoogroups.com
> <mailto:SkyWires-unsubscribe@yahoogroups.com?subject=Unsubscribe>
>
> * Your use of Yahoo! Groups is subject to the Yahoo! Terms of
> Service <http://docs.yahoo.com/info/terms/>.
>
>

724. RE: [SkyWires] no more bills!

Yahoo group: SkyWires
Date: 2004-09-11 19:19:16 UTC
From: David Shrum
Topic: 724 Message: 724

jornhofd1@... is banned and original message is deleted.

Dave N8PU

-----Original Message-----
From: jornhofd1 [mailto:jornhofd1@...]
Sent: Saturday, September 11, 2004 2:01 PM
To: skywires@yahoogroups.com
Subject: [SkyWires] no more bills!

i used these guys

725. Re: [SkyWires] Commercial Balanced Antenna Tuner

Yahoo group: SkyWires
Date: 2004-09-11 21:39:52 UTC
From: Dr.Ace Ratliff
Topic: 718 Message: 725

I would rather have it in a larger enclosure if it had 6 KV or higher rated caps.
For the price they want, I want higher rated caps.
If you run anywhere near legal limit power it is all to easy to arc the caps especially on 10 and/or 160 meter bands.
Ace - WH2T
----- Original Message -----
From: Scott Erwin
To: SkyWires@yahoogroups.com
Sent: Saturday, September 11, 2004 9:47 AM
Subject: Re: [SkyWires] Commercial Balanced Antenna Tuner

It is rated at 1500 watts PEP so the 4.5 Kv cap is
suitable for the size of the enclosure it's in. A
higher rated capacitor in the same size box would
require a very expensive vacuum variable unit. Also
the inductors are in line. This allows coupling
between them, which degrades performance. They should
be separated on each side of the enclosure.
Considering this is a commercial built tuner with
price a major factor this design is a good compromise.
What I would like to see in tuners with roller
inductors is an optional motor drive. I have arthritis
and I have a serious problem turning knobs. It really
hurts to crank the inductor from 160 to 80 meters on
my Heathkit SA-2060A tuner! I solved the problem with
one of the cheap battery type screwdrivers. I made a
small plastic funnel into a knob adaptor and attached
it to the end of the screwdriver. Now I simply hold
the electric knob turner on the inductor knob and let
it do the work!
--- "Dr.Ace Ratliff" <wh2t@...> wrote:

> Hi All,
> FYI ,
> Palstar is now offering a Commercial Balanced
> Antenna Tuner BT1500A rated for up to 1500 watts
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> At a quick glance the only thing I dislike about it
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> See it at :
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> http://www.palstar.com/palmain.htm
>
> Ace , WH2T.com

>
>
> ---
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> (http://www.grisoft.com).
> Version: 6.0.760 / Virus Database: 509 - Release
> Date: 9/10/2004

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c.. Your use of Yahoo! Groups is subject to the Yahoo! Terms of Service.

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Version: 6.0.760 / Virus Database: 509 - Release Date: 9/10/2004

726. hi guys!

Yahoo group: SkyWires
Date: 2004-09-13 03:54:06 UTC
From: exemptfromlife
Topic: 726 Message: 726

I just thought I would check in and see how everybody is doing.

My skywire blew down last month and I need to get it back up.

I hope the site has been doing well. I haven't heard any complaints.

thanks.

Walter
Skywire Loop Anntennas group founder...

727. Re: [SkyWires] hi guys!

Yahoo group: SkyWires
Date: 2004-09-13 10:20:26 UTC
From: Dr.Ace Ratliff
Topic: 726 Message: 727

Hi Walter,
Everything is going well, we still get the occasional spam message posted to the group.
Other than that it has been smooth sailing.
Very 73, Ace - WH2T
----- Original Message -----
From: exemptfromlife
To: SkyWires@yahoogroups.com
Sent: Sunday, September 12, 2004 10:54 PM
Subject: [SkyWires] hi guys!

I just thought I would check in and see how everybody is doing.

My skywire blew down last month and I need to get it back up.

I hope the site has been doing well. I haven't heard any complaints.

thanks.

Walter
Skywire Loop Anntennas group founder...

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b.. To unsubscribe from this group, send an email to:
SkyWires-unsubscribe@yahoogroups.com

c.. Your use of Yahoo! Groups is subject to the Yahoo! Terms of Service.

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Checked by AVG anti-virus system (http://www.grisoft.com).
Version: 6.0.760 / Virus Database: 509 - Release Date: 9/10/2004

728. Re: hi guys!

Yahoo group: SkyWires
Date: 2004-09-13 13:09:47 UTC
From: exemptfromlife
Topic: 726 Message: 728

good deal. thanks.

--- In SkyWires@yahoogroups.com, "Dr.Ace Ratliff" <wh2t@b...> wrote:
> Hi Walter,
> Everything is going well, we still get the occasional spam
message posted to the group.
> Other than that it has been smooth sailing.
> Very 73, Ace - WH2T
> ----- Original Message -----
> From: exemptfromlife
> To: SkyWires@yahoogroups.com
> Sent: Sunday, September 12, 2004 10:54 PM
> Subject: [SkyWires] hi guys!
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> I just thought I would check in and see how everybody is doing.
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> I hope the site has been doing well. I haven't heard any
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>
> thanks.
>
> Walter
> Skywire Loop Anntennas group founder...
>
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>
>
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> --

> Yahoo! Groups Links
>
> a.. To visit your group on the web, go to:
> http://groups.yahoo.com/group/SkyWires/
>
> b.. To unsubscribe from this group, send an email to:

> SkyWires-unsubscribe@yahoogroups.com
>
> c.. Your use of Yahoo! Groups is subject to the Yahoo! Terms of
Service.
>
>
>
> ---
> Outgoing mail is certified Virus Free by Dr.Ace .
> Checked by AVG anti-virus system (http://www.grisoft.com).
> Version: 6.0.760 / Virus Database: 509 - Release Date: 9/10/2004

729. Re: tunners

Yahoo group: SkyWires
Date: 2004-09-14 20:45:38 UTC
From: spark_gap2000
Topic: 706 Message: 729

Oh yeah!!!
The relay and terminal strip had nothing to do with the actual tuner.
They were meant as a built in TR switch for separate transmitter and
receiver.
Don't ever sell this tuner if you don't have to,they are miles better
than anything you can buy today.
Sid.

--- In SkyWires@yahoogroups.com, keith currie <kecurrie@s...> wrote:
> Could some one tell me if a johnson kilowatt matchbox with a missing
> relay and rear terminal strip will still work ok on my loop antenna?

730. New to group but just in time

Yahoo group: SkyWires
Date: 2004-09-16 17:20:45 UTC
From: Jay
Topic: 730 Message: 730

Hello all
I am putting up a 40-meter delta loop.
The height is 40 ft and the bottom spread will be 50 ft across.
The bottom of the antenna will be aprox 5.5 ft off the ground.
I plan on feeding in the corner.
Currently no amp only an icom746 running 100 watts.
Which 75ohm feed line should I use RG11 or RG59. The 50-ohm is RG312.
The orientation is going to be broadside to the east and west.
Any comments are welcome.

Secondly has any tried to use traps to make the delta loop multi
band. I found an article in the Arrl wire antenna book II.
Looks like a real good idea I was thinking about this for 30 and 20
meters.
Any comments?

Thank you
N3OW
Jay

731. Re: [SkyWires] New to group but just in time

Yahoo group: SkyWires
Date: 2004-09-17 00:23:38 UTC
From: Scott Erwin
Topic: 730 Message: 731

RG-59 will work fine. The length of the coax transformer for 40 meters will be 234 divided by Frequency in Mhz times .75 will equal length in feet or 24' 6". This will be very close to providing a 1:1 match on 40 meters. Traps are not required for multi band operation even with the 75-ohm coax matching transformer in place and an antenna tuner. You might have trouble with 30 meters. I guess this was the idea behind the added traps and I did try traps on a loop once with very poor results. The part of the loop that should have been removed by the traps still coupled with the part of the loop on the hot side of the traps. If you're going with an antenna with traps just stick with a dipole type antenna. I have found that a lot of ARRL articles on antennas were never really built by the author. They just dreamed it up and published it for the money or to get there name/call in the book.
--- Jay <ka4oww@...> wrote:

> Hello all
> I am putting up a 40-meter delta loop.
> The height is 40 ft and the bottom spread will be 50
> ft across.
> The bottom of the antenna will be aprox 5.5 ft off
> the ground.
> I plan on feeding in the corner.
> Currently no amp only an icom746 running 100 watts.
> Which 75ohm feed line should I use RG11 or RG59. The
> 50-ohm is RG312.
> The orientation is going to be broadside to the east
> and west.
> Any comments are welcome.
>
> Secondly has any tried to use traps to make the
> delta loop multi
> band. I found an article in the Arrl wire antenna
> book II.
> Looks like a real good idea I was thinking about
> this for 30 and 20
> meters.
> Any comments?
>
> Thank you
> N3OW

> Jay
>
>
>

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732. Re: New to group but just in time

Yahoo group: SkyWires
Date: 2004-09-17 01:23:12 UTC
From: Jay
Topic: 730 Message: 732

--- In SkyWires@yahoogroups.com, Scott Erwin <n4zou@y...> wrote:
Thank you
for the input.
Question any sugggection on were to get the materials.
Thank you
Jay
N3OW

733. 40m on 160m question...again

Yahoo group: SkyWires
Date: 2004-09-17 04:00:38 UTC
From: johndm90
Topic: 733 Message: 733

This may have been addressed in a previous post and if so, please disregard.
I plan to put up a 160m horizontal loop at approx. 40 ft.
I plan to feed it with coax. I don't plan on using it on 160m but some on 80m and spend most of my time on 40m, and some on 20 and 10 meters.
I'd like to use this loop without a tuner for all bands but I have one if I need to. Do I need a balun at the feedpoint?
Which coax should I use, 50 or 75 ohm and at which frequency do I cut it for...the fundamental freq. of the loop, 1.85 MHz. or 7.250 MHz?
Thanks for your help!
73,
John N5XYO

734. Re: [SkyWires] 40m on 160m question...again

Yahoo group: SkyWires
Date: 2004-09-17 05:09:36 UTC
From: Cristina
Topic: 733 Message: 734

Hello all
newbie here ;-)
I have just recieved an old shortwave and wish to try it out so I ask :
Can anyone please tell me what type of antenna is excellent to use so as
to recieve most of the shortwave bands.
Thanks
rod

735. links?

Yahoo group: SkyWires
Date: 2004-09-17 09:23:23 UTC
From: foster0611
Topic: 735 Message: 735

Hi Everyone!

I'm Sam. A friend of mine has just accidentally deleted my link collection. Could one of you post some good related links?

Your help would be very much appreciated!
Thanks!
Sam

736. Re: [SkyWires] links?

Yahoo group: SkyWires
Date: 2004-09-17 12:02:42 UTC
From: Dr.Ace Ratliff
Topic: 735 Message: 736

Hi Sam,
Here's one for you.

http://mywebpage.netscape.com/Dr69Ace/ant.htm

Ace - WH2T
----- Original Message -----
From: foster0611
To: SkyWires@yahoogroups.com
Sent: Friday, September 17, 2004 4:23 AM
Subject: [SkyWires] links?

Hi Everyone!

I'm Sam. A friend of mine has just accidentally deleted my link
collection. Could one of you post some good related links?

Your help would be very much appreciated!
Thanks!
Sam

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a.. To visit your group on the web, go to:
http://groups.yahoo.com/group/SkyWires/

b.. To unsubscribe from this group, send an email to:
SkyWires-unsubscribe@yahoogroups.com

c.. Your use of Yahoo! Groups is subject to the Yahoo! Terms of Service.

Outgoing mail is certified Virus Free by Dr.Ace .
Checked by AVG anti-virus system (http://www.grisoft.com).
Version: 6.0.764 / Virus Database: 511 - Release Date: 9/15/2004

737. 40 Meter Loop

Yahoo group: SkyWires
Date: 2004-09-17 14:20:49 UTC
From: K0PYK
Topic: 737 Message: 737

Here is alink to a 40 meter loop that I have built and use daily. I used RG59 for the matching section. Hope this helps. Enjoy!!!

http://bvarc.freeshell.org/w5rh/delta.htm

Tom, K0PYK

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738. Re: [SkyWires] 40m on 160m question...again

Yahoo group: SkyWires
Date: 2004-09-17 14:39:29 UTC
From: Scott Erwin
Topic: 733 Message: 738

If your using a modern transceiver you will need an antenna tuner for all band operation. If your using a transceiver with tube finals the Pi network will compensate for the impedance of the loop so just hook it up and go. Most of the time an internal antenna tuner in the transceiver will work just fine with a loop as the SWR will be 3:1 or less on the HF amateur bands. Do not put a Balun of any type at the antenna. You don't need it and most likely will just cause problems. If you're going to put up a 160-meter loop just make the wire length 530 ft long. Do not try and trim the length making it longer or shorter, it won't improve your signal at all. On 80 meters there will be a slight drop in efficiency due to self canceling as it will be operating on an even wavelength but it will still be a better antenna than an 80 meter dipole less than 1/2 wavelength above ground. On 40 meters it will have four major gain lobes and is a very good antenna for working DX and local stations. On the higher bands of 20, 15, and 10 meters DX stations are easy to work with very pronounced gain lobes and low angle radiation.
--- johndm90 <cqdx@...> wrote:

> This may have been addressed in a previous post and
> if so, please
> disregard.
> I plan to put up a 160m horizontal loop at approx.
> 40 ft.
> I plan to feed it with coax. I don't plan on using
> it on 160m but
> some on 80m and spend most of my time on 40m, and
> some on 20 and 10
> meters.
> I'd like to use this loop without a tuner for all
> bands but I have one
> if I need to. Do I need a balun at the feedpoint?
> Which coax should I use, 50 or 75 ohm and at which
> frequency do I cut
> it for...the fundamental freq. of the loop, 1.85
> MHz. or 7.250 MHz?
> Thanks for your help!
> 73,
> John N5XYO
>

>

_____
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739. Re: [SkyWires] Re: New to group but just in time

Yahoo group: SkyWires
Date: 2004-09-17 14:46:38 UTC
From: Scott Erwin
Topic: 730 Message: 739

Go to your local building supply store and buy the
required length of wire you will need. Insulated 16 or
14 gage stranded will work fine. A length of 1 inch
PVC pipe for making the center insulator and support
insulators. You might like the insulators used with
electric fence so check the electric fence supply
area. Most of the antenna supply people use these
insulators in there antenna projects and you can buy a
whole bag of them for what the antenna supply guys get
for two!
--- Jay <ka4oww@...> wrote:

> --- In SkyWires@yahoogroups.com, Scott Erwin
> <n4zou@y...> wrote:
> Thank you
> for the input.
> Question any sugggection on were to get the
> materials.
> Thank you
> Jay
> N3OW
>
>

_____
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740. New t the group. 160 meter loop

Yahoo group: SkyWires
Date: 2004-09-18 00:28:48 UTC
From: kb2sdrjay
Topic: 740 Message: 740

Hello,

I am new to the group and would like to put a 160 meter loop up at my QTH in SD, when I move there. I would like to support it by 4 Electric poles, I would like to get 40 foot poles to support it or taller. My questions are, will 4 poles be enough to support the antenna??? What is the recommended way to build the antenna? What am I to expect as far as performance???

73
Jason
KB2SDR

741. Tuners

Yahoo group: SkyWires
Date: 2004-09-18 05:36:39 UTC
From: keith currie
Topic: 741 Message: 741

Does any one have a schematic for a Johnson Match-Box Tuner. I am looking for one with all the componet values, something you could use for a starting point to build one. Plus I have never seen a complete schematic for one. I would love to have a copy of one, the kw or even the smaller 275w.
Thanks
Keith
VE5HKC

742. Re: [SkyWires] Tuners

Yahoo group: SkyWires
Date: 2004-09-18 11:57:54 UTC
From: Dave
Topic: 741 Message: 742

keith currie wrote:
> Does any one have a schematic for a Johnson Match-Box Tuner. I am

Keith,

If you haven't already, check out http://www.cebik.com/link/link.html for info on the Match Box tuners.

Dave
VE1VQ/VA6NS

743. Revisit of old question?

Yahoo group: SkyWires
Date: 2004-09-18 14:37:26 UTC
From: Dan Gilliam
Topic: 743 Message: 743

I seem to find that the question of SkyWire Loops is like the chicken and the egg. More opinion than answers.

I need answers BEFORE I put up my antenna. I live in the woods and I have lots of trees that would support a system about 30 feet high, as long as it is counterweighted. Lots of wind.

My problem is here:

I used EZNEC ARRL version to analyze my plans. IF (note the caps on IF)I am using it right, and I design an antenna that works great at 1.9 MHz, the SWR will be GREAT with a 512 foot loop at 30-35 feet. But it would seem that 80m, 40m etc. are off the scale for SWR.

I do not have an antenna analyzer and have not yet strung the trees full of jacketed copper. For some of you with all of your marbles still in place, this is likely a simple thing. I seem to find a blockage between my ears when it comes to using this program to build a multiband antenna.

ARRL handbook for 1994 had an article that said to just throw wire up and feed it just off of a corner with coax, skip the balun and it will work fine. I have seen so many other articles that nixed the idea.

Someone here has experience with this. Please share what you think I am doing wrong.

Thanks in advance.
Dan KE4PDO

744. Re: [SkyWires] Revisit of old question?

Yahoo group: SkyWires
Date: 2004-09-18 16:13:10 UTC
From: David Shrum
Topic: 743 Message: 744

Dan I can only relate my experience with my approximate 530 ft. (1.9 MHz) loop. Mine does not tune in ANYWHERE below 3.1 SWR. My loop is easier to tune from 40 Meter and up (with my older MFJ Tuner II (MFJ-944)). Although it seems to work work well on 160 & 80 and all the rest of the bands, if I were to know what I know about my experience with my loop, I don't think I would put up a loop, I would stick with dipoles. Although the fact that my loop is not supported from the trees, but against the trees, trunks and what-ever it can hang from probably has a big effect on my loop.

This again is MY experience and according to most all other reports people have excellent results with theirs.

Dave N8PU

Dan Gilliam wrote:
> I seem to find that the question of SkyWire Loops is like the chicken
> and the egg. More opinion than answers.
>
> I need answers BEFORE I put up my antenna. I live in the woods and I
> have lots of trees that would support a system about 30 feet high, as
> long as it is counterweighted. Lots of wind.
>
> My problem is here:
>
> I used EZNEC ARRL version to analyze my plans. IF (note the caps on
> IF)I am using it right, and I design an antenna that works great at
> 1.9 MHz, the SWR will be GREAT with a 512 foot loop at 30-35 feet.
> But it would seem that 80m, 40m etc. are off the scale for SWR.
>
> I do not have an antenna analyzer and have not yet strung the trees
> full of jacketed copper. For some of you with all of your marbles
> still in place, this is likely a simple thing. I seem to find a
> blockage between my ears when it comes to using this program to build
> a multiband antenna.
>
> ARRL handbook for 1994 had an article that said to just throw wire up
> and feed it just off of a corner with coax, skip the balun and it
> will work fine. I have seen so many other articles that nixed the
> idea.
>
> Someone here has experience with this. Please share what you think I
> am doing wrong.
>
> Thanks in advance.
> Dan KE4PDO

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745. Re: [SkyWires] Revisit of old question?

Yahoo group: SkyWires
Date: 2004-09-18 21:18:51 UTC
From: JimMcSkate@aol.com
Topic: 743 Message: 745

Since there seems to be no "standard" way to put up a loop, what you'll get are mostly opinions. The factors are - in no particular order - height, shape, length, feedline, tuners, desired bands for operation, etc.

I think that nearly every one of these factors has been debated on and off on this list.

So here's my opinion(s): Run a shorter loop (40m, about 130 feet) with less expensive wire - a 530' loop is a MAJOR undertaking. Feed it with window line (450 ohm), or even with 300 ohm TV lead like I do. And use a tuner - most modern rigs have them built in, or if you're running a fossil rig like me, lots of outboard tuners are around.

And play with it. I run on 160 through 10 on my 40m loop, and get out all over the place. It's on a little suburban lot about 18' above grade... the program says it should be a dud but it's the best antenna system I've ever had.

So - there's my opinion. Start small and work your way up.

Have fun & good luck!!
73,
Jim
WA2LGN, Blue Point, NY

http://www.qsl.net/wa2lgn

In a message dated 9/18/2004 10:38:11 AM Eastern Standard Time,
ke4pdo@... writes:

> I seem to find that the question of SkyWire Loops is like the chicken
> and the egg. More opinion than answers.
>
>

746. Re: [SkyWires] Revisit of old question?

Yahoo group: SkyWires
Date: 2004-09-19 00:45:59 UTC
From: Scott Erwin
Topic: 743 Message: 746

You might try changing your feed line length. Cut a foot or two and try it again. You can also add a foot or two if you're already at the minimum feed line length with your setup. The loop is not an exact 50-ohm match if your running coax so the impedance at the transceiver will be different all along the length of the line. Same thing with ladder line. Some places it will be good and some places it will be hard to match. If you take the time to try it you will find a feed line length that will work fine for your installation.
--- David Shrum <aq392@...> wrote:

> Dan I can only relate my experience with my
> approximate 530 ft. (1.9
> MHz) loop. Mine does not tune in ANYWHERE below 3.1
> SWR. My loop is
> easier to tune from 40 Meter and up (with my older
> MFJ Tuner II
> (MFJ-944)). Although it seems to work work well on
> 160 & 80 and all the
> rest of the bands, if I were to know what I know
> about my experience
> with my loop, I don't think I would put up a loop, I
> would stick with
> dipoles. Although the fact that my loop is not
> supported from the trees,
> but against the trees, trunks and what-ever it can
> hang from probably
> has a big effect on my loop.
>
> This again is MY experience and according to most
> all other reports
> people have excellent results with theirs.
>
> Dave N8PU
>
>
> Dan Gilliam wrote:
> > I seem to find that the question of SkyWire Loops
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> > I need answers BEFORE I put up my antenna. I live
> in the woods and I

> > have lots of trees that would support a system
> about 30 feet high, as
> > long as it is counterweighted. Lots of wind.
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> that works great at
> > 1.9 MHz, the SWR will be GREAT with a 512 foot
> loop at 30-35 feet.
> > But it would seem that 80m, 40m etc. are off the
> scale for SWR.
> >
> > I do not have an antenna analyzer and have not yet
> strung the trees
> > full of jacketed copper. For some of you with all
> of your marbles
> > still in place, this is likely a simple thing. I
> seem to find a
> > blockage between my ears when it comes to using
> this program to build
> > a multiband antenna.
> >
> > ARRL handbook for 1994 had an article that said to
> just throw wire up
> > and feed it just off of a corner with coax, skip
> the balun and it
> > will work fine. I have seen so many other
> articles that nixed the
> > idea.
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> > Someone here has experience with this. Please
> share what you think I
> > am doing wrong.
> >
> > Thanks in advance.
> > Dan KE4PDO
> >
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747. Angle aluminum for Magloop element.

Yahoo group: SkyWires
Date: 2004-09-19 23:42:14 UTC
From: n4zou
Topic: 747 Message: 747

I have a test Magloop built with RG-8 coax as the element and performance is outstanding considering the size and height above ground. One thing I ran into was trying to make the loop operate on 20 through 75-meter bands. The element is too small on 75 meters and almost too big on 20 meters. I have figured out that two Magloop's are required. One for 40 and 75 meters and one for 20 through 10 meters. The 40/75 Magloop will be made from 1 inch copper plumbing pipe and will be 9 feet across each of the four sides. This can be transported on the side of my camper. For the 20 through 10-meter loop I already have some 1-inch aluminum angle and I am considering making it out of this material. The program I downloaded for design of Magloop antennas only deals with round and flat material. I was just wondering if anyone has a formula for converting the area of angle material compared to round. Flat is width divided by 2 for the round material formula. I would guess that it comes out the same as round tubing but I am just guessing!

748. Re: Revisit of old question?

Yahoo group: SkyWires
Date: 2004-09-20 06:11:09 UTC
From: Bryan
Topic: 743 Message: 748

HI Dan,

Its late here but , here goes,
I have a 500+ft loop about an average of 15-20 ft off the ground..
sort of a rectangle shape I think.

initally I had all kind of problems.. I was feeding with 450 ohm
ladder line. and then a piece of RG8 into the shack.. the SWR was
aweful. I could get it down with a tuner on all bands but 160, it
was still TOUCHY at best.. some good signal reports on the High
bands , but equal as many poor ones on 40,80,and 160.

I went to www.wh2t.com DR Ace's site.. I built his open core balun,
(some call it a transformer) no ferrite core here!.
low and behold.. I was getting much better signal reports on low
bands and also much more distance as well. the balun is in the
ANTENNA section of the Wh2t site. It is very inexpensive to
construct. I built mine in about 35 minutes , out of spare items in
the basement shop.. basically cost me nothing in $$$.

I have had many NEGATIVE REBUKES for calling this a balun and on and
on. but "the PROOF is in the Pudding" so they say!. I cooked the
Pudding and wow what a difference.
I dont own a antenna analyzer of any fancy equipment, IM a disabled
operator on a tight budget! Dont ask me all the 411 on the ratios
and exact impedance, I simply have nothing to tell you, except it
really helped a lot.

I am running about 30 ft of 450 ladder line, and about 15-20 ft of
RG-8U coax. I installed the wh2t balun in between the ladder line
and coax and then wrapped the connections with electrical tape. I
also grounded it to my earth ground OUTSIDE the shack. my only final
tips is to ORIENT the balun in such a way that the water doesn't
collect in any way inside the PVC tube or in the connections. I
tinned all the wires in the house with my electric solder iron,
then proceeded outside with my hand held propane torch with
soldering tip. it worked like a charm, FAST AND EASY flow!

please tell me if you build this and let us know your results.

just as an FYI I have the MFJ 934 tuner and an ft840 barefoot,with a
stock hand mic.

Good luck Bryan Kc8hps

--- In SkyWires@yahoogroups.com, "Dan Gilliam" <ke4pdo@y...> wrote:
> I seem to find that the question of SkyWire Loops is like the

chicken
> and the egg. More opinion than answers.
>
> I need answers BEFORE I put up my antenna. I live in the woods
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> have lots of trees that would support a system about 30 feet high,
as
> long as it is counterweighted. Lots of wind.
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> 1.9 MHz, the SWR will be GREAT with a 512 foot loop at 30-35 feet.
> But it would seem that 80m, 40m etc. are off the scale for SWR.
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> I do not have an antenna analyzer and have not yet strung the
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> full of jacketed copper. For some of you with all of your marbles
> still in place, this is likely a simple thing. I seem to find a
> blockage between my ears when it comes to using this program to
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> a multiband antenna.
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> ARRL handbook for 1994 had an article that said to just throw wire
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> and feed it just off of a corner with coax, skip the balun and it
> will work fine. I have seen so many other articles that nixed the
> idea.
>
> Someone here has experience with this. Please share what you
think I
> am doing wrong.
>
> Thanks in advance.
> Dan KE4PDO

749. Re: [SkyWires] Tuners

Yahoo group: SkyWires
Date: 2004-09-20 11:55:56 UTC
From: Jim Dunstan
Topic: 741 Message: 749

At 10:36 PM 9/17/2004 -0700, you wrote:
>Does any one have a schematic for a Johnson Match-Box Tuner. I am
>looking for one with all the componet values, something you could use
>for a starting point to build one. Plus I have never seen a complete
>schematic for one. I would love to have a copy of one, the kw or even
>the smaller 275w.
>Thanks
> Keith
> VE5HKC

Hi Keith:

The link style tuner is excellent for matching a balanced feedline/antenna. However, the switching arrangement used in the Johnson Match-Box is very complicated and demanding of the switch quality. As you can see the switch contacts in some cases can be handling considerable voltage. Multi-wafer - multi-position high power ceramic switches are hard to come by.

In Match-Box 'days', another method of mult-band tuner construction was to use 'plug-in' inductors complete with the link coil for each band. I used this method years ago .... as a result the tuner inductors were fully exposed and I had several plug-in's, one for each band of interest. The wonder of the Match-Box was that it allowed the whole unit to be enclosed in a metal box and inductor changes were accomplished with a front panel switch. They were very expensive.

Then, for many reasons, the balanced feedline/tuner arrangement fell out of favor and the for the most part the balanced antenna tuner was no longer manufactured. However, the only commercial unit I know that continued with the link coupled antenna tuner was a British Company (now defunct I believe). Their antenna tuner survived because it was efficient, non band switching, covered all Ham bands, and would handle a either a balanced line or coax. It was called the KW E-ZEE Match. I still see them for sale on E-Bay.

If you search the Internet you can find several articles dealing with the KW E-ZEE Match. This tuner is designed for the 100 W output level. However, the circuit arrangement (Z-Match) is simplicity itself and a more robust multi-band tuner is easy to construct. I have used such a tuner for many years and I can attest to it's efficiency and ease of use. It works equally well whether the feedline is coax or balanced line such as 450 ohm ladderline or 300 ohm TV twin lead etc...

You can check out the following site for a lot of information on the operation and construction of such a tuner. I highly recommend it.

>http://www4.tpgi.com.au/users/ldbutler/SingleCoilZMatch.htm
>

Jim Dunstan, VE3CI
Thunder Bay, ON

750. Re: [SkyWires] Angle aluminum for Magloop element.

Yahoo group: SkyWires
Date: 2004-09-20 12:07:45 UTC
From: Jim Dunstan
Topic: 747 Message: 750

At 11:42 PM 9/19/2004 +0000, you wrote:

> For the 20 through 10-meter
>loop I already have some 1-inch aluminum angle and I am considering
>making it out of this material. The program I downloaded for design
>of Magloop antennas only deals with round and flat material. I was
>just wondering if anyone has a formula for converting the area of
>angle material compared to round. Flat is width divided by 2 for the
>round material formula. I would guess that it comes out the same as
>round tubing but I am just guessing!

I would guess that 1" angle stock would be equivalent to 2" flat
material. I wouldn't think the 'L' shape would affect the inductive
characteristics .... it would of course double the surface area.

Jim Dunstan, VE3CI
Thunder Bay, ON

751. Re: [SkyWires] Re: Revisit of old question?

Yahoo group: SkyWires
Date: 2004-09-20 14:19:58 UTC
From: Scott Erwin
Topic: 743 Message: 751

Just because it does not have a ferrite core does not mean that it's not a Balun! My 4:1 Balun has no ferrite core either and it works great. It's an AirDux made with two #B2009 coils. It's the same thing as the old Heathkit remote mount Balun in a box. If you want to get technical about it you really need a 9:1 Balun but for a Loop 4:1 works just fine!
--- Bryan <kc8hps_2003@...> wrote:

> HI Dan,
>
> Its late here but , here goes,
> I have a 500+ft loop about an average of 15-20 ft
> off the ground..
> sort of a rectangle shape I think.
>
> initally I had all kind of problems.. I was feeding
> with 450 ohm
> ladder line. and then a piece of RG8 into the
> shack.. the SWR was
> aweful. I could get it down with a tuner on all
> bands but 160, it
> was still TOUCHY at best.. some good signal reports
> on the High
> bands , but equal as many poor ones on 40,80,and
> 160.
>
> I went to www.wh2t.com DR Ace's site.. I built his
> open core balun,
> (some call it a transformer) no ferrite core here!.
> low and behold.. I was getting much better signal
> reports on low
> bands and also much more distance as well. the balun
> is in the
> ANTENNA section of the Wh2t site. It is very
> inexpensive to
> construct. I built mine in about 35 minutes , out of
> spare items in
> the basement shop.. basically cost me nothing in
> $$$.
>
> I have had many NEGATIVE REBUKES for calling this a
> balun and on and
> on. but "the PROOF is in the Pudding" so they say!.
> I cooked the

> Pudding and wow what a difference.
> I dont own a antenna analyzer of any fancy
> equipment, IM a disabled
> operator on a tight budget! Dont ask me all the 411
> on the ratios
> and exact impedance, I simply have nothing to tell
> you, except it
> really helped a lot.
>
> I am running about 30 ft of 450 ladder line, and
> about 15-20 ft of
> RG-8U coax. I installed the wh2t balun in between
> the ladder line
> and coax and then wrapped the connections with
> electrical tape. I
> also grounded it to my earth ground OUTSIDE the
> shack. my only final
> tips is to ORIENT the balun in such a way that the
> water doesn't
> collect in any way inside the PVC tube or in the
> connections. I
> tinned all the wires in the house with my electric
> solder iron,
> then proceeded outside with my hand held propane
> torch with
> soldering tip. it worked like a charm, FAST AND EASY
> flow!
>
> please tell me if you build this and let us know
> your results.
>
> just as an FYI I have the MFJ 934 tuner and an ft840
> barefoot,with a
> stock hand mic.
>
> Good luck Bryan Kc8hps
>
> --- In SkyWires@yahoogroups.com, "Dan Gilliam"
> <ke4pdo@y...> wrote:
> > I seem to find that the question of SkyWire Loops
> is like the
> chicken
> > and the egg. More opinion than answers.
> >
> > I need answers BEFORE I put up my antenna. I live
> in the woods
> and I
> > have lots of trees that would support a system
> about 30 feet high,
> as

> > long as it is counterweighted. Lots of wind.
> >
> > My problem is here:
> >
> > I used EZNEC ARRL version to analyze my plans. IF
> (note the caps
> on
> > IF)I am using it right, and I design an antenna
> that works great
> at
> > 1.9 MHz, the SWR will be GREAT with a 512 foot
> loop at 30-35 feet.
> > But it would seem that 80m, 40m etc. are off the
> scale for SWR.
> >
> > I do not have an antenna analyzer and have not yet
> strung the
> trees
> > full of jacketed copper. For some of you with all
> of your marbles
> > still in place, this is likely a simple thing. I
> seem to find a
> > blockage between my ears when it comes to using
> this program to
> build
> > a multiband antenna.
> >
> > ARRL handbook for 1994 had an article that said to
> just throw wire
> up
> > and feed it just off of a corner with coax, skip
> the balun and it
> > will work fine. I have seen so many other
> articles that nixed the
> > idea.
> >
> > Someone here has experience with this. Please
> share what you
> think I
> > am doing wrong.
> >
> > Thanks in advance.
> > Dan KE4PDO
>
>

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752. Antenna Question

Yahoo group: SkyWires
Date: 2004-09-20 15:07:02 UTC
From: Rtnmi
Topic: 752 Message: 752

I have some scrap laying around and wanted to build a dipole antenna or a single band vertical limited space antenna. Here is what I have available:
abt 50' RG6 75 ohm
abt 50' RG59 75 ohm
abt 88' Orange Insulated 6 conductor telephone wire
1 aluminum extendable paint roller rod abt 13' long
1 old circuit board abt 6"X6" for insulator(s)
abt 300' nylon rope.
some 1" OD PVC abt 15'
No ladderline
No flat lead tv line

Any ideas how I can use this most efficiently for building an antenna that I can tune to the cw portion of some hf band(s)? I have no antenna tuner so I need to make it as wide banded as possible.

God Bless and be encouraged,
Rev Robert L Autry and Family
147 Little Salty Court
Springtown, Tx 76082
817-523-4182 (off)
817-629-3852 (cell)

753. Re: [SkyWires] Angle aluminum for Magloop element.

Yahoo group: SkyWires
Date: 2004-09-20 16:55:31 UTC
From: Scott Erwin
Topic: 747 Message: 753

That's what I was thinking so it would be the same as
using 1 inch aluminum tubing. I know using aluminum
will drop the efficiency of the loop slightly but
adding the extra 1-foot length over 10 feet takes care
of that. Using aluminum makes the loop so light and
manageable for portable operation in a parking lot
where you can't have wire antennas strung in trees,
which are not there!
--- Jim Dunstan <jimdunstan@...> wrote:

> At 11:42 PM 9/19/2004 +0000, you wrote:
>
> > For the 20 through 10-meter
> >loop I already have some 1-inch aluminum angle and
> I am considering
> >making it out of this material. The program I
> downloaded for design
> >of Magloop antennas only deals with round and flat
> material. I was
> >just wondering if anyone has a formula for
> converting the area of
> >angle material compared to round. Flat is width
> divided by 2 for the
> >round material formula. I would guess that it comes
> out the same as
> >round tubing but I am just guessing!
>
> I would guess that 1" angle stock would be
> equivalent to 2" flat
> material. I wouldn't think the 'L' shape would
> affect the inductive
> characteristics .... it would of course double the
> surface area.
>
>
> Jim Dunstan, VE3CI
> Thunder Bay, ON

_____
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http://mail.yahoo.com

754. Re: [SkyWires] Antenna Question

Yahoo group: SkyWires
Date: 2004-09-20 18:07:06 UTC
From: Jim Dunstan
Topic: 752 Message: 754

At 10:07 AM 9/20/2004 -0500, you wrote:
>I have some scrap laying around and wanted to build a dipole antenna or a
>single band vertical limited space antenna. Here is what I have available:
>abt 50' RG6 75 ohm
>abt 50' RG59 75 ohm
>abt 88' Orange Insulated 6 conductor telephone wire
>1 aluminum extendable paint roller rod abt 13' long
>1 old circuit board abt 6"X6" for insulator(s)
>abt 300' nylon rope.
>some 1" OD PVC abt 15'
>No ladderline
>No flat lead tv line
>
>Any ideas how I can use this most efficiently for building an antenna that
>I can tune to the cw portion of some hf band(s)? I have no antenna tuner
>so I need to make it as wide banded as possible.
>God Bless and be encouraged,
>Rev Robert L Autry and Family
>147 Little Salty Court
>Springtown, Tx 76082
>817-523-4182 (off)
>817-629-3852 (cell)

Hi Rev.

Your post is really interesting .... it sounds almost like a group workshop exercise designed to promote interaction. I'm willing to bite. First, the most important information is antenna support and you make no mention of it. I am just going to have to assume there is a tree, a roof gable, or some such structures available to hold up the antenna. I will assume you have a house with a side drive and a gable roof.

You have 100' of 72 ohm coax; good we have established the feedline.

The type of antenna? I prefer the dipole in this situation since it will be much easier to create an efficient antenna than with a vertical, given the materials you list. The efficiency of a vertical will be directly related to the ground system, radials etc., while the dipole efficiency will be related to achieving height.

The wire you mention is not your usual antenna wire .... the 6 conductor telephone wire. However, it will have some advantage. It will consist of 6 thin wires #20 ? all wrapped in a plastic sheath. When you cut a length for a dipole element you will solder all six wires together at each end leaving at least 6" extra. Tape up one end and then simply bend the ends into a loop and secure the loop with tape. You will now have an element

made of 6 parallel insulated wires with a loop at each end to which you can attach a rope etc.

You mention you have 88' of this telephone wire .... that means you can choose a band as low as 40M (approx. 66'). My favorite band is 20M which would have a dipole length of approx. 34' (each element would be 17'). At this point you can see I am discussing a single band antenna. A mult-band antenna with no tuner and the materials you outline is too complicated.

Let's assume you choose 20M. check the dipole formulae to be sure of the total length and say it comes to 34'. You will need 2 elements 17' each. allow at least 6" extra at each end. Strip all 6 wires at each end and solder them together. Seal the soldered wires at one end. Form a loop at each end and secure it with tape. You will now have 2 elements each 17' long with loops at each end. One end will be sealed and the other will have the soldered wires exposed.

Now, a dipole is a balanced antenna and coax is an unbalanced feedline. The impedance match will be good but you really need a device to couple the balanced antenna to the unbalanced feed line. I suggest a 1:1 balun formed by coiling the coax at the feed point. Here, cut about 1 1/2' of your 1" pvc. The top of the pipe will be where the exposed ends of your 2 dipole elements are fastened. EG wrap the element ends around and fasten in place with small plastic tie wraps through small drilled holes in the PVC pipe. Form one end of the coax so you have 2 leads of sufficient length to reach the antenna elements ... 6" ??. tape or fasten the coax near the top of this piece of PVC. then coil about 20 turns or more on the PVC then tape for fasten the coax to the PVC at the end of this coil. This is your 1:1 balun. The other end of the coax (connected end to end as required) will go down to your operating position.

I don't know exactly what your 13' paint roller handle looks like .... but I suggest fastening it in some way to your high spot .... lets say you have a gable roof. Eg. a couple of screw clamps ?? Or fasten to your chimney etc... In any event you have this extendable handle fastened on the roof. Now with some electrical tie wraps fasten the 1 1/2' PVC pipe (which is the center of the dipole and is the form on which you wound the balun) to the top portion of the paint roller handle. Now extend the paint handle to full length and maximum height for the center of the dipole. Tie appropriate lengths of rope to the loops formed in the ends of the dipole elements and tie them off such that you are forming a kind of 'inverted V'.

This center of this antenna would be at least 8' over the peak of a single story house for a total of about 18' to 20' above ground. Keep the ends of the dipole at least 8' from the ground. This antenna will be very efficient, represent an excellent match, and maintain antenna balance. You will make many many contacts.

If you have a tree .... simply hoist the center with your rope ..... remember higher the better .... anything 20' or more will giver solid performance. There! How did I do?

PS .... don't throw the circuit board away.

Jim Dunstan, VE3CI Thunder Bay, ON

755. RE: [SkyWires] Antenna Question

Yahoo group: SkyWires
Date: 2004-09-21 04:38:33 UTC
From: Rtnmi
Topic: 752 Message: 755

Hello Jim:

Thanks for the reply. You did *real good* HIHI .

The only place you left me was when you got to the Balun thing.

#1 I was told it had to be more complicated to do a Balun and that it had to be 9:1 preferably or at least 4:1.
#2 The reason you left me is that I have never *really* understood the whole theory behind the Balun thing.

Oh yes I have read the theory until I was blue in the face, but there is usually a practical tie in that is missing when I don't get something like I don't get Balun. Problem with me is if I don't get the theory I always have a hard time putting it to practice.

By the way I just got this morning from a friend of mine an old radio shack type 20' telescoping antenna mast the kind with the guy wire ring around it (which it has) and an old rotted spool of 72 ohm coax (the coax is in *very* good shape just the wood is badly weathered) and 7 sections of 20 foot 2 inch galvanized steel where each section can be inserted into the other. (kind of thin for 140' but might work for 40 if I mount them to the ends of the mobile home. (double wide 36' long) No on second thought I guess that is too short. Well maybe I could mount one of them and do an inverted V. I just don't know which is going to be better the inverted V or a straight dipole.

He also had in a junk pile near his dumpster a roll of about 100' of 12AWG Electrical wire. Now I have *allot* more coax to work with about another 200 feet. The only problem is that I don't have a tuner and it is 72 ohm cable. Can I make the whole thing out of the 72 ohm coax or would the shield block the center conductor from radiating?

Any further ideas and a more detailed explanation of the Balun concept would be *MOST* appreciated. You sound like someone who just might be able to get through to me the way you explain things is excellent.

Now, a dipole is a balanced antenna and coax is an unbalanced feedline. The impedance match will be good but you really need a device to couple the balanced antenna to the unbalanced feed line. I suggest a 1:1 balun formed by coiling the coax at the feed point. Here, cut about 1 1/2' of your 1" pvc. The top of the pipe will be where the exposed ends of your 2 dipole elements are fastened. EG wrap the element ends around and fasten in place with small plastic tie wraps through small drilled holes in the PVC pipe. Form one end of the coax so you have 2 leads of sufficient length to reach the antenna elements ... 6" ??. tape or fasten the coax near the top of this piece of PVC. then coil about 20

turns or more on the PVC then tape for fasten the coax to the PVC at the end of this coil. This is your 1:1 balun. The other end of the coax (connected end to end as required) will go down to your operating position.

I don't know exactly what your 13' paint roller handle looks like .... but I suggest fastening it in some way to your high spot .... lets say you have a gable roof. Eg. a couple of screw clamps ?? Or fasten to your chimney etc... In any event you have this extendable handle fastened on the roof. Now with some electrical tie wraps fasten the 1 1/2' PVC pipe (which is the center of the dipole and is the form on which you wound the balun) to the top portion of the paint roller handle. Now extend the paint handle to full length and maximum height for the center of the dipole. Tie appropriate lengths of rope to the loops formed in the ends of the dipole elements and tie them off such that you are forming a kind of 'inverted V'.

This center of this antenna would be at least 8' over the peak of a single story house for a total of about 18' to 20' above ground. Keep the ends of the dipole at least 8' from the ground. This antenna will be very efficient, represent an excellent match, and maintain antenna balance. You will make many many contacts.

If you have a tree .... simply hoist the center with your rope ..... remember higher the better .... anything 20' or more will giver solid performance. There! How did I do?

PS .... don't throw the circuit board away.

756. Omni Loop Antenna - HF Antennas - Products

Yahoo group: SkyWires
Date: 2004-09-21 13:37:09 UTC
From: R H F
Topic: 756 Message: 756

FO&A,

HF Antennas - Products

HFA=> http://www.hfantennas.com/products.htm

Click-On the "Omni Loop" Antenna

* 160-10 Meters @ 560 Ft. [140 Ft Sq]

* 80-10 Meters @ 290 Ft. [73 Ft Sq]

* 40-10 Meters @ 145 Ft. [36 Ft Sq]

Omni Loop come as a "KIT" Complete with pre-measured
insulated Q-Flex wire, connectors, Loop Balun, sliding
tensioning insulators, and instructions, including
figure-8 folding. If your installation will not require
the loop to go through pulleys or around, over, or through
trees or other obstacles, we will assemble it free of charge.
Otherwise, take it in standard kit form so you can thread
it through, around or over the obstructions before attaching
the feedpoint.

Feed Line W/Pl-259's
FL98 - 98 Feet 1KW
FL50 - 50 Feet 1KW

iane ~ RHF

.

757. RE: [SkyWires] Antenna Question

Yahoo group: SkyWires
Date: 2004-09-21 13:56:37 UTC
From: Jim Dunstan
Topic: 752 Message: 757

At 11:38 PM 9/20/2004 -0500, you wrote:
> Hello Jim:
>
>Thanks for the reply. You did *real good* HIHI .
>
>The only place you left me was when you got to the Balun thing.
>
>#1 I was told it had to be more complicated to do a Balun and that it had
>to be 9:1 preferably or at least 4:1.
>#2 The reason you left me is that I have never *really* understood the
>whole theory behind the Balun thing.
>
>Oh yes I have read the theory until I was blue in the face, but there is
>usually a practical tie in that is missing when I don't get something like
>I don't get Balun. Problem with me is if I don't get the theory I always
>have a hard time putting it to practice.

Hi:

#1. The impedance of a resonant dipole is approx. 72 ohms .... changes a little when you slope the ends in an inverted V ... but not enough to worry about. The impedance of your coax. is also approx. 72 ohms. Therefore, the balun needs to be 1:1. #2. If you made the dipole out of 300 twin lead (what is called a folded dipole) the feed point impedance changes to approx. 300 ohms. Therefore, a balun needs to match 300:72 or approx. 4:1. If for whatever reason you designed an antenna that represented a feed impedance of 650 ohms then you would need a 9:1 impedance transformation, eg 650:72.

However, a balun performs 2 functions. It can provide impedance transformation ... example #2 above 4:1 .... but more importantly it provides 'balanced' to 'unbalanced' transformation. Coax. requires RF currents to be within the cable, between the inside of the shield and the center conductor. When you connect the shield to one side of dipole and the center conductor to the other side of the dipole the impedance match is correct (no impedance transformation is required) but antenna current now flows on the outside of the coax and it becomes part of the antenna. It becomes funny looking twin lead.

The simplest way to stop antenna currents on the outside of the coax is to form the coax into a coil immediately at the feed point. EG it forms an RF resistance on the outside of the shield or a 'choke'. So if you wind a coil of coax on your PVC pipe approx. 8"-12" long you will choke off most of the antenna currents on the outside of the coax. This is the reason you want to bring the coax away from the dipole in a perpendicular direction. You want it to be equal distance from either side of the dipole

so the induced currents from the radiating dipole elements will cancel themselves out.

This is a simple and effective BALanced to UNbalanced method or device ... referred to as a BALUN. This method does not use a toroid core.

>
> By the way I just got this morning from a friend of mine an old radio
> shack type 20' telescoping antenna mast the kind with the guy wire ring
> around it (which it has) and an old rotted spool of 72 ohm coax (the
> coax is in *very* good shape just the wood is badly weathered) and 7
> sections of 20 foot 2 inch galvanized steel where each section can be
> inserted into the other. (kind of thin for 140' but might work for 40 if
> I mount them to the ends of the mobile home. (double wide 36' long) No on
> second thought I guess that is too short. Well maybe I could mount one of
> them and do an inverted V. I just don't know which is going to be better
> the inverted V or a straight dipole.

One of my favorite antennas is a 100' inverted V with the apex 30' up supported by telescoping lengths of galvanized steel pipe. In one arrangement (when I was also living in a mobile home) was to erect the pipe with 3 equally spaced guys at the top and staked out in the lawn. 2 guys were the radiating elements and the 3rd was thin rope. I fed the dipole in the center with 300 TV twin lead to an antenna tuner. This antenna works even better if the base of the 30' pipe can be placed on the roof. I once had this arrangement on the peak of a 2 story house .... great antenna! In this arrangement the top of the pipe was about 70-75' above ground and my shack was in the basement. It was truly an all band antenna ... on 160 I treated the whole thing as a vertical (75' of twin lead) and the 100' inverted V became a capacity hat .... and used the hot water heating pipes as ground. It was a really good antenna for 160M.

In your case you would use dipole wires cut to the band of your choice and feed it with the coax choke (BALUN) ... clamp the PVC BALUN to the top and simply tape the coax down the pipe. If you can get 40' up all the better. the steel pipe will hold up well but needs to be guy'd. Your dipole will already provide 2 guys. If you brace the pole against the mobile home you should be able to get away with one set at the top.

I found the inverted V to be an excellent performer. The largest antenna currents are found closest to the feed point (at the center) of the dipole. Just make the apex angle as large as possible by tieing off the ends as far away as possible.

Jim

Jim Dunstan, VE3CI, Thunder Bay, ON

758. Any Good Schematics for 160 meter Loop???

Yahoo group: SkyWires
Date: 2004-09-21 16:06:38 UTC
From: kd5srl
Topic: 758 Message: 758

I recently purchased the ARRL Antenna book to get a basic understanding of antenna(s). As I can fully admit I'm new to ham and new to antenna building. What I would like to do is build a 160 meter loop that booms and I've come to a cross road now that I've been reading in this wonderful group. I read balum / no balum, 1:1 / 4:1, ladder line -vs- coax for feed and combinations of the two.

What I need is the simple honest plan of a working 160 meter full wave loop... one that is not just a plan but one that is and has worked. One of the things that got me interested in amateur radio was the desire to build and tweek an antenna, knowing... hey I built that. Any hep will be greatly appreciated. Yes I'm new to the group so if this is a redundant question, I'm sorry.

Best 73s,
Paul

759. RE: [SkyWires] Any Good Schematics for 160 meter Loop???

Yahoo group: SkyWires
Date: 2004-09-21 16:27:10 UTC
From: Rtnmi
Topic: 758 Message: 759

I like this question. I agree with the motivation of ham radio. I also love working with antennas (NOW) HIHI :0)

I think I have the balun question under control now also.

The only question I have now is can the dipole be made from *only* coax and bypass the balun all together?

God Bless and be encouraged,
Rev Robert L Autry and Family
147 Little Salty Court
Springtown, Tx 76082
817-523-4182 (off)
817-629-3852 (cell)

-----Original Message-----
From: kd5srl [mailto:kd5srl@...]
Sent: Tuesday, September 21, 2004 11:07 AM
To: SkyWires@yahoogroups.com
Subject: [SkyWires] Any Good Schematics for 160 meter Loop???

I recently purchased the ARRL Antenna book to get a basic understanding of antenna(s). As I can fully admit I'm new to ham and new to antenna building. What I would like to do is build a 160 meter loop that booms and I've come to a cross road now that I've been reading in this wonderful group. I read balum / no balum, 1:1 / 4:1, ladder line -vs- coax for feed and combinations of the two.

What I need is the simple honest plan of a working 160 meter full wave loop... one that is not just a plan but one that is and has worked. One of the things that got me interested in amateur radio was the desire to build and tweek an antenna, knowing... hey I built that. Any hep will be greatly appreciated. Yes I'm new to the group so if this is a redundant question, I'm sorry.

Best 73s,
Paul

Yahoo! Groups Links

760. Re: [SkyWires] Any Good Schematics for 160 meter Loop???

Yahoo group: SkyWires
Date: 2004-09-21 16:27:44 UTC
From: Paul Locker
Topic: 758 Message: 760

KD5SRL,
I've not had a lot of time to build my skywire loop antenna for 160, but over the past two weekends I have placed over 500 foot of wire in my back field as an almost loop. I only got 2 corners above 20 foot. The other two corners are in some trees as high as I could reach. I am feeding the loop with some spliced together twinlead.

I too am new, I've only been licensed a little over a year now. I've heard the arguments balun/no balun and coax/ladder line. I went with what I had at hand. I've basically have a rectangle sloping downard on one side. The wire is zipcord and I'm feeding it with twinlead from radio shack. I've not had time to test it yet, so it may not actually work :) I was on 160 last night and heard a few stations,and can even get a low swr on most of the 160 band, but when I had time to actually test it everyone was gone. I will let you know how it works when I get time to call more CQ's...

K4PML
Paul

--- kd5srl <kd5srl@...> wrote:

> I recently purchased the ARRL Antenna book to get a
> basic
> understanding of antenna(s). As I can fully admit
> I'm new to ham and
> new to antenna building. What I would like to do is
> build a 160
> meter loop that booms and I've come to a cross road
> now that I've
> been reading in this wonderful group. I read balum
> / no balum,
> 1:1 / 4:1, ladder line -vs- coax for feed and
> combinations of the
> two.
>
> What I need is the simple honest plan of a working
> 160 meter full
> wave loop... one that is not just a plan but one
> that is and has
> worked. One of the things that got me interested in
> amateur radio

> was the desire to build and tweek an antenna,
> knowing... hey I built
> that. Any hep will be greatly appreciated. Yes I'm
> new to the group
> so if this is a redundant question, I'm sorry.
>
> Best 73s,
> Paul
>
>
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761. RE: [SkyWires] Any Good Schematics for 160 meter Loop???

Yahoo group: SkyWires
Date: 2004-09-21 17:03:00 UTC
From: Jim Dunstan
Topic: 758 Message: 761

At 11:27 AM 9/21/2004 -0500, you wrote:
>I like this question. I agree with the motivation of ham radio. I also love
>working with antennas (NOW) HIHI :0)
>
>I think I have the balun question under control now also.
>
>The only question I have now is can the dipole be made from *only* coax and
>bypass the balun all together?

The answer is yes .... there is a version of the dipole that utilizes 72 ohm coax for both the dipole elements and the feed line. It is often configured in the inverted V arrangement. It does not require a balun in order to maintain balance or impedance match. It is claimed that this type of antenna is broader than a standard dipole and will give an acceptably low SWR across the whole band.

This antenna is a bit more complicated and you need to take care in preparing the coax elements. The antenna is known by the name "Double Bazooka". There is an excellent description of how to prepare the coax for this type of antenna at "Dr. Ace's" Web Page at the following location.

http://www.bloomington.in.us/~wh2t/bazooka.html

Jim

Jim Dunstan
Thunder Bay, ON

762. Re: [SkyWires] Any Good Schematics for 160 meter Loop???

Yahoo group: SkyWires
Date: 2004-09-21 17:06:52 UTC
From: Dr.Ace Ratliff
Topic: 758 Message: 762

Hi Paul,
Before I attempt to answer your question(s).
Let me ask you,
Do you intend to use the antenna only on the 160 mtr band, or multi band ?
Do you have an antenna tuner aka matchbox ?
73, Ace - WH2T
----- Original Message -----
From: kd5srl
To: SkyWires@yahoogroups.com
Sent: Tuesday, September 21, 2004 11:06 AM
Subject: [SkyWires] Any Good Schematics for 160 meter Loop???

I recently purchased the ARRL Antenna book to get a basic
understanding of antenna(s). As I can fully admit I'm new to ham and
new to antenna building. What I would like to do is build a 160
meter loop that booms and I've come to a cross road now that I've
been reading in this wonderful group. I read balum / no balum,
1:1 / 4:1, ladder line -vs- coax for feed and combinations of the
two.

What I need is the simple honest plan of a working 160 meter full
wave loop... one that is not just a plan but one that is and has
worked. One of the things that got me interested in amateur radio
was the desire to build and tweek an antenna, knowing... hey I built
that. Any hep will be greatly appreciated. Yes I'm new to the group
so if this is a redundant question, I'm sorry.

Best 73s,
Paul

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763. RE: [SkyWires] Any Good Schematics for 160 meter Loop???

Yahoo group: SkyWires
Date: 2004-09-21 17:08:13 UTC
From: Rtnmi
Topic: 758 Message: 763

Please do Paul:

This sounds really neat. I don't have 160 mtrs on my IC-730 but I do have 80
so I will be watching you posts with enthusiasm.

God Bless and be encouraged,
Rev Robert L Autry and Family
147 Little Salty Court
Springtown, Tx 76082
817-523-4182 (off)
817-629-3852 (cell)

-----Original Message-----
From: Paul Locker [mailto:pmlock1@...]
Sent: Tuesday, September 21, 2004 11:28 AM
To: SkyWires@yahoogroups.com
Subject: Re: [SkyWires] Any Good Schematics for 160 meter Loop???

KD5SRL,
I've not had a lot of time to build my skywire loop
antenna for 160, but over the past two weekends I have
placed over 500 foot of wire in my back field as an
almost loop. I only got 2 corners above 20 foot. The
other two corners are in some trees as high as I could
reach. I am feeding the loop with some spliced
together twinlead.

I too am new, I've only been licensed a little over a
year now. I've heard the arguments balun/no balun and
coax/ladder line. I went with what I had at hand.
I've basically have a rectangle sloping downard on one
side. The wire is zipcord and I'm feeding it with
twinlead from radio shack. I've not had time to test
it yet, so it may not actually work :) I was on 160
last night and heard a few stations,and can even get a
low swr on most of the 160 band, but when I had time
to actually test it everyone was gone. I will let you
know how it works when I get time to call more CQ's...

K4PML
Paul

--- kd5srl <kd5srl@...> wrote:

> I recently purchased the ARRL Antenna book to get a
> basic
> understanding of antenna(s). As I can fully admit

> I'm new to ham and
> new to antenna building. What I would like to do is
> build a 160
> meter loop that booms and I've come to a cross road
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> been reading in this wonderful group. I read balum
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> 1:1 / 4:1, ladder line -vs- coax for feed and
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> two.
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> worked. One of the things that got me interested in
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> was the desire to build and tweek an antenna,
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> that. Any hep will be greatly appreciated. Yes I'm
> new to the group
> so if this is a redundant question, I'm sorry.
>
> Best 73s,
> Paul
>
>
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764. Re: Any Good Schematics for 160 meter Loop???

Yahoo group: SkyWires
Date: 2004-09-21 18:27:55 UTC
From: kd5srl
Topic: 758 Message: 764

Ace,

Thanks for the quick reply! What I'm looking to build is 160 meter full wave, multi-band: 160, 80, 40, 20 & 10 if possible. Yes I have LDG AT-1000 1kw autotuner to match with a Kenwood TS-2000. I have a Amaritron AL-811H to drive a few extra watts if needed.

At this point I'm working with an Alpha Delta DXLB Plus with the feed point about 40 ft up. My property is on a hillside at approx. 30 deg. on 1.5 acres of forrest. I'm not getting good reports without use of the power amp. I've been told my signal on 80 meters is weak when barefoot, using phone, good signal reports... on CW of course. I want a nice antenna (loop) that will BOOM! It would be nice also if it were clean & quiet as I've heard loops are over dipoles. Can you help me out with this one? It would be appreciated.

I have 500' of #12 insulated solid copper wire, 200' of RG-213 and a CAL-AV Labs 1:1 Balum.

Best 73s,

Paul - KD5SRL

--- In SkyWires@yahoogroups.com, "Dr.Ace Ratliff" <wh2t@b...> wrote:
> Hi Paul,
> Before I attempt to answer your question(s).
> Let me ask you,
> Do you intend to use the antenna only on the 160 mtr band, or multi band ?
> Do you have an antenna tuner aka matchbox ?
> 73, Ace - WH2T
> ----- Original Message -----
> From: kd5srl
> To: SkyWires@yahoogroups.com
> Sent: Tuesday, September 21, 2004 11:06 AM
> Subject: [SkyWires] Any Good Schematics for 160 meter Loop???
>
>
> I recently purchased the ARRL Antenna book to get a basic
> understanding of antenna(s). As I can fully admit I'm new to ham and
> new to antenna building. What I would like to do is build a 160
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> been reading in this wonderful group. I read balum / no balum,

> 1:1 / 4:1, ladder line -vs- coax for feed and combinations of
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of Service.

765. 160 meter loop on 40

Yahoo group: SkyWires
Date: 2004-09-21 18:27:43 UTC
From: tukatuk4
Topic: 679 Message: 765

Hi all
I just love my loop.... This thing rip's up the band
on 40.. I work so many stations my voice is almost gone.
If you have the room for a 160 meter loop that is the way to go.

Mark K6fej

766. RE: [SkyWires] 160 meter loop on 40

Yahoo group: SkyWires
Date: 2004-09-21 19:28:18 UTC
From: Rtnmi
Topic: 679 Message: 766

Please tell us what you have Mark.

God Bless and be encouraged,
Rev Robert L Autry and Family
147 Little Salty Court
Springtown, Tx 76082
817-523-4182 (off)
817-629-3852 (cell)

-----Original Message-----
From: tukatuk4 [mailto:markthemover@...]
Sent: Tuesday, September 21, 2004 1:28 PM
To: SkyWires@yahoogroups.com
Subject: [SkyWires] 160 meter loop on 40

Hi all
I just love my loop.... This thing rip's up the band
on 40.. I work so many stations my voice is almost gone.
If you have the room for a 160 meter loop that is the way to go.

Mark K6fej

Yahoo! Groups Links

767. Re: 160 meter loop on 40

Yahoo group: SkyWires
Date: 2004-09-21 21:35:53 UTC
From: tukatuk4
Topic: 679 Message: 767

HI Rev
Well the loop here is 528 feet of #14 up about 50 feet,
I am feeding it with 75 feet of 450 ohm ladder line.
The match is good on 160 however I use a Palstar AT4K
balanced tuner to cover the rest of the bands and widen out
160. The palstar is great low loss tuner. Qst just did a review.
My experience with the loop has been great... Low noise is a
big plus.. I used a sling shot and fishing line to get it up
in the trees. It really is a great low cost antenna. Now I want to
make a bigger one :-)
73 and good DX Mark K6fej

-- In SkyWires@yahoogroups.com, "Rtnmi" <rtnmi@s...> wrote:
> Please tell us what you have Mark.
>
> God Bless and be encouraged,
> Rev Robert L Autry and Family
> 147 Little Salty Court
> Springtown, Tx 76082
> 817-523-4182 (off)
> 817-629-3852 (cell)
>
>
> -----Original Message-----
> From: tukatuk4 [mailto:markthemover@c...]
> Sent: Tuesday, September 21, 2004 1:28 PM
> To: SkyWires@yahoogroups.com
> Subject: [SkyWires] 160 meter loop on 40
>
>
> Hi all
> I just love my loop.... This thing rip's up the band
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> If you have the room for a 160 meter loop that is the way to go.
>
> Mark K6fej
>
>
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768. Re: [SkyWires] Re: Any Good Schematics for 160 meter Loop???

Yahoo group: SkyWires
Date: 2004-09-21 22:30:12 UTC
From: Dr.Ace Ratliff
Topic: 758 Message: 768

Hi Paul,
I recommend about a 530 foot horizontal loop (if you can come up with 30 more feet of wire).
Feed it with the length of RG-213 needed to reach the station , no balun.
Use the LDG AT-1000 1kw autotuner and you should be able to work 10 - 160 meters , No Problem !

There are other ways it can be done, This way will work great.

73, Ace - WH2T
http://www.wh2t.com/

----- Original Message -----
From: kd5srl
To: SkyWires@yahoogroups.com
Sent: Tuesday, September 21, 2004 1:27 PM
Subject: [SkyWires] Re: Any Good Schematics for 160 meter Loop???

Ace,

Thanks for the quick reply! What I'm looking to build is 160 meter full wave, multi-band: 160, 80, 40, 20 & 10 if possible. Yes I have LDG AT-1000 1kw autotuner to match with a Kenwood TS-2000. I have a Amaritron AL-811H to drive a few extra watts if needed.

At this point I'm working with an Alpha Delta DXLB Plus with the feed point about 40 ft up. My property is on a hillside at approx. 30 deg. on 1.5 acres of forrest. I'm not getting good reports without use of the power amp. I've been told my signal on 80 meters is weak when barefoot, using phone, good signal reports... on CW of course. I want a nice antenna (loop) that will BOOM! It would be nice also if it were clean & quiet as I've heard loops are over dipoles. Can you help me out with this one? It would be appreciated.

I have 500' of #12 insulated solid copper wire, 200' of RG-213 and a CAL-AV Labs 1:1 Balum.

Best 73s,

Paul - KD5SRL

--- In SkyWires@...m, "Dr.Ace Ratliff" <wh2t@b...> wrote:
> Hi Paul,
> Before I attempt to answer your question(s).
> Let me ask you,
> Do you intend to use the antenna only on the 160 mtr band, or

multi band ?
> Do you have an antenna tuner aka matchbox ?
> 73, Ace - WH2T
> ----- Original Message -----
> From: kd5srl
> To: SkyWires@yahoogroups.com
> Sent: Tuesday, September 21, 2004 11:06 AM
> Subject: [SkyWires] Any Good Schematics for 160 meter Loop???
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769. Re: Any Good Schematics for 160 meter Loop???

Yahoo group: SkyWires
Date: 2004-09-22 14:40:28 UTC
From: kd5srl
Topic: 758 Message: 769

Ace,

Thanks for the information. As soon as I get it built and tested
I'll give you an update. BTW... nice web site with great information
you have.

Best of 73,
Paul

--- In SkyWires@yahoogroups.com, "Dr.Ace Ratliff" <wh2t@b...> wrote:
> Hi Paul,
> I recommend about a 530 foot horizontal loop (if you can come
up with 30 more feet of wire).
> Feed it with the length of RG-213 needed to reach the station , no
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> ----- Original Message -----
> From: kd5srl
> To: SkyWires@yahoogroups.com
> Sent: Tuesday, September 21, 2004 1:27 PM
> Subject: [SkyWires] Re: Any Good Schematics for 160 meter Loop???
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> Ace,
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> Paul - KD5SRL
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> > Hi Paul,
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> > Do you intend to use the antenna only on the 160 mtr band, or
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> > Do you have an antenna tuner aka matchbox ?
> > 73, Ace - WH2T
> > ----- Original Message -----
> > From: kd5srl
> > To: SkyWires@yahoogroups.com
> > Sent: Tuesday, September 21, 2004 11:06 AM
> > Subject: [SkyWires] Any Good Schematics for 160 meter Loop???
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770. RE: [SkyWires] Any Good Schematics for 160 meter Loop???

Yahoo group: SkyWires
Date: 2004-09-22 17:13:38 UTC
From: Rtnmi
Topic: 758 Message: 770

Now I did it. Trying to make the Bazooka, out of habit, I cut the coax in half. If I solder the center conductors back together and insulate them from the shield at the middle, can I still go on as though nothing ever happened?

God Bless and be encouraged,
Rev Robert L Autry and Family
147 Little Salty Court
Springtown, Tx 76082
817-523-4182 (off)
817-629-3852 (cell)
-----Original Message-----
From: Jim Dunstan [mailto:jimdunstan@...]
Sent: Tuesday, September 21, 2004 12:03 PM
To: SkyWires@yahoogroups.com
Subject: RE: [SkyWires] Any Good Schematics for 160 meter Loop???

At 11:27 AM 9/21/2004 -0500, you wrote:

I like this question. I agree with the motivation of ham radio. I also love
working with antennas (NOW) HIHI :0)

I think I have the balun question under control now also.

The only question I have now is can the dipole be made from *only* coax and
bypass the balun all together?

The answer is yes .... there is a version of the dipole that utilizes 72 ohm coax for both the dipole elements and the feed line. It is often configured in the inverted V arrangement. It does not require a balun in order to maintain balance or impedance match. It is claimed that this type of antenna is broader than a standard dipole and will give an acceptably low SWR across the whole band.

This antenna is a bit more complicated and you need to take care in preparing the coax elements. The antenna is known by the name "Double Bazooka". There is an excellent description of how to prepare the coax for this type of antenna at "Dr. Ace's" Web Page at the following location.

http://www.bloomington.in.us/~wh2t/bazooka.html

Jim

Jim Dunstan
Thunder Bay, ON
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771. RE: [SkyWires] Any Good Schematics for 160 meter Loop???

Yahoo group: SkyWires
Date: 2004-09-22 18:23:14 UTC
From: Jim Dunstan
Topic: 758 Message: 771

At 12:13 PM 9/22/2004 -0500, you wrote:
>Now I did it. Trying to make the Bazooka, out of habit, I cut the coax in
>half. If I solder the center conductors back together and insulate them
>from the shield at the middle, can I still go on as though nothing ever
>happened?

Yes, no problem .... you will look after the mechanical details of strength
etc ....

Jim Dunstan
Thunder Bay, ON

772. Re: Any Good Schematics for 160 meter Loop???

Yahoo group: SkyWires
Date: 2004-09-23 12:24:17 UTC
From: bambazonke01
Topic: 758 Message: 772

Bob,
That is exactly how I make made one from odd lengths of coax. It
will work fine.
Jim VE3DDY

--- In SkyWires@yahoogroups.com, "Rtnmi" <rtnmi@s...> wrote:
> Now I did it. Trying to make the Bazooka, out of habit, I cut the
coax
> in half. If I solder the center conductors back together and
insulate
> them from the shield at the middle, can I still go on as though
nothing
> ever happened?
>
> God Bless and be encouraged,
> Rev Robert L Autry and Family
> 147 Little Salty Court
> Springtown, Tx 76082
> 817-523-4182 (off)
> 817-629-3852 (cell)
> -----Original Message-----
> From: Jim Dunstan [mailto:jimdunstan@r...]
> Sent: Tuesday, September 21, 2004 12:03 PM
> To: SkyWires@yahoogroups.com
> Subject: RE: [SkyWires] Any Good Schematics for 160 meter Loop???
>
>
> At 11:27 AM 9/21/2004 -0500, you wrote:
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> I like this question. I agree with the motivation of ham
radio. I
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>
> I think I have the balun question under control now also.
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> The only question I have now is can the dipole be made from
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> bypass the balun all together?
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>
> http://www.bloomington.in.us/~wh2t/bazooka.html
>
> Jim
>
> Jim Dunstan
> Thunder Bay, ON
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> Service.

773. RE: [SkyWires] Re: Any Good Schematics for 160 meter Loop???

Yahoo group: SkyWires
Date: 2004-09-23 15:11:04 UTC
From: Rtnmi
Topic: 758 Message: 773

Thank you Jim:

I have the coax together and I have made the balun, now I am working on the circuit board to mount everything to. I hope to have everything ready by this weekend to put on the poles. I now have the telescoping 20 foot mast from radio shack and also 7 20 sections of galvanized steel posts as well. This may turn out well after all. I am excited (as only another ham could understand). No one seems to understand why Dad is so excited over a "bunch of wires and poles). Well we do don't we HI HI :0) They are about to find out just how exciting it can be, once I get everything in place.

God Bless and be encouraged,
Rev Robert L Autry and Family
147 Little Salty Court
Springtown, Tx 76082
817-523-4182 (off)
817-629-3852 (cell)

-----Original Message-----
From: bambazonke01 [mailto:bambazonke@...]
Sent: Thursday, September 23, 2004 7:24 AM
To: SkyWires@yahoogroups.com
Subject: [SkyWires] Re: Any Good Schematics for 160 meter Loop???

Bob,
That is exactly how I make made one from odd lengths of coax. It will work fine.
Jim VE3DDY

--- In SkyWires@yahoogroups.com, "Rtnmi" <rtnmi@s...> wrote:
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> -----Original Message-----
> From: Jim Dunstan [mailto:jimdunstan@r...]

> Sent: Tuesday, September 21, 2004 12:03 PM
> To: SkyWires@yahoogroups.com
> Subject: RE: [SkyWires] Any Good Schematics for 160 meter Loop???
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only
> coax and
> bypass the balun all together?
>
>
> The answer is yes .... there is a version of the dipole that
utilizes
> 72 ohm coax for both the dipole elements and the feed line. It is
often
> configured in the inverted V arrangement. It does not require a
balun
> in order to maintain balance or impedance match. It is claimed
that
> this type of antenna is broader than a standard dipole and will
give an
> acceptably low SWR across the whole band.
>
> This antenna is a bit more complicated and you need to take care
in
> preparing the coax elements. The antenna is known by the
name "Double
> Bazooka". There is an excellent description of how to prepare the
coax
> for this type of antenna at "Dr. Ace's" Web Page at the following
> location.
>
>
> http://www.bloomington.in.us/~wh2t/bazooka.html
>
> Jim
>
> Jim Dunstan
> Thunder Bay, ON
> Yahoo! Groups Sponsor
> ADVERTISEMENT

>
>
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>
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>
>
> ---

> ------
> Yahoo! Groups Links
>
> a.. To visit your group on the web, go to:
> http://groups.yahoo.com/group/SkyWires/
>
> b.. To unsubscribe from this group, send an email to:
> SkyWires-unsubscribe@yahoogroups.com
>
> c.. Your use of Yahoo! Groups is subject to the Yahoo! Terms of
> Service.

Yahoo! Groups Links

774. New link. Loop calculator.

Yahoo group: SkyWires
Date: 2004-09-24 13:29:22 UTC
From: n4zou
Topic: 774 Message: 774

http://ka1fsb.home.att.net/loopcalc.html

The above link which I added to the Links area for the group has a simple calculator which uses the standard formula for determining the total wire length for a single element, full wave loop antenna, (1005/MHz). It also calculates measurements for:

A square or diamond loop shape

A rectangular shape with a 2:1 ratio, (where the horizontal is longer than the vertical length by a factor of 2)

A delta or triangular loop shape

A circular shape

in the HF and VHF Amateur Radio bands.

775. RE: [SkyWires] Antenna Question

Yahoo group: SkyWires
Date: 2004-09-25 16:02:49 UTC
From: Rtnmi
Topic: 752 Message: 775

I have question for anyone who is knowledgeable and willing to answer it.

When we connect a feedline to an antenna - are we making a parallel or a series circuit with regards to reactance?

In other words if I connect a 50 ohm feedline to a 300 ohm dipole without any matching circuit what impedance does my transmitter see. A series or a parallel circuit?

Also if I connect a 50 ohm feed line directly to a 75 ohm feed line say with a barrel connector. Have I made a series circuit or a parallel circuit or is it neither?

If I connect a 50 ohm feedline to a 75 ohm feedline and then to a 300 ohm twin lead but the 50 ohm feedline is 50' long the 75ohm line is 10' ling and the 300ohm twin lead is 25 feet long. Do the lengths affect the impedance or does is matter? What impedance would my transmitter see?

The last question is -- can I make a loop antenna that will fit on my roof - (say for 160 Mtrs) by measuring the length for a half wave length and wrapping the loop with multiple turns therefore - simply increasing the number of turns and decreasing the physical size and still end up with an efficient antenna?

Tnx,
Robert

776. Re: Antenna Question

Yahoo group: SkyWires
Date: 2004-09-26 12:07:39 UTC
From: bambazonke01
Topic: 752 Message: 776

Robert,
I'll try to answersome of your questions.
If you look at coax in an analytical manner with respect to inductance and capacitance then the center conductor can be drawn as a string of series inductors with small capacitance to the shield along the whole length.
If you draw a inductor with a capacitor to ground at each end (like a Pye circuit) then it can be redrawn as a PARALLEL circuit. So then the coax as a whole can be drawn as a parallel circuit.
When you connect to a dipole the top of the coax it is drawn as a SERIES circuit. Draw it out.
For Connecting a 50 ohm coax to a 300 ohm dipole you would calculate Z = square root(z1 +z2) (I think):-)

With regard to the rest of your question on the multiple lengths of different feedlines, the Z will alter dependant on frequency. That is why you can add or subtract a short length and change the feedpoint impedance.
Remember, the impedance of an antenna is reflected at every 1/2 wavelength of coax. If the impedances are the same (ie.50 ohms for antenna and coax) then it doesn't matter on the length.
If the impedances are different you need to make adjustment to get a match to the transmitter output.
I hope I have shed some light on this difficult question and I'm sure some other guys will now add their comments.
Jim VE3DDY

> When we connect a feedline to an antenna - are we making a parallel or a
> series circuit with regards to reactance?
>
> In other words if I connect a 50 ohm feedline to a 300 ohm dipole
> without any matching circuit what impedance does my transmitter see. A
> series or a parallel circuit?
>
> Also if I connect a 50 ohm feed line directly to a 75 ohm feed line say
> with a barrel connector. Have I made a series circuit or a parallel
> circuit or is it neither?
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> If I connect a 50 ohm feedline to a 75 ohm feedline and then to a 300
> ohm twin lead but the 50 ohm feedline is 50' long the 75ohm line is 10'

> ling and the 300ohm twin lead is 25 feet long. Do the lengths
affect the
> impedance or does is matter? What impedance would my transmitter
see?
>
> The last question is -- can I make a loop antenna that will fit on
my
> roof - (say for 160 Mtrs) by measuring the length for a half wave
length
> and wrapping the loop with multiple turns therefore - simply
increasing
> the number of turns and decreasing the physical size and still end
up
> with an efficient antenna?
>
> Tnx,
> Robert

777. Re: Antenna Question

Yahoo group: SkyWires
Date: 2004-09-26 12:10:22 UTC
From: bambazonke01
Topic: 752 Message: 777

In that formula I forgot to square the combination of the
individual impedances.
Jim VE3DDY

778. Ham's Online New Group

Yahoo group: SkyWires
Date: 2004-09-26 15:02:46 UTC
From: Wendall Bagwell
Topic: 778 Message: 778

You are invited!!

Ham's online is a new group searching for cool ham links. You add
links you find or your own and also find super cool ham links.

http://groups.yahoo.com/group/hams_online

Come and join the Fun!!

Wendall
kc5ess

779. A feedline experiment...

Yahoo group: SkyWires
Date: 2004-09-26 22:46:57 UTC
From: JimMcSkate@aol.com
Topic: 779 Message: 779

First, the background: I run a 40m skywire loop fed with 300-ohm TV twinlead - fine for the 80 or so watts I run on my old Kenwood TS-820.

I tune the loop with a manual, non-balanced antenna tuner - a Kenwood AT200. It does have a "random wire" output, and that's what I use to drive ONE LEG of the feedline; the other leg is grounded at the tuner, OR is left to float open. (I tried a ferrite toroidal balun, but it was a turkey, so we'll leave that one out of this.)

I had posted a simple description of this a week or two ago... and I received a private response from Jim, VE3DDY. He's hit upon a truly original idea - that instead of grounding the "grounded" feedline leg, I put a variable capacitor in series - then I *could* use the cap to "steer" the pattern of the antenna around. I am able to do this experiment, but the most "science" I can muster is cut and try... I don't have a reliable method (or assistants) to take field-strength meter readings, and it's not likely that I can devote sufficient time to it. But it's an experiment others can try as well - and I wanted to share Jim's email with the whole list in case others want to try it. I will report my own results when I have stuff to report...

73, Jim WA2LGN

<snip>

Hi Jim,
Interesting feed on your loop.
Feeding it with one leg of the twinlead grounded makes the twinlead a part of the radiator as current flow must then be a MAXIMUM at the ground point .
Several years ago when I was in the military I was a radio technician. One of the "loops" I serviced was on a vehicle and consisted of a 25 ft whip that was mounted on a truck's rear bumber. The tip of the whip was bent over in a big arc and grounded to the front bumper through a capacitor. The capacitor was in series but in effect the tip was grounded. A large copper braid ground strap went from the front bumper back to the rear bumper where the feed poit was.
I think the idea of grounding the tip through a capacitor was to force the current loop further up the whip. Anyhow the antenna worked gang busters and I used to lay a potent signal down all over the continent (Africa) with only 10 watts on 8 mhz. Later on when I got a 10 watt SSB set I used to keep regular skeds with United Nations forces at Ishmalia on the Suez canal . My location then was in the northern part of Zimbabwe.
I've often thought of building one of those loops.
The reason for this ramble is I wonder what would happen if you put a 150 pf variable capacitor in series with the grounded end of your loop? Possibly by changing the position of current loops on your sky wire you could "steer"
Ideas breed ideas the signal like you do with a beam.

Ideas breed Ideas
Jim VE3DDY

780. For the balanced Tuner crowd

Yahoo group: SkyWires
Date: 2004-09-27 00:44:13 UTC
From: Dr.Ace Ratliff
Topic: 780 Message: 780

If you take two pieces of equal lengths of coax, lay them side by side and solder the shields together at both ends. Then use the two center conductors as though they were twin lead or ladder line. This raises the impedance value of the line to exactly double its original value. If you use two pieces of 50 ohm coax then you have a near perfect match to a full wave loop antenna at the fundamental frequency!

If you move up to harmonic frequencies, then this no longer applies since the 100 - 104 ohms of the coax is only good for the design (lowest useable) frequency. And, your coax is impervious to nearby metal objects such as gutters, aluminum siding etc.

You still need a tuner between your 50 Ohm transmitter and your "shielded twin lead" feed line for multi-band operation.

Ace - WH2T

781. Re: [SkyWires] A feedline experiment...

Yahoo group: SkyWires
Date: 2004-09-27 14:18:48 UTC
From: Scott Erwin
Topic: 779 Message: 781

What Jim, VE3DDY is describing is a Magnetic loop antenna. He also emailed me about the same setup so I started investigating Homebrew Magloop antennas on the net. I found a site that really impressed me! http://www.laud.no/la6nca/loop/ It also started me on a project to build a Magloop for my small, pull behind camper that also gets used as a portable emergency commutation station. My problem was that almost every place that it is set up (parking lot) there is no place to hang wire for dipole antennas and no on the ground radial wires for a vertical as vehicles driving in the parking lot would be driving over them and destroying them. My Magloop element is made from 20 feet of old RG-8 coax that would be only good for throwing in a trash bin due to high loss from age. It is supported with two, one-inch diameter by eight feet long fiberglass rods in an "X" configuration with bungee cord holding the element taught in a square shape. A split stator capacitor is used for tuning the loop and a motor drive is connected to the capacitor for remote control operation. Here I went a little different than most Magloop tuning setups. My capacitor is mounted at the top of the loop where the ends of the coax element are connected to it and the motor drive is at the bottom of the loop with two 3/8-inch electric fence post fiberglass rod between them so there are no wires crossing the loop. This keeps the amount of conductive parts to a minimum inside the circumference of the loop element. Only a 3/8-inch bolt is used to attach the two fiberglass rods together and also acts as a hinge so the rods may be folded for transport. Also there is a 3/8-to-3/8 copper tubing compression fitting used to connect the two 3/8 fiberglass fence rods together as they only come in 4-foot lengths. Testing the Magloop mounted to the top of the camper shows a 1 S-unit loss when compared to a 40-meter dipole at 60 feet. Testing with another 40-meter dipole at 20 feet shows a 1/2 S-unit improvement for the Magloop over the low dipole. On 20 meters the Magloop was as good as a dipole and in one instance was a 1/2 S-unit better than a low mounted dipole. As for comparison to a mobile antenna the difference is astounding! A screwdriver antenna on 40 meters requires a 500-watt amplifier to provide the same received S-unit reading on a distant station when

compared to the Magloop antenna and only 100 watts output! The best thing about this antenna is it can be assembled and put into operation in less than five minutes by one person. I am currently working on an 80-meter version. This one will cover 80,60,40, and 30 meters and will be made from four, ten feet 3/4 inch copper plumbing pipes and can be mounted to the side of the camper for transport. A second Magloop to cover 20 through 10 from a single 10 foot length of 3/4 plumbing copper pipe is also in the works to replace the fold up Magloop and will be more efficient and it will be small enough to transport laying down in the bed of the truck.
--- JimMcSkate@... wrote:

> First, the background: I run a 40m skywire loop fed
> with 300-ohm TV twinlead
> - fine for the 80 or so watts I run on my old
> Kenwood TS-820.
>
> I tune the loop with a manual, non-balanced antenna
> tuner - a Kenwood AT200.
> It does have a "random wire" output, and that's what
> I use to drive ONE LEG
> of the feedline; the other leg is grounded at the
> tuner, OR is left to float
> open. (I tried a ferrite toroidal balun, but it was
> a turkey, so we'll leave
> that one out of this.)
>
> I had posted a simple description of this a week or
> two ago... and I
> received a private response from Jim, VE3DDY. He's
> hit upon a truly original idea -
> that instead of grounding the "grounded" feedline
> leg, I put a variable
> capacitor in series - then I *could* use the cap to
> "steer" the pattern of the
> antenna around. I am able to do this experiment,
> but the most "science" I can
> muster is cut and try... I don't have a reliable
> method (or assistants) to take
> field-strength meter readings, and it's not likely
> that I can devote sufficient
> time to it. But it's an experiment others can try
> as well - and I wanted to
> share Jim's email with the whole list in case others
> want to try it. I will
> report my own results when I have stuff to report...
>

> 73, Jim WA2LGN
>
> <snip>
>
>
> Hi Jim,
> Interesting feed on your loop.
> Feeding it with one leg of the twinlead grounded
> makes the twinlead a part
> of the radiator as current flow must then be a
> MAXIMUM at the ground point .
> Several years ago when I was in the military I was a
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> I think the idea of grounding the tip through a
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> worked gang busters and
> I used to lay a potent signal down all over the
> continent (Africa) with only
> 10 watts on 8 mhz. Later on when I got a 10 watt SSB
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> regular skeds with United Nations forces at Ishmalia
> on the Suez canal . My
> location then was in the northern part of Zimbabwe.
> I've often thought of building one of those loops.
> The reason for this ramble is I wonder what would
> happen if you put a 150 pf
> variable capacitor in series with the grounded end
> of your loop?? Possibly
> by changing the position of current loops on your
> sky wire you could "steer"
> Ideas breed ideas the signal like you do with a
> beam.
> Ideas breed Ideas
> Jim VE3DDY
>
>

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782. Re: A feedline experiment...

Yahoo group: SkyWires
Date: 2004-09-27 23:46:26 UTC
From: bambazonke01
Topic: 779 Message: 782

--- In SkyWires@yahoogroups.com, Scott Erwin <n4zou@y...> wrote:
> What Jim, VE3DDY is describing is a Magnetic loop
> antenna.

I didn't think it was a Magnetic loop. Maybe it is.???
A standard 1/4 wave vertical has distributed capacitance from the whip to ground. The higher up the 1/4 wave you go the lower the capacitance is . The current in a 1/4 wave antenna likewise diminishes as you go up.
Having a capacitor from the tip to ground helps boost the current further up the length for better radiation. If you take it to the extreme then when the tip is fully grounded as a direct short then the antenna becomes voltage fed and our usual tuners won't handle that excursion.
Scott, you were considering a Magnetic Loop on a vehicle and I suggested this as an alternative because I had good results with it.
I was looking at the tuner unit that I "liberated" all that time ago and it consists of a roller coil and a capacitor hoked up in parallel.
The heavy braid under the truck was used to short all the truck parts from front to rear to improve the grounding return. It also stopped a lot of noise.
From what little I know of Magnetic antennas (nothing) I thought they operated in a different way to conventional antennas as they are physically small and have the power coupled into them by a smaller loop. If you are right that this is a variant of a Magnetic antenna then Jim's 40M loop is the biggest Magnetic in the USA.
Jim VE3DDY

783. Re: For the balanced Tuner crowd

Yahoo group: SkyWires
Date: 2004-09-28 00:39:01 UTC
From: Hal
Topic: 780 Message: 783

I did almost the same thing. In my case I was using 450 ohm ladder line straight to the tuner from the antenna and I had a RF problem (It would shut off my computer when I would transmit). So I took a short length of coax cut it in half and soldered the shields together and then soldered one side of the coax centers to the ladder line. Then hooked the other end of the coax to the tuner. Now I have no RF problem in the shack, and it still tunes 40 thru 10m
fine.....
--- In SkyWires@yahoogroups.com, "Dr.Ace Ratliff" <wh2t@b...>
wrote:
> If you take two pieces of equal lengths of coax, lay them side by side and solder the shields together at both ends. Then use the two center conductors as though they were twin lead or ladder line. This raises the impedance value of the line to exactly double its original value. If you use two pieces of 50 ohm coax then you have a near perfect match to a full wave loop antenna at the fundamental frequency!

784. Bazooka

Yahoo group: SkyWires
Date: 2004-09-28 01:09:15 UTC
From: Rtnmi
Topic: 784 Message: 784

Hello Jim and everyone:

Well the antenna experiment was a success. I now have a semi inverted V antenna made from totally RG-6 and it receives *really* good. Just at twilight now for two straight nights I have tuned into the 20/40/80 mtr bands and am receiving all sorts of DX including Ve's and JA's. Pretty nice for someone who doesn't really know what they are doing even if I do say so myself.

Now I am really fired up. With the real-estate that I have I should be able to do some sort of beam antenna. I am on just a little less than an acre of land and not too many trees just a couple in the back yard about 50 feet tall.

Now I am wondering if a loop antenna would be good on 20 mtrs or if I should target only the lower bands with it. Most of the articles I have been reading about them talk about them being on the lower bands.

Tnx fer all the help everyone,
Rev Robert L Autry

785. Re: Bazooka

Yahoo group: SkyWires
Date: 2004-09-28 01:38:29 UTC
From: Hal
Topic: 784 Message: 785

I use a 40 meter horizontal loop on 40 thru 10M. It works great on 20 and 17. I've worked antartica on 20m with it. I've also worked the UK and Germany on 17 with it.. Just this week on all three. Loops cut for a lower freq seem to work better on the higher freqs. They have a lower take off angle.

Hal ACØAX

> Now I am really fired up. With the real-estate that I have I should be able
> to do some sort of beam antenna. I am on just a little less than an acre of
> land and not too many trees just a couple in the back yard about 50 feet
> tall.
>
> Now I am wondering if a loop antenna would be good on 20 mtrs or if I should
> target only the lower bands with it. Most of the articles I have been
> reading about them talk about them being on the lower bands.
>
> Tnx fer all the help everyone,
> Rev Robert L Autry

786. Re: [SkyWires] Re: For the balanced Tuner crowd

Yahoo group: SkyWires
Date: 2004-09-28 03:42:11 UTC
From: Scott Erwin
Topic: 780 Message: 786

I tried the capacitor on one side of the ladder line feed to "steer" my 160-meter loop. There is no effect in trying to shift the gain lobes around with the capacitor by unbalancing the feed line. All I managed to do was change my tuner setting, a lot! The only thing that?s going to work is to switch the feed point to a different point on the loop element. This might help out on 40 meters and above with a 160-meter loop with at least 1/4-wavelength height above ground. I did try this using two relays and did notice a slight difference in received signal strength on some stations but nothing that would warrant the time and work involved. I removed it due to the weight of the relays and feed line between the feed points and the required control box to replace the jerry rigged setup to control it.
--- Hal <kc0bdw@...> wrote:

> I did almost the same thing. In my case I was using
> 450 ohm ladder
> line straight to the tuner from the antenna and I
> had a RF problem
> (It would shut off my computer when I would
> transmit). So I took a
> short length of coax cut it in half and soldered the
> shields
> together and then soldered one side of the coax
> centers to the
> ladder line. Then hooked the other end of the coax
> to the tuner.
> Now I have no RF problem in the shack, and it still
> tunes 40 thru
> 10m
> fine.....
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> --- In SkyWires@yahoogroups.com, "Dr.Ace Ratliff"
> <wh2t@b...>
> wrote:
> > If you take two pieces of equal lengths of coax,
> lay them side by
> side and solder the shields together at both ends.
> Then use the two
> center conductors as though they were twin lead or
> ladder line. This
> raises the impedance value of the line to exactly

> double its
> original value. If you use two pieces of 50 ohm coax
> then you have a
> near perfect match to a full wave loop antenna at
> the fundamental
> frequency!
>
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>

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787. Re: [SkyWires] Re: A feedline experiment...

Yahoo group: SkyWires
Date: 2004-09-28 04:16:31 UTC
From: Scott Erwin
Topic: 779 Message: 787

If you look at a Magnetic loop you find a single turn element with a variable capacitor used to tune the element to the desired frequency. Putting the tip of the whip to ground with that capacitor between them and then using the coax brad to ensure a good conductive path did indeed result in a Magnetic loop antenna. The rubber tires would insulate it from ground very well. The L-network would be just fine for matching the loop impedance to the transceiver. Normal Magloop antennas use a second 1/5-diameter loop of the main loop to couple the RF to it. Also a gamma type feed can be used to tap a point somewhere along the circumference will also provide a 50 ohm match and most builders use these methods to feed it as it's cheap and easy to do. I found that you can also use 450 ohm ladder line by taping two evenly separated points Delta match style along the loop element for the proper match and a 9:1 Balun to transform it to the proper 50 ohm match. This will only work on a single band. The advantage is that the capacitor need not be variable and an antenna tuner is used to provide full single band coverage with a 1:1 to 1 SWR match. Contrary to what some "experts" say about element and capacitor losses in a Magloop where the capacitor is not welded across all the vanes and stator elements and non-soldered joints between the capacitor, element and add on door knob capacitors used to extend the range of the variable capacitor if care is taken with these connections very little loss will result.
--- bambazonke01 <bambazonke@...> wrote:

> --- In SkyWires@yahoogroups.com, Scott Erwin
> <n4zou@y...> wrote:
> > What Jim, VE3DDY is describing is a Magnetic loop
> > antenna.
>
> I didn't think it was a Magnetic loop. Maybe it
> is.???
> A standard 1/4 wave vertical has distributed
> capacitance from the
> whip to ground. The higher up the 1/4 wave you go
> the lower the
> capacitance is . The current in a 1/4 wave antenna
> likewise

> diminishes as you go up.
> Having a capacitor from the tip to ground helps
> boost the current
> further up the length for better radiation. If you
> take it to the
> extreme then when the tip is fully grounded as a
> direct short then
> the antenna becomes voltage fed and our usual tuners
> won't handle
> that excursion.
> Scott, you were considering a Magnetic Loop on a
> vehicle and I
> suggested this as an alternative because I had good
> results with it.
> I was looking at the tuner unit that I "liberated"
> all that time
> ago and it consists of a roller coil and a capacitor
> hoked up in
> parallel.
> The heavy braid under the truck was used to short
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> parts from front to rear to improve the grounding
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> are physically small and have the power coupled into
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> antenna then Jim's 40M loop is the biggest Magnetic
> in the USA.
> Jim VE3DDY
>
>
>

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788. New To The Group

Yahoo group: SkyWires
Date: 2004-09-28 04:54:02 UTC
From: Preston Shute
Topic: 788 Message: 788

Looking to build a new wire HF antenna, hope I can find some good ideas here.

Preston, WD4DDA

789. Re: New To The Group

Yahoo group: SkyWires
Date: 2004-09-28 11:17:47 UTC
From: bambazonke01
Topic: 788 Message: 789

--- In SkyWires@yahoogroups.com, "Preston Shute" <pshute@j...> wrote:
> Looking to build a new wire HF antenna, hope I can find some good
ideas here.
>
> Preston, WD4DDA
Hi Preston,
You are going to need LOTS and LOTS of wire. :-)
Welcome to the group.
Jim VE3DDY

790. Re: For the balanced Tuner crowd

Yahoo group: SkyWires
Date: 2004-09-28 11:26:27 UTC
From: bambazonke01
Topic: 780 Message: 790

Scott, If you try it on 20 Meters where the lobes of the pattern are more and more pronounced, you will see a big difference when you change the feed point. On my suggested experiment, I mentioned to the other Jim that changing a series capacitor would effect the tuner settings. By the time you have the tuner retuned the signal strength of the other station has altered anyway and you can never get an accurate reading. That is why we suggested plotting the loop pattern or at least taking signal strength readings from set positions for comparison.
Jim VE3DDY
--- In SkyWires@yahoogroups.com, Scott Erwin <n4zou@y...> wrote:
> I tried the capacitor on one side of the ladder line
> feed to "steer" my 160-meter loop. There is no effect
> in trying to shift the gain lobes around with the
> capacitor by unbalancing the feed line. All I managed
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> difference in received signal strength on some
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> work involved. I removed it due to the weight of the
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> to control it.
> --- Hal <kc0bdw@h...> wrote:
>
> > I did almost the same thing. In my case I was using
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> > together and then soldered one side of the coax
> > centers to the
> > ladder line. Then hooked the other end of the coax
> > to the tuner.
> > Now I have no RF problem in the shack, and it still
> > tunes 40 thru
> > 10m
> > fine.....

> >
> > --- In SkyWires@yahoogroups.com, "Dr.Ace Ratliff"
> > <wh2t@b...>
> > wrote:
> > > If you take two pieces of equal lengths of coax,
> > lay them side by
> > side and solder the shields together at both ends.
> > Then use the two
> > center conductors as though they were twin lead or
> > ladder line. This
> > raises the impedance value of the line to exactly
> > double its
> > original value. If you use two pieces of 50 ohm coax
> > then you have a
> > near perfect match to a full wave loop antenna at
> > the fundamental
> > frequency!
> >
> >
> >
>
>
>
>
> _____
> Do you Yahoo!?
> Yahoo! Mail - 50x more storage than other providers!
> http://promotions.yahoo.com/new_mail

791. Re: [SkyWires] Re: New To The Group

Yahoo group: SkyWires
Date: 2004-09-28 17:07:19 UTC
From: Scott Erwin
Topic: 788 Message: 791

If you're going to put up a Sky wire click the link
below.
http://ka1fsb.home.att.net/loopcalc.html
This Loop Calculator will tell you how much wire you
need and the area required for it. It's really handy
and fast. So get the tape measure and compass out and
measure for your new Loop Sky Wire antenna!

--- bambazonke01 <bambazonke@...> wrote:

> --- In SkyWires@yahoogroups.com, "Preston Shute"
> <pshute@j...> wrote:
> > Looking to build a new wire HF antenna, hope I can
> find some good
> ideas here.
> >
> > Preston, WD4DDA
> Hi Preston,
> You are going to need LOTS and LOTS of wire. :-)
> Welcome to the group.
> Jim VE3DDY
>
>

Do you Yahoo!?
New and Improved Yahoo! Mail - Send 10MB messages!
http://promotions.yahoo.com/new_mail

793. Re: [SkyWires] http://www.321.cn/singleparentlover/

Yahoo group: SkyWires
Date: 2004-09-29 16:29:20 UTC
From: Dr.Ace Ratliff
Topic: 793 Message: 793

I Deleted this message from the archive.
Ace
----- Original Message -----
From: dating_single_parent
To: SkyWires@yahoogroups.com
Sent: Tuesday, September 28, 2004 9:46 PM
Subject: [SkyWires]

794. Any Minneapolis area hams here?

Yahoo group: SkyWires
Date: 2004-09-30 01:36:41 UTC
From: George
Topic: 794 Message: 794

Hi,

Is there a Minneapolis area ham in this group who can help me put up a wire antenna? I'm 60 and have some back and leg problems that prevent me from being agile enough to get one up high enough for DX work.

I live in the southwest suburb of Bloomington and rent; the yard has some trees but they may not be high enough to get a half-wave or more in height for 20 meter operation. I'm wondering about buying a telescoping mast to help get the center of the antenna as high as possible.

If you're in my area and can help I'd be very grateful. I'll be happy to pay for assistance.

Thanks!

George W0QU

795. Dr. Ace... Question regarding Ground / Horizontal Polorization

Yahoo group: SkyWires
Date: 2004-10-02 10:30:13 UTC
From: kd5srl
Topic: 795 Message: 795

First of all Dr. Ace,

I'm building a 160 meter full wave loop with streight RG/8U coax to the feed point, #12 solid copper insulated wire. I'm running into my shack to a LDG, AT-1000 Auto Tuner.

The lot that the skywire will be installed on is a hillside. I don't own the property on the top so I have no choice but to install the antenna on the hill side with appox. 30 degree slope in a wooded lot... about 1.5 acres to play on. :p

My question here is, if I can get it up to about 40-50 feet, (not going to be a problem) should I angle the loop to match the slope or should I have it at perfectly horizontal? Which will provide better horizontal polarization

Paul - KD5SRL

796. Re: [SkyWires] Dr. Ace... Question regarding Ground / Horizontal Polorization

Yahoo group: SkyWires
Date: 2004-10-02 18:06:44 UTC
From: Dr.Ace Ratliff
Topic: 795 Message: 796

Hi Paul,
Try to have it perfectly horizontal, don't match the slope .
Ace - www.WH2T.com

----- Original Message -----
From: kd5srl
To: SkyWires@yahoogroups.com
Sent: Saturday, October 02, 2004 5:30 AM
Subject: [SkyWires] Dr. Ace... Question regarding Ground / Horizontal Polorization

First of all Dr. Ace,

I'm building a 160 meter full wave loop with streight RG/8U coax to
the feed point, #12 solid copper insulated wire. I'm running into my
shack to a LDG, AT-1000 Auto Tuner.

The lot that the skywire will be installed on is a hillside. I don't
own the property on the top so I have no choice but to install the
antenna on the hill side with appox. 30 degree slope in a wooded
lot... about 1.5 acres to play on. :p

My question here is, if I can get it up to about 40-50 feet, (not
going to be a problem) should I angle the loop to match the slope or
should I have it at perfectly horizontal? Which will provide better
horizontal polarization

Paul - KD5SRL

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799. I just put up a 160M loop

Yahoo group: SkyWires
Date: 2004-10-04 16:38:22 UTC
From: krmason2
Topic: 799 Message: 799

Hello all,

All I can say is WOW, it is sure fun to run a big wire antenna.

My setup would not work for most people. I live in California, and I'm on a hilside. The slope of the hill is twords the east. My antenna is not very tall, only about 27 to 30 feet off the ground and using 530 feet of wire and 450 ohm feed line. There are no trees on my property, it is a horse pasture. I slapped up some EMT pipe to my fence and the way I went.

I'm guessing that the slope is helping my antenna not be a cloud burner.

I checked out my new setup this weekend by handing out some points for the California QSO Party. I was shocked to be running 100 watts and I was the first to get through in a pileup to South Dakota on 20M. 20M seemed to be real hot as Europe and Japan was heard. Almost all the time I could hear both sides of any QSO. I could of worked all states this weekend, but yard work was needed.

The antenna tunes on 160M through 10M. I tried it on 6M but could not find the tuners seet spot.

Boy, am I going to have fun this winter....

Ken
KC6TEU

801. Re: [SkyWires] Important Letter for skywires Members

Yahoo group: SkyWires
Date: 2004-10-05 12:35:08 UTC
From: Dave
Topic: 801 Message: 801

knwajulq wrote:

>
> Refinancing your home is never easier and more profitable.
> Our staff works exclusively to save you the most money as possible on

Someone has snuck in the shack! Wonder if they'll loan me enough for a new rig?

803. Re: I just put up a 160M loop

Yahoo group: SkyWires
Date: 2004-10-05 16:23:28 UTC
From: Bryan
Topic: 799 Message: 803

Hi Ken,

Yes you will enjoy the Loop. I am finding my loop is stronger than anyother antenna that is on my property. its great in so many ways. yes sometimes you fish out a signal as it picks up from many directions at once. but.. the other upside is your not constantly turning a beam. I find when im in a NET the beam is more hassle than worth.

hope you enjoy your loop.. id be curious how it goes for you as time goes by. take care Bryan Kc8hps

--- In SkyWires@yahoogroups.com, "krmason2" <ken.r.mason@i...> wrote:
>
> Hello all,
>
> All I can say is WOW, it is sure fun to run a big wire antenna.
>
> My setup would not work for most people. I live in California, and
> I'm on a hilside. The slope of the hill is twords the east. My
> antenna is not very tall, only about 27 to 30 feet off the ground
> and using 530 feet of wire and 450 ohm feed line. There are no
trees
> on my property, it is a horse pasture. I slapped up some EMT pipe
to
> my fence and the way I went.
>
>
> I'm guessing that the slope is helping my antenna not be a cloud
> burner.
>
> I checked out my new setup this weekend by handing out some points
> for the California QSO Party. I was shocked to be running 100
watts
> and I was the first to get through in a pileup to South Dakota on
> 20M. 20M seemed to be real hot as Europe and Japan was heard.
Almost
> all the time I could hear both sides of any QSO. I could of worked
> all states this weekend, but yard work was needed.
>
> The antenna tunes on 160M through 10M. I tried it on 6M but could
> not find the tuners seet spot.
>
> Boy, am I going to have fun this winter....
>
> Ken

> KC6TEU

805. Grounding?

Yahoo group: SkyWires
Date: 2004-10-06 15:22:12 UTC
From: keith currie
Topic: 805 Message: 805

How good is the a ground on watter pipes in your house if you have a well and plastic lines going to the well? I have heare different thoughts on this, off corse the lines are full of water which is a great conductor. All replys welcom.
K.C.

806. Re: [SkyWires] Grounding?

Yahoo group: SkyWires
Date: 2004-10-06 16:41:46 UTC
From: Dave
Topic: 805 Message: 806

keith currie wrote:

> How good is the a ground on watter pipes in your house if you have a
> well and plastic lines going to the well? I have heare different
> thoughts on this, off corse the lines are full of water which is a great
> conductor. All replys welcom.
> K.C.

Keith,

The short answer is 'not very good'. Water is a conductor of sorts but no where near copper pipe.

Dave
VE1VQ

807. Re: [SkyWires] Grounding?

Yahoo group: SkyWires
Date: 2004-10-06 20:52:55 UTC
From: Dr.Ace Ratliff
Topic: 805 Message: 807

Hi Keith,
I agree with Dave's answer.

"The short answer is 'not very good'.
Water is a conductor of sorts but no where
near copper pipe."
Dave
VE1VQ

Pure "distilled" water is an insulator, salt water is a decent conductor.
I suspect the water in your well will be a very poor conductor.
Ace - www.WH2T.com

----- Original Message -----
From: keith currie
To: SkyWires@yahoogroups.com
Sent: Wednesday, October 06, 2004 10:22 AM
Subject: [SkyWires] Grounding?

How good is the a ground on watter pipes in your house if you have a
well and plastic lines going to the well? I have heare different
thoughts on this, off corse the lines are full of water which is a great
conductor. All replys welcom.
K.C.

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808. Re: [SkyWires] Grounding?

Yahoo group: SkyWires
Date: 2004-10-06 22:00:24 UTC
From: Jim Dunstan
Topic: 805 Message: 808

At 08:22 AM 10/6/04 -0700, you wrote:
>How good is the a ground on watter pipes in your house if you have a
>well and plastic lines going to the well? I have heare different
>thoughts on this, off corse the lines are full of water which is a great
>conductor. All replys welcom.
> K.C.

I assume you have copper pipes connecting taps, hot water tank etc ... This complex will be the ground .... the plastic pipe (with or without water) will be nil.

Jim Dunstan
Thunder Bay, ON

809. Re: [SkyWires] Grounding?

Yahoo group: SkyWires
Date: 2004-10-07 00:00:50 UTC
From: keith currie
Topic: 805 Message: 809

I use real ground rods not water pipes but just got in to the topic with a friend and wondered what every one thought. Like him and I there are different ideas on it. Thanks to all.
----- Original Message -----
From: Jim Dunstan
To: SkyWires@yahoogroups.com
Sent: Wednesday, October 06, 2004 3:00 PM
Subject: Re: [SkyWires] Grounding?

At 08:22 AM 10/6/04 -0700, you wrote:

How good is the a ground on watter pipes in your house if you have a
well and plastic lines going to the well? I have heare different
thoughts on this, off corse the lines are full of water which is a great
conductor. All replys welcom.
K.C.

I assume you have copper pipes connecting taps, hot water tank etc ... This complex will be the ground .... the plastic pipe (with or without water) will be nil.

Jim Dunstan
Thunder Bay, ON
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810. Re: [SkyWires] Grounding?

Yahoo group: SkyWires
Date: 2004-10-07 00:29:25 UTC
From: Dave
Topic: 805 Message: 810

Hello again Keith,

If all of the pipe connection to the well is plastic then there is no benefit to using it as a ground, either DC or RF. If some of it is copper, the part in the house, then there may be some use as an RF ground depending on the resonance of the copper.

Connecting to the water system may lead to RF burns from touching the taps. Always a pleasant experience. Even worse if the xyl is the one gaining the experience!

I apologize if my previous remark came across as flippant.

Dave
VE1VQ

811. Emails Destroyed

Yahoo group: SkyWires
Date: 2004-10-07 01:08:33 UTC
From: Rtnmi
Topic: 811 Message: 811
Attachments: 1 described; binary payloads are missing from this source WARC

BlankHello everyone:

Some of you in the group have sent me some *very* important emails. I regret to say that just in the last two days my hard drive crashed and all of your emails were lost. If you could be so kind as to resend them to me I would be most grateful.

Thank you,
Robert L Autry
Little Salty Court
Springtown, TX 76082
817-523-4182
817-629-3852

812. My Hard Drive Crashed

Yahoo group: SkyWires
Date: 2004-10-07 01:08:36 UTC
From: Rtnmi
Topic: 812 Message: 812
Attachments: 1 described; binary payloads are missing from this source WARC

BlankHello Fellow Hams:

Please help.

Some of you had sent me some emails answering questions and so forth not too long ago.

Since then my hard drive has crashed, I lost all of my favorites and all of my email along with about 7 gigs in a document folder over 3 years worth of work.

Your emails were very helpful and I would like to be able to recover them so that I can read them off line and save them for future reference. I am needing you to please resend them if you would. I am trying to recover all of the information that was lost in the crash.

Thank you,
Robert L Autry
Little Salty Court
Springtown, TX 76082
817-523-4182
817-629-3852

813. Re: [SkyWires] Emails Destroyed

Yahoo group: SkyWires
Date: 2004-10-07 01:22:48 UTC
From: David Shrum
Topic: 811 Message: 813

If they weren't sent to you privately, you can check the archive of the Yahoo groups, they should have a lot if not all that was sent to the groups that you are a member of.

Dave N8PU

On Wed, 2004-10-06 at 21:08, Rtnmi wrote:
> Hello everyone:
>
> Some of you in the group have sent me some *very* important emails. I
> regret to say that just in the last two days my hard drive crashed and
> all of your emails were lost. If you could be so kind as to resend
> them to me I would be most grateful.
>
> Thank you,
> Robert L Autry
> Little Salty Court
> Springtown, TX 76082
> 817-523-4182
> 817-629-3852
>
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> SkyWires-unsubscribe@yahoogroups.com
>
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> Service.
>

814. Re: [SkyWires] My Hard Drive Crashed

Yahoo group: SkyWires
Date: 2004-10-07 02:21:03 UTC
From: Dr.Ace Ratliff
Topic: 812 Message: 814
Attachments: 1 described; binary payloads are missing from this source WARC

BlankIf they weren't sent to you privately, you can check the archive of the Yahoo groups, they should have a lot if not all that was sent to the groups that you are a member of.
Here's a link for the SkyWires Group.

http://groups.yahoo.com/group/SkyWires/messages

Ace - www.WH2T.com

----- Original Message -----
From: Rtnmi
To: Digitalradio@Yahoogroups. Com ; Dxlab@Yahoogroups. Com ; Dx-List@Yahoogroups. Com ; Dxsoft@Yahoogroups. Com ; Hamlogger@Yahoogroups. Com ; Mixw@Yahoogroups. Com ; MMTTY@yahoogroups. com ; Amateur_Radio@Yahoogroups. Com ; Amateur-repairs@yahoogroups. com ; Amateurswap@Yahoogroups. Com ; Amatuerradioswapfest@Yahoogroups. Com ; HamRadioFleaMarket at Yahoo (HamRadioFleaMarket at Yahoo) ; HamRadioSale@yahoogroups. com ; HamRadioTradingPost (HamRadioTradingPost) ; HamSale Yahoo ; HamStuff at Yahoo (HamStuff at Yahoo) ; IC703@yahoogroups. com ; Ic706@Yahoogroups. Com ; IC746@yahoogroups. com ; Ic756pro2@Yahoogroups. Com ; ICOM706@yahoogroups. com ; Icom-All@Yahoogroups. Com ; Icomclassic@Yahoogroups. Com ; ICOMR3@yahoogroups. com ; Icomr75@Yahoogroups. Com ; IcomRadio@yahoogroups. com ; Motorola-User@yahoogroups. com ; Radiomart@Yahoogroups. Com ; Radio-Swapshop@Yahoogroups. Com ; Radiotrade@Yahoogroups. Com ; Antenna@Yahoogroups. Com ; Antenna-Design@Yahoogroups. Com ; HamRadioAntenna@yahoogroups. com ; Hex-Beam@Yahoogroups. Com ; SkyWires@yahoogroups. com
Sent: Wednesday, October 06, 2004 8:08 PM
Subject: [SkyWires] My Hard Drive Crashed

Hello Fellow Hams:

Please help.

Some of you had sent me some emails answering questions and so forth not too long ago.

Since then my hard drive has crashed, I lost all of my favorites and all of my email along with about 7 gigs in a document folder over 3 years worth of work.

Your emails were very helpful and I would like to be able to recover them so that I can read them off line and save them for future reference. I am needing you to please resend them if you would. I am trying to recover all of the information that was lost in the crash.

Thank you,
Robert L Autry
Little Salty Court
Springtown, TX 76082
817-523-4182

817-629-3852

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815. RE: [SkyWires] My Hard Drive Crashed

Yahoo group: SkyWires
Date: 2004-10-07 03:36:42 UTC
From: Rtnmi
Topic: 812 Message: 815
Attachments: 1 described; binary payloads are missing from this source WARC

BlankThank you Dr. Ratcliff:

Yes the ones I am referring to were sent privately and *very* much appreciated.

This is such a wonderful group as a result of this group and a little bit of study of my own based on the resources from many of the answers that I received I now have two *very* efficient antennas.

One for 40 Mtrs and one for 80 Mtrs. The worst case of which covers over 3/4 of the band, the other misses only a few kHz to being a perfect 1.5 swr on my ic-730 at 100W. The Bazooka is a *really* nice antenna and *so* quite.

We have been enjoying listening to the local stations up north on CW and RTTY and others mostly out of VE land.

Now my son believe it or not has found out in the woods where someone before we moved here left a spool of RG-6 cable. About 850 feet from what I can tell. The spool was 1000 feet originally. We are *really* excited about the prospects of this find. :0)

Now we am *seriously* looking into the type of antennas that you fellows are always going on about. they sound *really* neat and *very* efficient. At least I think I should have enough wire to do something with now. We hope we do.

At any rate, you can bet that we will be listening intently to *every* post from now on.

Thank you again,
Robert L Autry
Little Salty Court
Springtown, TX 76082
817-523-4182
817-629-3852

-----Original Message-----
From: Dr.Ace Ratliff [mailto:wh2t@...]
Sent: Wednesday, October 06, 2004 9:21 PM
To: SkyWires@yahoogroups.com
Subject: Re: [SkyWires] My Hard Drive Crashed

If they weren't sent to you privately, you can check the archive of the Yahoo groups, they should have a lot if not all that was sent to the groups that you are a member of.
Here's a link for the SkyWires Group.

http://groups.yahoo.com/group/SkyWires/messages

Ace - www.WH2T.com

----- Original Message -----
From: Rtnmi
To: Digitalradio@Yahoogroups. Com ; Dxlab@Yahoogroups. Com ;
Dx-List@Yahoogroups. Com ; Dxsoft@Yahoogroups. Com ; Hamlogger@Yahoogroups.
Com ; Mixw@Yahoogroups. Com ; MMTTY@yahoogroups. com ;
Amateur_Radio@Yahoogroups. Com ; Amateur-repairs@yahoogroups. com ;
Amateurswap@Yahoogroups. Com ; Amatuerradioswapfest@Yahoogroups. Com ;
HamRadioFleaMarket at Yahoo (HamRadioFleaMarket at Yahoo) ;
HamRadioSale@yahoogroups. com ; HamRadioTradingPost (HamRadioTradingPost) ;
HamSale Yahoo ; HamStuff at Yahoo (HamStuff at Yahoo) ; IC703@yahoogroups.
com ; Ic706@Yahoogroups. Com ; IC746@yahoogroups. com ;
Ic756pro2@Yahoogroups. Com ; ICOM706@yahoogroups. com ;
Icom-All@Yahoogroups. Com ; Icomclassic@Yahoogroups. Com ;
ICOMR3@yahoogroups. com ; Icomr75@Yahoogroups. Com ; IcomRadio@yahoogroups.
com ; Motorola-User@yahoogroups. com ; Radiomart@Yahoogroups. Com ;
Radio-Swapshop@Yahoogroups. Com ; Radiotrade@Yahoogroups. Com ;
Antenna@Yahoogroups. Com ; Antenna-Design@Yahoogroups. Com ;
HamRadioAntenna@yahoogroups. com ; Hex-Beam@Yahoogroups. Com ;
SkyWires@yahoogroups. com
Sent: Wednesday, October 06, 2004 8:08 PM
Subject: [SkyWires] My Hard Drive Crashed

Hello Fellow Hams:

Please help.

Some of you had sent me some emails answering questions and so forth not
too long ago.

Since then my hard drive has crashed, I lost all of my favorites and all
of my email along with about 7 gigs in a document folder over 3 years worth
of work.

Your emails were very helpful and I would like to be able to recover
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816. Grounding My Reply

Yahoo group: SkyWires
Date: 2004-10-08 18:27:21 UTC
From: Bryan
Topic: 816 Message: 816

I have just read the posts on Grounding.

If one is forced to use water pipes I would think it prudent to use to ground clamps and a #4 solid copper wire to span the plastic pipe and make a true connection to ground at the pump/well Head.

As for myself I use a 6ft copper ground rod driven under a very moist eve of the house.. (one where rain collects often) I have put some salts in a channel around the stake to enrich the ground effect. some people like regular Salt.. I personally like magnesium Sulfate << Epsom Salts.. less corrosive and I get basically the same results.

I plan however to enhance my grounding situation next spring by going to copper
pipe burried about one foot below ground exstending from the existing ground rod in several directions.. this should allow for a better absorbtion of energy..(more surface/ soil contact) should I take a direct hit with
lightning.

The one problem with a standard ground rod, especially in a sandy soil base, is the lack of surface area for absorbtion is dissipation of
energy. often in sandy soil lightning will ground through a standard ground rod as it normally would. but since it is below ground you dont see the
effects. what in essense takes place is, the energy turns the sand/silica to GLASS due to instant INTENSE heat of the strike. thus Insulating the ground rod further from
the soil.
What has happend here is the energy could not absorb into the ground fast
enough, over heated the soil around the rod.
this can be
dangerous as far as the next lightning strike is concerned. just a thought to
keep in mind as you further plan your Grounding needs.

Bryan Kc8hps

817. Re: [SkyWires] Grounding My Reply

Yahoo group: SkyWires
Date: 2004-10-08 19:05:57 UTC
From: Dave
Topic: 816 Message: 817

Because the ground (as in dirt) around here is very rocky, electricians are allowed to use the plate style of grounding in lieu of rods. I remember a radio installation job some years back that called for ground rods at every base station and repeater location. We had to drive them in at a very shallow angle.

Dave
VE1VQ

818. Re: [SkyWires] Grounding My Reply

Yahoo group: SkyWires
Date: 2004-10-08 21:10:07 UTC
From: keith currie
Topic: 816 Message: 818

Most all electrictions here use plates now.
I have a 10' rod straight down, and an other 10'laying flat joined to it, and down about 2' like you where it is wet.
I see as a kid a direct hit from lightning and I can tell you it dont matter what you use for a ground if that happens. I will never forget our barn with all the lightning roods and grounds it had, and the lightning just riped it apart so I for one try to unhook every thing in storms.
I think grounding in storms just helps with the static charge if the storm is close at all.
I had it dammage a tunned from a strike about 12 miles away two years ago.
Just my two cents Canadina so maybe only 1.8 cents?/
Keith
----- Original Message -----
From: Dave
To: SkyWires@yahoogroups.com
Sent: Friday, October 08, 2004 12:05 PM
Subject: Re: [SkyWires] Grounding My Reply

Because the ground (as in dirt) around here is very rocky, electricians are allowed to use the plate style of grounding in lieu of rods. I remember a radio installation job some years back that called for ground rods at every base station and repeater location. We had to drive them in at a very shallow angle.

Dave
VE1VQ

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819. Re: [SkyWires] Grounding My Reply

Yahoo group: SkyWires
Date: 2004-10-08 22:27:37 UTC
From: Dave
Topic: 816 Message: 819

keith currie wrote:

> Most all electrictions here use plates now.
> I have a 10' rod straight down, and an other 10'laying flat joined to
> it, and down about 2' like you where it is wet.
> I see as a kid a direct hit from lightning and I can tell you it dont
> matter what you use for a ground if that happens. I will never forget
> our barn with all the lightning roods and grounds it had, and the
> lightning just riped it apart so I for one try to unhook every thing in
> storms.
> I think grounding in storms just helps with the static charge if the
> storm is close at all.
> I had it dammage a tunned from a strike about 12 miles away two years ago.
> Just my two cents Canadina so maybe only 1.8 cents?/
> Keith
>

When not in use I keep the 1000' loop disconnected from all equipment and a 500 ohm resistor across the terminals where it enters the shack. I used to use a clip lead across the terminals until I saw the clip lead swing toward a nearby outlet cover (metal) just prior to thunder claps during a storm a few years back.

Dave
VE1VQ in southern Nova Scotia where our $ was over $0.79 yesterday.

820. Re: Grounding My Reply

Yahoo group: SkyWires
Date: 2004-10-08 22:56:59 UTC
From: bambazonke01
Topic: 816 Message: 820

I install my ground rods in the following way. The ground rods are made from 10 ft lengths of copper water pipe. I couple a water hosepipe to the end and use the water jet to drill a hole in the ground. The copper pipe slides into the ground as it follows the water jet. I'm fortunate that my ground area is sandy and the copper pipe doesn't hit too many stones as it slides into the ground.
For better ground, "drill" 2 length of pipe in opposite directions into the ground so that the ends are close together for connecting them together.
Jim VE3DDY

821. Re: [SkyWires] Digest Number 253

Yahoo group: SkyWires
Date: 2004-10-08 23:28:50 UTC
From: Bryan Burrma
Topic: 821 Message: 821

HI Dave,

Yes you are very correct. I have considered plate grounding,, mainly because I dont like digging that well.. If your able to do that I would think it would /could be superior to a ground rod, especially for current load handling.

73's Bryan

SkyWires@yahoogroups.com wrote:

There are 2 messages in this issue.

Topics in this digest:

1. Grounding My Reply
From: "Bryan"
2. Re: Grounding My Reply
From: Dave

Message: 1
Date: Fri, 08 Oct 2004 18:27:21 -0000
From: "Bryan"
Subject: Grounding My Reply

I have just read the posts on Grounding.

If one is forced to use water pipes I would think it prudent to use to ground clamps and a #4 solid copper wire to span the plastic pipe and make a true connection to ground at the pump/well Head.

As for myself I use a 6ft copper ground rod driven under a very moist eve of the house.. (one where rain collects often) I have put some salts in a channel around the stake to enrich the ground effect. some people like regular Salt.. I personally like magnesium Sulfate << Epsom Salts.. less corrosive and I get basically the same results.

I plan however to enhance my grounding situation next spring by going to copper
pipe burried about one foot below ground exstending from the existing ground rod in several directions.. this should allow for a better absorbtion of energy..(more surface/ soil contact) should I take a direct hit with
lightning.

The one problem with a standard ground rod, especially in a sandy soil base, is the lack of surface area for absorbtion is dissipation of
energy. often in sandy soil lightning will ground through a standard ground rod as it normally would. but since it is below ground you dont see the
effects. what in essense takes place is, the energy turns the sand/silica to GLASS due to instant INTENSE heat of the strike. thus Insulating the ground rod further from
the soil.
What has happend here is the energy could not absorb into the ground fast
enough, over heated the soil around the rod.
this can be
dangerous as far as the next lightning strike is concerned. just a thought to
keep in mind as you further plan your Grounding needs.

Bryan Kc8hps

Message: 2
Date: Fri, 08 Oct 2004 16:05:57 -0300
From: Dave
Subject: Re: Grounding My Reply

Because the ground (as in dirt) around here is very rocky, electricians are allowed to use the plate style of grounding in lieu of rods. I remember a radio installation job some years back that called for ground rods at every base station and repeater location. We had to drive them in at a very shallow angle.

Dave
VE1VQ

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823. The Yaesu FRG-7700 users group

Yahoo group: SkyWires
Date: 2004-10-17 17:49:52 UTC
From: Almir
Topic: 823 Message: 823

My name is Alvin Mirabal and my call is WP4IDK.

Besides enjoying ham radio and playing with a 40 Meter sky loop antenna I am also a SW listener and for this part of the radio-hobby I am an avid user of the Yaesu FRG-7700 general coverage receiver.

I have found that there was not a users group in the web to support this fine receiver and I decided then to create one.

Its location is:

http://groups.yahoo.com/group/FRG-7700/

Inside this group YOU can be find a collection of links related to the YAESU FRG-7700 receiver like repairs, modifications, parts and also photos of the many accessories available.

Also it contains messages by its members on all aspects on the use and enjoyment of the FRG-7700 and of course a medium to communicate with other FRG-7700 enthusiasts around the world.

Thank you very much.

Alvin

824. 160 meter Skywire Resonant Frequency

Yahoo group: SkyWires
Date: 2004-10-17 21:04:33 UTC
From: wmfreddycurtis
Topic: 824 Message: 824

I have a 160 meter skywire fed with 450 Ohm Ladder Line. It is horizontal and approximately 40 feet tall in most places. My problem is when connected to the Antenna Analyzer it shows the lowest SWR reading of 1.5:1 at 11.447 Mhz. Nowhere near the 1005/1.9 = 531 ft. That is the approximate length of the wire. Resonance should be at around 1.9 Mhz. It does touch a pine tree at the "half-way" point and the ladder line is fed at one "end" of the loop. It is pulled up the tower via a pulley and is approximately 3 feet from the tower. I have used The Wireman lightning arrestor but readings stay the same without it connected. Any help or ideas about this problem would be appreciated.

Freddy Curtis
KC4GUG
Smithvile, TN

825. Re: [SkyWires] 160 meter Skywire Resonant Frequency

Yahoo group: SkyWires
Date: 2004-10-17 23:41:35 UTC
From: keith currie
Topic: 824 Message: 825

How long is your 450 ohm ladder line freddy?
Made big changes in mine when I cut it.
Keith
----- Original Message -----
From: wmfreddycurtis
To: SkyWires@yahoogroups.com
Sent: Sunday, October 17, 2004 2:04 PM
Subject: [SkyWires] 160 meter Skywire Resonant Frequency

I have a 160 meter skywire fed with 450 Ohm Ladder Line. It is
horizontal and approximately 40 feet tall in most places. My problem
is when connected to the Antenna Analyzer it shows the lowest SWR
reading of 1.5:1 at 11.447 Mhz. Nowhere near the 1005/1.9 = 531 ft.
That is the approximate length of the wire. Resonance should be at
around 1.9 Mhz. It does touch a pine tree at the "half-way" point and
the ladder line is fed at one "end" of the loop. It is pulled up the
tower via a pulley and is approximately 3 feet from the tower. I have
used The Wireman lightning arrestor but readings stay the same without
it connected. Any help or ideas about this problem would be appreciated.

Freddy Curtis
KC4GUG
Smithvile, TN

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826. Re: 160 meter Skywire Resonant Frequency

Yahoo group: SkyWires
Date: 2004-10-17 23:40:27 UTC
From: Dr.Ace
Topic: 824 Message: 826

Hi Freddy,
I agree with Keith's answer.
Here's some info you might find handy.

To avoid problems matching the antenna with high impedance open wire line, keep the feedline around these lengths.

[The WORST POSSIBLE line lengths are shown in brackets]

160 meter antenna 35-60, 170-195 or 210-235 feet
[Avoid 130, 260 ft]

Good Luck and 73, Ace - www.WH2T.com

--- In SkyWires@yahoogroups.com, "wmfreddycurtis" <wmfreddycurtis@y...> wrote:
>
> I have a 160 meter skywire fed with 450 Ohm Ladder Line. It is
> horizontal and approximately 40 feet tall in most places. My problem
> is when connected to the Antenna Analyzer it shows the lowest SWR
> reading of 1.5:1 at 11.447 Mhz. Nowhere near the 1005/1.9 = 531 ft.
> That is the approximate length of the wire. Resonance should be at
> around 1.9 Mhz. It does touch a pine tree at the "half-way" point and
> the ladder line is fed at one "end" of the loop. It is pulled up the
> tower via a pulley and is approximately 3 feet from the tower. I have
> used The Wireman lightning arrestor but readings stay the same without
> it connected. Any help or ideas about this problem would be appreciated.
>
> Freddy Curtis
> KC4GUG
> Smithvile, TN

827. Re: [SkyWires] 160 meter Skywire Resonant Frequency

Yahoo group: SkyWires
Date: 2004-10-18 00:53:20 UTC
From: Scott Erwin
Topic: 824 Message: 827

Everyone is correct, most likely you have found a high or low impedance point along the line where you have your antenna tuner or SWR analyzer attached. Simply cut a few feet or add a few feet at a time until you get a feed line length where the impedance will be reasonable at the point where it attaches to your 4:1 Balun in your antenna tuner or your external mounted Balun. I have seen feed line tuners built that work fine and are simple and cheap. Simply take some feed line, ladder line or coax, and make a loop of 2 feet where it can be placed in and out of the feed line at will with a switch. Then make the same setup with 4 feet. Double the feed line lengths with this setup until you have the final feed line length at 32 feet. One or more of these lengths of feed line added will provide a low impedance point where it will connect to your tuner. This also works with the transceivers with internal automatic antenna tuners with a limited range of 3:1 SWR or less. Adding one or more of the lengths of feed line will provide a SWR or 3:1 or less. Use caution with the selection of feed line as with any antenna and feed line system. Remember; you're not tuning the antenna! You're just finding a place on the feed line where the impedance is reasonable. On other parts of the feed line a very high impedance and corresponding high voltage can exceed the rating of the feed line and burn out that or other sections of feed line.

--- wmfreddycurtis <wmfreddycurtis@...> wrote:

> I have a 160 meter skywire fed with 450 Ohm Ladder
> Line. It is
> horizontal and approximately 40 feet tall in most
> places. My problem
> is when connected to the Antenna Analyzer it shows
> the lowest SWR
> reading of 1.5:1 at 11.447 Mhz. Nowhere near the
> 1005/1.9 = 531 ft.
> That is the approximate length of the wire.
> Resonance should be at
> around 1.9 Mhz. It does touch a pine tree at the
> "half-way" point and
> the ladder line is fed at one "end" of the loop. It
> is pulled up the

> tower via a pulley and is approximately 3 feet from
> the tower. I have
> used The Wireman lightning arrestor but readings
> stay the same without
> it connected. Any help or ideas about this problem
> would be appreciated.
>
> Freddy Curtis
> KC4GUG
> Smithvile, TN
>
>
>
>
>

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828. Re: 160 meter Skywire Resonant Frequency

Yahoo group: SkyWires
Date: 2004-10-18 01:25:10 UTC
From: wmfreddycurtis
Topic: 824 Message: 828

Thanks for all the replies! When inspecting the feedline I noticed a respectful amount of rust on the DPST Knife switch, I bypassed the switch and 1.75:1 SWR on the analyzer at 1.9 Mhz!!! By the way the feedline length is about 45 feet from tuner to antenna. Thanks again for all the help!!!

Freddy
KC4GUG

--- In SkyWires@yahoogroups.com, "wmfreddycurtis" <wmfreddycurtis@y...> wrote:
>
> I have a 160 meter skywire fed with 450 Ohm Ladder Line. It is
> horizontal and approximately 40 feet tall in most places. My problem
> is when connected to the Antenna Analyzer it shows the lowest SWR
> reading of 1.5:1 at 11.447 Mhz. Nowhere near the 1005/1.9 = 531 ft.
> That is the approximate length of the wire. Resonance should be at
> around 1.9 Mhz. It does touch a pine tree at the "half-way" point and
> the ladder line is fed at one "end" of the loop. It is pulled up the
> tower via a pulley and is approximately 3 feet from the tower. I have
> used The Wireman lightning arrestor but readings stay the same without
> it connected. Any help or ideas about this problem would be appreciated.
>
> Freddy Curtis
> KC4GUG
> Smithvile, TN

829. 160M Loop is to long ??

Yahoo group: SkyWires
Date: 2004-10-18 13:00:42 UTC
From: ve6drw
Topic: 829 Message: 829

I recently put up a horizontal "long" loop for HF work. The shape is a triangle where each leg is 175 ft long (total loop length is 525 ft) at a height of 40 ft. I feed it with about 50 ft of 450 ohm line to a 4 TO 1 BALUN then into a LDG Z100 tuner and finally RG 213 into the shack. Each corner of the loop is supported by rope about 6 ft. from a Radio Shack steel tower

The antenna works great on all bands except on 160M, where it won't match. Taking the tuner OFF LINE and measuring the SWR and impedance at the BALUN with an Autek RF1, it shows the lowest SWR (3.8 to 1) down at about 1.650 Mhz (8 to 1 at 1.900 Mhz). Thus, it appears the loop is too long.

Before I start trimming (think twice, cut once ...), any suggestions or input? Are the corners too close to the towers?

Thanks

Dave
VE6DRW

830. Re: [SkyWires] 160M Loop is to long ??

Yahoo group: SkyWires
Date: 2004-10-18 15:31:17 UTC
From: keith currie
Topic: 829 Message: 830
Attachments: 2 described; binary payloads are missing from this source WARC

I would think at 8-1 a tunner would tune it. I know mine is higher then
that in some placess but it tunes ok on all bands.
Keith

ve6drw wrote:

>
> I recently put up a horizontal "long" loop for HF work. The shape is
> a triangle where each leg is 175 ft long (total loop length is 525
> ft) at a height of 40 ft. I feed it with about 50 ft of 450 ohm line
> to a 4 TO 1 BALUN then into a LDG Z100 tuner and finally RG 213 into
> the shack. Each corner of the loop is supported by rope about 6 ft.
> from a Radio Shack steel tower
>
> The antenna works great on all bands except on 160M, where it won't
> match. Taking the tuner OFF LINE and measuring the SWR and impedance
> at the BALUN with an Autek RF1, it shows the lowest SWR (3.8 to 1)
> down at about 1.650 Mhz (8 to 1 at 1.900 Mhz). Thus, it appears the
> loop is too long.
>
> Before I start trimming (think twice, cut once ...), any suggestions
> or input? Are the corners too close to the towers?
>
> Thanks
>
> Dave
> VE6DRW
>
>
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831. Re: [SkyWires] 160M Loop is to long ??

Yahoo group: SkyWires
Date: 2004-10-18 18:18:58 UTC
From: Dr.Ace Ratliff
Topic: 829 Message: 831

Hi Dave,
I would try trimming 40 ft off and test it again.
Is the loop made of insulated wire?
Ace - www.WH2T.com
----- Original Message -----
From: ve6drw
To: SkyWires@yahoogroups.com
Sent: Monday, October 18, 2004 8:00 AM
Subject: [SkyWires] 160M Loop is to long ??

I recently put up a horizontal "long" loop for HF work. The shape is
a triangle where each leg is 175 ft long (total loop length is 525
ft) at a height of 40 ft. I feed it with about 50 ft of 450 ohm line
to a 4 TO 1 BALUN then into a LDG Z100 tuner and finally RG 213 into
the shack. Each corner of the loop is supported by rope about 6 ft.
from a Radio Shack steel tower

The antenna works great on all bands except on 160M, where it won't
match. Taking the tuner OFF LINE and measuring the SWR and impedance
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loop is too long.

Before I start trimming (think twice, cut once ...), any suggestions
or input? Are the corners too close to the towers?

Thanks

Dave
VE6DRW

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832. Re: [SkyWires] 160M Loop is to long ??

Yahoo group: SkyWires
Date: 2004-10-18 23:48:37 UTC
From: Scott Erwin
Topic: 829 Message: 832

When you have a mismatch between the antenna and the feed line you will never get a true reading of the antenna SWR at that point of the feed line. First of all you should not try to trim or change the length of a Loop Sky wire antenna. What you have found is a point on your feed line that that has an impedance your antenna tuner (really a feed line tuner) cant tune out. The solution is to simply find a point on the feed line where the tuner can match the impedance that the tuner can match for your transceiver. Just remember that the feed point impedance of a loop is about 100 ohms and your using 450-ohm ladder line. The actual antenna impedance will be repeated every 1/2 wavelength along that feed line for that frequency. After you trim the feed line a few feet simply check the match on 160 meters and see what you have. You will also need to check the other bands as well as the impedance will change on the other bands as well. You may also add feed line length and do the same thing. You can also make a simple line tuner from the same type of feed line your using now. Simply take some feed
line, ladder line or coax, and make a loop of 2 feet where it can be placed in and out of the feed line at will with a switch. Then make the same setup with 4 feet. Double the feed line lengths with this setup until you have the final feed line length at 32 feet. One or more of these lengths of feed line added would provide a low impedance point where it will connect to your tuner. This also works with the transceivers with internal automatic antenna tuners with a limited range of 3:1 SWR or less. Adding one or more of the lengths of feed line will provide a SWR or 3:1 or less. Use caution with the selection of feed line as with any antenna and feed line system. Remember; you're not tuning the antenna! You're just finding a place on the feed line where the impedance is reasonable. On other parts of the feed line a very high impedance and corresponding high voltage can exceed the rating of the feed line and burn out that or other sections of feed line.

--- "Dr.Ace Ratliff" <wh2t@...> wrote:

> Hi Dave,
> I would try trimming 40 ft off and test it again.
> Is the loop made of insulated wire?
> Ace - www.WH2T.com
> ----- Original Message -----
> From: ve6drw
> To: SkyWires@yahoogroups.com
> Sent: Monday, October 18, 2004 8:00 AM
> Subject: [SkyWires] 160M Loop is to long ??
>
>
>
> I recently put up a horizontal "long" loop for HF
> work. The shape is
> a triangle where each leg is 175 ft long (total
> loop length is 525
> ft) at a height of 40 ft. I feed it with about 50
> ft of 450 ohm line
> to a 4 TO 1 BALUN then into a LDG Z100 tuner and
> finally RG 213 into
> the shack. Each corner of the loop is supported by
> rope about 6 ft.
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> The antenna works great on all bands except on
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> match. Taking the tuner OFF LINE and measuring the
> SWR and impedance
> at the BALUN with an Autek RF1, it shows the
> lowest SWR (3.8 to 1)
> down at about 1.650 Mhz (8 to 1 at 1.900 Mhz).
> Thus, it appears the
> loop is too long.
>
> Before I start trimming (think twice, cut once
> ...), any suggestions
> or input? Are the corners too close to the towers?
>
> Thanks
>
> Dave
> VE6DRW
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833. Re: 160M Loop is to long ??

Yahoo group: SkyWires
Date: 2004-10-19 09:43:54 UTC
From: Eric
Topic: 829 Message: 833

Hello to Dave and All,
Why not just bend the wire back on itself to
cancel out that section instead of taking the scissors to it. Eric
G3SXQ Somerset UK--- In SkyWires@yahoogroups.com, Scott Erwin
<n4zou@y...> wrote:
> When you have a mismatch between the antenna and the
> feed line you will never get a true reading of the
> antenna SWR at that point of the feed line. First of
> all you should not try to trim or change the length of
> a Loop Sky wire antenna. What you have found is a
> point on your feed line that that has an impedance
> your antenna tuner (really a feed line tuner) cant
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> the feed line where the tuner can match the impedance
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> remember that the feed point impedance of a loop is
> about 100 ohms and your using 450-ohm ladder line. The
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> After you trim the feed line a few feet simply check
> the match on 160 meters and see what you have. You
> will also need to check the other bands as well as the
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> may also add feed line length and do the same thing.
> You can also make a simple line tuner from the same
> type of feed line your using now. Simply take some
> feed
> line, ladder line or coax, and make a loop of 2 feet
> where it can be placed in and out of the feed line at
> will with a switch. Then make the same setup with 4
> feet. Double the feed line lengths with this setup
> until you have the final feed line length at 32 feet.
> One or more of these lengths of feed line added would
> provide a low impedance point where it will connect to
> your tuner. This also works with the transceivers with
> internal automatic antenna tuners with a limited range
> of 3:1 SWR or less. Adding one or more of the lengths
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> caution with the selection of feed line as with any
> antenna and feed line system. Remember; you're not
> tuning the antenna! You're just finding a place on the
> feed line where the impedance is reasonable. On other
> parts of the feed line a very high impedance and
> corresponding high voltage can exceed the rating of
> the feed line and burn out that or other sections of

> feed line.
>
> --- "Dr.Ace Ratliff" <wh2t@b...> wrote:
>
> > Hi Dave,
> > I would try trimming 40 ft off and test it again.
> > Is the loop made of insulated wire?
> > Ace - www.WH2T.com
> > ----- Original Message -----
> > From: ve6drw
> > To: SkyWires@yahoogroups.com
> > Sent: Monday, October 18, 2004 8:00 AM
> > Subject: [SkyWires] 160M Loop is to long ??
> > >
> > >
> > >
> > > I recently put up a horizontal "long" loop for HF
> > > work. The shape is
> > > a triangle where each leg is 175 ft long (total
> > > loop length is 525
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> > > ft of 450 ohm line
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> > > finally RG 213 into
> > > the shack. Each corner of the loop is supported by
> > > rope about 6 ft.
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> > > The antenna works great on all bands except on
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> > >
> > > Thanks
> > >
> > > Dave
> > > VE6DRW
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835. Slinky

Yahoo group: SkyWires
Date: 2004-10-19 17:12:49 UTC
From: Jerome
Topic: 835 Message: 835

Did anybody know there is 57 feet of coiled steel in a slinky? Shortened dipole, connect 3 in a loop,One in a loop? Any ideas Jerry

_____
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836. Re: [SkyWires] Slinky

Yahoo group: SkyWires
Date: 2004-10-19 17:22:46 UTC
From: kb0fhp@comcast.net
Topic: 835 Message: 836

In ON4AU book "Low Band Dxing", he describes a beverage antenna composed of several Slinkys attached together. The coil tends to shorten the length of the beverage.

---------- Original message ----------
Did anybody know there is 57 feet of coiled steel in a slinky? Shortened dipole, connect 3 in a loop,
One in a loop? Any ideas Jerry

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837. Re: [SkyWires] Re: 160M Loop is to long ??

Yahoo group: SkyWires
Date: 2004-10-19 18:23:08 UTC
From: JimMcSkate@aol.com
Topic: 829 Message: 837

Try an unconventional feedline configuration: drive one half of the window line, and let the other half float at the tuner - this is how I get 160 to work. You could also try to drive a shorted feedline as a vertical from your tuner's random out, but this may put a lot of RF in your shack.

I am not sure how the 4:1 inline balun will affect these configurations... but try everything before you cut anything!!
73,
Jim
WA2LGN

<snip>
Before I start trimming (think twice, cut once ...), any suggestions
or input? Are the corners too close to the towers?

Thanks

Dave
VE6DRW

838. "Stacked" Two Turn SkyWave Loop Antennas - What's the Spacing between Turns ?

Yahoo group: SkyWires
Date: 2004-10-21 00:20:37 UTC
From: R H F
Topic: 838 Message: 838

BJ,

When considering "Stacked" Two Turn (2X) SkyWave Loop Antennas:
[Try this amount of 'Spacing' between the Two Loops.]

160 Meter Band = Two Turns of 254.5 Feet with 62 Inch Spacing
- Only 63.6 Feet per Side with a 2X Total Length of 529 Feet.

80 Meter Band = Two Turns of 134 Feet with 31 Inch Spacing
- Only 33.5 Feet per Side with a 2X Total Length of 268 Feet.

40 Meter Band = Two Turns of 70 Feet with 17 Inch Spacing
- Only 17.5 Feet per Side with a 2X Total Length of 141 Feet.

FWIW: 'Rightly or Wrongly' I used the Formula for the
Spacing of the "T2FD Antenna" to come up with this amount
of spacing between the Turns since it seems to be Frequency
'dependent' with respect to the Lowest Operating Frequency.

The Formulas for Calculating T2FD Dimensions are as follows.
http://www.hard-core-dx.com/nordicdx/antenna/wire/t2design.html
#2. The spacing between radiating wires ("B") is equal
to 3000 divided by the lowest desired operating frequency
(in kHz) and then multiplied by 3.28. The answer is in feet.

Any Rebuttal ?
Or does anyone have a Formula for a 'better' "Spacing" Number ?

iane ~ RHF
.
.
= = = bpnj*ns*n@y*h**.c*m (bpnjensen) wrote in message
= = = news:<37af7e1c.0410191035.34d18561@...>...
>
> Hi, folks - I have seen a good of info on Full Wave loops,
> and as I have mentioned before, I intend to get one going
> here soon.
>
> I live on a small lot, and a full wave for lower HF freqs
> can have a pretty lengthy perimeter, several hundred feet
> - which I do not have room without lots of wiggling and
> gerrymandering.
>
> However, as I understand it, small loop antennas
> (like Wellbrooks, homebrews for MW and so forth) have

> the loops folded on top of themselves, allowing a lot
> of antenna in just a tiny fraction of the area, with
> multiple small loops making up the length.
>
> Could this be done for a horizontal full wave, maybe
> just a single doubling of the loop, so that you could
> stick, say, 120 meters' worth of wire on just a 60-meter
> perimeter? Is there any reason to believe that this
> would not be a good compromise, or that any special
> matching might need to be accomplished? Would the
> wires need to be a minimum or constant space apart?
>
> If there are any websites with this info, which so
> far I haven't been able to find, I would appreciate
> some pointers toward them.
>
> Many thanks,
> Bruce Jensen
.

839. Re: 160M Loop is to long ??

Yahoo group: SkyWires
Date: 2004-10-21 00:32:37 UTC
From: R H F
Topic: 829 Message: 839

DAVE,

1. Trim or Lengthen the Ladder Line.
[Not the Antenna Wire Element.]

2. Look at eliminating the Ladder Line. Place the Balun
up at the Wire Antenna Element and use Coax Cable Feed-Line
all the way from the Antenna to the Shack.

~ RHF
.
.
= = = In SkyWires@yahoogroups.com,
= = = "ve6drw" <dwds@t...> wrote:
>
> I recently put up a horizontal "long" loop for HF work. The shape
is
> a triangle where each leg is 175 ft long (total loop length is 525
> ft) at a height of 40 ft. I feed it with about 50 ft of 450 ohm
line
> to a 4 TO 1 BALUN then into a LDG Z100 tuner and finally RG 213
into
> the shack. Each corner of the loop is supported by rope about 6
ft.
> from a Radio Shack steel tower
>
> The antenna works great on all bands except on 160M, where it
won't
> match. Taking the tuner OFF LINE and measuring the SWR and
impedance
> at the BALUN with an Autek RF1, it shows the lowest SWR (3.8 to 1)
> down at about 1.650 Mhz (8 to 1 at 1.900 Mhz). Thus, it appears
the
> loop is too long.
>
> Before I start trimming (think twice, cut once ...), any
suggestions
> or input? Are the corners too close to the towers?
>
> Thanks
>
> Dave
> VE6DRW

840. Re: 160M Loop is to long ??

Yahoo group: SkyWires
Date: 2004-10-21 05:27:51 UTC
From: Dr.Ace
Topic: 829 Message: 840

Hi Dave,
I see that you have had several replies to your posting.

Let me explain my position and why I asked you -
"Is the loop made of insulated wire?"
Which by the way you have not answered that question.
And also why "I would try trimming 40 ft off and test it again".

The resonant frequency is related to the electrical length of the antenna. This is usually the physical length of the wire multiplied by the ratio of the speed of wave propagation in the wire a.k.a. velocity factor. The only practical way to measure the resonant frequency of an antenna is to use a Grid DIP METER or antenna analyzer at the antenna, Not at the end of the feed line.

An antenna that is resonant at its lowest Frequency/Band is a good thing contrary to what several members of this group appears to me to think, based on their postings!

Scott Said "The actual antenna impedance will be repeated every 1/2 wavelength along that feed line for that frequency."

The only time this will occur is when the antenna impedance and the feed line impedance are equal at that frequency.

When the antenna impedance is greater than the feed line's characteristic impedance, a maximum impedance point will appear every half wavelength from the antenna, and a minimum impedance point occurs at every quarter wavelength point between. When the antenna impedance is less than the feed line's characteristic impedance, the maximum and minimum points swap places.

Sometimes a difficult-to-match situation can be helped by changing the line length. Doing so changes the impedance seen by the transceiver or antenna tuner (and hopefully gets it within a range the tuner can handle) But it does not change the SWR on the line Or the antenna's resonant frequency.

As the old saying goes "There is more than one way to skin a cat."

IF the loop made of insulated wire, I would not hesitate to trim it and test it again".

BTW , I didn't arrive at the cut off 40 ft educated guess by pulling a number out of a hat. I used an equation.

40ft is only 7.6% of 525ft . IF my calculations are correct, And IF the loop is made of insulated wire.

IF the design Freq was about 1.9 Mhz and the loop is resonant at
about 1.650 Mhz .

Then I believe the insulated wire (If insulated wire was used) must
have a velocity factor of about 92.4%

Ace - www.WH2T.com

--- In SkyWires@yahoogroups.com, "ve6drw" <dwds@t...> wrote:
>
> I recently put up a horizontal "long" loop for HF work. The shape
is
> a triangle where each leg is 175 ft long (total loop length is 525
> ft) at a height of 40 ft. I feed it with about 50 ft of 450 ohm
line
> to a 4 TO 1 BALUN then into a LDG Z100 tuner and finally RG 213
into
> the shack. Each corner of the loop is supported by rope about 6 ft.
> from a Radio Shack steel tower
>
> The antenna works great on all bands except on 160M, where it won't
> match. Taking the tuner OFF LINE and measuring the SWR and
impedance
> at the BALUN with an Autek RF1, it shows the lowest SWR (3.8 to 1)
> down at about 1.650 Mhz (8 to 1 at 1.900 Mhz). Thus, it appears the
> loop is too long.
>
> Before I start trimming (think twice, cut once ...), any
suggestions
> or input? Are the corners too close to the towers?
>
> Thanks
>
> Dave
> VE6DRW

841. Re: [SkyWires] "Stacked" Two Turn SkyWave Loop Antennas - What's the Spacing between Turns ?

Yahoo group: SkyWires
Date: 2004-10-21 18:01:40 UTC
From: Scott Erwin
Topic: 838 Message: 841

Trying to use formulas for a loop as compared to a T2FD folded dipole will not work. These are different types of antennas. The T2FD uses a resistor opposite the feed point that simply absorbs the reflected RF power that would be sent back down the feed line to the transmitter. The T2FD folded dipole formulas are used to try and limit the loss when transmitting in the amateur HF bands. If you make the resistor the same value as the feed line impedance then the resistor will keep that impedance match the same on resonant frequencies the antenna is used on. Trying to use these formulas with a multi-turn loop and no resistor to suck up the reflected power plus a multi-turn loop will not radiate as well as a single turn loop as the second wire has a shielding effect on both from the induced magnetic field. Loops produce a magnet field when transmitting and receive the magnet-induced field for reception, which is why a loop antenna is somewhat immune to non-magnet signal.
--- R H F <rhf-mail@...> wrote:

>
> BJ,
>
> When considering "Stacked" Two Turn (2X) SkyWave
> Loop Antennas:
> [Try this amount of 'Spacing' between the Two
> Loops.]
>
> 160 Meter Band = Two Turns of 254.5 Feet with 62
> Inch Spacing
> - Only 63.6 Feet per Side with a 2X Total Length of
> 529 Feet.
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> 80 Meter Band = Two Turns of 134 Feet with 31 Inch
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> - Only 33.5 Feet per Side with a 2X Total Length of
> 268 Feet.
>
> 40 Meter Band = Two Turns of 70 Feet with 17 Inch
> Spacing
> - Only 17.5 Feet per Side with a 2X Total Length of
> 141 Feet.
>

> FWIW: 'Rightly or Wrongly' I used the Formula for
> the
> Spacing of the "T2FD Antenna" to come up with this
> amount
> of spacing between the Turns since it seems to be
> Frequency
> 'dependent' with respect to the Lowest Operating
> Frequency.
>
> The Formulas for Calculating T2FD Dimensions are as
> follows.
>
http://www.hard-core-dx.com/nordicdx/antenna/wire/t2design.html
>
> #2. The spacing between radiating wires ("B") is
> equal
> to 3000 divided by the lowest desired operating
> frequency
> (in kHz) and then multiplied by 3.28. The answer is
> in feet.
>
> Any Rebuttal ?
> Or does anyone have a Formula for a 'better'
> "Spacing" Number ?
>
> iane ~ RHF
> .
> .
> = = = bpnj*ns*n@y*h**.c*m (bpnjensen) wrote in
> message
> = = =
>
news:<37af7e1c.0410191035.34d18561@...>...
>
> >
> > Hi, folks - I have seen a good of info on Full
> Wave loops,
> > and as I have mentioned before, I intend to get
> one going
> > here soon.
> >
> > I live on a small lot, and a full wave for lower
> HF freqs
> > can have a pretty lengthy perimeter, several
> hundred feet
> > - which I do not have room without lots of
> wiggling and
> > gerrymandering.
> >
> > However, as I understand it, small loop antennas

> > (like Wellbrooks, homebrews for MW and so forth)
> have
> > the loops folded on top of themselves, allowing a
> lot
> > of antenna in just a tiny fraction of the area,
> with
> > multiple small loops making up the length.
> >
> > Could this be done for a horizontal full wave,
> maybe
> > just a single doubling of the loop, so that you
> could
> > stick, say, 120 meters' worth of wire on just a
> 60-meter
> > perimeter? Is there any reason to believe that
> this
> > would not be a good compromise, or that any
> special
> > matching might need to be accomplished? Would the
>
> > wires need to be a minimum or constant space
> apart?
> >
> > If there are any websites with this info, which so
>
> > far I haven't been able to find, I would
> appreciate
> > some pointers toward them.
> >
> > Many thanks,
> > Bruce Jensen
> .
>
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>
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>

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842. Re: 160M Loop is to long ??

Yahoo group: SkyWires
Date: 2004-10-22 01:23:40 UTC
From: ve6drw
Topic: 829 Message: 842

Thanks for all who replied. I am still gathering suggestions and will be working on the antenna this weekend (pending good weather - no snow).

To answer the one question posed so far:
The antenna wire is insulated: it is #13 stranded polyethylene coated copperweld wire.

I will start by altering the length of the ladder feedline as it is the easiest to accomplish. I'll remove the tuner so that it does not affect my readings and will try measurements using my Autek RF1 with and without the balun.

I'll post the results next week.

Regards

Dave
VE6DRW

843. Hf Bands

Yahoo group: SkyWires
Date: 2004-10-22 02:33:14 UTC
From: Rtnmi
Topic: 843 Message: 843

Can anyone tell me if there are any nets on HF where antennas are discussed on a consistent periodic basis?

I hve plenty of wire and room and I am looking to make a *large* loop for 15 mtrs (the bigger the loop the more gain right?) and would like to learn more by just listening to some ot's talk about their antennas in order to get some ideas.

Tnx,
Lee
KE5CTY

844. Re: [SkyWires] Hf Bands

Yahoo group: SkyWires
Date: 2004-10-22 02:42:18 UTC
From: desmoface@aol.com
Topic: 843 Message: 844

In a message dated 10/21/2004 10:38:57 PM Eastern Daylight Time,
rtnmi@... writes:
Can anyone tell me if there are any nets on HF where antennas are discussed
on a consistent periodic basis?

I hve plenty of wire and room and I am looking to make a *large* loop for 15
mtrs (the bigger the loop the more gain right?) and would like to learn more
by just listening to some ot's talk about their antennas in order to get
some ideas.

Tnx,
Lee
KE5CTY
How bout a skywires net??

Steve
kb8viv

845. MAA FILE

Yahoo group: SkyWires
Date: 2004-10-22 04:58:25 UTC
From: Rtnmi
Topic: 845 Message: 845

Can someone please tell me what an MAA file is? Also FYI to the group owner, I went to the files and links site just now and there appears to be some links out of date.

Tnx,
Lee
KE5CTY

847. More Wavelength

Yahoo group: SkyWires
Date: 2004-10-22 15:28:52 UTC
From: Rtnmi
Topic: 847 Message: 847

Can someone tell me how to figure the length of a single turn loop tuned for 28.250 Mhz that would be at least double a standard full wave length? I am looking to get some of the gain talked abt in the discussion on harmonics of the full wave.

Would I use the formula given for a full wave 1005/f (1005/28.250) and just double the number I get or is it that simple? And would the impedance at the feed point still be around 102ohms?

Tnx,
Lee
KE5CTY

848. Re: [SkyWires] MAA FILE

Yahoo group: SkyWires
Date: 2004-10-22 17:15:24 UTC
From: kb0fhp@comcast.net
Topic: 845 Message: 848

an *.maa file, is the file extension used by the FREE antenna modeling program MMANA. It is an excellent program made even better by being freeware. It can be found easily doing a google search on MMANA

--------------- Original message ---------------
Can someone please tell me what an MAA file is? Also FYI to the group owner,
I went to the files and links site just now and there appears to be some
links out of date.

Tnx,
Lee
KE5CTY

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849. Re: [SkyWires] More Wavelength

Yahoo group: SkyWires
Date: 2004-10-22 19:37:52 UTC
From: Scott Erwin
Topic: 847 Message: 849

You would want to use an odd wavelength like 3, 5, or 7 times the standard wavelength formula. Simply doubling would give an even wavelength and the loop would have self-canceling and loss of radiated power as would other even wavelengths. At 10-meters the element size is not very large. You might want to simply build a Halo antenna for 10 meters with a rotor under it, as it would have a gain lobe off the end with the gap opposite the feed point. A 40-meter sky wire loop is not very large and has gain on 10-meters. Any loop size with an odd wavelength will produce around a 100 ohm feed point impedance. A 75-ohm coax cable cut for 1/4-wavelength times the velocity factor attached to the feed point of the antenna will give you very close to a 50-ohm match. Any length of 50-ohm coax may be connected to the 75 ohm coax for the run to your transceiver.

--- Rtnmi <rtnmi@...> wrote:

> Can someone tell me how to figure the length of a
> single turn loop tuned for
> 28.250 Mhz that would be at least double a standard
> full wave length? I am
> looking to get some of the gain talked abt in the
> discussion on harmonics of
> the full wave.
>
> Would I use the formula given for a full wave 1005/f
> (1005/28.250) and just
> double the number I get or is it that simple? And
> would the impedance at the
> feed point still be around 102ohms?
>
> Tnx,
> Lee
> KE5CTY
>
>
>

_____
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850. RE: [SkyWires] More Wavelength

Yahoo group: SkyWires
Date: 2004-10-22 20:47:07 UTC
From: Rtnmi
Topic: 847 Message: 850

Tnx Scott:

I read abt that in the materials but I only hve 75 ohm coax and allot of it. So I am wondering if I use the 75 ohm coax as the loop and connect 75 ohm coax to it if I will have a match like I do with my double bazooka on 80 mtrs.

Also would the same theories apply for 15 mtrs. I may do 15 mtrs instead of 10 at this point.

Tnx,
Lee
KE5CTY

-----Original Message-----
From: Scott Erwin [mailto:n4zou@...]
Sent: Friday, October 22, 2004 2:38 PM
To: SkyWires@yahoogroups.com
Subject: Re: [SkyWires] More Wavelength

You would want to use an odd wavelength like 3, 5, or 7 times the standard wavelength formula. Simply doubling would give an even wavelength and the loop would have self-canceling and loss of radiated power as would other even wavelengths. At 10-meters the element size is not very large. You might want to simply build a Halo antenna for 10 meters with a rotor under it, as it would have a gain lobe off the end with the gap opposite the feed point. A 40-meter sky wire loop is not very large and has gain on 10-meters. Any loop size with an odd wavelength will produce around a 100 ohm feed point impedance. A 75-ohm coax cable cut for 1/4-wavelength times the velocity factor attached to the feed point of the antenna will give you very close to a 50-ohm match. Any length of 50-ohm coax may be connected to the 75 ohm coax for the run to your transceiver.
--- Rtnmi <rtnmi@...> wrote:

> Can someone tell me how to figure the length of a
> single turn loop tuned for
> 28.250 Mhz that would be at least double a standard
> full wave length? I am
> looking to get some of the gain talked abt in the
> discussion on harmonics of
> the full wave.

>
> Would I use the formula given for a full wave 1005/f
> (1005/28.250) and just
> double the number I get or is it that simple? And
> would the impedance at the
> feed point still be around 102ohms?
>
> Tnx,
> Lee
> KE5CTY
>
>
>

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851. Multi-turn loops

Yahoo group: SkyWires
Date: 2004-10-23 00:04:11 UTC
From: Mel Vance
Topic: 851 Message: 851

Has anyone done any real experimenting with multi-turn loops?

I live on a city lot about 120' by 75' and am restricted as to where support poles may be placed
and hight above ground (45feet with 10 feet 'grace'...55feet total). With trees, can get away an
80 meter loop of about 40' by 75-80'.

I have looked at the 'star loop' configuration (should be able to do that with some slight changes) and have wondered about a 'star loop' and standard 'lazy quad' hybrid. Was thinking
about something like:

Start at the center to corner 1

corner 1 to corner 2

corner 2 to corner 3

corner 3 to center

center to corner 2

continue as above, 'overlapping' corners to complete to loop.

Due to visual impact, was thinking of spacing of about 1-2 foot...an attempt to keep max. hight
and keep the neighbors from complaining any worse than they are now.

Anyone who has tried a multi-turn loop with any info on best spacing to retain good multi-band
operations, let me know what you have found.

Mel
N7OKL

852. Re: [SkyWires] Multi-turn loops

Yahoo group: SkyWires
Date: 2004-10-23 00:35:48 UTC
From: Dr.Ace Ratliff
Topic: 851 Message: 852

Hi Mel,
I haven't tried a multi-turn loop.
But here's some info that you might find helpful.

http://www.bloomington.in.us/~wh2t/Super%20Loop%20Antenna.htm

Ace - WH2T

----- Original Message -----
From: Mel Vance
To: SkyWires@yahoogroups.com
Sent: Friday, October 22, 2004 7:04 PM
Subject: [SkyWires] Multi-turn loops

Has anyone done any real experimenting with multi-turn loops?

I live on a city lot about 120' by 75' and am restricted as to where support poles may be placed
and hight above ground (45feet with 10 feet 'grace'...55feet total). With trees, can get away an
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I have looked at the 'star loop' configuration (should be able to do that with some slight changes) and have wondered about a 'star loop' and standard 'lazy quad' hybrid. Was thinking
about something like:

Start at the center to corner 1

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continue as above, 'overlapping' corners to complete to loop.

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Mel
N7OKL

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854. Re: Multi-turn loops

Yahoo group: SkyWires
Date: 2004-10-23 21:41:56 UTC
From: Eric
Topic: 851 Message: 854

Hello All,
There's an interesting read to be had at www.sgcworld.com
under 'Stealth Kit'. Eric G3SXQ Somerset UK--- In
SkyWires@yahoogroups.com, "Dr.Ace Ratliff" <wh2t@b...> wrote:
> Hi Mel,
> I haven't tried a multi-turn loop.
> But here's some info that you might find helpful.
>
> http://www.bloomington.in.us/~wh2t/Super%20Loop%20Antenna.htm
>
> Ace - WH2T
>
>
> ----- Original Message -----
> From: Mel Vance
> To: SkyWires@yahoogroups.com
> Sent: Friday, October 22, 2004 7:04 PM
> Subject: [SkyWires] Multi-turn loops
>
>
> Has anyone done any real experimenting with multi-turn loops?
>
> I live on a city lot about 120' by 75' and am restricted as to
where support poles may be placed
> and hight above ground (45feet with 10 feet 'grace'...55feet
total). With trees, can get away an
> 80 meter loop of about 40' by 75-80'.
>
> I have looked at the 'star loop' configuration (should be able
to do that with some slight
> changes) and have wondered about a 'star loop' and
standard 'lazy quad' hybrid. Was thinking
> about something like:
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> Start at the center to corner 1
>
> corner 1 to corner 2
>
> corner 2 to corner 3
>
> corner 3 to center
>
> center to corner 2
>
> continue as above, 'overlapping' corners to complete to loop.

>
> Due to visual impact, was thinking of spacing of about 1-2
foot...an attempt to keep max. hight
> and keep the neighbors from complaining any worse than they are
now.
>
> Anyone who has tried a multi-turn loop with any info on best
spacing to retain good multi-band
> operations, let me know what you have found.
>
> Mel
> N7OKL
>
>
>
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855. antenna tuners?? what kind would be best and or cheapest?

Yahoo group: SkyWires
Date: 2004-10-24 12:20:58 UTC
From: khmenway
Topic: 855 Message: 855

hi i i have an ldg auto tuner but i would like to try an open wire snake antenna . what would be an antenna tuner to use cheap is good
73's
kb9wac

856. RE: [SkyWires] antenna tuners?? what kind would be best and or cheapest?

Yahoo group: SkyWires
Date: 2004-10-24 17:41:28 UTC
From: D. Scott MacKenzie
Topic: 855 Message: 856

I would make one from old capacitors and coils.....
-----Original Message-----
From: khmenway [mailto:khmenway@...]
Sent: Sunday, October 24, 2004 8:21 AM
To: SkyWires@yahoogroups.com
Subject: [SkyWires] antenna tuners?? what kind would be best and or cheapest?

hi i i have an ldg auto tuner but i would like to try an open wire snake antenna . what would be an antenna tuner to use cheap is good
73's
kb9wac

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857. 160M loop too Long??

Yahoo group: SkyWires
Date: 2004-10-24 22:00:42 UTC
From: Dave White
Topic: 857 Message: 857

Some of you have been following my exploits of a loop 160M loop that would not tune correctly on 160M -- it seemed to be too long. The reflector provided many good suggestions.

I was able to do a bit of work on it this weekend. Here is what I found:

Weather prevented me from changing the antenna wire length. However, I have discovered that the loop IS too long by about 30 to 40 ft to achieve resonance at 1.9 Mhz. It appears the overall length needs to be about 490 ft. It has to do with the velocity factor of insulated wire vs. bare wire. Thanks to WH2T and VE3BFM for this information.

I was able to alter the feedline length and it amazed me what a small difference a few feet made. By lengthening the feedline by 2 ft. I was able to tune the antenna on 160M. I tried it with two tuners and the results were repeatable. This altered the tuning on the other bands, and it knocked 17M out of the tuner's range. By lengthening the feedline one extra ft (3 ft change total), I was able to get all bands to fall within the range of the tuner. For fun, I tried changing the length of the coax at the radio AND the length of the ladder line before the balun. Both gave the same results.

The antenna performs VERY well (it helps that the bands were very good this weekend). I compared it with my Cushcraft A4S beam at 5p ft. on 20, 15 and 10M, and in most cases the beam was about 1 to 2 S units better. Of course it varied depending on the distance of the contact (DX being comparatively better on the beam). Many "stateside" signals were identical between the two.

Most likely the weather will prevent changing the antenna length until next spring, so I intend to evaluate the antenna this winter "as is", and change the length next year. Some may argue that changing the antenna length will not make any performance difference and they may be right, but it is an experiment that won't cost anything, so why not ...

Regards

Dave
VE6DRW

858. slightly OT...plastic trees to disguise poles

Yahoo group: SkyWires
Date: 2004-10-25 06:02:35 UTC
From: Mel Vance
Topic: 858 Message: 858

Anyone tried using plastic artificial christmas trees to disguise support poles and/or towers?

Have lots of fir, pine, and hemlocks around here. Thought that if the plastic would hold up to
the UV rays, might be able to appease some of those who are not hams around here.....

Mel
N7OKL

859. RMT 108 bc 5 to 1000 mhz

Yahoo group: SkyWires
Date: 2004-10-31 17:18:05 UTC
From: desmoines_2000
Topic: 859 Message: 859

i would like to know if a rmt 108 5-1000 mhz (used as a cable tv tap/splitter) can be used as a filter amp for radio rec any help would be apriciated. (cant find any other info on part on internet)

860. Re: [SkyWires] RMT 108 bc 5 to 1000 mhz

Yahoo group: SkyWires
Date: 2004-10-31 23:23:04 UTC
From: Dr.Ace Ratliff
Topic: 859 Message: 860

Hi,
I believe it can, but I am not sure.
I was able to find very limited info on the web, NO technical specifications.
It's Manufactured by Regal and has 8 ports.

Coast CATV Supply sells them.
Their Item ID is RGL-T-RMT-108 .
They have a "Contact Us" link on their page:

http://www.coastcatvsupply.com/

They also have a BBS Forum at:

http://www.coastcatvsupply.com/bbs/

I hope this info is of some help.

Ace - WH2T

----- Original Message -----
From: desmoines_2000
To: SkyWires@yahoogroups.com
Sent: Sunday, October 31, 2004 12:18 PM
Subject: [SkyWires] RMT 108 bc 5 to 1000 mhz

i would like to know if a rmt 108 5-1000 mhz (used as a cable tv
tap/splitter) can be used as a filter amp for radio rec any help
would be apriciated. (cant find any other info on part on internet)

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861. Hi,

Yahoo group: SkyWires
Date: 2004-11-01 06:55:55 UTC
From: (no author)
Topic: 859 Message: 861

Hi,
Its really true now the outgoing calls2any country is free .You just
klik this link below

and sign-up .Hurry up before this offer ends.Just chek it out .
http://www.tinyurl.com/65arq

{signup-go2free minutes□get free calling card immediately in just 5
MINUTS}

http://www.tinyurl.com/65arq

bye

862. Re: RMT 108 bc 5 to 1000 mhz

Yahoo group: SkyWires
Date: 2004-11-02 12:09:07 UTC
From: desmoines_2000
Topic: 859 Message: 862

--- In SkyWires@yahoogroups.com, "Dr.Ace Ratliff" <wh2t@b...> wrote:
Thank you ifound the web pages and buletin board i will let you know
if i find anything usefull about these
> I believe it can, but I am not sure.
> I was able to find very limited info on the web, NO technical
specifications.
> It's Manufactured by Regal and has 8 ports.
>
> Coast CATV Supply sells them.
> Their Item ID is RGL-T-RMT-108 .
> They have a "Contact Us" link on their page:
>
> http://www.coastcatvsupply.com/
>
> They also have a BBS Forum at:
>
> http://www.coastcatvsupply.com/bbs/
>
> I hope this info is of some help.
>
> Ace - WH2T
>
> ----- Original Message -----
> From: desmoines_2000
> To: SkyWires@yahoogroups.com
> Sent: Sunday, October 31, 2004 12:18 PM
> Subject: [SkyWires] RMT 108 bc 5 to 1000 mhz
>
>
>
> i would like to know if a rmt 108 5-1000 mhz (used as a cable tv
> tap/splitter) can be used as a filter amp for radio rec any help
> would be apriciated. (cant find any other info on part on
internet)
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863. SKYWIRE Antenna Mast Kits

Yahoo group: SkyWires
Date: 2004-11-03 18:40:42 UTC
From: KI4BUN / AAV4TP
Topic: 863 Message: 863

MARS, ARES, RACES - 48' Portable Antenna Mast Kits

I have several NEW IN BAG, UNUSED, UNOPENED, milspec kits containing 12- 4 foot fiberglass sections, stakes, batten spreaders, and batten nuts, all in a heavy duty rubberized carry bag. These are perfect for portable emergency operating or can be used for a permenant mast.

I have an 80 mete skyloop set up using 4 kits and it works GREAT!

A more detailed description is at:

http://cgi.ebay.com/ws/eBayISAPI.dll?
ViewItem&rd=1&item=5729448053&ssPageName=STRK:MESE:IT

If interested please e-mail me at: pcsutton@...

Thank you.

KI4BUN / AAV4TP

864. Re: [SkyWires] Digest Number 266

Yahoo group: SkyWires
Date: 2004-11-04 13:59:06 UTC
From: charles allison
Topic: 864 Message: 864

```
----- Original Message -----
From: <SkyWires@yahoogroups.com>
To: <SkyWires@yahoogroups.com>
Sent: Wednesday, November 03, 2004 11:01 PM
Subject: [SkyWires] Digest Number 266

>
>
> There is 1 message in this issue.
>
> Topics in this digest:
>
> 1. SKYWIRE Antenna Mast Kits
> From: "KI4BUN / AAV4TP" <pcsutton@...>
>
>
> ------------------------------------------------------------------------
> ------------------------------------------------------------------------
>
> Message: 1
> Date: Wed, 03 Nov 2004 18:40:42 -0000
> From: "KI4BUN / AAV4TP" <pcsutton@...>
> Subject: SKYWIRE Antenna Mast Kits
>
>
> MARS, ARES, RACES - 48' Portable Antenna Mast Kits
>
> I have several NEW IN BAG, UNUSED, UNOPENED, milspec kits containing
> 12- 4 foot fiberglass sections, stakes, batten spreaders, and batten
> nuts, all in a heavy duty rubberized carry bag. These are perfect
> for portable emergency operating or can be used for a permenant
> mast.
>
> I have an 80 mete skyloop set up using 4 kits and it works GREAT!
>
> A more detailed description is at:
>
>
http://cgi.ebay.com/ws/eBayISAPI.dll?ViewItem&rd=1&item=5729448053&ssPageName=STRK:MESE:IT
>
> If interested please e-mail me at: pcsutton@...
>
> Thank you.
>
> KI4BUN / AAV4TP
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867. Re: [SkyWires] Re: Thanks :)

Yahoo group: SkyWires
Date: 2004-11-06 01:36:56 UTC
From: Dr.Ace Ratliff
Topic: 867 Message: 867

Virus Warning from Ace - WH2T

About the last message posted by Khmenway

W32.Beagle.AR@mm is a mass-mailing worm that uses its own SMTP engine to spread.

The email attachment (typically price.com, price.scr, or joke.cpl) is a downloader that downloads the worm from an external source.

----- Original Message -----
From: Khmenway
To: SkyWires
Sent: Friday, November 05, 2004 7:52 PM
Subject: [SkyWires] Re: Thanks :)

:)

Ace - WH2T

872. virus problem solved???

Yahoo group: SkyWires
Date: 2004-11-08 01:05:48 UTC
From: khmenway
Topic: 872 Message: 872

apon notice of virus i have updated my mcafee , spybot, and adaware
software i hope this works please inform me if this doesnt work.
this is my only reply the time is 7:06 pm sunday nov 7

873. Re: [SkyWires] virus problem solved???

Yahoo group: SkyWires
Date: 2004-11-08 03:21:04 UTC
From: Dr.Ace Ratliff
Topic: 872 Message: 873

Hi ,
So far, so good.
BTW, I use AVG anti-virus , they have a free version at:

http://free.grisoft.com/freeweb.php/doc/1/

I also use NoAdWare from

http://www.noadware.net/

Ace - WH2T
----- Original Message -----
From: khmenway
To: SkyWires@yahoogroups.com
Sent: Sunday, November 07, 2004 8:05 PM
Subject: [SkyWires] virus problem solved???

apon notice of virus i have updated my mcafee , spybot, and adaware
software i hope this works please inform me if this doesnt work.
this is my only reply the time is 7:06 pm sunday nov 7

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874. Moving

Yahoo group: SkyWires
Date: 2004-11-08 03:27:35 UTC
From: Burr Patterson, Jr.
Topic: 874 Message: 874

Evening Group,
I'm Burr, I have been a member for a year or so and am just
getting ready to use a loop antenna.
I am retiring to the Philippines and our house is on a small lot
so I'll need to use a loop antenna, I have used a long wire in an "L"
& slooped for years.
A few questions I can think of now are, what is the minimun size
or best size?

What would be the best wire to take with me for the antenna?

How should I ground the loop? I have telephone ground blocks that
I use now!

If there is a long side should it be north or east??

TIA,

Burr

875. 160 meter loop for mobile

Yahoo group: SkyWires
Date: 2004-11-08 21:01:09 UTC
From: tukatuk4
Topic: 875 Message: 875

Hi all

I am building a loop for my pick up for 160 meters.
The plan is to put 4 8 foot 2x4's in the rail holders on the
pick up bed this will give me a cube of 5.5 ft by 5 feet now 21
feet per turn spaced at 7.25 inches and 13 turns that would be
273 feet of wire. Thats 1/2 wave at 160.. I know there is a lot of
factors that change the formulas however the old saying the more
wire in the air the better should apply. I of course would use a
tuner to match the antenna..Any comments as to if this would work or
would I be just wasting my time..

Thank's Mark K6FEJ

876. Re: [SkyWires] 160 meter loop for mobile

Yahoo group: SkyWires
Date: 2004-11-09 01:04:06 UTC
From: Scott Erwin
Topic: 875 Message: 876

You would be wasting your time trying to use this for transmitting. What your thinking of building is a multi turn magnetic loop. For transmitting a Magloop normally will be one turn but two or three are possible but as the turns increase self canceling develops between the turn elements. Also, as the numbers of turns are increase the element starts to act more as a large inductor and less as a radiating element. There was an article in 73 many years ago detailing a large multi turn loop using 3/4 inch copper tubing and matched tuning capacitors on each turn. The writer said he made contacts on it but did not detail the quality. He could have done the same thing with a light bulb used as a radiating element, been there and done that! Try it sometime. Just hook up a 100-watt light bulb to your antenna tuner and with good conditions you can make contacts with it!
--- tukatuk4 <markthemover@...> wrote:

>
> Hi all
>
> I am building a loop for my pick up for 160 meters.
> The plan is to put 4 8 foot 2x4's in the rail
> holders on the
> pick up bed this will give me a cube of 5.5 ft by 5
> feet now 21
> feet per turn spaced at 7.25 inches and 13 turns
> that would be
> 273 feet of wire. Thats 1/2 wave at 160.. I know
> there is a lot of
> factors that change the formulas however the old
> saying the more
> wire in the air the better should apply. I of course
> would use a
> tuner to match the antenna..Any comments as to if
> this would work or
> would I be just wasting my time..
>
> Thank's Mark K6FEJ
>
>
>
>

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877. Low mounted 160M Full Wave Loop

Yahoo group: SkyWires
Date: 2004-11-09 04:52:32 UTC
From: n8tz_50
Topic: 877 Message: 877

I have recently put up a 160M loop. It is about 20 ft. off the ground. It has about 530 ft. of 14 ga. stranded insulated wire. I connected it to the shack by means of 50 ft. of 450 ohm ladder line. My ATR30 will not tune the antenna in the 160M band. I hooked it up to an old Dentron Super Tuner Plus and it will tune it, but when I try to run more than 100 watts I get alot of reflected power back into the tuner. Does being that close to the ground have that much effect on the tuning of the loop? Any ideas would be appreciated. I mainly put it up for receive, but would like to have it for transmitting also.

Thanks, Steve

878. Re: [SkyWires] Low mounted 160M Full Wave Loop

Yahoo group: SkyWires
Date: 2004-11-09 10:15:33 UTC
From: David Shrum
Topic: 877 Message: 878

My setup is similar to yours with one exception, I used coax and only around i5 to 20 feet of it, I'm not exactly sure of the length because it was laying around and I did not measure it. I only have the radio, no amp so I don't what more power would do. On 160 I can tune it BUT it is VERY difficult to do and then if I am lucky can only get about a +- 10 kc swing before I would need to re-tune, so I seldom use 160 for that reason, also I have mine suspended against, over and around trees, another negative against me.

Dave N8PU

On Mon, 2004-11-08 at 23:52, n8tz_50 wrote:
> I have recently put up a 160M loop. It is about 20 ft. off the
> ground. It has about 530 ft. of 14 ga. stranded insulated wire. I
> connected it to the shack by means of 50 ft. of 450 ohm ladder line.
> My ATR30 will not tune the antenna in the 160M band. I hooked it up
> to an old Dentron Super Tuner Plus and it will tune it, but when I
> try to run more than 100 watts I get alot of reflected power back
> into the tuner. Does being that close to the ground have that much
> effect on the tuning of the loop? Any ideas would be appreciated. I
> mainly put it up for receive, but would like to have it for
> transmitting also.
>
> Thanks, Steve

879. Re: Low mounted 160M Full Wave Loop

Yahoo group: SkyWires
Date: 2004-11-09 19:51:24 UTC
From: Peter Hewitson
Topic: 877 Message: 879

Steve,

Try letting one side of the feeder "float" ie disconnect one side of
the feeder at the tuner. It can either be left floating or ground it.

Peter

--- In SkyWires@yahoogroups.com, "n8tz_50" <n8tz_50@y...> wrote:
>
> I have recently put up a 160M loop. It is about 20 ft. off the
> ground. It has about 530 ft. of 14 ga. stranded insulated wire. I
> connected it to the shack by means of 50 ft. of 450 ohm ladder
line.
> My ATR30 will not tune the antenna in the 160M band. I hooked it
up
> to an old Dentron Super Tuner Plus and it will tune it, but when I
> try to run more than 100 watts I get alot of reflected power back
> into the tuner. Does being that close to the ground have that much
> effect on the tuning of the loop? Any ideas would be appreciated.
I
> mainly put it up for receive, but would like to have it for
> transmitting also.
>
> Thanks, Steve

880. Re: [SkyWires] Low mounted 160M Full Wave Loop

Yahoo group: SkyWires
Date: 2004-11-09 20:38:26 UTC
From: Dr.Ace Ratliff
Topic: 877 Message: 880

Hi Steve,
I had a a 160M loop.
It was about 20 ft. off the ground. It worked great.
It should be about 530 ft. of 14 ga. stranded BARE wire.
Your antenna is too long .
When you use insulated wire you need to allow for the Velocity Factor of the wire.
From the limited info you gave , I would try trimming about 5% off (about 25 Feet).
Ace - WH2T
----- Original Message -----
From: n8tz_50
To: SkyWires@yahoogroups.com
Sent: Monday, November 08, 2004 11:52 PM
Subject: [SkyWires] Low mounted 160M Full Wave Loop

I have recently put up a 160M loop. It is about 20 ft. off the
ground. It has about 530 ft. of 14 ga. stranded insulated wire. I
connected it to the shack by means of 50 ft. of 450 ohm ladder line.
My ATR30 will not tune the antenna in the 160M band. I hooked it up
to an old Dentron Super Tuner Plus and it will tune it, but when I
try to run more than 100 watts I get alot of reflected power back
into the tuner. Does being that close to the ground have that much
effect on the tuning of the loop? Any ideas would be appreciated. I
mainly put it up for receive, but would like to have it for
transmitting also.

Thanks, Steve

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881. Re: [SkyWires] Low mounted 160M Full Wave Loop

Yahoo group: SkyWires
Date: 2004-11-09 23:03:27 UTC
From: keith currie
Topic: 877 Message: 881
Attachments: 2 described; binary payloads are missing from this source WARC

That sounds about right Ace, Mine is 490' of #12 stranded insulated wire
and resonant at 1.86.
Keith

"Dr.Ace Ratliff" wrote:

> Hi Steve, I had a a 160M loop.It was about 20 ft. off the ground. It
> worked great.It should be about 530 ft. of 14 ga. stranded BARE
> wire.Your antenna is too long .When you use insulated wire you need to
> allow for the Velocity Factor of the wire.From the limited info you
> gave , I would try trimming about 5% off (about 25 Feet).Ace - WH2T
>
> ----- Original Message -----
> From: n8tz_50
> To: SkyWires@yahoogroups.com
> Sent: Monday, November 08, 2004 11:52 PM
> Subject: [SkyWires] Low mounted 160M Full Wave Loop
>
>
>
> I have recently put up a 160M loop. It is about 20 ft. off
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> ground. It has about 530 ft. of 14 ga. stranded insulated
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> connected it to the shack by means of 50 ft. of 450 ohm
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> that much
> effect on the tuning of the loop? Any ideas would be
> appreciated. I
> mainly put it up for receive, but would like to have it for
> transmitting also.
>
> Thanks, Steve
>
>
>
>

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882. Re: Low mounted 160M Full Wave Loop

Yahoo group: SkyWires
Date: 2004-11-09 22:16:48 UTC
From: n8tz_50
Topic: 877 Message: 882

--Thanks everyone, I feel so stupid it hurts :-) I actually took the time today to strectch out a tape measure under the wire and found it to be 592 ft long. (have no idea how I misjudged or mismeasured that badly) I'll blame the windy weather we've been having here. HI HI I shortened it by 62 feet to get to the 530 ft length but didn't take into account the difference in velocity factor of the insulated wire. (I believe Dr. Ace is right on the money) The antenna is now resonant at 1.782 Mhz being fed with coax. Removing another 25 ft or so should put about where I want it. (1.893 Mhz) Actually the formula figures to remove 33 ft. to get it from 1.782 up to 1.893 Mhz. That will have to wait till another day as I have to start midnight shift tonight :(I will let everyone know how the final product turns out. Again thanks to everyone that replied to my problem.

73, Steve

- In SkyWires@yahoogroups.com, "Dr.Ace Ratliff" <wh2t@b...> wrote:
> Hi Steve,
> I had a a 160M loop.
> It was about 20 ft. off the ground. It worked great.
> It should be about 530 ft. of 14 ga. stranded BARE wire.
> Your antenna is too long .
> When you use insulated wire you need to allow for the Velocity Factor of the wire.
> From the limited info you gave , I would try trimming about 5% off (about 25 Feet).
> Ace - WH2T
> ----- Original Message -----
> From: n8tz_50
> To: SkyWires@yahoogroups.com
> Sent: Monday, November 08, 2004 11:52 PM
> Subject: [SkyWires] Low mounted 160M Full Wave Loop
>
>
>
> I have recently put up a 160M loop. It is about 20 ft. off the
> ground. It has about 530 ft. of 14 ga. stranded insulated wire. I
> connected it to the shack by means of 50 ft. of 450 ohm ladder line.
> My ATR30 will not tune the antenna in the 160M band. I hooked it up
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much
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I
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883. Re: [SkyWires] Re: Low mounted 160M Full Wave Loop

Yahoo group: SkyWires
Date: 2004-11-10 00:05:58 UTC
From: Dr.Ace Ratliff
Topic: 877 Message: 883

Hi Steve,
I would try trimming about half of what the formula gives (when you get the time) .
33 / 2 = 16.5 feet .
It is easier to trim than to put back on .
It has been my experience that the formula works great with center fed dipole and/or zepp type antennas .
But when using it with loop antennas, the formula will have you trim off about twice as much as needed.
Then you end up with an antenna resonant on a higher freq than you wanted .
Then if you use the formula again, it will tell you to put back on what you just trimmed off.
I am not the only one to encounter this phenomenon .
I haven't had a chance to determine if a person needs to trim 50% or 66.6% of the amount the formula gives. My guess is 50% .
Please let me know how much you end up trimming off to move it from 1.782 to 1.893 Mhz (for my education).
Ace - WH2T
----- Original Message -----
From: n8tz_50
To: SkyWires@yahoogroups.com
Sent: Tuesday, November 09, 2004 5:16 PM
Subject: [SkyWires] Re: Low mounted 160M Full Wave Loop

--Thanks everyone, I feel so stupid it hurts :-) I actually took the time today to strectch out a tape measure under the wire and found it to be 592 ft long. (have no idea how I misjudged or mismeasured that badly) I'll blame the windy weather we've been having here. HI HI
I shortened it by 62 feet to get to the 530 ft length but didn't take into account the difference in velocity factor of the insulated wire. (I believe Dr. Ace is right on the money) The antenna is now resonant at 1.782 Mhz being fed with coax. Removing another 25 ft or so should put about where I want it. (1.893 Mhz) Actually the formula figures to remove 33 ft. to get it from 1.782 up to 1.893 Mhz. That will have to wait till another day as I have to start midnight shift tonight :(
I will let everyone know how the final product turns out. Again thanks to everyone that replied to my problem.

73, Steve

- In SkyWires@yahoogroups.com, "Dr.Ace Ratliff" <wh2t@b...> wrote:
> Hi Steve,
> I had a a 160M loop.
> It was about 20 ft. off the ground. It worked great.
> It should be about 530 ft. of 14 ga. stranded BARE wire.
> Your antenna is too long .
> When you use insulated wire you need to allow for the Velocity

Factor of the wire.
> From the limited info you gave , I would try trimming about 5% off
(about 25 Feet).
> Ace - WH2T
> ----- Original Message -----
> From: n8tz_50
> To: SkyWires@yahoogroups.com
> Sent: Monday, November 08, 2004 11:52 PM
> Subject: [SkyWires] Low mounted 160M Full Wave Loop
>
>
>
> I have recently put up a 160M loop. It is about 20 ft. off the
> ground. It has about 530 ft. of 14 ga. stranded insulated wire. I
> connected it to the shack by means of 50 ft. of 450 ohm ladder
line.
> My ATR30 will not tune the antenna in the 160M band. I hooked it
up
> to an old Dentron Super Tuner Plus and it will tune it, but when
I
> try to run more than 100 watts I get alot of reflected power back
> into the tuner. Does being that close to the ground have that
much
> effect on the tuning of the loop? Any ideas would be appreciated.
I
> mainly put it up for receive, but would like to have it for
> transmitting also.
>
> Thanks, Steve
>
>
>
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885. Re: Low mounted 160M Full Wave Loop

Yahoo group: SkyWires
Date: 2004-11-10 14:11:40 UTC
From: s3hampton
Topic: 877 Message: 885

--- In SkyWires@yahoogroups.com, "Dr.Ace Ratliff" <wh2t@b...> wrote:
> Hi Steve,
> I would try trimming about half of what the formula gives (when you get the time) .
> 33 / 2 = 16.5 feet .
> It is easier to trim than to put back on .

Good day; I have a similar problem in TWO newly erected antennas. (I will address the LOOP in a second posting.)

The first antenna is a 120 degree-angled inverted-vee, whose apex is at 90 feet. My inverted-vee is 126.5 feet on each leg, and made of 14 Guage THHN stranded/plastic covered wire.

It is resonant (1:1 VSWR) at 1.6, 3.0, 4.0, 10.0, 11.1, 14.1 and 15.8 Mhz. (Under 3:1 VSWR at 5.5, 7.1, 8.7, 12.6, 14.1 Mhz.)

All this is with the feedline in place. The inv-vee is fed with about 120 feet of 450 Ohm twinlead. This clear-span runs down to a 4:1 balun. From the balun, I have 40 feet of RG-8 to an LDG (model RT-11) autotuner. Eight feet of RG-8 coax to the radio completes the thing.

So, I am wondering if the feedline(s) and all of the balun/tuner stuff is causing a "good load" to be seen as I noted above?

Or, am I to assume only the LOWEST figure, here, and trim the antenna accordingly?
(Any assistance would be helpful)

886. Re: Low mounted 160M Full Wave Loop

Yahoo group: SkyWires
Date: 2004-11-10 14:25:18 UTC
From: s3hampton
Topic: 877 Message: 886

--- In SkyWires@yahoogroups.com, "Dr.Ace Ratliff" <wh2t@b...> wrote:
> Hi Steve,
> I would try trimming about half of what the formula gives (when you get the time) .
> 33 / 2 = 16.5 feet .

I have two antennas that I am in need of assistance. I posted an outline for the INVERTED VEE in a previous post.

This posting has to do with a standard horizontal LOOP ANTENNA.

It is 50 feet off the ground, and made with 545 feet of THHN stranded (plastic covered) copper wire. The feedline is a run of 55 feet of 450 Ohm ladder line. The ladder line is held about five feet from the tower, etc, through the use of PVC pipe, with TEE fittings. The ladder line is fed by an Icom AH-4 autotuner. (About 12 feet of RG-8 to the radio completes the feedline.)

I see a 1:1 VSWR at .7, 2.9, 5.1, 6.1, 7.8 and 10.6 Mhz. (A dip at 1.9 Mhz yeilds 1.8:1 VSWR.) All of these figures are with the tuner BYPASSED.

I forgot to mention this in my posting on the INVERTED-VEE antenna; The LDG autotuner was bypassed in this unit also; This is how I am able to "see" a VSWR. -The tuners do struggle at times, but they both are able to "tune" on all ham bands, with both antennas.

In reading the response above, it appears that a "fudge-factor" should be applied to the STANDARD formula, when a loop is considered. With this in mind, how much should I trim? (I want to run 40 Meters SSB and also 1.9 and 3.9 Mhz with this antenna.)

Thank you! -Mike- K0JTA

887. Re: [SkyWires] Re: Low mounted 160M Full Wave Loop

Yahoo group: SkyWires
Date: 2004-11-10 20:51:46 UTC
From: Dr.Ace Ratliff
Topic: 877 Message: 887

Hi Mike,
I would probably just leave it like it is since it tunes all bands. But if you want to trim it , I recommend trimming 16 feet off (not taking into account the velocity factor of the wire) and try that.
Ace - WH2T
----- Original Message -----
From: s3hampton
To: SkyWires@yahoogroups.com
Sent: Wednesday, November 10, 2004 9:25 AM
Subject: [SkyWires] Re: Low mounted 160M Full Wave Loop

--- In SkyWires@yahoogroups.com, "Dr.Ace Ratliff" <wh2t@b...> wrote:
> Hi Steve,
> I would try trimming about half of what the formula gives (when you get the time) .
> 33 / 2 = 16.5 feet .

I have two antennas that I am in need of assistance. I posted an outline for the INVERTED VEE in a previous post.

This posting has to do with a standard horizontal LOOP ANTENNA.

It is 50 feet off the ground, and made with 545 feet of THHN stranded (plastic covered) copper wire. The feedline is a run of 55 feet of 450 Ohm ladder line. The ladder line is held about five feet from the tower, etc, through the use of PVC pipe, with TEE fittings. The ladder line is fed by an Icom AH-4 autotuner. (About 12 feet of RG-8 to the radio completes the feedline.)

I see a 1:1 VSWR at .7, 2.9, 5.1, 6.1, 7.8 and 10.6 Mhz. (A dip at 1.9 Mhz yeilds 1.8:1 VSWR.) All of these figures are with the tuner BYPASSED.

I forgot to mention this in my posting on the INVERTED-VEE antenna; The LDG autotuner was bypassed in this unit also; This is how I am able to "see" a VSWR. -The tuners do struggle at times, but they both are able to "tune" on all ham bands, with both antennas.

In reading the response above, it appears that a "fudge-factor" should be applied to the STANDARD formula, when a loop is considered. With this in mind, how much should I trim? (I want to run 40 Meters SSB and also 1.9 and 3.9 Mhz with this antenna.)

Thank you! -Mike- K0JTA

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888. Re: [SkyWires] Re: Low mounted 160M Full Wave Loop >>formula

Yahoo group: SkyWires
Date: 2004-11-10 22:19:30 UTC
From: David Shrum
Topic: 877 Message: 888

I am curious, the formula that is being referred to, is this the one that is 234 divide by freq for 1/4 wave, 468 divide by freq for 1/2 wave, etc... or 1005 divide by freq, OR are we talking about another formula altogether different. I am just curious and thanks.

Dave N8PU

On Tue, 2004-11-09 at 19:05, Dr.Ace Ratliff wrote:

> I would try trimming about half of what the formula gives (when you
> get the time) .

889. Re: [SkyWires] Re: Low mounted 160M Full Wave Loop >>formula

Yahoo group: SkyWires
Date: 2004-11-10 22:36:52 UTC
From: Steve Book
Topic: 877 Message: 889

I was using the 1005 formula from the article loop
skywires in the ARRL Antenna handbook.

73, Steve

--- David Shrum <aq392@...> wrote:

> I am curious, the formula that is being referred to,
> is this the one
> that is 234 divide by freq for 1/4 wave, 468 divide
> by freq for 1/2
> wave, etc... or 1005 divide by freq, OR are we
> talking about another
> formula altogether different. I am just curious and
> thanks.
>
> Dave N8PU
>
> On Tue, 2004-11-09 at 19:05, Dr.Ace Ratliff wrote:
>
> > I would try trimming about half of what the
> formula gives (when you
> > get the time) .
>
>
>

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891. Re: [SkyWires] Re: Low mounted 160M Full Wave Loop >>formula

Yahoo group: SkyWires
Date: 2004-11-11 03:22:18 UTC
From: Dr.Ace Ratliff
Topic: 877 Message: 891

Hi Dave ,

The "Formula" lets you build an antenna that is really resonant at it's design freq. without the need to trim and recheck the resonant freq multiple times.
I will give you an example.
Let's use a dipole as an example.
Let's say you want a dipole antenna that is resonant at 3.750 Mhz.
You do the math 468/3.75 = 124.8 feet .
So you make a dipole that is 124.8 feet (end to end).
But, after you put it up, you check the resonant freq.
And let's say you measure that the dipole is resonant at 3.5 Mhz (Not what you wanted).

Here comes the formula!

Remember:
You want a dipole antenna that is resonant at 3.750 Mhz.
You did the math 468/3.75 = 124.8 feet .
So you made a dipole that is 124.8 feet (end to end).

Now take the TRUE resonant Freq. 3.5 Mhz and divide it by 468 .
468/3.5 = 133.7 feet

Here's the formula!
Subtract 133.7 feet - 124.8 feet = 8.9 feet
Trim a total of 8.9 feet off the antenna (4.45 feet off each end)
The antenna will now be resonant very near the original design freq.

I have used this formula many times and I know a few people who have also used it (with great success).

It has been my experience that the formula works great with center fed dipole and/or zepp type antennas .
But when using it with loop antennas, the formula will have you trim off about twice as much as needed.
Then you end up with an antenna resonant on a higher freq than you wanted .
Then if you use the formula again, it will tell you to put back on what you just trimmed off.
I am not the only one to encounter this phenomenon .
I haven't had a chance to determine if a person needs to trim 50% or 66.6% of the amount the formula gives. My guess is 50% .
Ace - www.WH2T.com

----- Original Message -----
From: David Shrum
To: SkyWires
Sent: Wednesday, November 10, 2004 5:19 PM
Subject: Re: [SkyWires] Re: Low mounted 160M Full Wave Loop >>formula

I am curious, the formula that is being referred to, is this the one that is 234 divide by freq for 1/4 wave, 468 divide by freq for 1/2 wave, etc... or 1005 divide by freq, OR are we talking about another formula altogether different. I am just curious and thanks.

Dave N8PU

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> I would try trimming about half of what the formula gives (when you
> get the time) .

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892. Re: [SkyWires] Re: Low mounted 160M Full Wave Loop >>formula

Yahoo group: SkyWires
Date: 2004-11-11 04:37:21 UTC
From: NØATH
Topic: 877 Message: 892

Hello Ace and the group -- FWIW I do it slightly different and with so far good results. I build
my 3.750 dipole that comes up resonant at 3.5 as you say, (124.8 feet) but resonant 250 khz. lower than I want it. Then I add the 250 khz to my original freq of 3750 (or 4.0 Mhz)and
recalculate a dipole for that freq - 468/4 = 117 feet and it will be dead on my original design freq
of 3750 using all of the original components minus 7.8 feet overall length. I suppose about the same
thing only different. Hi

NØATH / Dave (Different Dave)

Hi Dave ,

The "Formula" lets you build an antenna that is really resonant at it's design freq.
without the need to trim and recheck the resonant freq multiple times.
I will give you an example.
Let's use a dipole as an example.
Let's say you want a dipole antenna that is resonant at 3.750 Mhz.
You do the math 468/3.75 = 124.8 feet .
So you make a dipole that is 124.8 feet (end to end).
But, after you put it up, you check the resonant freq.
And let's say you measure that the dipole is resonant at 3.5 Mhz (Not what you wanted).

Here comes the formula!

Remember:
You want a dipole antenna that is resonant at 3.750 Mhz.
You did the math 468/3.75 = 124.8 feet .
So you made a dipole that is 124.8 feet (end to end).

Now take the TRUE resonant Freq. 3.5 Mhz and divide it by 468 .
468/3.5 = 133.7 feet

Here's the formula!
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The antenna will now be resonant very near the original design freq.

I have used this formula many times and I know a few people who have also used it (with great success).

It has been my experience that the formula works great with center fed dipole and/or zepp type antennas .
But when using it with loop antennas, the formula will have you trim off about twice as much as needed.

Then you end up with an antenna resonant on a higher freq than you wanted .
Then if you use the formula again, it will tell you to put back on what you just trimmed off.
I am not the only one to encounter this phenomenon .
I haven't had a chance to determine if a person needs to trim 50% or 66.6% of the amount the formula gives. My guess is 50% .
Ace -

893. Re: [SkyWires] Re: Low mounted 160M Full Wave Loop >>formula

Yahoo group: SkyWires
Date: 2004-11-11 10:48:22 UTC
From: David Shrum
Topic: 877 Message: 893
Attachments: 1 described; binary payloads are missing from this source WARC

Thanks, this is probably a reason why at 160 it won't even begin to show resonant in there any where, the trees are something else I won't get into that now, that is probably the reason when I first put my loop up, in the middle of winter in a hurry, actual measurements were not tape measure to wire exact, then went back later and trimmed off about 45 feet to get it a little closer, we (my son and I) still didn't put tape to wire, figured we got it close to 530 feet long, and still won't begin to tune at 1.900, some where way below there I think, the radio won't transmit below 1.600 and besides I ain't suppose to be there any way. So later on I need to do some more trimming again. Thanks guys for your help.

Dave N8PU (the other Dave, good name too I think :))

On Wed, 2004-11-10 at 23:37, NØATH wrote:

> Hello Ace and the group -- FWIW I do it slightly different and with so
> far good results. I build
> my 3.750 dipole that comes up resonant at 3.5 as you say, (124.8 feet
>) but resonant 250
> khz. lower than I want it. Then I add the 250 khz to my original freq
> of 3750 (or 4.0 Mhz)and
> recalculate a dipole for that freq - 468/4 = 117 feet and it will be
> dead on my original design freq
> of 3750 using all of the original components minus 7.8 feet overall
> length. I suppose about the same
> thing only different. Hi
>
> NØATH / Dave (Different Dave)
>
>
> Hi Dave ,
>
> The "Formula" lets you build an antenna that is really
> resonant at it's design freq. without the need to trim and
> recheck the resonant freq multiple times.
> I will give you an example.
> Let's use a dipole as an example.
> Let's say you want a dipole antenna that is resonant at 3.750
> Mhz.
> You do the math 468/3.75 = 124.8 feet .
> So you make a dipole that is 124.8 feet (end to end).
> But, after you put it up, you check the resonant freq.
> And let's say you measure that the dipole is resonant at 3.5
> Mhz (Not what you wanted).

>
> Here comes the formula!
>
> Remember:
> You want a dipole antenna that is resonant at 3.750 Mhz.
> You did the math 468/3.75 = 124.8 feet .
> So you made a dipole that is 124.8 feet (end to end).
>
> Now take the TRUE resonant Freq. 3.5 Mhz and divide it by 468
> .
> 468/3.5 = 133.7 feet
>
> Here's the formula!
> Subtract 133.7 feet - 124.8 feet = 8.9 feet
> Trim a total of 8.9 feet off the antenna (4.45 feet off each
> end)
> The antenna will now be resonant very near the original design
> freq.
>
> I have used this formula many times and I know a few people
> who have also used it (with great success).
>
> It has been my experience that the formula works great with
> center fed dipole and/or zepp type antennas .
> But when using it with loop antennas, the formula will have
> you trim off about twice as much as needed.
> Then you end up with an antenna resonant on a higher freq than
> you wanted .
> Then if you use the formula again, it will tell you to put
> back on what you just trimmed off.
> I am not the only one to encounter this phenomenon .
> I haven't had a chance to determine if a person needs to trim
> 50% or 66.6% of the amount the formula gives. My guess is 50%
> .
> Ace -
>
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894. Insulated Wire Correction Factor

Yahoo group: SkyWires
Date: 2004-11-11 11:58:35 UTC
From: K0PYK
Topic: 894 Message: 894

SkyWire Group...
There has been some nice discissions on getting loops to resonance. Many have been using insulated wire for there projects. I am also using 12 ga insulated wire for my wire projects. I am in the irrigation business so have plenty on hand. I have a lot of trees to go through, so I am concerned about bare wire laying in the trees.
My questions as follows:

* Is 1005/f the standard loop formula???

* I would like to use my loop for multiple bands...so is 1.775, 3.55, 7.1, 14.2, 28.4 a good design philosophy???

* When I build a 1.775 loop...the length would be...566'...What would be a correction factor for insulated wire???

* If I feed with ladder line to a balun...is there a correct length to aid in matching...such as a 1/4 wave of 72 ohm coax???

* I only have the autotuners in the rigs...so my matching extremes are limited. I built a 80 meter double extended zepp and used wh2t's 4:1 balun...works nice. I also used the dipole3 program to get the ladder line to a proper length. Is there a program like this for building loops???
Thanks...
Tom, K0PYK

_____
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895. Durability of insulated wire

Yahoo group: SkyWires
Date: 2004-11-11 13:10:22 UTC
From: charles allison
Topic: 895 Message: 895

Hi folks,

I've built up an 80 meter loop for NVIS which is working pretty good. It's made using red insulated 12awg stranded wire from the hardware store. I did have to trim it some per the 160m discussion thread and maybe should trim even more to move the resonance up. since it is only up at 15 ft. and is presently implemented with a 1:1 current balun and no ladder line it gives some strange results using the mfj269. Future enhancements are to improve the length and go with 450 ohm ladder line to one of those baluns made from romex and 1" pvc plumbing pipe, per the instructions from Dr. Ace's website?

What is the durability or expected life of the insulated wire? If all or even half of the insulation flecks off then is this going to have to be replaced or extended in length to achieve resonance again? And if this $20 / 500 ft roll of 12 AWG is going to have problems in 1 to 2 years, then would it be better to use noninsulated wire?

I'm currently planning to do a 160 m loop up about 30 feet and have been collecting pushup poles and other items for the task as there is nothing around here in the way of vegetation that grows beyond about 15-20 ft.

best regards,

Charles
wb5izd

896. Re: [SkyWires] Insulated Wire Correction Factor

Yahoo group: SkyWires
Date: 2004-11-11 14:34:12 UTC
From: desmoface@aol.com
Topic: 894 Message: 896

>>""* When I build a 1.775 loop...the length would
be...566'...What would be a correction factor for
insulated wire???""<<

Hi Tom, I built an 80 meter loop last year around this time using insulated wire and found out that the antenna was about ~5% too long using the formula you mentioned. I would make it the appropriate length using the formula and then trim it for the lowest swr at the desired frequency.

I can't comment on the balun/ladder line question as I used coax.

If you build it for 160 meters you should have no trouble working the rest of the bands you mentioned..at least thats been my experience..the 80 meter loop works all the hf bands above it's design freq..I can hear good on 160 but can't tune it up with my cheap mfj tuner...wish I had the ability to put up a 160 meter loop but the woods behind my house weren't very accomodation..not to mention all the poison ivy thats everywhere..

Good luck. I'm confident you will be happy with the loop's performance..I sure am..

Steve
kb8viv

899. New!! Live Ham Chat Room

Yahoo group: SkyWires
Date: 2004-11-13 15:00:16 UTC
From: Wendall Bagwell
Topic: 899 Message: 899

Hello,

There is a new Live Ham Chat Room for Ham's only. Come join in the fun!!
You can chat via voice or text...

http://www.kc5ess.us/chat.html

73
kc5ess

901. Coax loss

Yahoo group: SkyWires
Date: 2004-11-13 23:44:27 UTC
From: drizzel153
Topic: 901 Message: 901

All,

Checked my loop the other day. The swr was ok for 20m ~ 2.5 to
3.1:1 (tuneable - as expected). However, the line loss measured was
3.2 db. It should be less than that. Any thoughts on why this is?
I've checked my connections and they appear to be in order. Should
I re-string the loop? Thanks.

Marty/nm4s

902. Re: [SkyWires] Coax loss

Yahoo group: SkyWires
Date: 2004-11-14 00:28:40 UTC
From: Jim Dunstan
Topic: 901 Message: 902
Attachments: 1 described; binary payloads are missing from this source WARC

At 11:44 PM 11/13/04 +0000, you wrote:

>All,
>
>Checked my loop the other day. The swr was ok for 20m ~ 2.5 to
>3.1:1 (tuneable - as expected). However, the line loss measured was
>3.2 db. It should be less than that. Any thoughts on why this is?
>I've checked my connections and they appear to be in order. Should
>I re-string the loop? Thanks.
>
>Marty/nm4s

How do you measure line loss ? Just curious.

>1468f08.jpg

Jim Dunstan
Thunder Bay, ON

903. Re: Coax loss

Yahoo group: SkyWires
Date: 2004-11-14 04:15:42 UTC
From: drizzel153
Topic: 901 Message: 903

With an MFJ 259B antenna analyzer

904. RE: [SkyWires] Re: Coax loss

Yahoo group: SkyWires
Date: 2004-11-14 04:18:37 UTC
From: D. Scott MacKenzie
Topic: 901 Message: 904

Was the antenna disconnected? The instructions recommend that it be
measured with the coax disconnected......
-----Original Message-----
From: drizzel153 [mailto:no_reply@yahoogroups.com]
Sent: Saturday, November 13, 2004 11:16 PM
To: SkyWires@yahoogroups.com
Subject: [SkyWires] Re: Coax loss

With an MFJ 259B antenna analyzer

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905. MFJ-935 and MFJ-936, Any experience?

Yahoo group: SkyWires
Date: 2004-11-14 14:20:34 UTC
From: kd7zd
Topic: 905 Message: 905

I get the impression these are new products although it may be that I just never noticed them before, however I can't find any reviews. Is anyone using them and if so, what's your experience?

Phil
KD7ZD

906. Length of Ladder Line

Yahoo group: SkyWires
Date: 2004-11-15 14:52:47 UTC
From: kg5i
Topic: 906 Message: 906

I'm about to raise a 80 meter full wave loop; I thought I read somewhere that I should cut the ladder line to a specific length but I cannot seem to locate that info now. I do plan on feeding the loop entirely by balanced line (450 ohm).

So does it make much difference if I used 60 feet or 100 feet; I've even heard that the more ladder line the better.....What's the real scoop??

Thanks,

Larry, KG5I

907. Re: [SkyWires] Length of Ladder Line

Yahoo group: SkyWires
Date: 2004-11-15 18:19:31 UTC
From: Scott Erwin
Topic: 906 Message: 907

You will need to check the impedance at the end of the ladder line where it would connect to the antenna tuner and trim or lengthen as required. As the loop will be used on many bands the antenna to ladder line match will be incorrect for all but a very few frequency's. This will set up a condition on the feed line where the voltage and current will be high and low on different parts of the feed line according to the frequency used. This is true for any type of antenna. The solution is to simply add a little more feed line in order to change the impedance to something the tuner can handle at the feed line end where the tuner is connected. You will need a noise bridge or SWR analyzer to properly do this. If you do not have one of these instruments you can use a SWR meter between the output of the antenna tuner and the feed line. Just cut or add feed line length until you have an SWR reading below 3 to 1. Even the internal automatic antenna tuner in a transceiver can safely handle this impedance. If the impedance is below 10 ohms and you try to use any antenna tuner to match this most likely the several thousands of volts present will cause damage the antenna tuner capacitors and/or inductor from arcing or heating. Simply add or cut a few feet of the feed line to move this very low impedance point to a different point on the line. Using a 4:1 Balun with already too low impedance is a recipe for disaster. Those 10 ohms are now 2.5 ohms on the antenna capacitor and inductor. Even full legal limit antenna tuners at 100 watts will most likely arc and burn up. Just remember that when you check the impedance so if you use the internal 4:1 Balun in the tuner you will need to open the cover on the tuner and connect your Noise Bridge or SWR analyzer to the 4:1 Balun or connect a SWR meter between the 4:1 Balun and the T network.
You can build a simple feed line matcher with ladder line or coax. Simply make lengths of feed line 2, 4, 8, 16, and 32 feet long. Add one of the lengths as required to provide impedance that your antenna tuner can handle. This can be as simple as these lengths hanging on the wall and inserted as required to fancy relays and computer control. A loop Skywire antenna is not too hard on the feed line with wide voltage swings and the feed line matcher most likely will not be

required once the feed line length is found that will
provide an impedance that will be fine on all bands
but a G5RV used as a muli-band antenna will produce
wild swings of voltage on the feed line and has
"killed" more antenna tuners than can be imagined.

--- kg5i <kg5i@...> wrote:

>
> I'm about to raise a 80 meter full wave loop; I
> thought I read
> somewhere that I should cut the ladder line to a
> specific length but
> I cannot seem to locate that info now. I do plan on
> feeding the loop
> entirely by balanced line (450 ohm).
>
> So does it make much difference if I used 60 feet or
> 100 feet; I've
> even heard that the more ladder line the
> better.......What's the real
> scoop??
>
> Thanks,
>
> Larry, KG5I
>
>
>
>

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Check out the new Yahoo! Front Page.
www.yahoo.com

908. Re: [SkyWires] Length of Ladder Line

Yahoo group: SkyWires
Date: 2004-11-15 23:23:44 UTC
From: Dr.Ace Ratliff
Topic: 906 Message: 908

Larry,
Keep the feedline around these lengths.
[The WORST POSSIBLE line lengths are shown in brackets]

80 meter antenna 34-40, 90-102 or 160-172 feet
[Avoid 66, 135, 190 ft]

Some slight trimming or adding of feedline may be necessary to accommodate the higher frequency bands.

Ace - WH2T

----- Original Message -----
From: kg5i
To: SkyWires@yahoogroups.com
Sent: Monday, November 15, 2004 9:52 AM
Subject: [SkyWires] Length of Ladder Line

I'm about to raise a 80 meter full wave loop; I thought I read somewhere that I should cut the ladder line to a specific length but I cannot seem to locate that info now. I do plan on feeding the loop entirely by balanced line (450 ohm).

So does it make much difference if I used 60 feet or 100 feet; I've even heard that the more ladder line the better.....What's the real scoop??

Thanks,

Larry, KG5I

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909. Re: [SkyWires] Length of Ladder Line

Yahoo group: SkyWires
Date: 2004-11-15 23:30:11 UTC
From: Jeff - N3YEA
Topic: 906 Message: 909

I'm using 100 ft. on my 80 mete full wave loop - with no issues at all. Tunes on all bands - no RFI..
I am using a 4:1 DX Engineering Balun though also..

----- Original Message -----
From: Dr.Ace Ratliff
To: SkyWires@yahoogroups.com
Sent: Monday, November 15, 2004 6:23 PM
Subject: Re: [SkyWires] Length of Ladder Line

Larry,
Keep the feedline around these lengths.
[The WORST POSSIBLE line lengths are shown in brackets]

80 meter antenna 34-40, 90-102 or 160-172 feet
[Avoid 66, 135, 190 ft]

Some slight trimming or adding of feedline may be necessary to accommodate the higher frequency bands.

Ace - WH2T

----- Original Message -----
From: kg5i
To: SkyWires@yahoogroups.com
Sent: Monday, November 15, 2004 9:52 AM
Subject: [SkyWires] Length of Ladder Line

I'm about to raise a 80 meter full wave loop; I thought I read
somewhere that I should cut the ladder line to a specific length but
I cannot seem to locate that info now. I do plan on feeding the loop
entirely by balanced line (450 ohm).

So does it make much difference if I used 60 feet or 100 feet; I've
even heard that the more ladder line the better.....What's the real
scoop??

Thanks,

Larry, KG5I

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910. Re: [SkyWires] Insulated Wire Correction Factor

Yahoo group: SkyWires
Date: 2004-11-16 00:07:06 UTC
From: Dr.Ace Ratliff
Topic: 894 Message: 910

Hi Tom,
Below are my opinions.
----- Original Message -----
From: K0PYK
To: SkyWires@yahoogroups.com
Sent: Thursday, November 11, 2004 6:58 AM
Subject: [SkyWires] Insulated Wire Correction Factor

SkyWire Group...
There has been some nice discissions on getting loops
to resonance. Many have been using insulated wire for
there projects. I am also using 12 ga insulated wire
for my wire projects. I am in the irrigation business
so have plenty on hand. I have a lot of trees to go
through, so I am concerned about bare wire laying in
the trees.
My questions as follows:

* Is 1005/f the standard loop formula???

YES

* I would like to use my loop for multiple bands...so
is 1.775, 3.55, 7.1, 14.2, 28.4 a good design
philosophy???

I WOULD DESIGN THE ANTENNA FOR 1.8 MHZ

* When I build a 1.775 loop...the length would
be...566'...What would be a correction factor for
insulated wire???

If instead of bare wire, insulated wire is used a 3 to 5% shortening may be required to obtain resonance, due too insulated wire's lower velocity factor.

* If I feed with ladder line to a balun...is there a
correct length to aid in matching...such as a 1/4 wave
of 72 ohm coax???

YES AND NO

Keep the ladder line around these lengths.
[The WORST POSSIBLE line lengths are shown in brackets]

160 meter antenna 35-60, 170-195 or 210-235 feet
[Avoid 130, 260 ft]

Some slight trimming or adding of the ladder line may be necessary to accommodate the higher frequency bands.

FROM THE BALUN USE ANY NEEDED LENGTH OF 50 OHM COAX TO REACH THE STATION.

* I only have the autotuners in the rigs...so my
matching extremes are limited. I built a 80 meter
double extended zepp and used wh2t's 4:1 balun...works
nice. I also used the dipole3 program to get the
ladder line to a proper length. Is there a program
like this for building loops???

RJELOOP1 AND RJELOOP2 AND MANY OTHER PROGRAMS CAN BE DOWNLOADED FROM :
http://webpages.charter.net/crstrode/calcs/RFcalcs.htm

I HOPE THIS INFO IS HELPFUL.
ACE - WH2T

914. Re: [SkyWires] Re: Hello>> Possible Virus

Yahoo group: SkyWires
Date: 2004-11-18 03:08:56 UTC
From: David Shrum
Topic: 914 Message: 914

I am going to error on the side of caution and ban the sender, if they are legit, someone please let me know. I would also advise not opening the attachment that came with the original message if you are using a Windows system.

Dave N8PU

On Wed, 2004-11-17 at 21:26, Khmenway wrote:
> :))
>

915. Re: [SkyWires] Re: Hello>> Possible Virus

Yahoo group: SkyWires
Date: 2004-11-18 11:48:53 UTC
From: Dr.Ace Ratliff
Topic: 914 Message: 915

Hi Dave,
No Doubt About It, It's Another Virus.
It's Bagle or one of it's variants.
Ace - WH2T
----- Original Message -----
From: David Shrum
To: SkyWires
Sent: Wednesday, November 17, 2004 10:08 PM
Subject: Re: [SkyWires] Re: Hello>> Possible Virus

I am going to error on the side of caution and ban the sender, if they
are legit, someone please let me know. I would also advise not opening
the attachment that came with the original message if you are using a
Windows system.

Dave N8PU

On Wed, 2004-11-17 at 21:26, Khmenway wrote:
> :))
>

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916. Re: [SkyWires] Re: Hello>> Possible Virus

Yahoo group: SkyWires
Date: 2004-11-18 12:11:08 UTC
From: Dr.Ace Ratliff
Topic: 914 Message: 916

Dave,
Since the posting below by khmenway, his computer has posted the virus as an attachment again in messages No. 868, 870, 871, 890, 897, 898, and 900.
I deleted those messages from the archive.

I eMailed him and informed him that his computer is still infected.
Ace - www.WH2T.com

From: "khmenway" <khmenway@...>
Date: Sun Nov 7, 2004 8:05 pm
Subject: virus problem solved???

apon notice of virus i have updated my mcafee , spybot, and adaware software i hope this works please inform me if this doesnt work.
this is my only reply the time is 7:06 pm sunday nov 7

----- Original Message -----
From: David Shrum
To: SkyWires
Sent: Wednesday, November 17, 2004 10:08 PM
Subject: Re: [SkyWires] Re: Hello>> Possible Virus

I am going to error on the side of caution and ban the sender, if they are legit, someone please let me know. I would also advise not opening the attachment that came with the original message if you are using a Windows system.

Dave N8PU

On Wed, 2004-11-17 at 21:26, Khmenway wrote:
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917. I'll vouch for Keith Hemmerway.....

Yahoo group: SkyWires
Date: 2004-11-18 15:46:46 UTC
From: KI4BUN / AAV4TP
Topic: 917 Message: 917

The guy is having computer problems, but is a bona fide HAM and an all around good guy. Please dont block him from the newsgroup.

C.L. Sutton KI4BUN/AAV4TP
Henderson County KY ARES Emergency Coordinator

918. Antenna Mast Kits

Yahoo group: SkyWires
Date: 2004-11-18 15:58:23 UTC
From: KI4BUN / AAV4TP
Topic: 918 Message: 918

Shouls anyone in this group be interested, I have a number of BRAND NEW, UNUSED, Military Surplus Camo Suport Systems. They make GREAT Antenna Masts for both portable operation or as I have done to support a SkyWire Loop.

These units are still sealed in the 40mil plastic bags from the factory and contain:

12 - 4 foot fiberglass mast sections
16 - battens (easy to mod for guy plates)
16 - aluminum stakes
4 - batten nuts
1 - heavy duty rubberized carry bag.

These make great go-kits for ARES, MARS, EMCOM. If you need one, two, three, or all four masts for a SkyWire Loop, these are just the ticket.

I am asking $25.00 plus shipping per unit. They can also be picked up in the Evansville IN area.

For more info please e-mail me at: pcsutton@... or call 270.826.9988

Best regards,

C.L. Sutton KI4BUN/AAV4TP
Henderson County KY ARES Emergency Coordinator

919. Re: [SkyWires] Antenna Mast Kits

Yahoo group: SkyWires
Date: 2004-11-18 16:44:55 UTC
From: DavesRadio"RR"
Topic: 918 Message: 919

what do they weigh?... I'm trying to figure shipping

Dave
K5DRC
BULL SHOALES LAKE
http://www.bullshoals.org/lake.htm
AR/MO STATE LINE
----- Original Message -----
From: KI4BUN / AAV4TP
To: SkyWires@yahoogroups.com
Sent: Thursday, November 18, 2004 9:58 AM
Subject: [SkyWires] Antenna Mast Kits

Shouls anyone in this group be interested, I have a number of BRAND NEW, UNUSED, Military Surplus Camo Suport Systems. They make GREAT Antenna Masts for both portable operation or as I have done to support a SkyWire Loop.

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Best regards,

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Henderson County KY ARES Emergency Coordinator

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920. Re: Antenna Mast Kits

Yahoo group: SkyWires
Date: 2004-11-18 19:43:12 UTC
From: KI4BUN / AAV4TP
Topic: 918 Message: 920

I'm glad you asked. These kits weigh 60 lbs 6oz and measure 50x12x10 inches.

I have recently shipped one to St. Pete FL for about $28.00, ,or one can pick them up in the Evansville IN area.

73

C.L. Sutton KI4BUN/AAV4TP

--- In SkyWires@yahoogroups.com, "DavesRadio\"RR\"" <davesradio@a...> wrote:
> what do they weigh?... I'm trying to figure shipping
>
> Dave
> K5DRC
> BULL SHOALES LAKE
> http://www.bullshoals.org/lake.htm
> AR/MO STATE LINE
> ----- Original Message -----
> From: KI4BUN / AAV4TP
> To: SkyWires@yahoogroups.com
> Sent: Thursday, November 18, 2004 9:58 AM
> Subject: [SkyWires] Antenna Mast Kits
>
>
>
> Shouls anyone in this group be interested, I have a number of BRAND
> NEW, UNUSED, Military Surplus Camo Suport Systems. They make GREAT
> Antenna Masts for both portable operation or as I have done to
> support a SkyWire Loop.
>
> These units are still sealed in the 40mil plastic bags from the
> factory and contain:
>
> 12 - 4 foot fiberglass mast sections
> 16 - battens (easy to mod for guy plates)
> 16 - aluminum stakes
> 4 - batten nuts
> 1 - heavy duty rubberized carry bag.
>
> These make great go-kits for ARES, MARS, EMCOM. If you need one,
> two, three, or all four masts for a SkyWire Loop, these are just the

> ticket.
>
> I am asking $25.00 plus shipping per unit. They can also be
picked
> up in the Evansville IN area.
>
> For more info please e-mail me at: pcsutton@i... or call
> 270.826.9988
>
> Best regards,
>
> C.L. Sutton KI4BUN/AAV4TP
> Henderson County KY ARES Emergency Coordinator
>
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921. SV: [SkyWires] Antenna Mast Kits

Yahoo group: SkyWires
Date: 2004-11-18 21:00:51 UTC
From: Per Eriksson
Topic: 918 Message: 921

Well, im interested too...but shipment to Sweden will moust surely cost more than the gear....

Didn't you have those on a web-page somewhere? I think I saw some pictures a month a go...ebay?

/Per

-----Ursprungligt meddelande-----
Från: KI4BUN / AAV4TP [mailto:pcsutton@...]
Skickat: den 18 november 2004 16:58
Till: SkyWires@yahoogroups.com
Ämne: [SkyWires] Antenna Mast Kits

Shouls anyone in this group be interested, I have a number of BRAND NEW, UNUSED, Military Surplus Camo Suport Systems. They make GREAT Antenna Masts for both portable operation or as I have done to support a SkyWire Loop.

These units are still sealed in the 40mil plastic bags from the factory and contain:

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16 - aluminum stakes
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1 - heavy duty rubberized carry bag.

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For more info please e-mail me at: pcsutton@... or call 270.826.9988

Best regards,

C.L. Sutton KI4BUN/AAV4TP
Henderson County KY ARES Emergency Coordinator

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<http://us.adserver.yahoo.com/l?M=298184.5584357.6650215.3001176/D=groups/S=:HM/A=2434970/rand=746822394>

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<mailto:SkyWires-unsubscribe@yahoogroups.com?subject=Unsubscribe>

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922. Re: [SkyWires] I'll vouch for Keith Hemmerway.....

Yahoo group: SkyWires
Date: 2004-11-18 23:19:08 UTC
From: David Shrum
Topic: 917 Message: 922

I believed I UN-banned him.

Dave N8PU

PS I guess we will need to watch for post from him (attachments), until
he gets his virus problem squared away.

On Thu, 2004-11-18 at 10:46, KI4BUN / AAV4TP wrote:
> The guy is having computer problems, but is a bona fide HAM and an
> all around good guy. Please dont block him from the newsgroup.
>
> C.L. Sutton KI4BUN/AAV4TP
> Henderson County KY ARES Emergency Coordinator
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923. what is the restance for a 40 meter loop

Yahoo group: SkyWires
Date: 2004-12-01 14:47:35 UTC
From: Jay
Topic: 923 Message: 923

When I installed mine and installed the pl259 I checked the
resistance and saw 1.459 ohms but the swr was 1.7:1 and this is the
best swr I got.
I do have a another question my wire lays on a wooden fence but when
I tried to increase the height ant get it off the fence my swer went
out. I could not find it any were in the 40-meter band what could
cause this.
Thank you
Jay Mason

924. Re: [SkyWires] what is the restance for a 40 meter loop

Yahoo group: SkyWires
Date: 2004-12-01 14:58:09 UTC
From: desmoface@aol.com
Topic: 923 Message: 924

Hi Jay, if you are just running the antenna right into the swr meter, 1.7 is about the lowest you will see..same thing with my 80 meter loop..

Not sure why the swr changed radically, are you using bare or insulated wire?

Steve
kb8viv

""When I installed mine and installed the pl259 I checked the
resistance and saw 1.459 ohms but the swr was 1.7:1 and this is the
best swr I got.
I do have a another question my wire lays on a wooden fence but when
I tried to increase the height ant get it off the fence my swer went
out. I could not find it any were in the 40-meter band what could
cause this.
Thank you
Jay Mason""

925. Re: what is the restance for a 40 meter loop

Yahoo group: SkyWires
Date: 2004-12-01 15:13:11 UTC
From: Jay
Topic: 923 Message: 925

>
> Not sure why the swr changed radically, are you using bare or
insulated wire?

Bare wire and the configuration is a delta loop
Thank you
Jay

926. Re: [SkyWires] Re: what is the restance for a 40 meter loop

Yahoo group: SkyWires
Date: 2004-12-01 15:44:39 UTC
From: desmoface@aol.com
Topic: 923 Message: 926

"Bare wire and the configuration is a delta loop
Thank you
Jay"

Im sure there are people out here more knowledgable than me but I'll take a stab at what happened. The height above ground changes the way an antenna acts which may effect the swr. But it's strange that it was acceptable when it was laying on the fence but shot up when it was raised. Or, the antenna may have been interacting with the fence and moving it away from the fence changed the electrical properties of the antenna, especially with bare wire.

Another consideration is the connections may have been compromised when you moved the antenna...I'd recheck all the connections and make sure they are true. Can you tune it down with a transmatch??

Steve
kb8viv

927. Re: [SkyWires] Re: what is the restance for a 40 meter loop

Yahoo group: SkyWires
Date: 2004-12-01 16:08:16 UTC
From: Scott Erwin
Topic: 923 Message: 927

The feed point impedance (Z) on any loop antenna is around 100 ohms and is variable with conditions present around the antenna such as a metal fence wire and ground coupling according to the height above ground. A SWR of 1.7 to 1 would be about right if measured at the feed point of the antenna. Do not confuse AC Impedance with DC resistance! You can't simply use a volt/ohm meter to read the impedance of an antenna. With a loop you are simply reading the resistance of the length of wire used as the antenna element. The feed line and length of it can produce different SWR readings at the transceiver end of the feed line. The reason for this is that the feed line impedance is different than the antenna impedance where no matching device is used between the antenna and the feed line. This causes changes of impedance along the feed line. To correct the problem if you plan on using the loop on 40 meters only then simply insert a section of 75 ohm coax 1/4-wavelength times the velocity factor of the coax used. Using Radio Shack RG-59 coax for 40 meters this would be 32 feet long. If you plan on using the loop on higher bands the feed point impedance will again be different but on HF bands and a loop antenna this is really no problem as long as you do not try to load the feed line and antenna on bands lower than the band the antenna was made for. The trick is to simply find a point on the feed line where the impedance will be something your antenna tuner can handle. You can build a simple feed line tuner by making different lengths of coax of 2, 4, 8, 16, and 32-foot lengths and adding then to the end of the coax feed line. This can be as simple as just having them ready with the proper coax connectors to install them as required to a fancy relays with computer control via the parallel port on a computer to switch in the required length. Using the lengths shown you can obtain a SWR 3 to 1 or lower than even an automatic antenna tuner in a modern transceiver can tune without problems.
--- Jay <ka4oww@...> wrote:

>
> >
> > Not sure why the swr changed radically, are you
> using bare or

> insulated wire?
>
> Bare wire and the configuration is a delta loop
> Thank you
> Jay
>
>
>
>
>

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The all-new My Yahoo! - What will yours do?
http://my.yahoo.com

928. Re: what is the restance for a 40 meter loop

Yahoo group: SkyWires
Date: 2004-12-02 01:14:32 UTC
From: Jay
Topic: 923 Message: 928

I am using a 75ohm rg11 matching section that is 1/4 wave @7.225---

Jay

In SkyWires@yahoogroups.com, Scott Erwin <n4zou@y...> wrote:
> The feed point impedance (Z) on any loop antenna is
> around 100 ohms and is variable with conditions
> present around the antenna such as a metal fence wire
> and ground coupling according to the height above
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> along the feed line. To correct the problem if you
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> Shack RG-59 coax for 40 meters this would be 32 feet
> long. If you plan on using the loop on higher bands
> the feed point impedance will again be different but
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> line and antenna on bands lower than the band the
> antenna was made for. The trick is to simply find a
> point on the feed line where the impedance will be
> something your antenna tuner can handle. You can build
> a simple feed line tuner by making different lengths
> of coax of 2, 4, 8, 16, and 32-foot lengths and adding
> then to the end of the coax feed line. This can be as
> simple as just having them ready with the proper coax
> connectors to install them as required to a fancy
> relays with computer control via the parallel port on
> a computer to switch in the required length. Using the
> lengths shown you can obtain a SWR 3 to 1 or lower
> than even an automatic antenna tuner in a modern
> transceiver can tune without problems.
> --- Jay <ka4oww@y...> wrote:

>
> >
> > >
> > > Not sure why the swr changed radically, are you
> > using bare or
> > insulated wire?
> >
> > Bare wire and the configuration is a delta loop
> > Thank you
> > Jay
> >
> >
> >
> >
> >
>
>
>
>
> _____
> Do you Yahoo!?
> The all-new My Yahoo! - What will yours do?
> http://my.yahoo.com

929. 160 Dipole Help Needed

Yahoo group: SkyWires
Date: 2004-12-06 03:56:05 UTC
From: Mike
Topic: 929 Message: 929

I am new to the group so maybe this has already been covered. In the fall of 2003 I put up a 270' dipole into the trees. The center is about 40' up in a tree. (Best I can do) One end is up about the same hight but the other end is only about 25' up. (It was higher but came down this spring and I had no way to get it back up again.)

I feed it with about 100' of 450 ohm ladder line directly into my shack and into my TenTec 238B tuner. I am able to tune 75 meters and 40 meters without difficulty and can use my AL811 amp without difficulty. However I cannot tune 160. I recently got a MFJ 259B antenna analyzer to check out the system.

Here is what I got.

Freq R X SWR
1880 mhz 104 333 17.8:1
2159 mhz 51 5 1.1:1

So my antenna is resonant up in the 2.0 mhz area. So any ideas on how to get it down to 1.9 mhz. I could get the ends down but it would be tough. Can I somehow adjust the feedline to move the freq down?

Any ideas would be greatly appreciated.

Mike W7CO

930. RE: [SkyWires] 160 Dipole Help Needed

Yahoo group: SkyWires
Date: 2004-12-06 04:26:39 UTC
From: D. Scott MacKenzie
Topic: 929 Message: 930

Your antenna is too short. By strict calculations - assuming no ground interactions:

1.880: 248.9 feet
2.159: 216.8 feet

If a simple proportion is made:

270/216 = x/248 and solving for x, it appears that 310 feet would be appropriate for your height and conditions. You can try messing with the feed line, and finding a position that would fit. There are a variety of methods in antenna books that describe the method...but I would first try adding wire - about 20 feet to each side....If you are only interested in 160M, then I would try a length of 50 ohm coax, then a 1/4 wave of 75 ohm - this would make it 125 ohm, and a reasonable match for your antenna - not perfect, but it would work, and probably not need a tuner for 160M....

Others may recommend different ways, but this way usually brings me close....

Scott, KB?FHP

-----Original Message-----
From: Mike [mailto:w7co@...]
Sent: Sunday, December 05, 2004 10:56 PM
To: SkyWires@yahoogroups.com
Subject: [SkyWires] 160 Dipole Help Needed

I am new to the group so maybe this has already been covered. In the fall of 2003 I put up a 270' dipole into the trees. The center is about 40' up in a tree. (Best I can do) One end is up about the same hight but the other end is only about 25' up. (It was higher but came down this spring and I had no way to get it back up again.)

I feed it with about 100' of 450 ohm ladder line directly into my shack and into my TenTec 238B tuner. I am able to tune 75 meters and 40 meters without difficulty and can use my AL811 amp without difficulty. However I cannot tune 160. I recently got a MFJ 259B antenna analyzer to check out the system.

Here is what I got.

Freq R X SWR
1880 mhz 104 333 17.8:1
2159 mhz 51 5 1.1:1

So my antenna is resonant up in the 2.0 mhz area. So any ideas on how to get it down to 1.9 mhz. I could get the ends down but it

would be tough. Can I somehow adjust the feedline to move the freq
down?

Any ideas would be greatly appreciated.

Mike W7CO

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931. Re: [SkyWires] 160 Dipole Help Needed

Yahoo group: SkyWires
Date: 2004-12-06 05:05:38 UTC
From: Dr.Ace Ratliff
Topic: 929 Message: 931

Hi Mike ,
Standard 1/2 wave dipole formula assuming bare wire is 468/Freq in Mhz = length in feet.
468/1.9Mhz = 246 feet.
Yes, you can adjust the feedline length to get a better match at 1.9 Mhz , in the station.
Add or subtract one foot at a time the recheck it.
Ace - WH2T
----- Original Message -----
From: Mike
To: SkyWires@yahoogroups.com
Sent: Sunday, December 05, 2004 10:56 PM
Subject: [SkyWires] 160 Dipole Help Needed

I am new to the group so maybe this has already been covered. In
the fall of 2003 I put up a 270' dipole into the trees. The center
is about 40' up in a tree. (Best I can do) One end is up about the
same hight but the other end is only about 25' up. (It was higher
but came down this spring and I had no way to get it back up again.)

I feed it with about 100' of 450 ohm ladder line directly into my
shack and into my TenTec 238B tuner. I am able to tune 75 meters
and 40 meters without difficulty and can use my AL811 amp without
difficulty. However I cannot tune 160. I recently got a MFJ 259B
antenna analyzer to check out the system.

Here is what I got.

Freq R X SWR
1880 mhz 104 333 17.8:1
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So my antenna is resonant up in the 2.0 mhz area. So any ideas on
how to get it down to 1.9 mhz. I could get the ends down but it
would be tough. Can I somehow adjust the feedline to move the freq
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Any ideas would be greatly appreciated.

Mike W7CO

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932. Re: [SkyWires] 160 Dipole Help Needed

Yahoo group: SkyWires
Date: 2004-12-06 12:05:28 UTC
From: Dr.Ace Ratliff
Topic: 929 Message: 932

Typo - Should read "Then recheck it".
----- Original Message -----
From: Dr.Ace Ratliff
To: SkyWires@yahoogroups.com
Sent: Monday, December 06, 2004 12:05 AM
Subject: Re: [SkyWires] 160 Dipole Help Needed

Hi Mike ,
Standard 1/2 wave dipole formula assuming bare wire is 468/Freq in Mhz = length in feet.
468/1.9Mhz = 246 feet.
Yes, you can adjust the feedline length to get a better match at 1.9 Mhz , in the station.
Add or subtract one foot at a time the recheck it.
Ace - WH2T
----- Original Message -----
From: Mike
To: SkyWires@yahoogroups.com
Sent: Sunday, December 05, 2004 10:56 PM
Subject: [SkyWires] 160 Dipole Help Needed

I am new to the group so maybe this has already been covered. In
the fall of 2003 I put up a 270' dipole into the trees. The center
is about 40' up in a tree. (Best I can do) One end is up about the
same hight but the other end is only about 25' up. (It was higher
but came down this spring and I had no way to get it back up again.)

I feed it with about 100' of 450 ohm ladder line directly into my
shack and into my TenTec 238B tuner. I am able to tune 75 meters
and 40 meters without difficulty and can use my AL811 amp without
difficulty. However I cannot tune 160. I recently got a MFJ 259B
antenna analyzer to check out the system.

Here is what I got.

Freq R X SWR
1880 mhz 104 333 17.8:1
2159 mhz 51 5 1.1:1

So my antenna is resonant up in the 2.0 mhz area. So any ideas on
how to get it down to 1.9 mhz. I could get the ends down but it
would be tough. Can I somehow adjust the feedline to move the freq
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Any ideas would be greatly appreciated.

Mike W7CO

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933. Re: 160 Dipole Help Needed

Yahoo group: SkyWires
Date: 2004-12-08 00:24:16 UTC
From: Mike
Topic: 929 Message: 933

Success.

Since getting the ends of my "monster dipole out of the trees would be a monumental job for one guy I took the "adjust the feedline" approach. First I added 4' of 450 ohm twin lead to the existing wire and checked it on my MFJ 259B. The resonate freq was comming down, but still in the low 2.0 mhz range. Next I added about 8' and retested. The resonate freq was now in the 1.980 range. 75 meters was in the 3.8 range and 40 meters was about 6.9 mhz. I figured my Ten Tec 238B could match this so I hooked up the antenna to the tuner and sure enough I can tune 160, 75 and 40 meters with full output power.

Thanks to those who provided input. I realize getting an antenna that is closer to resonance is better but I think this will get me through the winter or until the wind knocks this antenna down.

Mike W7CO

934. Re: 160 Dipole Help Needed

Yahoo group: SkyWires
Date: 2004-12-08 12:56:44 UTC
From: K0PYK
Topic: 929 Message: 934

I would do a google for the "dipole3" program. It
worked for me when I had trouble matching my 80 meter
double extended zepp. Just plug your numbers in and
find out what direction you should go.
Tom, K0PYK

--- SkyWires@yahoogroups.com wrote:

>
> ---------- Yahoo! Groups Sponsor
> ----------~-->
> $4.98 domain names from Yahoo!. Register anything.
>
http://us.click.yahoo.com/Q7_YsB/neXJAA/yQLSAA/ELTolB/TM
>
---~->
>
>
> There is 1 message in this issue.
>
> Topics in this digest:
>
> 1. Re: 160 Dipole Help Needed
> From: "Dr.Ace Ratliff"
> <wh2t@...>
>
>
>

_____
>

_____
>
> Message: 1
> Date: Mon, 6 Dec 2004 07:05:28 -0500
> From: "Dr.Ace Ratliff" <wh2t@...>
> Subject: Re: 160 Dipole Help Needed
>
> Typo - Should read "Then recheck it".
> ----- Original Message -----
> From: Dr.Ace Ratliff
> To: SkyWires@yahoogroups.com
> Sent: Monday, December 06, 2004 12:05 AM
> Subject: Re: [SkyWires] 160 Dipole Help Needed
>
>

> Hi Mike ,
> Standard 1/2 wave dipole formula assuming bare
> wire is 468/Freq in Mhz = length in feet.
> 468/1.9Mhz = 246 feet.
> Yes, you can adjust the feedline length to get a
> better match at 1.9 Mhz , in the station.
> Add or subtract one foot at a time the recheck it.
> Ace - WH2T
> ----- Original Message -----
> From: Mike
> To: SkyWires@yahoogroups.com
> Sent: Sunday, December 05, 2004 10:56 PM
> Subject: [SkyWires] 160 Dipole Help Needed
>
>
>
> I am new to the group so maybe this has already
> been covered. In
> the fall of 2003 I put up a 270' dipole into the
> trees. The center
> is about 40' up in a tree. (Best I can do) One
> end is up about the
> same hight but the other end is only about 25'
> up. (It was higher
> but came down this spring and I had no way to
> get it back up again.)
>
> I feed it with about 100' of 450 ohm ladder line
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> shack and into my TenTec 238B tuner. I am able
> to tune 75 meters
> and 40 meters without difficulty and can use my
> AL811 amp without
> difficulty. However I cannot tune 160. I
> recently got a MFJ 259B
> antenna analyzer to check out the system.
>
> Here is what I got.
>
> Freq R X SWR
> 1880 mhz 104 333 17.8:1
> 2159 mhz 51 5 1.1:1
>
> So my antenna is resonant up in the 2.0 mhz
> area. So any ideas on
> how to get it down to 1.9 mhz. I could get the
> ends down but it
> would be tough. Can I somehow adjust the
> feedline to move the freq
> down?

>
> Any ideas would be greatly appreciated.
>
> Mike W7CO
>
>
>
>
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936. Re: [SkyWires] Site

Yahoo group: SkyWires
Date: 2004-12-08 22:05:59 UTC
From: David Shrum
Topic: 936 Message: 936

Original poster and message, banned/deleted.

Dave N8PU

Natalie wrote:

937. Re: [SkyWires] Site

Yahoo group: SkyWires
Date: 2004-12-08 23:21:29 UTC
From: Dr.Ace Ratliff
Topic: 936 Message: 937

Good Job Dave !
----- Original Message -----
From: David Shrum
To: SkyWires@yahoogroups.com
Sent: Wednesday, December 08, 2004 5:05 PM
Subject: Re: [SkyWires] Site

Original poster and message, banned/deleted.

Dave N8PU

Natalie wrote:

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938. Re: 160 Dipole Help Needed -> DIPOLE3

Yahoo group: SkyWires
Date: 2004-12-09 14:27:01 UTC
From: Ron McConnell
Topic: 938 Message: 938

DIPOLE3 is one of many useful and educational
little antenna and transmission freeware programs
by Reg Edwards, G4FGQ, available at

<http://www.btinternet.com/~g4fgq.regp/>

Save time by going ahead and downloading them all
into a new "G4FGQ" directory.
Sort them out later by saving the description/download page.

<http://www.btinternet.com/~g4fgq.regp/page3.html#S301%22>

Have fun.

Cheers, 73,

Ron McC.
w2iol@...

Ronald C. McConnell, PhD

WGS-84: N 40° 46' 57.6" +/-0.1"
W 74° 41' 22.1" +/-0.1"
FN20ps.77GU31 +/-
V +5058.3438 H +1504.2531

<http://home.earthlink.net/~rcmcc>

I hear and I forget.
I see and I remember.
I do and I understand.
- Chinese proverb

939. Re: [SkyWires] Re: 160 Dipole Help Needed -> DIPOLE3

Yahoo group: SkyWires
Date: 2004-12-09 19:41:15 UTC
From: Dr.Ace Ratliff
Topic: 938 Message: 939

Will DIPOLE3 run in Widows XP ?
Ace - WH2T
----- Original Message -----
From: Ron McConnell
To: SkyWires@yahoogroups.com ; k0pyk@...
Cc: Ron McConnell ; Reg G4FGQ Edwards
Sent: Thursday, December 09, 2004 9:27 AM
Subject: [SkyWires] Re: 160 Dipole Help Needed -> DIPOLE3

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little antenna and transmission freeware programs
by Reg Edwards, G4FGQ, available at

<http://www.btinternet.com/~g4fgq.regp/>

Save time by going ahead and downloading them all
into a new "G4FGQ" directory.
Sort them out later by saving the description/download page.

<http://www.btinternet.com/~g4fgq.regp/page3.html#S301%22>

Have fun.

Cheers, 73,

Ron McC.
w2iol@...

Ronald C. McConnell, PhD

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940. Re: [SkyWires] Re: 160 Dipole Help Needed -> DIPOLE3

Yahoo group: SkyWires
Date: 2004-12-09 20:59:52 UTC
From: W1GOR
Topic: 938 Message: 940

Yes... It runs on XP

73, Larry - W1GOR

----- Original Message -----
From: Dr.Ace Ratliff
To: SkyWires@yahoogroups.com
Sent: Thursday, December 09, 2004 2:41 PM
Subject: Re: [SkyWires] Re: 160 Dipole Help Needed -> DIPOLE3

Will DIPOLE3 run in Widows XP ?
Ace - WH2T

941. Re: [SkyWires] Re: 160 Dipole Help Needed -> DIPOLE3

Yahoo group: SkyWires
Date: 2004-12-09 21:26:25 UTC
From: desmoface@aol.com
Topic: 938 Message: 941

Hey Larry, hows things in Maine? Spent 8 years there while in the navy, stationed at nas brunswick, me..my wife is from Caribou..73's..

Steve
kb8viv

"Yes... It runs on XP

73, Larry - W1GOR"

942. Re: [SkyWires] Re: 160 Dipole Help Needed -> DIPOLE3

Yahoo group: SkyWires
Date: 2004-12-10 04:14:42 UTC
From: Dr.Ace Ratliff
Topic: 938 Message: 942

Hi all,
Every time I download and try to run DIPOLE3 , I get :

"The system file is not suitable for running MS-DOS and Microsoft Windows applications. Choose 'Close' to terminate the application."

I am using NTFS . Any HELP ???

Ace - WH2T
----- Original Message -----
From: W1GOR
To: SkyWires@yahoogroups.com
Sent: Thursday, December 09, 2004 3:59 PM
Subject: Re: [SkyWires] Re: 160 Dipole Help Needed -> DIPOLE3

Yes... It runs on XP

73, Larry - W1GOR

----- Original Message -----
From: Dr.Ace Ratliff
To: SkyWires@yahoogroups.com
Sent: Thursday, December 09, 2004 2:41 PM
Subject: Re: [SkyWires] Re: 160 Dipole Help Needed -> DIPOLE3

Will DIPOLE3 run in Widows XP ?
Ace - WH2T

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943. Re: [SkyWires] Re: 160 Dipole Help Needed -> DIPOLE3

Yahoo group: SkyWires
Date: 2004-12-10 04:20:29 UTC
From: Dr.Ace Ratliff
Topic: 938 Message: 943

Hi,
Every time I download and try to run DIPOLE3 , I get :

"The system file is not suitable for running MS-DOS and Microsoft Windows applications. Choose 'Close' to terminate the application."

I am using NTFS . Any HELP ???

Ace - WH2T
----- Original Message -----
From: W1GOR
To: SkyWires@yahoogroups.com
Sent: Thursday, December 09, 2004 3:59 PM
Subject: Re: [SkyWires] Re: 160 Dipole Help Needed -> DIPOLE3

Yes... It runs on XP

73, Larry - W1GOR

----- Original Message -----
From: Dr.Ace Ratliff
To: SkyWires@yahoogroups.com
Sent: Thursday, December 09, 2004 2:41 PM
Subject: Re: [SkyWires] Re: 160 Dipole Help Needed -> DIPOLE3

Will DIPOLE3 run in Widows XP ?
Ace - WH2T

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944. Re: [SkyWires] Re: 160 Dipole Help Needed -> DIPOLE3

Yahoo group: SkyWires
Date: 2004-12-10 04:23:03 UTC
From: Dr.Ace Ratliff
Topic: 938 Message: 944

Hi,
Every time I download and try to run DIPOLE3 , I get :

"The system file is not suitable for running MS-DOS and Microsoft Windows applications.
Choose 'Close' to terminate the application."

I am using NTFS . Any HELP ???

Ace - WH2T
----- Original Message -----
From: Ron McConnell
To: SkyWires@yahoogroups.com ; k0pyk@...
Cc: Ron McConnell ; Reg G4FGQ Edwards
Sent: Thursday, December 09, 2004 9:27 AM
Subject: [SkyWires] Re: 160 Dipole Help Needed -> DIPOLE3

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Have fun.

Cheers, 73,

Ron McC.
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Ronald C. McConnell, PhD

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945. Re: [SkyWires]Sorry - Help Needed -> DIPOLE3

Yahoo group: SkyWires
Date: 2004-12-10 04:26:19 UTC
From: Dr.Ace Ratliff
Topic: 945 Message: 945

Sorry about the multiple postings.
Ace - WH2T
----- Original Message -----
From: Dr.Ace Ratliff
To: SkyWires@yahoogroups.com
Sent: Thursday, December 09, 2004 11:23 PM
Subject: Re: [SkyWires] Re: 160 Dipole Help Needed -> DIPOLE3

Hi,
Every time I download and try to run DIPOLE3 , I get :

"The system file is not suitable for running MS-DOS and Microsoft Windows applications.
Choose 'Close' to terminate the application."

I am using NTFS . Any HELP ???

Ace - WH2T
----- Original Message -----
From: Ron McConnell
To: SkyWires@yahoogroups.com ; k0pyk@yahoo.com
Cc: Ron McConnell ; Reg G4FGQ Edwards
Sent: Thursday, December 09, 2004 9:27 AM
Subject: [SkyWires] Re: 160 Dipole Help Needed -> DIPOLE3

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little antenna and transmission freeware programs
by Reg Edwards, G4FGQ, available at

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Save time by going ahead and downloading them all
into a new "G4FGQ" directory.
Sort them out later by saving the description/download page.

<http://www.btinternet.com/~g4fgq.regp/page3.html#S301%22>

Have fun.

Cheers, 73,

Ron McC.
w2iol@...

Ronald C. McConnell, PhD

WGS-84: N 40º 46' 57.6" +/-0.1"
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<http://home.earthlink.net/~rcmcc>

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946. Re: [SkyWires] Re: 160 Dipole Help Needed -> DIPOLE3

Yahoo group: SkyWires
Date: 2004-12-10 08:16:20 UTC
From: W1GOR
Topic: 938 Message: 946

Ace,

My OS is XP and the HD is not NTFS format... Dipole3 is displayed as a smaller-than-usual format, but readable...

73, Larry - W1GOR
----- Original Message -----
From: Dr.Ace Ratliff
To: SkyWires@yahoogroups.com
Sent: Thursday, December 09, 2004 11:14 PM
Subject: Re: [SkyWires] Re: 160 Dipole Help Needed -> DIPOLE3

Hi all,
Every time I download and try to run DIPOLE3 , I get :

"The system file is not suitable for running MS-DOS and Microsoft Windows applications. Choose 'Close' to terminate the application."

I am using NTFS . Any HELP ???

Ace - WH2T
----- Original Message -----
From: W1GOR
To: SkyWires@yahoogroups.com
Sent: Thursday, December 09, 2004 3:59 PM
Subject: Re: [SkyWires] Re: 160 Dipole Help Needed -> DIPOLE3

Yes... It runs on XP

73, Larry - W1GOR

----- Original Message -----
From: Dr.Ace Ratliff
To: SkyWires@yahoogroups.com
Sent: Thursday, December 09, 2004 2:41 PM
Subject: Re: [SkyWires] Re: 160 Dipole Help Needed -> DIPOLE3

Will DIPOLE3 run in Widows XP ?
Ace - WH2T

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947. Re: [SkyWires] Re: 160 Dipole Help Needed -> DIPOLE3

Yahoo group: SkyWires
Date: 2004-12-10 08:38:51 UTC
From: C. Beijersbergen
Topic: 938 Message: 947

Since a few weeks I get the same message when I try to strart my Windoes 95 Autosketch CAD program (and other older .exe programs) on my desktop. Before that moment I had no problem. After compairing system files of my XP desk top with my XP laptop, where Autosketch still runs normally, I found an AUTOEXEC.NT file in the c:/windows/system32 directory that is on my laptop but not on my desktop. When I copy this file to the desktop Autosketch starts normally again. But after closing down the desktop and starting up again this file has disappeared. I installed the 2005 version of Norton Internet security recently, might that be the cause of this all? I did not install it on my laptop yet.

Any remarks from anybody?

greetings,

Cor Beijersbergen van Henegouwen
----- Original Message -----
From: Dr.Ace Ratliff
To: SkyWires@yahoogroups.com
Sent: Friday, December 10, 2004 5:23 AM
Subject: Re: [SkyWires] Re: 160 Dipole Help Needed -> DIPOLE3

Hi,
Every time I download and try to run DIPOLE3 , I get :

"The system file is not suitable for running MS-DOS and Microsoft Windows applications. Choose 'Close' to terminate the application."

I am using NTFS . Any HELP ???

Ace - WH2T

948. RE: DIPOLE3 vs. WXP (was 160 Dipole Help Needed)

Yahoo group: SkyWires
Date: 2004-12-10 16:08:10 UTC
From: Ron McConnell
Topic: 948 Message: 948

DIPOLE3 and the other DOS programs _should_ work
on Windows XP. I haven't installed my WXP on this PC yet
but I have used DOS programs on other WXP machines.

For Windows XP,
use Start and Run to run "cmd.exe"
to open a DOS emulation window with a "C:\" prompt.

For older Windows,
use "command.com" instead of "cmd.exe."

If you use DOS frequently, create a shortcut to
"cmd.exe" or "command.com."

Ace says,
"The system file is not suitable...I am using NTFS,..."

Not sure what NFTS is.
If "cmd.exe" doesn't work, maybe someone else
who _really_ understands these things will speak up.

Let us know how you do.

Cheers, 73,

Ron McC.
w2iol@...

Ronald C. McConnell, PhD

WGS-84: N 40º 46' 57.6" +/-0.1"
W 74º 41' 22.1" +/-0.1"
FN20ps.77GU31 +/-
V +5058.3438 H +1504.2531

<http://home.earthlink.net/~rcmcc>

There are 10 kinds of people.
Those who understand binary arithmetic
and those who do not.

949. Re: [SkyWires] RE: DIPOLE3 vs. WXP (was 160 Dipole Help Needed)

Yahoo group: SkyWires
Date: 2004-12-10 20:30:31 UTC
From: Scott Erwin
Topic: 948 Message: 949

Everyone is making older DOS programs run under XP too difficult.
Simply burn a bootable DC-R with DOS and run a batch file that turns some of your memory into a virtual drive and load the program into it. You should have more than enough to take care of it if your running any flavor of Windows! Get your old DOS book out and get started making up your CD and batch file. This eliminates problems from Windows and turns your computer into something very stable and super fast!
Doing this will make DIPOLE3 very easy to run. I run Terman93 (AN-93) software with an old terminal unit and do RTTY, Amtor, and Pactor I modes with that program with true ARQ capability. With a switch of serial port wire changes via a switch I can run WF1B RTTY contest software with outstanding results, no TNC required! Something no Windows OS can do. Google terman93.zip to find this free software and also "WF1B RTTY contest software" which is also free now.

--- Ron McConnell <rcmcc@...> wrote:

>
> DIPOLE3 and the other DOS programs _should_ work
> on Windows XP. I haven't installed my WXP on this
> PC yet
> but I have used DOS programs on other WXP machines.
>
> For Windows XP,
> use Start and Run to run "cmd.exe"
> to open a DOS emulation window with a "C:\" prompt.
>
> For older Windows,
> use "command.com" instead of "cmd.exe."
>
> If you use DOS frequently, create a shortcut to
> "cmd.exe" or "command.com."
>
> Ace says,
> "The system file is not suitable...I am using
> NTFS,..."
>
> Not sure what NFTS is.
> If "cmd.exe" doesn't work, maybe someone else
> who _really_ understands these things will speak up.

>
> Let us know how you do.
>
> Cheers, 73,
>
> Ron McC.
> w2iol@...
>
> Ronald C. McConnell, PhD
>
> WGS-84: N 40? 46' 57.6" +/-0.1"
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>
> There are 10 kinds of people.
> Those who understand binary arithmetic
> and those who do not.
>
>
>

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950. Re: [SkyWires] RE: DIPOLE3 vs. WXP (was 160 Dipole Help Needed)

Yahoo group: SkyWires
Date: 2004-12-10 23:27:09 UTC
From: David Shrum
Topic: 948 Message: 950

I don't have any problems running any of them (DOS programs) with XP
Pro. They start their own 'DOS' window on my computer.

Dave N8PU

My next project, someday, it to see if I can get them to run under Linux.

Scott Erwin wrote:
> Everyone is making older DOS programs run under XP too
> difficult.
> Simply burn a bootable DC-R with DOS and run a batch
> file that turns some of your memory into a virtual
> drive and load the program into it. You should have
> more than enough to take care of it if your running
> any flavor of Windows! Get your old DOS book out and
> get started making up your CD and batch file. This
> eliminates problems from Windows and turns your
> computer into something very stable and super fast!
> Doing this will make DIPOLE3 very easy to run. I run
> Terman93 (AN-93) software with an old terminal unit
> and do RTTY, Amtor, and Pactor I modes with that
> program with true ARQ capability. With a switch of
> serial port wire changes via a switch I can run WF1B
> RTTY contest software with outstanding results, no TNC
> required! Something no Windows OS can do. Google
> terman93.zip to find this free software and also "WF1B
> RTTY contest software" which is also free now.
>
> --- Ron McConnell <rcmcc@...> wrote:
>
>
>>DIPOLE3 and the other DOS programs _should_ work
>>on Windows XP. I haven't installed my WXP on this
>>PC yet
>>but I have used DOS programs on other WXP machines.
>>
>>For Windows XP,
>>use Start and Run to run "cmd.exe"
>>to open a DOS emulation window with a "C:\" prompt.
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>>For older Windows,
>>use "command.com" instead of "cmd.exe."
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>>Ace says,
>>"The system file is not suitable...I am using
>>NTFS,..."
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>>Not sure what NFTS is.
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>>Let us know how you do.
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>> WGS-84: N 40? 46' 57.6" +/-0.1"
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>>
>>There are 10 kinds of people.
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951. Re: [SkyWires] RE: DIPOLE3 vs. WXP (was 160 Dipole Help Needed)

Yahoo group: SkyWires
Date: 2004-12-11 17:35:57 UTC
From: Dr.Ace Ratliff
Topic: 948 Message: 951

Hi ,
I give up.
It still does'nt run / work.
F.Y.I. - NTFS is Network Terminal File System, NOT FAT16 or FAT32.
Ace - WH2T
----- Original Message -----
From: Ron McConnell
To: SkyWires@yahoogroups.com
Cc: wh2t@bloomington.in.us ; W2IOL
Sent: Friday, December 10, 2004 11:08 AM
Subject: [SkyWires] RE: DIPOLE3 vs. WXP (was 160 Dipole Help Needed)

DIPOLE3 and the other DOS programs _should_ work
on Windows XP. I haven't installed my WXP on this PC yet
but I have used DOS programs on other WXP machines.

For Windows XP,
use Start and Run to run "cmd.exe"
to open a DOS emulation window with a "C:\" prompt.

For older Windows,
use "command.com" instead of "cmd.exe."

If you use DOS frequently, create a shortcut to
"cmd.exe" or "command.com."

Ace says,
"The system file is not suitable...I am using NTFS,..."

Not sure what NFTS is.
If "cmd.exe" doesn't work, maybe someone else
who _really_ understands these things will speak up.

Let us know how you do.

Cheers, 73,

Ron McC.
w2iol@arrl.net

Ronald C. McConnell, PhD

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952. Re: [SkyWires] RE: DIPOLE3 vs. WXP (was 160 Dipole Help Needed)

Yahoo group: SkyWires
Date: 2004-12-11 17:51:12 UTC
From: W1GOR
Topic: 948 Message: 952

Ace...

Don't give up... make a DOS 6.22 bootable diskette and place Dipole3 on the same diskette... Boot your machine from the diskette and then run Dipole3 from the diskette. This will bypass the hard drive operating system and allow DOS-based programs to function.

73, Larry - W1GOR

----- Original Message -----
From: Dr.Ace Ratliff
To: SkyWires@yahoogroups.com
Sent: Saturday, December 11, 2004 12:35 PM
Subject: Re: [SkyWires] RE: DIPOLE3 vs. WXP (was 160 Dipole Help Needed)

Hi ,
I give up.
It still does'nt run / work.
F.Y.I. - NTFS is Network Terminal File System, NOT FAT16 or FAT32.
Ace - WH2T
----- Original Message -----
From: Ron McConnell
To: SkyWires@yahoogroups.com
Cc: wh2t@bloomington.in.us ; W2IOL
Sent: Friday, December 10, 2004 11:08 AM
Subject: [SkyWires] RE: DIPOLE3 vs. WXP (was 160 Dipole Help Needed)

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use Start and Run to run "cmd.exe"
to open a DOS emulation window with a "C:\" prompt.

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use "command.com" instead of "cmd.exe."

If you use DOS frequently, create a shortcut to
"cmd.exe" or "command.com."

Ace says,
"The system file is not suitable...I am using NTFS,..."

Not sure what NFTS is.
If "cmd.exe" doesn't work, maybe someone else
who _really_ understands these things will speak up.

Let us know how you do.

Cheers, 73,

Ron McC.
w2iol@...

Ronald C. McConnell, PhD

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953. Re: [SkyWires] RE: DIPOLE3 vs. WXP (was 160 Dipole Help Needed)

Yahoo group: SkyWires
Date: 2004-12-11 18:00:38 UTC
From: Dr.Ace Ratliff
Topic: 948 Message: 953

Thanks Larry,
I will try that.
Ace - WH2T
----- Original Message -----
From: W1GOR
To: SkyWires@yahoogroups.com
Sent: Saturday, December 11, 2004 12:51 PM
Subject: Re: [SkyWires] RE: DIPOLE3 vs. WXP (was 160 Dipole Help Needed)

Ace...

Don't give up... make a DOS 6.22 bootable diskette and place Dipole3 on the same diskette... Boot your machine from the diskette and then run Dipole3 from the diskette. This will bypass the hard drive operating system and allow DOS-based programs to function.

73, Larry - W1GOR

----- Original Message -----
From: Dr.Ace Ratliff
To: SkyWires@yahoogroups.com
Sent: Saturday, December 11, 2004 12:35 PM
Subject: Re: [SkyWires] RE: DIPOLE3 vs. WXP (was 160 Dipole Help Needed)

Hi ,
I give up.
It still does'nt run / work.
F.Y.I. - NTFS is Network Terminal File System, NOT FAT16 or FAT32.
Ace - WH2T
----- Original Message -----
From: Ron McConnell
To: SkyWires@yahoogroups.com
Cc: wh2t@... ; W2IOL
Sent: Friday, December 10, 2004 11:08 AM
Subject: [SkyWires] RE: DIPOLE3 vs. WXP (was 160 Dipole Help Needed)

DIPOLE3 and the other DOS programs _should_ work
on Windows XP. I haven't installed my WXP on this PC yet
but I have used DOS programs on other WXP machines.

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to open a DOS emulation window with a "C:\" prompt.

For older Windows,
use "command.com" instead of "cmd.exe."

If you use DOS frequently, create a shortcut to
"cmd.exe" or "command.com."

Ace says,
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Not sure what NFTS is.
If "cmd.exe" doesn't work, maybe someone else
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Let us know how you do.

Cheers, 73,

Ron McC.
w2iol@...

Ronald C. McConnell, PhD

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954. Re: DIPOLE3 vs. WXP (was 160 Dipole Help Needed)

Yahoo group: SkyWires
Date: 2004-12-12 16:53:23 UTC
From: KI4BUN / AAV4TP
Topic: 948 Message: 954

Greetings,

Just an attempt to help. First off, NTFS is "New
Technology File System" and FAT is "File Allocation Table".

In order to have partitions larger than 2 gig, one needs to convert
to NTFS.

I am attaching 2 links for your edification. Hope they help.

http://www.microsoft.com/technet/archive/ittasks/deploy/fat.mspx

http://www.microsoft.com/technet/prodtechnol/winxppro/maintain/conver
tfat.mspx

Best regards,

C.L. Sutton, KI4BUN/AAV4TP

955. DCTL antenna with copper pipe

Yahoo group: SkyWires
Date: 2004-12-13 01:48:05 UTC
From: bambazonke01
Topic: 955 Message: 955

Has anyone made the DCTL loop antenna using copper pipe? If so how
did it compare to the 300 ohm twin lead version?
Jim VE3DDY

956. RE: [SkyWires] Digest Number 290

Yahoo group: SkyWires
Date: 2004-12-14 10:09:46 UTC
From: Jerome
Topic: 956 Message: 956

Hate to ask dumb questions, what is a DCTL antenna, Jerry KC9GNXHas anyone made the DCTL loop antenna using copper pipe? If so how did it compare to the 300 ohm twin lead version?Jim VE3DDY

_____
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Make My Way your home on the Web - http://www.myway.com

957. Re: Digest Number 290

Yahoo group: SkyWires
Date: 2004-12-14 12:21:50 UTC
From: bambazonke01
Topic: 956 Message: 957

--- In SkyWires@yahoogroups.com, "Jerome" <jeromeg@m...> wrote:
>
> Hate to ask dumb questions, what is a DCTL antenna, Jerry

Jerry, The DCTL stands for Distributed Capacitance Tuned Loop
You can find complete construction data on it in Google.
I made one with twin lead for 40 meters. It is a 4 ft square and performed well by my estimates. I made SSB 5 watt contacts out to 600 to 700 Km (400-500 miles)
The twin lead version would be great for packing as it only has to be mounted high enough to clear the ground.
I'm considering making one out of copper pipe for home or maybe mobile use. The use of copper pipe would increase efficiency and durability.
Jim VE3DDY

958. Re: [SkyWires] Re: Digest Number 290

Yahoo group: SkyWires
Date: 2004-12-14 15:06:38 UTC
From: W1GOR
Topic: 956 Message: 958

Jim...

Making a DCTL out of copper pipe would be quite expensive and very heavy... How about considering aluminum tubing, which is much lighter and far less expensive. The joints don't need to be soldered... simply held together with screw-type hose clamps...

gud luk, de Larry - W1GOR

----- Original Message -----
From: bambazonke01
To: SkyWires@yahoogroups.com
Sent: Tuesday, December 14, 2004 7:21 AM
Subject: [SkyWires] Re: Digest Number 290

--- In SkyWires@yahoogroups.com, "Jerome" <jeromeg@m...> wrote:
>
> Hate to ask dumb questions, what is a DCTL antenna, Jerry

Jerry, The DCTL stands for Distributed Capacitance Tuned Loop
You can find complete construction data on it in Google.
I made one with twin lead for 40 meters. It is a 4 ft square and
performed well by my estimates. I made SSB 5 watt contacts out to
600 to 700 Km (400-500 miles)
The twin lead version would be great for packing as it only has to
be mounted high enough to clear the ground.
I'm considering making one out of copper pipe for home or maybe
mobile use. The use of copper pipe would increase efficiency and
durability.
Jim VE3DDY

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959. Re: Digest Number 290

Yahoo group: SkyWires
Date: 2004-12-15 02:50:51 UTC
From: bambazonke01
Topic: 956 Message: 959

--- In SkyWires@yahoogroups.com, "W1GOR" <w1gor@m...> wrote:
> Jim...
>
> Making a DCTL out of copper pipe would be quite expensive and very heavy... How about considering aluminum tubing, which is much lighter and far less expensive. The joints don't need to be soldered... simply held together with screw-type hose clamps...
>
> gud luk, de Larry - W1GOR

Hi Larry, My reason for making the DCTL out of copper pipe is that as it is a Magnetic loop there are very high currents flowing on the skin surface and as such I chose copper tube as I'm able to solder the connections. I'm already 1/2 done and will have it working in a couple of days. I only intend to elevate the thing a few feet as long as it is in the clear. Further more copper tube and fittings were readily available from the local hardware store.
Maybe the next version will be Aluminum but I'm also considering using strips of printed circuit board maybe about 2 inches in width and bending the pair in a side by side loop or even concentric or over lapping circles spaced appropiately to retain the correct distributed capacitance value. Keeping the capacitance at about 5 to 6 pf per foot would be nigh impossible with side by side loops.
The PCB version would be very light and could be mounted on a higher pole. Any of these 2 loop contraptions will suffer from rain or snow unles sealed up but "Ideas breed Ideas". How about braid pulled on to a poly tube?
Ideally the configuration should be a circle as the radiation off the face edge of a continually bending surface is better than one that flows in a straight line. I don't know if I'm saying that correctly.
I've still got to come up with a suitable --easy to tune cpacitor to replace the capacitance stub .
Any thoughts you have or possible ideas are highly appreciated.
Jim VE3DDY

960. DCTL

Yahoo group: SkyWires
Date: 2004-12-15 09:29:39 UTC
From: Jerome
Topic: 960 Message: 960

Thanks everybody for the help, appreciate it. Going to try one for the heck of it.
JerryKC9GNX

_____
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961. Re: [SkyWires] DCTL

Yahoo group: SkyWires
Date: 2004-12-17 03:40:06 UTC
From: Yvson Costa e Silva
Topic: 960 Message: 961

Does anyone ever tried to use coax cable to make a DCTL instead of
copper or aluminium tubes?

Yvson Costa e Silva (Boca) - PR7BOK - PY-5513V AER
Mastering in Agricultural Engineering - UFCG - Grid Locator: HI22bs
Campina Grande - PB - Brazil - PGP Key Available by Request
E-Mail: pr7bok@... - ICQ:6683946 - Linux User: 268794

962. Re: DCTL

Yahoo group: SkyWires
Date: 2004-12-17 12:37:08 UTC
From: bambazonke01
Topic: 960 Message: 962

--- In SkyWires@yahoogroups.com, "Yvson Costa e Silva" <pr7bok@y...>
wrote:
> Does anyone ever tried to use coax cable to make a DCTL
instead of
> copper or aluminium tubes?

You could use the outer braid of the coax to make the two turn loop
but not use the inner conductor as it is shielded by the braid. The
idea is to have a loop where the proximity of the two conductors (as
in twinlead) acts as a capacitance distributed along it's length.
As such, the correct spacing would have to be maintained otherwise
it's capacitance will vary.
The two turns in the loop make a much greater inductance (X4 I think)
and the capacitance doesn't have to be that large.
On the lower bands such as 40 meters, the loop size is approximately
48" square(1219m) On a single turn loop the capacitor is placed
opposite the feedpoint whereas with this two turn loop the capacitor
is now placed adjacent to the feed point close by, but on the other
turn. I think that the voltage acrss the capacitor is not as high as
with a single turn loop but I'm not sure.
I posted some pictures of my loop but they were re-produced very
small and I'll try again for your convenience.
My loop works very well and I'm amazed at how well I'm getting out
on 40 Meters considering I operate QRP ssb and the loop is indoors
on a chair.
This would be a great antenna for apartment dwellers or for those
who can't put up antennas outside.
Jim VE3DDY

963. DCTL Antenna Details

Yahoo group: SkyWires
Date: 2004-12-17 13:02:33 UTC
From: bambazonke01
Topic: 963 Message: 963

Hi Guys,
Check the details of my DCTL in the pictures section under VE3DDY.
I'll answer questions here.
Jim VE3DDY

964. HELP WITH A STANDARD GX 2000 SERIES VHF MOBILE

Yahoo group: SkyWires
Date: 2004-12-22 10:46:43 UTC
From: clarkjj99
Topic: 964 Message: 964

Fellow Group Memebers:

I am a public service volunteer, in the Upstate of SC. I am a volunteer Fire Fighter, Haz-Mat team member, County Rescue Team memeber, also I am a volunteer on a K-9 Search and Rescue Team.

I have just bought a Standard GX 2000 Series VHF Mobile Radio. I would like to talk with anyone that knows anything about that type of radio.

At the moment I am having trouble finding a mounting bracket for it, I plan on putting it under the dash of a 91 Ford F-150.

I look fwd to hearing back from any group memeber.

John J. Clark
clarkjj99@...
(AOL IM) RESCUE911A
(Yahoo MSG) clarkjj99

965. Comming new year

Yahoo group: SkyWires
Date: 2004-12-23 18:06:46 UTC
From: Mel Vance
Topic: 965 Message: 965

With the approaching new year, I would like to offer a thought to all.....

May the new year bring you and yours twice the riches you can dream;

And half the trouble you deserve.....

Happy New Years.....

Mel
N7OKL

966. Re: DCTL Antenna Details & Photos

Yahoo group: SkyWires
Date: 2004-12-25 07:05:48 UTC
From: R H F
Topic: 963 Message: 966

= = = In SkyWires@yahoogroups.com,
= = = "bambazonke01" <bambazonke@h...> wrote:
>
> Hi Guys,
> Check the details of my DCTL in the pictures section
> under VE3DDY.
>
> I'll answer questions here.
> Jim VE3DDY

JIM [VE3DDY]

If you use the [Edit Name] Button at the bottom
right-hand corner of the Photo/Image webpage.

You will access the "Change Photo Description" Feature
and there you can Expand on your "Description" of what
is being 'presented' in the Photo/Image.

~ RHF
.

967. Re: DCTL Antenna Details & Photos

Yahoo group: SkyWires
Date: 2004-12-25 13:31:18 UTC
From: bambazonke01
Topic: 963 Message: 967

--- In SkyWires@yahoogroups.com, "R H F" <rhf-mail@u...> wrote:
Thanks I'll look at them.
If you need clarification details write me here or directly.
Jim VE3DDY

968. Re: DCTL Antenna Details & Photos

Yahoo group: SkyWires
Date: 2004-12-25 13:44:31 UTC
From: bambazonke01
Topic: 963 Message: 968

--- In SkyWires@yahoogroups.com, "R H F" <rhf-mail@u...> wrote:>
> If you use the [Edit Name] Button at the bottom
> right-hand corner of the Photo/Image webpage.
>
> You will access the "Change Photo Description" Feature
> and there you can Expand on your "Description" of what
> is being 'presented' in the Photo/Image.
>
> ~ RHF

I changed the descriptions. Understanding this antenna requires
looking up the original article on Google "DCTL antenna"
Jim VE3DDY

969. First in 2005

Yahoo group: SkyWires
Date: 2005-01-01 12:54:35 UTC
From: bambazonke01
Topic: 969 Message: 969

Happy New Year to all,
I was last in posting in 2004 and here I am , FIRST in 2005.
Isn't anyone doing any experimenting?
I'm making a vertically polarized 1/2 loop of small size for
possible vehicular mount.Photos to come sometime when I get it
working properly.
Jim VE3DDY/W4
PM-QRP

970. Re: [SkyWires] First in 2005

Yahoo group: SkyWires
Date: 2005-01-01 13:22:46 UTC
From: JimMcSkate@aol.com
Topic: 969 Message: 970

Happy new year, all! I've been experimenting with ways to keep RF out of my 13 month old daughter's electronic "white noise" machine... so far, the best way is to avoid operating during nap time (which used to be the only time I'd get to operate!!)

When I run the loop at its fundamental 40m (no tuner, sweet!) I (think) I don't get into the machine, but I continue to experiment. I tried a few CQs on Straight Key Night but had no luck.

Anyway - wishing you all a pleasant and prosperous 2005!
73 de WA2LGN
Jim

In a message dated 1/1/2005 7:55:22 AM Eastern Standard Time, bambazonke@... writes:

> Isn't anyone doing any experimenting?

971. Re: [SkyWires] First in 2005

Yahoo group: SkyWires
Date: 2005-01-01 16:04:13 UTC
From: Dave
Topic: 969 Message: 971

Happy New Year Jim and all,

I suppose the changes I made to my 1000 foot loop in November to reduce the size to 500+ feet will count as I didn't get a chance during December to do any testing.

I call into an 80m east coast net every Saturday morning and had been receiving poor signal reports for some time. Several hours of physically measuring the old loop and on the computer with EZNEC showed a slight null in the required direction. Further time showed a gain with the smaller loop (toward the south and southwest) resulting in a total theoretical gain of just under 10db.

An unused water hose reel was used to collect and store the #14 stranded/cover copper wire.

The trusty slingshot was used with a new spinning reel from Walmart (on sale for $8.90 last fall!) to get the ropes over the closer-in trees.

Several bungee cords were replaced because of fraying or over stretching. I know it's better to wait until mid winter when they fail but I figure the kidney stone attacks I was suffering at the time more than counted!

This morning was the first time on the air and signal reports (with only a few on the net) were favorable.

Dave
VE1VQ
Southwest Nova Scotia

972. Re: [SkyWires] First in 2005

Yahoo group: SkyWires
Date: 2005-01-02 11:01:51 UTC
From: Lee McClellan
Topic: 969 Message: 972

Hello Jim
I too was having some rf trouble feeding my 360 ft loop 160-10mtrs..
I made a 1:1 chock balun. Parts used the smaller 75 ohm coax 30 turns around a 4 inch pvc pipe.And two PL-259s..I hooked the balun from TX and then to Input of Tuner..Not only did the
RF stop but the whole system has less noisy and tunes alot easyer & faster..You might give it a try..

JimMcSkate@... wrote:
Happy new year, all! I've been experimenting with ways to keep RF out of my 13 month old daughter's electronic "white noise" machine... so far, the best way is to avoid operating during nap time (which used to be the only time I'd get to operate!!)

When I run the loop at its fundamental 40m (no tuner, sweet!) I (think) I don't get into the machine, but I continue to experiment. I tried a few CQs on Straight Key Night but had no luck.

Anyway - wishing you all a pleasant and prosperous 2005!
73 de WA2LGN
Jim

In a message dated 1/1/2005 7:55:22 AM Eastern Standard Time, bambazonke@... writes:

Isn't anyone doing any experimenting?

Yahoo! Groups Links

To visit your group on the web, go to:
http://groups.yahoo.com/group/SkyWires/

To unsubscribe from this group, send an email to:
SkyWires-unsubscribe@yahoogroups.com

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Do you Yahoo!?
The all-new My Yahoo! ? What will yours do?

973. Re: [SkyWires] First in 2005

Yahoo group: SkyWires
Date: 2005-01-02 15:40:08 UTC
From: William Mahaffey
Topic: 969 Message: 973

My story is almost exactly the same. Highly recommended.

bill w6eet

On Jan 2, 2005, at 3:01 AM, Lee McClellan wrote:

> Hello Jim
> I too was having some rf trouble feeding my 360 ft loop 160-10mtrs..
> I made a 1:1 chock balun. Parts used the smaller 75 ohm coax 30 turns
> around a 4 inch pvc
> pipe.And two PL-259s..I hooked the balun from TX and then to Input of
> Tuner..Not only did the
> RF stop but the whole system has less noisy and tunes alot easyer &
> faster..You might give
> it a try..
>
> JimMcSkate@aol.com wrote:
> Happy new year, all! I've been experimenting with ways to keep RF out
> of my 13 month old daughter's electronic "white noise" machine... so
> far, the best way is to avoid operating during nap time (which used to
> be the only time I'd get to operate!!)
>
> When I run the loop at its fundamental 40m (no tuner, sweet!) I
> (think) I don't get into the machine, but I continue to experiment. I
> tried a few CQs on Straight Key Night but had no luck.
>
> Anyway - wishing you all a pleasant and prosperous 2005!
> 73 de WA2LGN
> Jim
>
>
> In a message dated 1/1/2005 7:55:22 AM Eastern Standard Time,
> bambazonke@... writes:
>
>
> Isn't anyone doing any experimenting?
>
>
>
> Do you Yahoo!?
> The all-new My Yahoo! - What will yours do?
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> <111704_1104_g_300250a.gif>
> <l.gif>
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> Yahoo! Groups Links
>
> • To visit your group on the web, go to:
> http://groups.yahoo.com/group/SkyWires/
>
> • To unsubscribe from this group, send an email to:
> SkyWires-unsubscribe@yahoogroups.com
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> • Your use of Yahoo! Groups is subject to the Yahoo! Terms of
> Service.
>
>

974. Skywire possibly overloading portable shortwave receiver?

Yahoo group: SkyWires
Date: 2005-01-02 21:27:10 UTC
From: denisnh
Topic: 974 Message: 974

Hi All. I'm a shortwave DX'er but am studying for my amateur radio license as time allows.

Currently, the radio I run the most is a Radio Shack DX-398 (made by Sanjean I believe) portable shortwave receiver. It's REALLY portable, so much so that I find it a bit clumsy to use. For antenna, I the use a Sony active loop antenna that folds up for storage and works pretty decent. I've used inverted V, random wire, dipole, etc over the years but wire antennas have a very limited life.

I'm currently setting up a skywire loop about 500' long 60' off the ground. It will be fed with RG-58 coax with the center wire to one end of the loop and the shield to the other end. The shield will be grounded to an 8' ground rod. The coax leading to the radio will be about 50' long. (Does this sound right so far?)

I have the ARRL Antenna book which describes the Skywire. For using this antenna for receive only with a portable shortwave, do I need the following:

- Loops in the coax?
- Baluns?
- Antenna tuner and what brand and model if needed?
- In place of the coax, could I get away with simple twin lead wire or lamp cord? It would be nice if I could slip this under a window.

Is there anything else I should do to prevent overloading of my radio?

Thanks,
Denis

975. i am new on posting

Yahoo group: SkyWires
Date: 2005-01-03 11:38:52 UTC
From: bill f woodard jr
Topic: 975 Message: 975

hi all will dont hav nonthening to say and may godbless all ov you
and 73 for now kd5pfx

976. Re: [SkyWires] Skywire possibly overloading portable shortwave receiver?

Yahoo group: SkyWires
Date: 2005-01-03 14:57:37 UTC
From: JimMcSkate@aol.com
Topic: 974 Message: 976

In a message dated 1/2/2005 4:28:46 PM Eastern Standard Time,
denisnh@... writes:

> I'm currently setting up a skywire loop about 500' long 60' off the
> ground. It will be fed with RG-58 coax with the center wire to one
> end of the loop and the shield to the other end. The shield will be
> grounded to an 8' ground rod. The coax leading to the radio will be
> about 50' long. (Does this sound right so far?)
>
> I have the ARRL Antenna book which describes the Skywire. For using
> this antenna for receive only with a portable shortwave, do I need
> the following:
>
> - Loops in the coax?
> - Baluns?
> - Antenna tuner and what brand and model if needed?
> - In place of the coax, could I get away with simple twin lead wire
> or lamp cord? It would be nice if I could slip this under a window.
>
> Is there anything else I should do to prevent overloading of my radio?
>

977. Re: [SkyWires] Skywire possibly overloading portable shortwave receiver?

Yahoo group: SkyWires
Date: 2005-01-03 15:07:34 UTC
From: JimMcSkate@aol.com
Topic: 974 Message: 977

Denis,

My recommendations - worth what you pay for them ;-) are as follows:

1. Use quality 300 ohm twinlead for the whole feedline- way cheaper and much more efficient than coax, and fits under a window.

2. Trim or add to the loop a little so that it is resonant in one of the ham bands - add another 40' and you're in the middle of the 160 meter band, which is a great loop to have... they can be used for all the higher bands with a tuner. I say this since someone with your determination will get his FCC ticket in short order. But - this is non critical for receiving, and for transmitting you can usually pull it in with an antenna tuner.

3. There's no worries about overloading a decent receiver with any antenna, provided you're not living next to Radio Havana's antenna farm or something ;-) You could rig up an attenuator if it's a problem - but I suspect not.

4. And the most important thing: Ignore any advice that you want to. The great thing about skywires is that they are largely non-critical in their design. Plus they're the cheapest antennas around... plus they work like all get out. There's all sorts of methods of hanging them, and you'll likely figure out new ways to do stuff and tell us all about it here on Skywires!

So, welcome, have fun, and get that ticket!

73,
WA2LGN
Jim McAward
Blue Point, NY

In a message dated 1/2/2005 4:28:46 PM Eastern Standard Time,
denisnh@... writes:

> I'm currently setting up a skywire loop about 500' long 60' off the
> ground. It will be fed with RG-58 coax with the center wire to one
> end of the loop and the shield to the other end. The shield will be
> grounded to an 8' ground rod. The coax leading to the radio will be
> about 50' long. (Does this sound right so far?)
>
> I have the ARRL Antenna book which describes the Skywire. For using
> this antenna for receive only with a portable shortwave, do I need
> the following:
>
> - Loops in the coax?
> - Baluns?
> - Antenna tuner and what brand and model if needed?

> - In place of the coax, could I get away with simple twin lead wire
> or lamp cord? It would be nice if I could slip this under a window.
>
> Is there anything else I should do to prevent overloading of my radio?
>

978. 160m half wave?

Yahoo group: SkyWires
Date: 2005-01-05 17:45:12 UTC
From: Al Midkiff
Topic: 978 Message: 978

Hello everyone.. I am new to this forum but have been a Ham for a number of years and have never experimented with a skyloop.. Can anyone tell me if an 80m full wave loop will work as a 160m half wave with a tunner? Or... will I have to make a full wave 160m loop to work 160m?
tnx
k0ndn

979. Re: [SkyWires] 160m half wave?

Yahoo group: SkyWires
Date: 2005-01-05 19:15:08 UTC
From: Scott Erwin
Topic: 978 Message: 979

You will have trouble trying to use an 80-meter loop on 160-meters when trying to use it as a 1/2 wave loop. It will be very hard to make contacts and it would be very easy to arc the capacitors or overheat the inductor in your antenna tuner. You will have others tell you to open the loop at the side opposite the feed point but as the now 160-meter dipole is in a folded configuration you will have high loss due to self-cancellation. Then there is the trick of tying the feed line ends together and feeding it as a vertical but this requires and extensive ground radial system, which is difficult to obtain on 160 meters. The only usable solution is to make a tuned feeder line for the 80-meter loop. You will still be using the loop as a 1/2 wave with poor performance but you wont burn up your antenna tuner. What you do is make some wide spaced ladder line that is at least 6 inches wide between the feed line wires. The length will be calculated by making the total length of wire equal to the wire used in a 160-meter loop, which is 530 feet. An 80-meter loop uses 272 feet of wire. Your homebrew ladder line will need to be 129 feet long plus you will need to make it at least 20 feet longer and start trimming to obtain a low SWR (on the antenna tuner side of the internal Balun) at the frequency you plan on using. The 3:1 SWR bandwidth will be around 50 MHz if you're lucky. Again, performance will be low compared to a full size loop or dipole.
--- Al Midkiff <k0ndn@...> wrote:

>
> Hello everyone.. I am new to this forum but have
> been a Ham for a
> number of years and have never experimented with a
> skyloop.. Can
> anyone tell me if an 80m full wave loop will work as
> a 160m half
> wave with a tunner? Or... will I have to make a full
> wave 160m loop
> to work 160m?
> tnx
> k0ndn
>
>
>

>

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980. Re: [SkyWires] 160m half wave?

Yahoo group: SkyWires
Date: 2005-01-05 19:29:08 UTC
From: NØATH
Topic: 978 Message: 980

This sounds like some indian that has been on to much firewater and peyote

Hello Al from NØATH / Dave
Moderator Note - Don't worry - Al will understand

> Hello everyone.. I am new to this forum but have
> been a Ham for a
> number of years and have never experimented with a
> skyloop.. Can
> anyone tell me if an 80m full wave loop will work as
> a 160m half
> wave with a tunner? Or... will I have to make a full
> wave 160m loop
> to work 160m?
> tnx
> k0ndn
>
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>

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a.. To visit your group on the web, go to:
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b.. To unsubscribe from this group, send an email to:
SkyWires-unsubscribe@yahoogroups.com

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981. Re: 160m half wave?

Yahoo group: SkyWires
Date: 2005-01-05 20:26:45 UTC
From: Al Midkiff
Topic: 978 Message: 981

Thanks Scott..I figured this was the case but wanted experenced opinions..--- In SkyWires@yahoogroups.com, Scott Erwin <n4zou@y...> wrote:

> You will have trouble trying to use an 80-meter loop
> on 160-meters when trying to use it as a 1/2 wave
> loop. It will be very hard to make contacts and it
> would be very easy to arc the capacitors or overheat
> the inductor in your antenna tuner. You will have
> others tell you to open the loop at the side opposite
> the feed point but as the now 160-meter dipole is in a
> folded configuration you will have high loss due to
> self-cancellation. Then there is the trick of tying
> the feed line ends together and feeding it as a
> vertical but this requires and extensive ground radial
> system, which is difficult to obtain on 160 meters.
> The only usable solution is to make a tuned feeder
> line for the 80-meter loop. You will still be using
> the loop as a 1/2 wave with poor performance but you
> wont burn up your antenna tuner. What you do is make
> some wide spaced ladder line that is at least 6 inches
> wide between the feed line wires. The length will be
> calculated by making the total length of wire equal to
> the wire used in a 160-meter loop, which is 530 feet.
> An 80-meter loop uses 272 feet of wire. Your homebrew
> ladder line will need to be 129 feet long plus you
> will need to make it at least 20 feet longer and start
> trimming to obtain a low SWR (on the antenna tuner
> side of the internal Balun) at the frequency you plan
> on using. The 3:1 SWR bandwidth will be around 50 MHz
> if you're lucky. Again, performance will be low
> compared to a full size loop or dipole.
> --- Al Midkiff <k0ndn@a...> wrote:
>
> >
> > Hello everyone.. I am new to this forum but have
> > been a Ham for a
> > number of years and have never experimented with a
> > skyloop.. Can
> > anyone tell me if an 80m full wave loop will work as
> > a 160m half
> > wave with a tunner? Or... will I have to make a full
> > wave 160m loop
> > to work 160m?
> > tnx
> > k0ndn

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> _____
> Do you Yahoo!?
> Meet the all-new My Yahoo! - Tıy it today!
> http://my.yahoo.com

982. Re: [SkyWires] Skywire possibly overloading portable shortwave receiver?

Yahoo group: SkyWires
Date: 2005-01-06 00:23:51 UTC
From: Adam Ebel
Topic: 974 Message: 982

May I suggest the following

MFJ 956 or MFJ 1046 http://www.universal-radio.com Part No: #2964 or 3736
also a attenuator and high pass filter for SW and low pass filter for LW. I hope this helps Its just something that I may suggest to you and also myself for my next antenna project. Take care and 73 Adam E.

JimMcSkate@... wrote:
In a message dated 1/2/2005 4:28:46 PM Eastern Standard Time, denisnh@... writes:

I'm currently setting up a skywire loop about 500' long 60' off the
ground. It will be fed with RG-58 coax with the center wire to one
end of the loop and the shield to the other end. The shield will be
grounded to an 8' ground rod. The coax leading to the radio will be
about 50' long. (Does this sound right so far?)

I have the ARRL Antenna book which describes the Skywire. For using
this antenna for receive only with a portable shortwave, do I need
the following:

- Loops in the coax?
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- In place of the coax, could I get away with simple twin lead wire
or lamp cord? It would be nice if I could slip this under a window.

Is there anything else I should do to prevent overloading of my radio?

Yahoo! Groups Links

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http://groups.yahoo.com/group/SkyWires/

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SkyWires-unsubscribe@yahoogroups.com

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983. HF Antennas OmniLoop?

Yahoo group: SkyWires
Date: 2005-01-08 16:11:36 UTC
From: Jim Duarte
Topic: 983 Message: 983

Hi Folks,

Has anyone tried the Omniloop (http://www.hfantennas.com/Products.htm) setup? I just finished an 80M Loop myself and it works great but the ladder line (I believe) is giving me some RFI. I've got 100' of ladder line feeding into an LDG 4:1 Balun, then 20' of RG-8X going to the LDG AT-11MP tuner (the tuner doesn't have a wire input). Just wondered if the Omniloop's "Loop Balun" and coax works well on that Omniloop... any experience out there?

73 de N1IV

984. Sky wire

Yahoo group: SkyWires
Date: 2005-01-09 05:49:10 UTC
From: carsonmcaloney
Topic: 984 Message: 984

could someone post a picture?

985. Re: Skywire possibly overloading portable shortwave receiver?

Yahoo group: SkyWires
Date: 2005-01-09 08:50:14 UTC
From: denisnh
Topic: 974 Message: 985

Many thanks for the helpful advice! I guess a receive antenna is not as difficult as a transmitting one would be. It all sounds very straight forward. I have had my eye on that MFJ tuner, though, and I'll probably pick one up. It can't hurt the setup and I'll hopefully learn something from it.

We've had a few moderate snow storms here in New Hampshire the last few days. I don't care for tromping through the snow and brush trying to run a wire this long. I'm now thinking I should work up to the skywire by first going with a loop and an inverted L after I get the loop working properly. The skywire can go up in the spring.

By the way, what sort of reactions do you get from your neighbors when running that much wire? I had thought about telling them what I'm doing before I start. My wife says it will just give them an excuse to complain about everything from the "eye sore" to even the slightest interference they might experience through their phones or TV.

Regards,
Denis

986. Re: [SkyWires] Re: Skywire possibly overloading portable shortwave receiver?

Yahoo group: SkyWires
Date: 2005-01-09 15:19:58 UTC
From: JimMcSkate@aol.com
Topic: 974 Message: 986

I don't know what it is about me and rotten weather, and I suspect many of
you are the same: we ONLY work on antennas outside when the weather is rotten.
I don't know what this actually says about us, but I assume it's something
of significance.

Last winter I was on a ladder, at night, in sub-freezing weather... thinking
that
I really do have a loose screw in my head...

The loop is the least-noticed antenna design I have ever put up. No one sees
it in the trees... just the feedline is visible. So, I get no ack-ack from
the neighbors. Except when they see me in the winter, on a ladder, at night!
Then they think I am nuts.

73 de WA2LGN
Jim McAward
Blue Point, NY

In a message dated 1/9/2005 3:50:26 AM Eastern Standard Time,
denisnh@... writes:

> We've had a few moderate snow storms here in New Hampshire the last
> few days. I don't care for tromping through the snow and brush
> trying to run a wire this long. I'm now thinking I should work up
> to the skywire by first going with a loop and an inverted L after I
> get the loop working properly. The skywire can go up in the spring.
>
> By the way, what sort of reactions do you get from your neighbors
> when running that much wire? I had thought about telling them what
> I'm doing before I start. My wife says it will just give them an
> excuse to complain about everything from the "eye sore" to even the
> slightest interference they might experience through their phones or
> TV.
>

987. Re: [SkyWires] Re: Skywire possibly overloading portable shortwave receiver?

Yahoo group: SkyWires
Date: 2005-01-09 15:53:24 UTC
From: Dr.Ace Ratliff
Topic: 974 Message: 987
Attachments: 1 described; binary payloads are missing from this source WARC

Denis,
I agree with your wife.
Don't tell the neighbors.
I use an 80 mtr loop and a 160 mtr inverted L , they both work great.
Good Luck
Ace - www.WH2T.com
----- Original Message -----
From: denisnh
To: SkyWires@yahoogroups.com
Sent: Sunday, January 09, 2005 3:50 AM
Subject: [SkyWires] Re: Skywire possibly overloading portable shortwave receiver?

Many thanks for the helpful advice! I guess a receive antenna is
not as difficult as a transmitting one would be. It all sounds very
straight forward. I have had my eye on that MFJ tuner, though, and
I'll probably pick one up. It can't hurt the setup and I'll
hopefully learn something from it.

We've had a few moderate snow storms here in New Hampshire the last
few days. I don't care for tromping through the snow and brush
trying to run a wire this long. I'm now thinking I should work up
to the skywire by first going with a loop and an inverted L after I
get the loop working properly. The skywire can go up in the spring.

By the way, what sort of reactions do you get from your neighbors
when running that much wire? I had thought about telling them what
I'm doing before I start. My wife says it will just give them an
excuse to complain about everything from the "eye sore" to even the
slightest interference they might experience through their phones or
TV.

Regards,
Denis

Yahoo! Groups Links

a.. To visit your group on the web, go to:
http://groups.yahoo.com/group/SkyWires/

b.. To unsubscribe from this group, send an email to:
SkyWires-unsubscribe@yahoogroups.com

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No virus found in this incoming message.
Checked by AVG Anti-Virus.
Version: 7.0.299 / Virus Database: 265.6.9 - Release Date: 1/6/2005

988. Re: [SkyWires] Sky wire

Yahoo group: SkyWires
Date: 2005-01-09 15:58:18 UTC
From: Dr.Ace Ratliff
Topic: 984 Message: 988
Attachments: 1 described; binary payloads are missing from this source WARC

YES
----- Original Message -----
From: carsonmcaloney
To: SkyWires@yahoogroups.com
Sent: Sunday, January 09, 2005 12:49 AM
Subject: [SkyWires] Sky wire

could someone post a picture?

Yahoo! Groups Links

a.. To visit your group on the web, go to:
http://groups.yahoo.com/group/SkyWires/

b.. To unsubscribe from this group, send an email to:
SkyWires-unsubscribe@yahoogroups.com

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No virus found in this incoming message.
Checked by AVG Anti-Virus.
Version: 7.0.299 / Virus Database: 265.6.9 - Release Date: 1/6/2005

989. Re: Skywire possibly overloading portable shortwave receiver?

Yahoo group: SkyWires
Date: 2005-01-11 13:35:08 UTC
From: R H F
Topic: 974 Message: 989

DR. ACE,

They might blame DENIS for the Crop Circles
in their nice Green Lawns :o)

Run Away Dogs

Dead Gold Fish

Sour Milk in the Frig

just for the fun of it ~ RHF
.
.
= = = In SkyWires@yahoogroups.com,
= = = "Dr.Ace Ratliff" <wh2t@b...> wrote:
> Denis,
> I agree with your wife.
> Don't tell the neighbors.
> I use an 80 mtr loop and a 160 mtr inverted L , they both work
great.
> Good Luck
> Ace - www.WH2T.com
> ----- Original Message -----
> From: denisnh
> To: SkyWires@yahoogroups.com
> Sent: Sunday, January 09, 2005 3:50 AM
> Subject: [SkyWires] Re: Skywire possibly overloading portable
shortwave receiver?
>
>
>
> Many thanks for the helpful advice! I guess a receive antenna
is
> not as difficult as a transmitting one would be. It all sounds
very
> straight forward. I have had my eye on that MFJ tuner, though,
and
> I'll probably pick one up. It can't hurt the setup and I'll
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> get the loop working properly. The skywire can go up in the
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> By the way, what sort of reactions do you get from your
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> when running that much wire? I had thought about telling them
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> I'm doing before I start. My wife says it will just give them an
> excuse to complain about everything from the "eye sore" to even
the
> slightest interference they might experience through their
phones or
> TV.
>
> Regards,
> Denis
>
>
>
>
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> ---

> Yahoo! Groups Links
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> a.. To visit your group on the web, go to:
> http://groups.yahoo.com/group/SkyWires/
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> b.. To unsubscribe from this group, send an email to:
> SkyWires-unsubscribe@yahoogroups.com
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>
> No virus found in this incoming message.
> Checked by AVG Anti-Virus.
> Version: 7.0.299 / Virus Database: 265.6.9 - Release Date:
1/6/2005
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990. Re: Skywire possibly overloading portable shortwave receiver?

Yahoo group: SkyWires
Date: 2005-01-14 14:16:12 UTC
From: denisnh
Topic: 974 Message: 990

Dr. Ace! I knew your name sounded familiar. I've read a number of your articles posted on the internet and they're great! I've learned a lot from them.

One quick question if you don't mind, regarding static buildup in a longwire. You had mentioned in an article that an end fed antenna should have a resistor from the center conductor of the coax feedline to ground. I believe this was 100k? Assuming the high voltage of a static charge, this resistor should bleed off all static. (I hope)

Being the worrier that I am, is there any type of "backup" static discharge device to go with the bleed off resistor? I've heard mention of neon bulbs, spark gaps, zener diodes. Any comments on this?

Also heard that some CB'ers use a "static discharge block" in their systems. I wasn't able to find skematic info or a supplier for these blocks. Anyone know anything more about them?

Thanks,
Denis

PS-That comment about the crop circles really cracked me up! :-)

--- In SkyWires@yahoogroups.com, "Dr.Ace Ratliff" <wh2t@b...> wrote:
> Denis,
> I agree with your wife.
> Don't tell the neighbors.
> I use an 80 mtr loop and a 160 mtr inverted L , they both work great.
> Good Luck
> Ace - www.WH2T.com
> ----- Original Message -----
> From: denisnh
> To: SkyWires@yahoogroups.com
> Sent: Sunday, January 09, 2005 3:50 AM
> Subject: [SkyWires] Re: Skywire possibly overloading portable shortwave receiver?
>
>
>
> Many thanks for the helpful advice! I guess a receive antenna is
> not as difficult as a transmitting one would be. It all sounds very

> straight forward. I have had my eye on that MFJ tuner, though,
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991. Re: [SkyWires] Re: Skywire possibly overloading portable shortwave receiver?

Yahoo group: SkyWires
Date: 2005-01-14 17:28:29 UTC
From: Dr.Ace Ratliff
Topic: 974 Message: 991
Attachments: 2 described; binary payloads are missing from this source WARC

Hi Denis,

End fed wire antennas can develop very high static voltages on them.
This static voltage can easily be high enough to knock the front end out of sensitive receivers.
To overcome this problem, I suggest you connect a resistor from the antenna wire to ground near the back of the receiver or from the coax center to shield where the antenna wire connects to the coax.

Only use a non-inductive resistor, carbon resistors work fine.
Don't use wire wound or metal film resistors.
The resistance value is not critical.
I suggest about a 56K ohm 1/2 watt resistor for receive only or if transmitting with up to 100 watts.
If you will be transmitting with high power "QRO", I suggest using about a 1 Meg ohm 1/2 watt resistor.
This resistor should bleed off all static build up.

A spark gap requires a high voltage before it will spark across the gap.

I have a very small neon bulb with pigtail leads connected across my telephone line in an attempt to squelch lightning discharge induced voltages in the telephone line (I lost several computer modems) from nearby strikes. The neon bulb lights when the phone rings too.

Some antenna coax switches have built in static discharge devices.

There is an item called a Blitz Bug that supposedly discharges static
http://64.233.167.104/search?q=cache:Amid6tHjw1sJ:www.acksupply.com/catalog/antenna.pdf+%22blitz+bug%22&hl=en

A conventional TR Cell is a gas discharge tube, acting as an electronic switch. This is used to short the receiver input and thus protect it. The transmitted pulse causes the gap in the cell to break down, thus forming the short circuit.

Gas discharge tubes take time to turn on, and longer to turn off again. Often a keep-alive is used to prime the cell ready for action. The gas in the cell is critical to the time it takes for it to ionize and deionize, and water vapor proves to be the most stable.

Hope this info is somewhat helpful.

73, Ace www.WH2T.com

----- Original Message -----
From: denisnh

To: SkyWires@yahoogroups.com
Sent: Friday, January 14, 2005 9:16 AM
Subject: [SkyWires] Re: Skywire possibly overloading portable shortwave receiver?

Dr. Ace! I knew your name sounded familiar. I've read a number of your articles posted on the internet and they're great! I've learned a lot from them.

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Thanks,
Denis

PS-That comment about the crop circles really cracked me up! :-)

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No virus found in this incoming message.
Checked by AVG Anti-Virus.
Version: 7.0.302 / Virus Database: 265.6.11 - Release Date: 1/12/2005

992. Radio Propagation Information from Your "Remote S-Meter" WebSite

Yahoo group: SkyWires
Date: 2005-01-17 14:06:07 UTC
From: R H F
Topic: 992 Message: 992

For One and All,
.
Radio Propagation Information from Your "Remote S-Meter" WebSite
REMOTE S-METER => http://www.smeter.net/
.
Radio Propagation
http://www.smeter.net/propagation/propagation.php
.
* View the exact current gray-line position on Earth.
http://www.smeter.net/propagation/views/current-gray-line.php
Current Gray-Line on Earth Current Gray-Line on a World
Topographical Map Special ionospheric propagation conditions
often exist between two or more stations simultaneously . . .
.
* Current Sun View of Earth
Current Solar High-Noon & Gray-Line
http://www.smeter.net/propagation/views/earth-from-sun.php
The current position of the Sun over the Earth is a primary
factor determining current radio propagation conditions . . .
.
* Current Moon View of Earth Current View of Earth
from the Moon
http://www.smeter.net/propagation/views/earth-from-moon.php
The current position of the Moon over the Earth
is important to Earth-Moon-Earth (EME) moon-bounce
communications, because . . .
.
* Northern Hemisphere Aurora Northern Hemisphere
Auroral Activity
http://www.smeter.net/propagation/views/auroral-activity-north.php
Displays a statistical plot that provides an estimate of the
location, intensity and extent of current northern hemisphere
Aurora . . .
.
* Southern Hemisphere Aurora Southern Hemisphere
Auroral Activity
http://www.smeter.net/propagation/views/auroral-activity-south.php
Displays a statistical plot that provides an estimate of the
location, intensity and extent of current southern hemisphere
Aurora . . .
.
FREE "DOWNLOADS" - Radio Propagation Analysis Programs
Run these free radio propagation programs from the web or
download and run them from your hard drive.
.

* Diffraction 1 Radio Propagation by Diffraction Over an
Obstruction When there are two radio antennas located on
or near the Earth's surface propagation can ordinarily occur
between them by groundwave. If an obstruction, a hill,
a mountain, a building intervenes, propagation can still
occur via slant paths over the top edge of the obstruction.
This depends on diffraction over the edge. So, in addition to
the basic or spreading loss along the sum of the slant paths,
D1+D2, there is an additional loss due to diffraction . . .
DF#1 => http://www.smeter.net/propagation/diffrac1.php
.
* Diffraction 2 Radio Propagation by Diffraction Over Two
Successive Obstructions This program calculates the
overall transmitter-to-receiver loss when the radio path
includes diffraction over two successive obstructions.
Results include field strength at the receiving site.
Antenna efficiency can be allowed for . . .
DF#1 => http://www.smeter.net/propagation/diffrac2.php
.
* Groundwave Groundwave Propagation vs. Path-length
& Frequency for Various Terrains Both transmitting and
receiving antennas are verticals, height = 1/4-wavelength
or less, above a system of buried radial wires.
A 1/2-wave vertical has 1 dB more gain than a short vertical.
A 5/8-wave vertical has 1.6 dB more gain . . .
GWP => http://www.smeter.net/propagation/grndwav3.php
.
Line-of-Sight Propagation Over Line-of-Sight Radio Paths
This program covers just the essentials. Refraction in the
Earth's atmosphere, ground reflections and antenna
radiating efficiency are not taken into account . . .
LOS => http://www.smeter.net/propagation/lineosite.php
.
* Two-Hops Sky-Wave Trigonometry For given one-hop
ground path distance and height of reflecting layer this
program calculates radio path distances and the
radio-path elevation angle . . .
SWT => http://www.smeter.net/propagation/twohops.php
.
.
iane ~ RHF
.
All are WELCOME at the Shortwave Listener (SWL) "Antenna Ashram"
<http://groups.yahoo.com/group/Shortwave-SWL-Antenna/>
.
Some Say: On A Clear Day You Can See Forever.
http://groups.yahoo.com/group/Shortwave-SWL-Antenna/message/502
.
I BELIEVE: On A Clear Night . . .
You Can Hear Forever and Beyond, The BEYOND !

With a Shortwave Listener SWL Antenna of your own making.
"If You Build It {SWL Antenna} You Will Hear Them !"
.
.

993. Limited space/rules loop...

Yahoo group: SkyWires
Date: 2005-01-18 02:50:00 UTC
From: n4onl
Topic: 993 Message: 993

Hello everyone!

I'm getting back into ham radio after a few years absence and have
been researching antennas.The horiz. skyloop sounds like what I want,
but as usual what I want and what I get aren't usually the same. I've
been told by the landlady that I can put up any antenna I want as long
as its in the tree next to the house. Seems like theres always a 'as
long as' in my life, but its better than a flat NO.

Limited space, wanting to be able to put out some signal on 75 &160m
to ragchew with some local (15 to 150? miles) friends that hang out on
those bands, and with a brain thats turning to jelly from reading too
darn much. I was grandfathered to general with my old tech licence and
have no experience on any bands lower in freq. than 10m novice phone.
Yep I'm a phone guy, no CW allowed in this shack, we don't get along. ;)
But I'm planning on upgrading to extra in the next few months and have
a like new IC746 raring to TX. I have to say it beats the heck out my
old TS130, FT101ZD... on features and RX! B)

After reading abt 90% of the posts in the group you have me interested
in trying a single loop, center supported off of 4 insulated poles to
the center support mast. Size wise it looks like I'll be limited to a
40m (~132' insulated wire and ~50' high) loop, fed with 450 ladder
line (~90-100') for multiband, and a manual tuner With that in mind
the Qs begin...

1) Can I expect a good tuner to let me have some kind of signal on 75m
or 160m?
Yes I realize its a serious compromise but what in life isnt? Anyway
the main person I'd like to be able to reach on 160m lives ~15 miles
away so a unshielded dummy load would probably do that at 50ish ft.
Any further would be a bonus! On 75m the gang seems to be in a 100-150
mile radius.

2) What about a Slinky loop for extending the wire length in the same
space, or will the steel (?) eat up most of my power in resistence?

3) From what I've been reading 2 turn loops seem to self cancel, but
would a 3 turn or odd # turn loopoffset this to a usable degree?
(thinking of more wire for 75-160m but higher bands may suffer?)

4) Dr.Ace likes the MFJ989C tuner, would it or another tuner be able
to tune 75-160m with a 40m loop? (IOW What tuners would be recommended?)

5) I would like to build a mid power linear this year (4-500watts),
what wire size would be recommended for that power level.

Any comments, suggestions, etc... are welcome!

73
mike

994. star loop

Yahoo group: SkyWires
Date: 2005-01-18 03:04:40 UTC
From: Mel Vance
Topic: 994 Message: 994

Still looking for more wire/lower bands within my rather severely restricted lot...

1 idea I am looking at is a modified star loop....

Could the legs on the star loop be done into a 'T' shape and still work well?
It seems to me the star loop is just the loop skywire wadded up to fit a smaller area and some additional folding should not have too much of an effect.

Mel
N7OKL

995. antenna question

Yahoo group: SkyWires
Date: 2005-01-18 03:58:37 UTC
From: Donnie Barlow
Topic: 995 Message: 995

hello everyone. i have a dual band 2/440 meter base antenna cant remember what kind it is. it was gave to me by a ham friend. but my question is will it work good hooked up to a police scanner? i think its called a discone or something like that anyways i got a 2nd question 4 yea. will cable coax for like cable tv work till i can get around to buying regular RG8 coax? if anyone would please get back with me on this couse my scanner dont pick up very far away i like to monator the police and EMS and fire Depts of the town my parents live in witch is 25 miles away. thanks for takeing the time reading this.

sky_walker_975

996. Re: [SkyWires] antenna question

Yahoo group: SkyWires
Date: 2005-01-18 04:08:45 UTC
From: DavesRadio"RR"
Topic: 995 Message: 996

it will work VERY good on your scanner....

K5DRC
BULL SHOALES LAKE
http://www.bullshoals.org/lake.htm
AR/MO STATE LINE
----- Original Message -----
From: Donnie Barlow
To: SkyWires@yahoogroups.com
Sent: Monday, January 17, 2005 9:58 PM
Subject: [SkyWires] antenna question

hello everyone. i have a dual band 2/440 meter base antenna cant
remember what kind it is. it was gave to me by a ham friend. but my
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997. RE: [SkyWires] antenna question

Yahoo group: SkyWires
Date: 2005-01-18 04:10:31 UTC
From: D. Scott MacKenzie
Topic: 995 Message: 997

Should work OK - not the best, but adequately for SWL use
If antenna is a Discone - (kinda looks like a cone) - it should also work ok....
-----Original Message-----
From: Donnie Barlow [mailto:sky_walker_975@...]
Sent: Monday, January 17, 2005 10:59 PM
To: SkyWires@yahoogroups.com
Subject: [SkyWires] antenna question

hello everyone. i have a dual band 2/440 meter base antenna cant remember what kind it is. it was gave to me by a ham friend. but my question is will it work good hooked up to a police scanner? i think its called a discone or something like that anyways i got a 2nd question 4 yea. will cable coax for like cable tv work till i can get around to buying regular RG8 coax? if anyone would please get back with me on this couse my scanner dont pick up very far away i like to monator the police and EMS and fire Depts of the town my parents live in witch is 25 miles away. thanks for takeing the time reading this.

sky_walker_975

998. Re: [SkyWires] antenna question

Yahoo group: SkyWires
Date: 2005-01-18 04:14:23 UTC
From: DavesRadio"RR"
Topic: 995 Message: 998

guess I should have read the rest of the message..... yes you can use the 75 ohm coax for the scanner.... it will be a bit of a mismatch but you won't notice it....

K5DRC
BULL SHOALES LAKE
http://www.bullshoals.org/lake.htm
AR/MO STATE LINE
----- Original Message -----
From: Donnie Barlow
To: SkyWires@yahoogroups.com
Sent: Monday, January 17, 2005 9:58 PM
Subject: [SkyWires] antenna question

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999. Re: antenna question

Yahoo group: SkyWires
Date: 2005-01-18 04:46:59 UTC
From: n4onl
Topic: 995 Message: 999

--- In SkyWires@yahoogroups.com, "Donnie Barlow" <sky_walker_975@y...>
wrote:
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> hello everyone. i have a dual band 2/440 meter base antenna cant
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> parents live in witch is 25 miles away. thanks for takeing the time
> reading this.
>
> sky_walker_975

If it is a discone both it and the 75ohm coax should work ok on both TX and RX across the rated bandwidth (frequency range) of the antenna. Typically ham rigs will have better recieve sensitivity and selectivity than a scanner radio, so it should perk up your ears over just using a scanner.

If your just going to recieve, hook it up and try it out, it sure won't hurt anything. I would suggest using better coax, something with a foil shield under the braid like rg-6x, for lower loss/better RX sensitivity. Better coax at higher frequencies does help. Also you might want to research mast mounted recieve preamps for more gain. but research before you buy (if you go that route) you want one with the lowest noise rating and decent gain.

Another option would be to build a dual band beam (quad) for recieving in their area. 2 elements would give some gain without narrowing down the beamwidth too bad. Their simple and cheap to make, and the soze os less critical for RX only.

Remember that an antenna system only preforms as well as its weakest link, so optimizing the rx, coax and antenna will do wonders.

73
mike

1000. Re: [SkyWires] antenna question

Yahoo group: SkyWires
Date: 2005-01-18 05:06:36 UTC
From: Dr.Ace Ratliff
Topic: 995 Message: 1000
Attachments: 1 described; binary payloads are missing from this source WARC

Hi ,
The antenna will work on the police scanner.
Any coax will work, BUT if you want to use TV coax V/U or 82 channel coax such as RG-6 will work much better than VHF only coax such as RG-59 type used by cable companies.
Ace - WH2T

----- Original Message -----
From: Donnie Barlow
To: SkyWires@yahoogroups.com
Sent: Monday, January 17, 2005 10:58 PM
Subject: [SkyWires] antenna question

hello everyone. i have a dual band 2/440 meter base antenna cant remember what kind it is. it was gave to me by a ham friend. but my question is will it work good hooked up to a police scanner? i think its called a discone or something like that anyways i got a 2nd question 4 yea. will cable coax for like cable tv work till i can get around to buying regular RG8 coax? if anyone would please get back with me on this couse my scanner dont pick up very far away i like to monator the police and EMS and fire Depts of the town my parents live in witch is 25 miles away. thanks for takeing the time reading this.

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1001. Re: [SkyWires] antenna question

Yahoo group: SkyWires
Date: 2005-01-18 05:08:49 UTC
From: Dr.Ace Ratliff
Topic: 995 Message: 1001
Attachments: 1 described; binary payloads are missing from this source WARC

END SHOULD READ - RG-59 type used by cable TV companies.

----- Original Message -----
From: Dr.Ace Ratliff
To: SkyWires@yahoogroups.com
Sent: Tuesday, January 18, 2005 12:06 AM
Subject: Re: [SkyWires] antenna question

Hi ,
The antenna will work on the police scanner.
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Sent: Monday, January 17, 2005 10:58 PM
Subject: [SkyWires] antenna question

hello everyone. i have a dual band 2/440 meter base antenna cant remember what kind it is. it was gave to me by a ham friend. but my question is will it work good hooked up to a police scanner? i think its called a discone or something like that anyways i got a 2nd question 4 yea. will cable coax for like cable tv work till i can get around to buying regular RG8 coax? if anyone would please get back with me on this couse my scanner dont pick up very far away i like to monator the police and EMS and fire Depts of the town my parents live in witch is 25 miles away. thanks for takeing the time reading this.

sky_walker_975

Yahoo! Groups Links

a.. To visit your group on the web, go to:
http://groups.yahoo.com/group/SkyWires/

b.. To unsubscribe from this group, send an email to:
SkyWires-unsubscribe@yahoogroups.com

c.. Your use of Yahoo! Groups is subject to the Yahoo! Terms of Service.

No virus found in this outgoing message.
Checked by AVG Anti-Virus.
Version: 7.0.300 / Virus Database: 265.7.0 - Release Date: 1/17/2005

1002. Re: [SkyWires] Re: antenna question

Yahoo group: SkyWires
Date: 2005-01-18 04:51:40 UTC
From: capn2
Topic: 995 Message: 1002

Hiya...Discones are good scanner receive antennas. I use one myself. The cable ur referring to (I think) is RG-58. It's ok for receive only, but if you intend to transmit you'll need to go to the RG8.

73,

Dave
KD8AMR
FISTS 11229
capn2@...
----- Original Message -----
From: n4onl
To: SkyWires@yahoogroups.com
Sent: Monday, January 17, 2005 11:46 PM
Subject: [SkyWires] Re: antenna question

--- In SkyWires@yahoogroups.com, "Donnie Barlow" <sky_walker_975@y...>
wrote:
>
> hello everyone. i have a dual band 2/440 meter base antenna cant
> remember what kind it is. it was gave to me by a ham friend. but my
> question is will it work good hooked up to a police scanner? i think
> its called a discone or something like that anyways i got a 2nd
> question 4 yea. will cable coax for like cable tv work till i can
> get around to buying regular RG8 coax? if anyone would please get
> back with me on this couse my scanner dont pick up very far away i
> like to monator the police and EMS and fire Depts of the town my
> parents live in witch is 25 miles away. thanks for takeing the time
> reading this.
>
> sky_walker_975

If it is a discone both it and the 75ohm coax should work ok on both TX and RX across the rated bandwidth (frequency range) of the antenna. Typically ham rigs will have better recieve sensitivity and selectivity than a scanner radio, so it should perk up your ears over just using a scanner.

If your just going to recieve, hook it up and try it out, it sure won't hurt anything. I would suggest using better coax, something with a foil shield under the braid like rg-6x, for lower loss/better RX sensitivity. Better coax at higher frequencies does help. Also you might want to research mast mounted recieve preamps for more gain. but research before you buy (if you go that route) you want one with the lowest noise rating and decent gain.

Another option would be to build a dual band beam (quad) for recieving in their area. 2 elements would give some gain without narrowing down the beamwidth too bad. Their simple and cheap to make, and the soze os less critical for RX only.

Remember that an antenna system only preforms as well as its weakest link, so optimizing the rx, coax and antenna will do wonders.

73
mike

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1003. Re: [SkyWires] antenna question

Yahoo group: SkyWires
Date: 2005-01-18 11:35:43 UTC
From: W1GOR
Topic: 995 Message: 1003

Hello Donnie,

What does the antenna look like..? Is it a single, vertical element, or a cone-shaped antenna with a group of spoke-shaped elements at the top..? For scanning, a Discone is the best choice because it covers a very wide frequency range. You can use TV cable between the antenna and the scanner. The difference between 75 ohm TV cable (RG-59) and 50 ohm RG-58, RG-8, or RG-8X is not much of a problem with receiving (scanning). So, you don't have to spend your $$$ for 50 ohm cable.

Just mount it up high and enjoy listening to the Police, EMS, and Fire departments.

...Larry
----- Original Message -----
From: Donnie Barlow
To: SkyWires@yahoogroups.com
Sent: Monday, January 17, 2005 10:58 PM
Subject: [SkyWires] antenna question

hello everyone. i have a dual band 2/440 meter base antenna cant remember what kind it is. it was gave to me by a ham friend. but my question is will it work good hooked up to a police scanner? i think its called a discone or something like that anyways i got a 2nd question 4 yea. will cable coax for like cable tv work till i can get around to buying regular RG8 coax? if anyone would please get back with me on this couse my scanner dont pick up very far away i like to monator the police and EMS and fire Depts of the town my parents live in witch is 25 miles away. thanks for takeing the time reading this.

sky_walker_975

1004. Re: [SkyWires] antenna question

Yahoo group: SkyWires
Date: 2005-01-18 16:56:23 UTC
From: Donnie Barlow
Topic: 995 Message: 1004
Attachments: 1 described; binary payloads are missing from this source WARC

this is a pic of what the antenna looks like.

W1GOR <w1gor@...> wrote: Hello Donnie,

What does the antenna look like..? Is it a single, vertical element, or a cone-shaped antenna with a group of spoke-shaped elements at the top..? For scanning, a Discone is the best choice because it covers a very wide frequency range. You can use TV cable between the antenna and the scanner. The difference between 75 ohm TV cable (RG-59) and 50 ohm RG-58, RG-8, or RG-8X is not much of a problem with receiving (scanning). So, you don't have to spend your $$$ for 50 ohm cable.

Just mount it up high and enjoy listening to the Police, EMS, and Fire departments.

...Larry
----- Original Message -----
From: Donnie Barlow
To: SkyWires@yahoogroups.com
Sent: Monday, January 17, 2005 10:58 PM
Subject: [SkyWires] antenna question

hello everyone. i have a dual band 2/440 meter base antenna cant remember what kind it is. it was gave to me by a ham friend. but my question is will it work good hooked up to a police scanner? i think its called a discone or something like that anyways i got a 2nd question 4 yea. will cable coax for like cable tv work till i can get around to buying regular RG8 coax? if anyone would please get back with me on this couse my scanner dont pick up very far away i like to monator the police and EMS and fire Depts of the town my parents live in witch is 25 miles away. thanks for takeing the time reading this.

sky_walker_975

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Donnie Barlow
OWNER /President & Founder
Of Wabash Valley Radio Club

Fairfield, Illinois Office
http://groups.yahoo.com/group/WabashvalleyRadioWorldwideDXclub/
Email Address
sky_walker_975@...
W.V.R.C. has a NEW WEB SITE ! ! !
http://wabashvalleyradiogroup.bravehost.com/

Do you Yahoo!?
Yahoo! Mail - Helps protect you from nasty viruses.

1005. Re: [SkyWires] antenna question

Yahoo group: SkyWires
Date: 2005-01-18 17:15:27 UTC
From: Donnie Barlow
Topic: 995 Message: 1005
Attachments: 1 described; binary payloads are missing from this source WARC

this is a pic of what the antenna looks like.

Donnie Barlow
OWNER /President & Founder
Of Wabash Valley Radio Club
Fairfield, Illinois Office
http://groups.yahoo.com/group/WabashvalleyRadioWorldwideDXclub/
Email Address
sky_walker_975@...
W.V.R.C. has a NEW WEB SITE ! ! !
http://wabashvalleyradiogroup.bravehost.com/

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http://mail.yahoo.com

1006. Re: [SkyWires] antenna question

Yahoo group: SkyWires
Date: 2005-01-18 18:27:10 UTC
From: Dr.Ace Ratliff
Topic: 995 Message: 1006
Attachments: 1 described; binary payloads are missing from this source WARC

That is a Discone Antenna .
Ace - WH2T
----- Original Message -----
From: Donnie Barlow
To: SkyWires@yahoogroups.com
Sent: Tuesday, January 18, 2005 11:56 AM
Subject: Re: [SkyWires] antenna question

this is a pic of what the antenna looks like.

W1GOR <w1gor@...> wrote:
Hello Donnie,

What does the antenna look like..? Is it a single, vertical element, or a cone-shaped antenna with a group of spoke-shaped elements at the top..? For scanning, a Discone is the best choice because it covers a very wide frequency range. You can use TV cable between the antenna and the scanner. The difference between 75 ohm TV cable (RG-59) and 50 ohm RG-58, RG-8, or RG-8X is not much of a problem with receiving (scanning). So, you don't have to spend your $$$ for 50 ohm cable.

Just mount it up high and enjoy listening to the Police, EMS, and Fire departments.

...Larry
----- Original Message -----
From: Donnie Barlow
To: SkyWires@yahoogroups.com
Sent: Monday, January 17, 2005 10:58 PM
Subject: [SkyWires] antenna question

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sky_walker_975

Donnie Barlow
OWNER /President & Founder
Of Wabash Valley Radio Club
Fairfield, Illinois Office

http://groups.yahoo.com/group/WabashvalleyRadioWorldwideDXclub/
Email Address
sky_walker_975@yahoo.com
W.V.R.C. has a NEW WEB SITE ! ! !
http://wabashvalleyradiogroup.bravehost.com/

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Yahoo! Groups Links

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b.. To unsubscribe from this group, send an email to:
SkyWires-unsubscribe@yahoogroups.com

c.. Your use of Yahoo! Groups is subject to the Yahoo! Terms of Service.

1007. PLEASE PASS AROUND this kid has a great point

Yahoo group: SkyWires
Date: 2005-01-18 21:10:22 UTC
From: Donnie Barlow
Topic: 1007 Message: 1007
Attachments: 1 described; binary payloads are missing from this source WARC

Please help here, could be expanded to National Firefighters, Police and EMS personnel Day as well.

An idea from the son of a 9/11 firefighter... so before you delete this, just remember that this is a 14 year-old boy who lost his father on September 11th. All you're asked to do is type, point and click.

He's got a really great idea. Thanks!

Hello,
I lost my Dad on September 11th; he was Chief Edward Geraghty, Battalion 9, New York City Fire Department. He lost his life with many other heroes that day, victims of the terrorists. Firefighters from all over have come to the aid and rescue of the tragedy in New York and Washington, D.C. Many firefighters lost their lives to save someone else's. The truth of the matter is, they do this every single day.

They truly are heroes. I know many people feel helpless, especially those who live far from NYC and D.C. We all want to do something to show our appreciation, our support. I think we can... In honor of the bravery, courage, and determination of American firefighters, there should be a day in our nation to celebrate and appreciate their hard-work and never-ending passion for saving lives. I think we should
honor all those other heroes who still live today. I'm starting a petition for a National Firefighters Day. Will you help make every September 11th "National Firefighters Day"? Please join me! Thank you.
> Connor Geraghty, age 14,
> Rockville Centre,
> New York
> (I Love U, DAD!!)
> PS: When this list reaches 500 names, please send it back to me at ceg8587@....
Instructions: To add your name, click forward, add your name at the bottom of the list. Send it to all you know. OR...COPY AND
> PASTE INTO A NEW EMAIL... ADD YOUR NAME. (This is best)
>
> 1. Ray Vant, Rochester N.Y.
> 2 Debbie Vant, Rochester N.Y.
> 3. Magna Hatelevik, Niagara Falls, Ontario
> 4. Gail Moore, Hamilton, Ontario
> 5. Shannon Goba-Marr, Niagara Falls, Ontario
> 6. Lorie Bradshaw, Niagara Falls, Ontario
> 7. Kim Michael, Niagara Falls, Ontario

> 8. Marc Michael, Niagara Falls, Ontario
> 9. Nicole Panto, Niagara Falls, Ont.
> 10. Steve Lambert, Niagara Falls, Ont.
> 11. Kamrin Bradshaw, Niagara Falls, Ontario
> 12. Chris Bradshaw, Niagara Falls, Ontario
> 13. Richard Eldon, Hamilton Ontario
> 14 Shari Roberts, Hamilton Ontario
> 15 Terry Eldon, Niagara Falls, Ontario
> 16 Greg Cooper, Burlington Ontario
> 17 Andre Frehn, Mississau ga Ontario
> 18 Tanya Roberts, Ottawa, ON
> 19. Crystal Devost, Ottawa, Ontario
> 20. Lisa McIsaac, Ottawa, Ontario
> 21. Sharon Jessome, Glace Bay, NS
> 22. Karen Marsh, Glace Bay, Nova Scotia, Canada
> 23. Tracy Hanlon, Halifax, Nova Scotia, Canada
> 24. Justin Hanlon, Halifax, Nova Scotia, Canada
> 25. Diane Cleveland, Halifax, Nova Scotia, Canada
> 26. Brenda Upshaw, NS
> 27. Jim de la Mothe, Hackettb (tm)s Cove, NS, Canada
> 28. Keith Humphrey, Edmonton, Alberta
> 29. L Sneddon, Edmonton. Alberta
> 30. Rick Shail, Georgetown, Ontario
> 31. Rhonda Shail, Georgetown, Ontario
> 32. Tom Hoy, St. Louis, MO
> 33. Cathy Hoy, St. Louis, MO
> 34. Vickie Pohlmann, St. Louis, MO
> 35. Randy Pohlmann, St. Louis, MO
> 36. Christine Keene, St. Louis, MO
> 37. Jamie Miller, St. Louis, Mo
> 38. Bridget McCullough
> 39. Bob McCullough
> 40. Katie Doherty, Chicago, IL
> 41. Kevin Doherty, Chicago, IL
> 42. Michael John Doherty, Chicago,IL
> 43. Mary Hie, Chicago, IL
> 44. John Hie, Chicago, IL
> 45. Patricia Hie, Prairie Ridge, IL
> 46. Jeanne Cavers, Arlington Heights, IL
> 47. John Cavers, Arlington Heights, IL
> 48. Will Cavers, Arlington Heights, IL
> 49. Colleen Cavers, Arlington Heights, IL
> 50. Michael Cavers, Arlington Heights, IL
> 51. Kevin Cavers, Arlington Heights, IL
> 52. Lisa Majeske, Wood Dale, IL
> 53. Joseph Majeske, Wood Dale, IL
> 54. Rob Degen, Bloomingdale, IL
> 55. Sheri Degen, Bloomingdale, IL
> 56. Denise Powell, Itasca, IL
> 57. Bill Powell, Itasca, IL

> 58. Marina Jakubowski, Lake Bluff, IL
> 59. Chuck Knesley, Lake Bluff, Il
> 60. Ken Arns wald, Mundelein, IL
> 61 James Pellitteri, Gurnee, IL< BR
> 62. John Skillman, Gurnee, IL
> 63. Steven Orusa, Waukegan, IL
> 64. James Pavelick, Waukegan, IL
> 65. Dan Kublank, Waukegan, IL
> 66. David Kublank, Lindenhurst, IL
> 67. Rob Kublank, Wisconsin Rapids, WI--I have your father's name on a
> memorial wrist band. God be with you. 68. Merry Soyck-Doring, Cameron,
> WI 69. Raymond L. Doring, Cameron, WI 70. Frank J. Pierson, Clifton
> Park, N.Y. 71. Judith Pierson, Clifton Park, N.Y. 72. Jennifer
> Richard, Easthampton, MA 73. Aimee Richards, Winooski, VT 74.
> Gretel-Ann Fischer, Colchester, VT 75 Jane Alexy, Queensbury,NY 76
> Barbara Parks, Queensbury, NY 77. Barbara McCarthy Hartford, NY 78.
> Martha Schaefer Hayes, NY 79. Paula Bailey, NH 80. Dee Ann Wright, TX
> 81. Janice Hazzard, CA 82. Lisa Voeltz, Corona, CA 83. Elizabeth
> George, Independence, KY 84. Katie O'Shaughnessy, Cincinnati, OH 85.
> Denny O'Shaughnessy, Cincinnati, OH 86. Rick Otto, Cincinnati, OH 87.
> Ginny Otto, Cincinnati, OH 89. David Collins, Cincinnati, OH 90.
> Stephanie Byer, Cincinnati, OH 91. Matthew Fries, Cincinnati, OH 92.
> Hillary Metcalf, Cincinnati, OH 93. Diane Katz, Cincinnati,OH 94.
> Abbie Brant, Cincinnati, OH 95. Carol Boy mel, Cincinnati, Oh 96.
> Susan Shorr, Cincinnati, Oh 97. Sarah Singer-Nourie, Cincinnati, OH 98.
> Erin G Richards, Cincinnati, OH 99. Michelle Goret, Cincinnati, OH 100
> Kathie Huesman, Cincinnati, OH 101. Lisa Jones Crowley, Richmond, VA
> 102. Pat File, Richmond, VA 103. Gaye Cook, Locust Grove, VA 104.
> Paula Montes de Oca, Locust Grove, VA 105. Karen Minter, Spotsylvania,
> VA 106. Nell Davis, Fredericksburg, VA 107. Joyce Wright, Fred
> ericksburg, Virginia 108. Richard Wright, Fredericksburg, Virginia 109.
> Andrew J. Mills, Fredericksburg, Virginia 110. Therese Cormier,
> Ontario, Canada 111. Judith Ellenberger, Black River Falls, WI 112.
> Kenneth Ellenberger Sr., Black River Falls, WI 113. Bonnie Van Arsdale,
> Peoria, Arizona 114. Lynne Servetnick, Philadelphia, PA 115. Ron
> Servetnick, Philadelphia, PA 116. Gary Servetnick, Philadelphia, PA
> 117. Brian Servetnick, Bensalem, PA 118. Michele Raucheisen, Phila.
> Pa 119. John Raucheisen, Phila. Pa 120. Jenna Oder, Doylestown, Pa
> 121.Phyllis Spivack Phila.Pa 122.Edward Spivack Phila. Pa 123.Sharon
> Price.Richboro Pa 124.David Price, Richboro,Pa 125.Robyn Price,
> Richboro,Pa. 126.Janis Gottfried, Phila.,PA 127. Pam Dragoni, Woodbine,
> NJ 128. Wendy Kaminsky, Worcester, PA 129 Suzie Simko, Hazleton Pa.
> 130. Lori Young, NY 131. Bob Young, NY 132. Laci Young, NY 133. Lisa
> Minnich, Manahawkin, NJ 134. Mark Minnich 135. Adam Minnich 136.
> Tyler Minnich 137. Colleen Neil, Manahawkin, NJ 138. Michelle Degeso,
> Little Egg NJ 139. Jeffrey Olson, Manahawkin, NJ 140. Judith Olson,
> Manahawkin, NJ 141. Genevieve Stelter, Maywood, NJ 142. Eddy Stelter,
> Maywood, NJ 143. Meagan Bennett 144. Jerry O'Suulivan,N.Y. 145.
> Heather O'Sullivan,N.Y. 146. Bill Hurley, FL 147 Marianne Hurley, FL
> 148 Mike Flannery, Westerly, RI 149 Betty Flannery, Westerly, RI 150

> David E Forbes Sr, Pawcatuck, CT 151 Gail Forbes, Pawcatuck, CT 152.
> Linda C. McDougal, Niantic, CT 153. Charles McDougal, Niantic,CT 154.
> Carolyn Sandoval, Phoenix, AZ 155. John Sandoval,Phoenix, AZ 156.
> Marie Duff,Lebanon,CT 157. Lori Biron,Plainfield,CT 158. Chris
> Biron,Plainfield,CT 159. Mark Biron,Plainfield,CT 160. Jennifer
> Biron,Plainfield,CT 161. Teresa Ferrigno, Deadwood, S.D 162 Leila
> Ferrigno, Deadwood, S.D 163 Kayleen Mixon, Deadwood,S.D 164 Priscilla
> Ferrigno, Custer, S.D 165 Sonny Ferrigno, Custer, S.D 166 Jeffrey
> Wilson, Deadwood, S.D. 167 Arlene Morris, Deadwood. S.D 168 Rosemary
> Krammer, Uncasville, CT orig. Chicago, IL) 169. Judy Berglund, Rapid
> City, SD 170 Nancy christensen, Prairie City, Iowa 171 Juanita Graybill,
> Sioux City, Iowa 172 Farrel Morton, Windsor Locks, CT 173 Richie (Dick)
> Norton, North Quincy , MA 174 Donna Haugen, N.Smithfield, RI 175 Pam
> Bruno, Smithfield, R.I. 176 William Lee, Barrington, RI 177 Rebecca Lee,
> Barrington, RI 178 Jane Gillis, Carver MA 179 Jamie Coutu, North
> Providence, RI 180 Joyce Darcy, Fall River, MA 181. Suzy Oliveira,
> Cumberland, 182 Maria DeCastro, Pawtucket, 183 Bernard R Perry,
> Providence, RI 184 Lorna Parsons, Alamo, CA 185 Barbara King, Livermore,
> CA 186 Andrea Pedigo, Tracy, CA " May God be with you and your family
> always. I think this is a wonderful idea and a great way to keep your
> father's spirit alive. 187 Crystal Arbuthn ot, Garberville, CA 189 Darcy
> Bruckenstein, Garberville, CA 190 Melanie Anderson, Garberville CA 191
> Karen Chesnut, Clarksburg, CA 192 R.J.BARKER YUBA CITY CA 193. Ken
> Lothridge, Sacrameento, CA 194. Maria Lothridge, Sacramento, CA 195.
> Shirley Lewis, Citrus Heights, CA 196. Charlene Ranger, El Cajon, CA
> 197. Bobbi Jones, El Cajon, CA 198. Sherrie Graham 199. Brandi
> Moller, Virginia Beach,VA 200. Amethyst Guzman, Richlands NC 201. Judy
> Moore, Springfield IL 202. Cindy & Ron Baum, Williamsburg, PA 203.
> Deborah Turner, Pioneertown, CA 204. Diana Shay-Diehl, Yucca Valley, CA
> 205. Terry Burdett, Twentynine Palms, CA 206. Heather Moore, Shawnee,
> KS 207. Lynnette Swanson, Waldorf, MD 208. Shawn Swanson, Dover, DE
> 209. Alice Miletic, Pittsburgh, Pa.< BR 210. Ray Miletic, Pittsburgh,
> Pa. 211. Carol Larkin, Pittsburgh, PA 212. Scott Larkin, Pittsburgh,
> PA 213. Mary Louise Lula, Pittsburgh, PA 214. Donna Detore,
> Greensburg, PA 215. Maureen Krautz 216. Stephani Wick, Greensburg, PA
> 217. Kevin Wick, Greensburg, PA 218. Andrew Horner, Greensburg, PA
> 219. Joe Horner, Greensburg, PA 220. Mary Ann Parfitt, Greensburg, PA
> 221. Paul Currier, Crestview, FL 222. Cathy Currier, Crestview, FL
> 223. Daniel Testa, Livonia, MI 224. John M. Hathaway, New Stanton, PA
> 225. Duie Matenkosky 226. Denine Wengewicz, Pittsburgh,PA 227. Joan
> Schader, Port Richey, Fl 228. Cindy Dockray,Vernon.NJ 229. Lorna
> Bates, Manchester UK 230. John Smith, Somerset UK 231 Michelle Hendrie
> Somerset UK 232. Jodi Lattanzio, Bayside, New York 233. Beth Mills,
> Murchison, Tx 234. Stephan ie McDaniel, GA 235. Richard Putnam, SC
> 236. Tom & Reba Mullins, Georgia 237. Carolyn Stevens, Ohio
> 238.Heather Abbott, Ohio 239.Matt Abbott, Ohio 240.Teresa Matters, Iowa
> 241.Bethany Aschan, Iowa 242. Kristin Akes, Iowa 243. Tiffany Fink,
> Iowa 244. Lori Davidson, Iowa 245. Kelly Betts, Iowa 246. Sandy
> Brown, Iowa 247. Jim Brown, Iowa 248. Kevin Brown, Iowa 249. Lewis
> Snow, Iowa 250. Betty Snow, Iowa 251. Vivolyn Bu tler,Iowa 252.

> Frances Lewis, Iowa 253. Betty Koppin, Iowa 254. Teddy Van Hoosen,
> Iowa 255. Lori Coleman, Missouri 256. Raymond Coleman, Missouri 257.
> Raechel Coleman, Missouri 258. Sandy Gordinier, Missouri 259. Martha
> Garrett, Missouri 260. Dan Garrett, Missouri 261. Norris Flagler
> Missouri 262. Bettie Flagler Missouri 263. Jevern Vetterly N.M. 2002
> http://www.hushport.com/ 264 Richard Vetterly N.M. 265. Michael Jones
> TN 266. Dianne Jones TN 267. C. Chitwood TN 268. J. Coley AL 269.
> Bob Surbaugh Keister WVA 270. Carole Terry Wuest FL 271. Jenny Pike KY
> 272. Wesley Pike KY 273. Brandy M. Lee, Lexington, KY 274. Cyndi
> Fields, KY 275. Bonnie Cooper KY 276. I Robertson, KY 277. Dea
> Redmon, Morehead, KY 278. Rev. C. Thomas Redmon Jr., Morehead, KY
> 279. Heidi R Bone, Jamestown, OH 280. Anita Garrison, Wilmington, OH
> 281. Phillip E. Brewer, Wilmington, OH 282. R. Gayle Ferguson,
> Beavercreek OH 283. Delores J. Kellogg, Dayton, OH 284. Jay C.
> Kellogg, Dayton, OH 285. Gene Phillabaum, Miamisburg, Ohio 286. Mary
> Phillabaum, Miamisburg, Ohio 287. Gilbert Fortney, St. Louisville,
> Ohio 288. Jane Fortney, St. Louisville, Ohio 289. Steve Veatch,
> Utica, Ohio 290. Carolyn Veatch, Utica, Ohio 291. Margaret Parsons,
> Ohio 292. Lu Colley, Ohio 293. Karen Crawford, Dresden, OH 294. Tom
> Crawford, Dresden, OH 295. Tricia Kidd, OH 296. Beth M. Dawe 297.
> Kathryn A Dawe 298. Brittany Summers, Waynesville, OH 299. Michael
> Williams, Wellston, OH 300. Tiffany Williams, Wellston, OH 301. Tyonna
> Williams, Wellston, OH 302. Rick Williams, Wellston, OH 303. Keith
> Manring, Rhodes, OH 304. Rosland Manring, Rhodes, OH 305. Cathy
> Manring, Rhodes, OH 306. Charlie Manring, Rhodes, OH 307. Harold
> Manring, Rhodes, OH 308. Louetta Patrick, Jackson, OH 309. J. Heisey,
> Atlanta, GA 310. K. Cushing, Beverly Hills, Fl. 311. Robin Cushing,
> Beverly Hills, Fl. 312.Corinne Richardson, Evans, GA 313. Patrick and
> Peggy Richardson 313. Patrick and Peggy Richardson, Fl 314. Robin
> Bolick, Norfolk, VA. 315 Larry Curtis, Mathews, VA. 316 Carol and Mike
> LaDue, Tampa, Florida 317. Dian and Dave Minick, Tampa Fl 317, David
> and Phyllis James, Coraopolis, PA 318. Bernie and Doris Mousseau,
> Clarkston, MI 319. Gloria J. Spain, Wellston, MI 320. Kim Walz 321.
> Kaitlyn Glomski (14 yrs old) 322. Karl Walz Ossineke, MI 323. Ryan M.
> Peirce Ossineke, MI 324. Jean Peirce Hubbard Lake, MI 325. Felipe Lozano
> Kerrville, TX 326. Adolph Castillo, Kerrville,Texas 327. Maxine
> Castillo, Kerrville, Texas 328. Robert L Hamilton D.O Mabank, TX 329.
> Loretta M Hamilton Mabank, TX 330. Barbara Toll, Bella Vista, Arkansas
> 331. Harry Toll, Bella Vista, Arkansas 332. Barry M Nimtz Onalaska, WI
> 333. Lynda C Nimtz Onalaska, WI 334. Jenny Zielke Lewiston, MN 335.
> Theresa Neimeyer Blue Springs, MO 336. Delores Zimmermann Milladore, WI
> 337. Lori Ott Mosinee WI 338. Shirl Mannel CA 339. B&M Clark WI 340.
> J. Passineau, Nekoosa, WI 341. D. Passineau, Nekoosa, WI 342. Amber
> Lowell, Nekoosa, WI 343. Kathy Werner, New Port Richey, FL 344. Ray
> and Brenda Merkes, Wisconsin Rapids, WI 345. Todd and Teresa Wenzel,
> Nekoosa, WI 346. Sandy Dillingham 347. Rick Arneson, Del Rio, TX 348.
> JoJo Arneson, Del Rio, TX 349. Sandy Whitson, South Lebanon, Ohio 350.
> Howard Whitson, South Lebanon, Ohio 351. Shawna Ernst, Lake Worth, FL
> 352. Joseph Cusito, Lake Worth, FL 353. Jordan Cusito, Lake Worth, FL
> 354. Brooke Cusito, Lake Worth, FL 355. Chelsea Cusiot, Lake Worth, FL

> 356. Bibiane Hettiger, Boynton Beach, FL 357. Sara Schmidt, Lantana,
> FL 358. Sally Weber, Atlantis, FL 359. Jon Weber, Atlantis, FL 360.
> Paul Keene, Lantana, FL 361. Lonza Keene, Lantana, FL 362. Joel Keene,
> Lantana, FL 363. Laurie Keene, Lantana, FL 364. Ashley Keene, Lantana,
> FL 365. Travis Keene, Lantana, FL 366. Rachel Keene, Lantana, FL 367.
> Kimberly Long, Tampa, FL 368. Paige Harper, Tampa, FL 369. Robyn Arey,
> Tampa, FL 370. Daryl Bellush, Tampa, FL 371. Sylvia Lewis, San
> Antonio, TX 372. Jacob Lewis, Albuquerque, NM 373. Effie Wood, San
> Antonio, TX 374. Stephanie Albert, San Antonio, TX 375. Jennifer Meade,
> San Antonio, TX 376. Martha Drake, Harlingen, TX 377. Roland Drake,
> Harlingen,TX 378.Jack Drake, Harlingen, TX 379. S. E. Wallace, Alvarado,
> TX 380. J. Logsdon, Muleshoe, TX 381 Coy& Jeanie Denison
> 382. George Nieman
> 383. Dianne Nieman
> 384. Jim Nieman
> 385. Ruth Nieman
> 386. P J Fanning
> 387. Jim Wilson, OKC, OK
> 388. Tina Schmidt, Edmond, OK
> 389. Dewey Schmidt, Edmond, OK
> 390. Davine Smith, Nichols Hills, OK
> 400. Tracy B., OKC, OK ~ Fiance to a firefighter
401. RJ Burke, Oklahoma City, OK
401. Tami Burke, Oklahoma City, OK
402. Chris Burke, Oklahoma City, OK
403. Jan Wenzel, West Warwick, RI
404. Ron Wenzel, West Warwick
405. Diana Penrose
406.Bob Cilette
407.Ric Probert
408. Roberta Travis, Cranston, RI
409. Joe Travis, Cranston RI
410. Eleanor Mower, Marion Ma.
411. Bob Joseph Fairhaven, MA 412. James & Karen Garant Mass.
412. W. Boggs Okanogan, Wa.
413 JOE CANO CORPUS CHRISTI TEXAS 2rsn4145
414 Brian Harper Indianapolis,IN 2RSN2755
415 Donnie Barlow Fairfield, Illinois WVRC975
416 Vanessa Cown Fairfield, Illinois WVRC976
417 Jonathan Barlow Fairfield, Illinois WVRC977
418 Kimberly Barlow Fairfield, Illinois WVRC978
419 Robert Barlow Fairfield, Illinois WVRC979
420 Michael Barlow Centralia, Illinois
421 Missy Smith Terre Haute, IN
422 Mike Smith Terre Haute, IN
423 Debbie Garner West Terre Haute, IN

Donnie Barlow
OWNER /President & Founder
Of Wabash Valley Radio Club

Fairfield, Illinois Office
http://groups.yahoo.com/group/WabashvalleyRadioWorldwideDXclub/
Email Address
sky_walker_975@...
W.V.R.C. has a NEW WEB SITE ! ! !
http://wabashvalleyradiogroup.bravehost.com/

Do you Yahoo!?
Yahoo! Mail - Helps protect you from nasty viruses.

1008. Re: [SkyWires] PLEASE PASS AROUND this kid has a great point

Yahoo group: SkyWires
Date: 2005-01-18 21:26:13 UTC
From: Mel Vance
Topic: 1007 Message: 1008

Hope I am wrong about this one, but it is very much like lots of others that were running around just after 9/11. If you look at the bottom of the message, it is looking to get a return
message with 500 names. Lots of these turn out to be 'phishing' for information for mail lists.

The idea of a firefighters/police/EMT day is great. We have a little known day for firefighters
and police in WA already.

Mel
N7OKL

1009. Re: [SkyWires] PLEASE PASS AROUND this kid has a great point

Yahoo group: SkyWires
Date: 2005-01-18 21:33:52 UTC
From: Sarge
Topic: 1007 Message: 1009

Its true http://urbanlegends.about.com/library/blfirefighters.htm

but as I remember there already is a National Firefighter's Day. Early December I think.

1010. Re: [SkyWires] star loop

Yahoo group: SkyWires
Date: 2005-01-19 01:52:57 UTC
From: Dr.Ace Ratliff
Topic: 994 Message: 1010
Attachments: 1 described; binary payloads are missing from this source WARC

Hi Mel,
Have you considered a Multi-Band Mini Super Loop Antenna ?
It will work 10 - 80 mtrs with a tuner.
You would need about 100 feet of horizontal space to hang it across like a dipole.

Construction Info is at
http://www.bloomington.in.us/~wh2t/Super%20Loop%20Antenna.htm

Ace - WH2T

----- Original Message -----
From: Mel Vance
To: SkyWires@yahoogroups.com
Sent: Monday, January 17, 2005 10:04 PM
Subject: [SkyWires] star loop

Still looking for more wire/lower bands within my rather severely restricted lot...

1 idea I am looking at is a modified star loop....

Could the legs on the star loop be done into a 'T' shape and still work well?
It seems to me the star loop is just the loop skywire wadded up to fit a smaller area and some additional folding should not have too much of an effect.

Mel
N7OKL

Yahoo! Groups Links

a.. To visit your group on the web, go to:
http://groups.yahoo.com/group/SkyWires/

b.. To unsubscribe from this group, send an email to:
SkyWires-unsubscribe@yahoogroups.com

c.. Your use of Yahoo! Groups is subject to the Yahoo! Terms of Service.

1011. Re: [SkyWires] Limited space/rules loop...

Yahoo group: SkyWires
Date: 2005-01-19 07:34:43 UTC
From: Dr.Ace Ratliff
Topic: 993 Message: 1011
Attachments: 1 described; binary payloads are missing from this source WARC

Hi Mike,
I don't believe you have had any takers on your questions yet, so here's my 2 cents worth. First let me say that if you go with a "40m (~132' insulated wire and ~50' high) loop, fed with 450 ladder line (~90-100') for multiband" you very well might need to change the length of the 450 ohm ladder line.

As I state on my web page http://www.bloomington.in.us/~wh2t/zepp.html
To avoid problems matching any center fed antenna with high impedance open wire lines, keep the feedline around these lengths.

[The WORST POSSIBLE line lengths are shown in brackets]

40 meter antenna 42-52, 73-83, 112-123 or 145-155 feet
[Avoid 32, 64, 96, 128 ft]

Now on to your questions.

#1 "Can I expect a good tuner to let me have some kind of signal on 75m
or 160m?"

It will be very difficult for ANY tuner to give you a good match on any band lower than the antenna's fundamental design frequency/band. You can expect to have a VERY weak signal on 75 or 160 mtr bands.

#2 "What about a Slinky loop for extending the wire length in the same
space, or will the steel (?) eat up most of my power in resistance?"

It would be worth trying, there will be some (I squared R) loss if the slinky is steel.

#3 "From what I've been reading 2 turn loops seem to self cancel, but
would a 3 turn or odd # turn loop offset this to a usable degree?
(thinking of more wire for 75-160m but higher bands may suffer?)"

I don't believe a multi turn loop is what you need. More wire is great and the higher bands will not suffer.

#4 "Dr.Ace likes the MFJ989C tuner, would it or another tuner be able
to tune 75-160m with a 40m loop? (IOW What tuners would be recommended?)"

As I stated on Question #1 - It will be very difficult for ANY tuner to give you a good match on any band lower than the antenna's fundamental design frequency/band. You already know I like the MFJ-989C "3 KW" tuner. Also, Ameritron's True Legal LimitT ATR-30 Antenna Tuner is very nice but it costs more money.

When I was shopping for an antenna tuner the Ameritron's True Legal LimitT ATR-30 wasn't yet on the market. I did consider the Nye Viking tuner, but at around $900.00 I was unimpressed that it used a fixed value "door knob" capacitor in place of a variable.

Probably the best value or "bang for the buck" is to get an old Johnson KW Matchbox, BUT keep in mind they will not work on the 160 mtr band ! If shopping for a new Antenna Tuner, be sure to check the voltage rating of the variable capacitors. The MFJ-989C uses 6 KV caps, many other brand tuners use 4 KV or 4.5 KV caps, expect these lighter duty tuners to arc at lower power levels than their heavier duty counter parts!

#5 "I would like to build a mid power linear this year (4-500watts),
what wire size would be recommended for that power level.

" 14 Gauge will more than do the job, it will handle legal limit, 16 awg will handle the power but will break easier. On my loop I am using 272" of 8 gauge solid copper wire. I called all the electric supply houses in town, found the place that was the lowest cost, went in and told the guy "I want 272 feet of 8 gauge solid bare copper wire". He had a machine that ran it off on a spool, I asked him how accurate the machine was, he said with-in a few inches. I came home put it up with no measuring and it was a great success. That was several years ago, if memory serves me that wire cost me about $15.00

On any antenna, Bandwidth is proportional to the diameter of the conductor. The larger the diameter the lower the Q . The larger the diameter of the conductor the broader the antenna's bandwidth. By using 8 gauge solid copper wire on my 272" 80 meter full wave horizontal loop antenna I am able to cover the entire phone band from 3.750 - 4 Mhz with a 2:1 vswr or less!

Also here is one of my web pages that may be of interest to you:

http://mywebpage.netscape.com/Dr69Ace/ant.htm

Note: If you try the ANTENNA link above and you get
"Sorry, we can't find that page".
Click your REFRESH Button.
You may need to click it more than once.

Let the group know how your antenna project turns out.
Good Luck with the license upgrade and 73,
Ace -
Shamelessly whoring my website since 1995
www.WH2T.com

----- Original Message -----
From: n4onl
To: SkyWires@yahoogroups.com
Sent: Monday, January 17, 2005 9:50 PM
Subject: [SkyWires] Limited space/rules loop...

Hello everyone!

I'm getting back into ham radio after a few years absence and have
been researching antennas.The horiz. skyloop sounds like what I want,
but as usual what I want and what I get aren't usually the same. I've
been told by the landlady that I can put up any antenna I want as long
as its in the tree next to the house. Seems like theres always a 'as
long as' in my life, but its better than a flat NO.

Limited space, wanting to be able to put out some signal on 75 &160m
to ragchew with some local (15 to 150? miles) friends that hang out on
those bands, and with a brain thats turning to jelly from reading too
darn much. I was grandfathered to general with my old tech licence and
have no experience on any bands lower in freq. than 10m novice phone.
Yep I'm a phone guy, no CW allowed in this shack, we don't get along. ;)
But I'm planning on upgrading to extra in the next few months and have
a like new IC746 raring to TX. I have to say it beats the heck out my
old TS130, FT101ZD... on features and RX! B)

After reading abt 90% of the posts in the group you have me interested
in trying a single loop, center supported off of 4 insulated poles to
the center support mast. Size wise it looks like I'll be limited to a
40m (~132' insulated wire and ~50' high) loop, fed with 450 ladder
line (~90-100') for multiband, and a manual tuner With that in mind
the Qs begin...

1) Can I expect a good tuner to let me have some kind of signal on 75m
or 160m?
Yes I realize its a serious compromise but what in life isnt? Anyway
the main person I'd like to be able to reach on 160m lives ~15 miles
away so a unshielded dummy load would probably do that at 50ish ft.
Any further would be a bonus! On 75m the gang seems to be in a 100-150
mile radius.

2) What about a Slinky loop for extending the wire length in the same
space, or will the steel (?) eat up most of my power in resistence?

3) From what I've been reading 2 turn loops seem to self cancel, but
would a 3 turn or odd # turn loopoffset this to a usable degree?
(thinking of more wire for 75-160m but higher bands may suffer?)

4) Dr.Ace likes the MFJ989C tuner, would it or another tuner be able
to tune 75-160m with a 40m loop? (IOW What tuners would be recommended?)

5) I would like to build a mid power linear this year (4-500watts),
what wire size would be recommended for that power level.

Any comments, suggestions, etc... are welcome!

73
mike

Yahoo! Groups Links

a.. To visit your group on the web, go to:
http://groups.yahoo.com/group/SkyWires/

b.. To unsubscribe from this group, send an email to:
SkyWires-unsubscribe@yahoogroups.com

c.. Your use of Yahoo! Groups is subject to the Yahoo! Terms of Service.

1012. Re: Skywire possibly overloading portable shortwave receiver?

Yahoo group: SkyWires
Date: 2005-01-20 07:06:31 UTC
From: denisnh
Topic: 974 Message: 1012

Your answer was very helpful! Thanks for all the info.

Regards,
Denis

--- In SkyWires@yahoogroups.com, "Dr.Ace Ratliff" <wh2t@b...> wrote:
> Hi Denis,
>
> End fed wire antennas can develop very high static voltages on them.
> This static voltage can easily be high enough to knock the front end out of sensitive receivers.
> To overcome this problem, I suggest you connect a resistor from the antenna wire to ground near the back of the receiver or from the coax center to shield where the antenna wire connects to the coax.
>
> Only use a non-inductive resistor, carbon resistors work fine.
> Don't use wire wound or metal film resistors.
> The resistance value is not critical.
> I suggest about a 56K ohm 1/2 watt resistor for receive only or if transmitting with up to 100 watts.
> If you will be transmitting with high power "QRO", I suggest using about a 1 Meg ohm 1/2 watt resistor.
> This resistor should bleed off all static build up.
>
> A spark gap requires a high voltage before it will spark across the gap.
>
> I have a very small neon bulb with pigtail leads connected across my telephone line in an attempt to squelch lightning discharge induced voltages in the telephone line (I lost several computer modems) from nearby strikes. The neon bulb lights when the phone rings too.
>
> Some antenna coax switches have built in static discharge devices.
>
> There is an item called a Blitz Bug that supposedly discharges static
> http://64.233.167.104/search?q=cache:Amid6tHjw1sJ:www.acksupply.com/catalog/antenna.pdf+%22blitz+bug%22&hl=en
>
> A conventional TR Cell is a gas discharge tube, acting as an electronic switch. This is used to short the receiver input and thus protect it. The transmitted pulse causes the gap in the cell to

break down, thus forming the short circuit.
>
> Gas discharge tubes take time to turn on, and longer to
turn off again. Often a keep-alive is used to prime the cell ready
for action. The gas in the cell is critical to the time it takes for
it to ionize and deionize, and water vapor proves to be the most
stable.
>
>
>
> Hope this info is somewhat helpful.
>
> 73, Ace www.WH2T.com
>
>
>
>
> ----- Original Message -----
> From: denisnh
> To: SkyWires@yahoogroups.com
> Sent: Friday, January 14, 2005 9:16 AM
> Subject: [SkyWires] Re: Skywire possibly overloading portable
shortwave receiver?
>
>
>
> Dr. Ace! I knew your name sounded familiar. I've read a number
of
> your articles posted on the internet and they're great! I've
> learned a lot from them.
>
> One quick question if you don't mind, regarding static buildup
in a
> longwire. You had mentioned in an article that an end fed
antenna
> should have a resistor from the center conductor of the coax
> feedline to ground. I believe this was 100k? Assuming the high
> voltage of a static charge, this resistor should bleed off all
> static. (I hope)
>
> Being the worrier that I am, is there any type of "backup"
static
> discharge device to go with the bleed off resistor? I've heard
> mention of neon bulbs, spark gaps, zener diodes. Any comments
on
> this?
>
> Also heard that some CB'ers use a "static discharge block" in
their
> systems. I wasn't able to find skematic info or a supplier for

> these blocks. Anyone know anything more about them?
>
> Thanks,
> Denis
>
> PS-That comment about the crop circles really cracked me up! :-)
>
>
> --- In SkyWires@yahoogroups.com, "Dr.Ace Ratliff" <wh2t@b...>
wrote:
> > Denis,
> > I agree with your wife.
> > Don't tell the neighbors.
> > I use an 80 mtr loop and a 160 mtr inverted L , they both work
> great.
> > Good Luck
> > Ace - www.WH2T.com
> > ----- Original Message -----
> > From: denisnh
> > To: SkyWires@yahoogroups.com
> > Sent: Sunday, January 09, 2005 3:50 AM
> > Subject: [SkyWires] Re: Skywire possibly overloading
portable
> shortwave receiver?
> >
> >
> >
> > Many thanks for the helpful advice! I guess a receive
antenna
> is
> > not as difficult as a transmitting one would be. It all
sounds
> very
> > straight forward. I have had my eye on that MFJ tuner,
though,
> and
> > I'll probably pick one up. It can't hurt the setup and I'll
> > hopefully learn something from it.
> >
> > We've had a few moderate snow storms here in New Hampshire
the
> last
> > few days. I don't care for tromping through the snow and
brush
> > trying to run a wire this long. I'm now thinking I should
work
> up
> > to the skywire by first going with a loop and an inverted L
> after I
> > get the loop working properly. The skywire can go up in the

> spring.
> >
> > By the way, what sort of reactions do you get from your
> neighbors
> > when running that much wire? I had thought about telling
them
> what
> > I'm doing before I start. My wife says it will just give
them an
> > excuse to complain about everything from the "eye sore" to
even
> the
> > slightest interference they might experience through their
> phones or
> > TV.
> >
> > Regards,
> > Denis
> >
> >
> >
> >
> >
> > --

> -----------
> > Yahoo! Groups Links
> >
> > a.. To visit your group on the web, go to:
> > http://groups.yahoo.com/group/SkyWires/
> >
> > b.. To unsubscribe from this group, send an email to:
> > SkyWires-unsubscribe@yahoogroups.com
> >
> > c.. Your use of Yahoo! Groups is subject to the Yahoo!
Terms
> of Service.
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> >
> >
> > No virus found in this incoming message.
> > Checked by AVG Anti-Virus.
> > Version: 7.0.299 / Virus Database: 265.6.9 - Release Date:
> 1/6/2005

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1/6/2005
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> ---

> Yahoo! Groups Links
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> http://groups.yahoo.com/group/SkyWires/
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> b.. To unsubscribe from this group, send an email to:
> SkyWires-unsubscribe@yahoogroups.com
>
> c.. Your use of Yahoo! Groups is subject to the Yahoo! Terms
of Service.
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>
> No virus found in this incoming message.
> Checked by AVG Anti-Virus.
> Version: 7.0.302 / Virus Database: 265.6.11 - Release Date:
1/12/2005
>
> No virus found in this outgoing message.
> Checked by AVG Anti-Virus.
> Version: 7.0.302 / Virus Database: 265.6.11 - Release Date:
1/12/2005

1013. Re: Limited space/rules loop...

Yahoo group: SkyWires
Date: 2005-01-22 22:05:16 UTC
From: n4onl
Topic: 993 Message: 1013

--- In SkyWires@yahoogroups.com, "Dr.Ace Ratliff" <wh2t@b...> wrote:
>>Hi Mike,
I don't believe you have had any takers on your questions yet, so
here's my 2 cents worth.
First let me say that if you go with a "40m (~132' insulated wire and
~50' high) loop, fed with 450 ladder line (~90-100') for multiband"
you very well might need to change the length of the 450 ohm ladder
line...<<

Thanks, I'd read n saved that already, I was just calculating the
short run distance, I'll extend as necessary.

>>>#1 "Can I expect a good tuner to let me have some kind of signal on 75m
or 160m?"<

It will be very difficult for ANY tuner to give you a good match on
any band lower than the antenna's fundamental design frequency/band.
You can expect to have a VERY weak signal on 75 or 160 mtr bands.<<

I realize that the signal would be weak, but weak is better than none!

As for the tuners, many of the automatic tuners will match shorter
antennas to low frequencies, so I thought the manual tuners should be
capible of it. I've set up automatic tuners (SEA, SGC, Motorola) on
small towboats that would easily match a 50' or so antenna to the 2mhz
coast guard frequency (2182khz? its been a while and SSB isn't as
dominate on towboats as it once was, cell phones, watercom and sat
communications like Qualcom dominate now). Of course they have a few
hundred ton boat on water as a ground. B)

>>>#2 "What about a Slinky loop for extending the wire length in the same
space, or will the steel (?) eat up most of my power in resistance?"<

It would be worth trying, there will be some (I squared R) loss if the
slinky is steel.<<

I've read its claimed to be 80' of steel originally, but is down to
62-3' now. Which would be one reason for their use on 80meter
shortened antennas.

I'm mainly kicking around ideas at this point.

>>>#3 "From what I've been reading 2 turn loops seem to self cancel, but
would a 3 turn or odd # turn loop offset this to a usable degree?
(thinking of more wire for 75-160m but higher bands may suffer?)"<

I don't believe a multi turn loop is what you need. More wire is great
and the higher bands will not suffer.<<<

Other than hellically wound (Slinky or emulating it) or multi turns I've not come up with another way to get more wire up, considering my limitations.

Back to the auto tuners, SGC has one (or more) with a 80' wire for a loop that will tune 75-80meters, in single or multi loop configurations. It seems to me with more wire the 160m band should be realisticly tuneable. Of course its a comprimize but without compromize I wont be getting on the air at all on the 2 lower bands.

>>>#4 "Dr.Ace likes the MFJ989C tuner, would it or another tuner be able to tune 75-160m with a 40m loop? (IOW What tuners would be recommended?)" <

As I stated on Question #1 - It will be very difficult for ANY tuner to give you a good match on any band lower than the antenna's fundamental design frequency/band. You already know I like the MFJ-989C "3 KW" tuner. Also, Ameritron's True Legal Limit□ ATR-30 Antenna Tuner is very nice but it costs more money.

When I was shopping for an antenna tuner the Ameritron's True Legal Limit□ ATR-30 wasn't yet on the market. I did consider the Nye Viking tuner, but at around $900.00 I was unimpressed that it used a fixed value "door knob" capacitor in place of a variable. Probably the best value or "bang for the buck" is to get an old Johnson KW Matchbox, BUT keep in mind they will not work on the 160 mtr band ! If shopping for a new Antenna Tuner, be sure to check the voltage rating of the variable capacitors. The MFJ-989C uses 6 KV caps, many other brand tuners use 4 KV or 4.5 KV caps, expect these lighter duty tuners to arc at lower power levels than their heavier duty counter parts!<<<

I have a old MFJ-989 on the way to play with, for $120 I thought it would be good for testing. If it won't tune a limited size antenna properly then I havent wasted $300 on a new 'C' model. Like most hams I don't have unlimited funds, but I'll spend as needed when I know something will work, or dabble in the less expensive stuff then fumbling around. ;)

>>>#5 "I would like to build a mid power linear this year (4-500watts), what wire size would be recommended for that power level.<<

" 14 Gauge will more than do the job, it will handle legal limit, 16 awg will handle the power but will break easier. On my loop I am using 272" of 8 gauge solid copper wire. I called all the electric supply houses in town, found the place that was the lowest cost, went in and told the guy "I want 272 feet of 8 gauge solid bare copper wire". He had a machine that ran it off on a spool, I asked him how accurate the machine was, he said with-in a few inches. I came home put it up with no measuring and it was a great success.
That was several years ago, if memory serves me that wire cost me about $15.00<<

If I do a limited size, center supported, loop the wire will be the least of my expenses. Price some fiberglass 40m quad spreaders! ;)

>>On any antenna, Bandwidth is proportional to the diameter of the conductor. The larger the diameter the lower the Q . The larger the diameter of the conductor the broader the antenna's bandwidth. By using 8 gauge solid copper wire on my 272" 80 meter full wave horizontal loop antenna I am able to cover the entire phone band from 3.750 - 4 Mhz with a 2:1 vswr or less!<<

Yep, or you can use 2 or more smaller conductors, spaced, to fool it into acting like a larger diameter single conductor at RF frequencies for extended bandwidth.

>>>Also here is one of my web pages that may be of interest to you:

http://mywebpage.netscape.com/Dr69Ace/ant.htm
Note: If you try the ANTENNA link above and you get
"Sorry, we can't find that page".
Click your REFRESH Button.
You may need to click it more than once.<<

Thanks Ace, but if I lived on a farm I'd just put up a 530' loop n be done with it. I'm trying to meet a restriction challenge, but it is fun trying to find a better way.

>>Let the group know how your antenna project turns out.
Good Luck with the license upgrade and 73,
Ace -
Shamelessly whoring my website since 1995
www.WH2T.com<<

Thanks Dr.Ace!
I'll post when I get something figured out or tested.

mike

1014. Height of 160 meter loop, 40 feet or 60 feet

Yahoo group: SkyWires
Date: 2005-01-23 17:42:10 UTC
From: johnisella
Topic: 1014 Message: 1014

Does anyone have experience or opinion on the height of a 160 meter loop? I am going to be installing 4 phone poles and can get them 40, 50 or 60 feet above ground, other than the higher is better approach does anyone have hard experience or theory to support higher, 60 feet, or lower, 40 foot installation?

Thanks, John K1KSC

1015. Re: [SkyWires] Height of 160 meter loop, 40 feet or 60 feet

Yahoo group: SkyWires
Date: 2005-01-23 19:49:31 UTC
From: keith currie
Topic: 1014 Message: 1015

My loop is up at about 50' but it is very long so I think it changes the
pattern a bit. Mine is 980' so the lobes are very close and it works
great on all bands.
Just my experience not real sure, I just go with what works
for me.
VE5HKC
Keith

johnisella wrote:

>
> Does anyone have experience or opinion on the height of a 160 meter
> loop? I am going to
> be installing 4 phone poles and can get them 40, 50 or 60 feet above
> ground, other than
> the higher is better approach does anyone have hard experience or
> theory to support
> higher, 60 feet, or lower, 40 foot installation?
>
> Thanks, John K1KSC
>
>
>
>
> --
> Yahoo! Groups Links
>
> * To visit your group on the web, go to:
> http://groups.yahoo.com/group/SkyWires/
>
> * To unsubscribe from this group, send an email to:
> SkyWires-unsubscribe@yahoogroups.com
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> Service.
>

1016. Re: [SkyWires] Height of 160 meter loop, 40 feet or 60 feet

Yahoo group: SkyWires
Date: 2005-01-23 18:27:00 UTC
From: Erik Weaver, n0ew
Topic: 1014 Message: 1016

Anything less than 1/4 wavelength for the frequency being used is NVIS (Near Vertical Incident Skywave), sometimes called _cloud burners_ due to the very up-and-down reflections.

I doubt for 160-meters there is much pratical difference between 40 and 60 feet height. If however, you are also using this on all the other bands some of them there will be a difference, based upon where the 1/4 wavelength height is for each band.

My $0.02. Goodluck!
-Erik n0ew

>
>
> Does anyone have experience or opinion on the height of a 160 meter loop?
> I am going to
> be installing 4 phone poles and can get them 40, 50 or 60 feet above
> ground, other than
> the higher is better approach does anyone have hard experience or theory
> to support
> higher, 60 feet, or lower, 40 foot installation?
>
> Thanks, John K1KSC
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> Yahoo! Groups Links
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Erik E. Weaver
erik@...
www.n0ew.org

1017. Re: [SkyWires] Height of 160 meter loop, 40 feet or 60 feet

Yahoo group: SkyWires
Date: 2005-01-23 21:26:48 UTC
From: Scott Erwin
Topic: 1014 Message: 1017

You nailed it when you said that higher is always better! This is a true statement with any antenna. Horizontal loops seam to work just fine close to the ground. It may be that the ground under it unlike the voltage/current-induced signal produced by a dipole type antenna does not suck up the magnetic part of the radiated signal. It does seam to concentrate it in a tighter vertical radiated signal the closer it is to ground as compared to the frequency used. Hence, the old "Sky burner" term used to describe Sky wire loop antennas. Due to modern antenna pattern software we know this is a false statement when a large loop is used on the higher HF bands. Just put up what you can and enjoy the surprising results of a Sky wire loop no matter how high or low to the ground it is!
--- keith currie <kecurrie@...> wrote:

> My loop is up at about 50' but it is very long so I
> think it changes the
> pattern a bit. Mine is 980' so the lobes are very
> close and it works
> great on all bands.
> Just my experience not real sure, I just
> go with what works
> for me.
>
> VE5HKC
>
> Keith
>
> johnisella wrote:
>
> >
> > Does anyone have experience or opinion on the
> height of a 160 meter
> > loop? I am going to
> > be installing 4 phone poles and can get them 40,
> 50 or 60 feet above
> > ground, other than
> > the higher is better approach does anyone have
> hard experience or
> > theory to support
> > higher, 60 feet, or lower, 40 foot installation?
> >
> > Thanks, John K1KSC

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>

> > Yahoo! Groups Links
> >
> > * To visit your group on the web, go to:
> > http://groups.yahoo.com/group/SkyWires/
> >
> > * To unsubscribe from this group, send an email
> to:
> > SkyWires-unsubscribe@yahoogroups.com
> >
> > * Your use of Yahoo! Groups is subject to the
> Yahoo! Terms of
> > Service.
> >
>

Do you Yahoo!?
Yahoo! Mail - Easier than ever with enhanced search. Learn more.
http://info.mail.yahoo.com/mail_250

1018. Re: [SkyWires] Height of 160 meter loop, 40 feet or 60 feet

Yahoo group: SkyWires
Date: 2005-01-23 21:42:39 UTC
From: Dave
Topic: 1014 Message: 1018

Given the choice of 40' or 60' poles, I would have the longer ones installed and do some experimenting with raising/lowering the loop.

Dave
VE1VQ

1019. How high??

Yahoo group: SkyWires
Date: 2005-01-24 00:00:25 UTC
From: KI4BUN / AAV4TP
Topic: 1019 Message: 1019

O.K. Here is the result of several months of trial and error in finding how high to run my sky loop.

I have my loop suspended between 4 fiberglass masts which are 48 feet tall. Each pole has its own 'flagpole lanyard' system which consists of a small pulley at the top with a nylon cord looped through it which I will refer to as a lanyard.

Each lanyard has a ceramic insulator attached. Through the other hole in the insulator is run my antenna wire. I have used 18 ga. chandelier wire, 280 feet long. This configuration allows the wire to free-float through the insulators.

The lanyards are raised one at a time to the point in height I want to operate. Using this method of adjustment, I can even change the basic shape of the loop...i.e. two oposite corners high, two lower. I have even tried "aiming" the loop by adjusting two adjoining poles low and the other side high.

What has proven to work best is a horizontally flat configuration about 12 feet off the ground. This works best for dx as opposed to flat at 20, 25, 30, 40, or 48 feet.

This post is not meant to criticize others who maintain the higher the better, but to let you know what has worked best for me.

73

1020. Re: [SkyWires] How high??

Yahoo group: SkyWires
Date: 2005-01-24 21:58:54 UTC
From: Paul
Topic: 1019 Message: 1020

What sort of ground do you have there?

Dry, wet, sandy, clay?

Paul MW0CDO 150 ft loop at 24ft above wet ground 50ft ASL 2.45Km from the sea & 800m from a tidal basin.
----- Original Message -----
From: KI4BUN / AAV4TP
To: SkyWires@yahoogroups.com
Sent: Monday, January 24, 2005 12:00 AM
Subject: [SkyWires] How high??

O.K. Here is the result of several months of trial and error in finding how high to run my sky loop.

I have my loop suspended between 4 fiberglass masts which are 48 feet tall. Each pole has its own 'flagpole lanyard' system which consists of a small pulley at the top with a nylon cord looped through it which I will refer to as a lanyard.

Each lanyard has a ceramic insulator attached. Through the other hole in the insulator is run my antenna wire. I have used 18 ga. chandelier wire, 280 feet long. This configuration allows the wire to free-float through the insulators.

The lanyards are raised one at a time to the point in height I want to operate. Using this method of adjustment, I can even change the basic shape of the loop...i.e. two oposite corners high, two lower. I have even tried "aiming" the loop by adjusting two adjoining poles low and the other side high.

What has proven to work best is a horizontally flat configuration about 12 feet off the ground. This works best for dx as opposed to flat at 20, 25, 30, 40, or 48 feet.

This post is not meant to criticize others who maintain the higher the better, but to let you know what has worked best for me.

73

Yahoo! Groups Links

a.. To visit your group on the web, go to:
http://groups.yahoo.com/group/SkyWires/

b.. To unsubscribe from this group, send an email to:
SkyWires-unsubscribe@yahoogroups.com

c.. Your use of Yahoo! Groups is subject to the Yahoo! Terms of Service.

1021. 1 More question about scanners

Yahoo group: SkyWires
Date: 2005-01-25 06:55:54 UTC
From: Donnie Barlow
Topic: 1021 Message: 1021

ok since all a scanner does it receve instead of transmit does it really matter if its got a good ground on the antenna? couse we just got a new Van today and only place i can mount my mobile scanner antenna is on the luggage rack witch its alumaunum (<--- sorry 4 the spelling) I was told that alumaunum will carry a little bit of a ground but not enough for like a CB or a Ham Radio. will it be ok just for a scanner? thanks for your time and your INFO.

Donnie

1022. Re: [SkyWires] 1 More question about scanners

Yahoo group: SkyWires
Date: 2005-01-25 10:04:48 UTC
From: Dr.Ace Ratliff
Topic: 1021 Message: 1022
Attachments: 1 described; binary payloads are missing from this source WARC

Hi Donnie,
Aluminum Has good conductive and thermal properties.
It will work fine.
Ace - WH2T

----- Original Message -----
From: Donnie Barlow
To: SkyWires@yahoogroups.com
Sent: Tuesday, January 25, 2005 1:55 AM
Subject: [SkyWires] 1 More question about scanners

ok since all a scanner does it receve instead of transmit does it
really matter if its got a good ground on the antenna? couse we just
got a new Van today and only place i can mount my mobile scanner
antenna is on the luggage rack witch its alumaunum (<--- sorry 4 the
spelling) I was told that alumaunum will carry a little bit of a
ground but not enough for like a CB or a Ham Radio. will it be ok
just for a scanner? thanks for your time and your INFO.

Donnie

Yahoo! Groups Links

a.. To visit your group on the web, go to:
http://groups.yahoo.com/group/SkyWires/

b.. To unsubscribe from this group, send an email to:
SkyWires-unsubscribe@yahoogroups.com

c.. Your use of Yahoo! Groups is subject to the Yahoo! Terms of Service.

1023. Re: How high??

Yahoo group: SkyWires
Date: 2005-01-26 15:53:00 UTC
From: KI4BUN / AAV4TP
Topic: 1019 Message: 1023

The ground beneath my antenna is an old farm field with about 26 inches of moist loam over hard pan.

73

C.L. Sutton KI4BUN/AAV4TP

1024. Re: star loop

Yahoo group: SkyWires
Date: 2005-01-26 16:19:13 UTC
From: bambazonke01
Topic: 994 Message: 1024

Hi Ace and Other Guys,
Why not try the DCTL loop?
See my copper 47 Inch square 40 Meter pipe version in the pictures
under VE3DDY. It works very well and I was only using QRP on 40 M and
had solid coverage out to 600 miles BW on 40 M was 26 KHz but would
extend further with a tuner. I can provide more details if required
Jim VE3DDY

-- In SkyWires@yahoogroups.com, "Dr.Ace Ratliff" <wh2t@b...> wrote:
> Hi Mel,
> Have you considered a Multi-Band Mini Super Loop Antenna ?
> It will work 10 - 80 mtrs with a tuner.
> You would need about 100 feet of horizontal space to hang it across
like a dipole.
>
> Construction Info is at
> http://www.bloomington.in.us/~wh2t/Super%20Loop%20Antenna.htm
>
> Ace - WH2T
>
> ----- Original Message -----
> From: Mel Vance
> To: SkyWires@yahoogroups.com
> Sent: Monday, January 17, 2005 10:04 PM
> Subject: [SkyWires] star loop
>
>
> Still looking for more wire/lower bands within my rather severely
restricted lot...
>
> 1 idea I am looking at is a modified star loop....
>
> Could the legs on the star loop be done into a 'T' shape and
still work well?
> It seems to me the star loop is just the loop skywire wadded up
to fit a smaller area and
> some additional folding should not have too much of an effect.
>
> Mel
> N7OKL
>
>
>
> --

> Yahoo! Groups Links
>
> a.. To visit your group on the web, go to:
> http://groups.yahoo.com/group/SkyWires/
>
> b.. To unsubscribe from this group, send an email to:
> SkyWires-unsubscribe@yahoogroups.com
>
> c.. Your use of Yahoo! Groups is subject to the Yahoo! Terms of
Service.
>
>
> No virus found in this outgoing message.
> Checked by AVG Anti-Virus.
> Version: 7.0.300 / Virus Database: 265.7.0 - Release Date: 1/17/2005

1025. Re: [SkyWires] Digest Number 313

Yahoo group: SkyWires
Date: 2005-01-27 12:32:15 UTC
From: RonW
Topic: 1025 Message: 1025

Hi Ace, can't get the link to load anything. ?? Ron AG4LH

> Hi Mel,
> Have you considered a Multi-Band Mini Super Loop Antenna ?
> It will work 10 - 80 mtrs with a tuner.
> You would need about 100 feet of horizontal space to hang it across
like a dipole.
>
> Construction Info is at
> http://www.bloomington.in.us/~wh2t/Super%20Loop%20Antenna.htm
>
> Ace - WH2T
>

1026. Re: [SkyWires] Digest Number 313

Yahoo group: SkyWires
Date: 2005-01-27 17:40:40 UTC
From: Dr.Ace Ratliff
Topic: 1025 Message: 1026
Attachments: 2 described; binary payloads are missing from this source WARC

Ron,
I just tried it and it works fine here.
Anyway here's what is on the webpage.
Ace - WH2T

Multi-Band Mini Super Loop Antenna Info

I have heard rumors that something similar to this
Multi-Band loop antenna is available commercially
as a "Super Loop" from???
But why buy when you can build an antenna.

To build this antenna you need a lot that is at least 100 feet across.
(This can be on a diagonal).
This antenna works as a Full Wave Loop on 80 Meters and also works as 2 one wave length loops fed in phase on the 40 Meter band.
Any antenna tuned for 80 Meters should also work on 20 and 10 meters as well. If an antenna works on 40 it should work on 15 as well. A tuner will probably be needed for 10, 18 and 24 MHz Band operations.

The loop is an inverted vertical triangle with the base along the top and what would be the apex hanging down. Or it could be erected horizontally if needed.

The feed point at the bottom uses a 3:1 or 4:1 balun and is then fed with any needed length of 50 ohm coax. The top center is broken with an insulator and has a 29 feet 10 inch length of 450 ohm ladder line connected across the insulator.
IMPORTANT - The 450 ohm ladder line is shorted across at the bottom end.

Here is how I calculated the loop size.
Dimensions -
One wavelength at say 7.25 MHz = 1005/7.25 = 138.62 or 138 feet 7.5 inches. If this length is doubled and used on 80 meters as a loop Then Freq(for a loop) = 1005/(2 x 138.62) = 3.625 MHz.

The 1/4 wave stub = 246 multiplied by .88 (Velocity Factor of ladder line) /7.25 = 29.86 feet or 29' 10".

The perimeter of the 80 meter loop for 3.625 MHz = 277.24 - (2 x 29' 10")[2 x 29.86 feet = the length of both sides of the wire in the ladder line] = 217.52 ft. Let's call it 217.5 feet.

If the top horizontal span is made 99.5 feet overall and the legs 59 feet each then the balun will hang about 30.5 ft below the top center insulator.
The 29' 10" ladder line can have its bottom - shorted end - tied to the top of the balun with a short length of fishing line, weed eater line, string, or cord etc.

On 40 meters the ladder line stub automatically acts as a switch and opens the connection across the insulator so the antenna works as 2 one wave length loops fed in phase.

This antenna could also be configured as a 54' 4.5" square on a horizontal plane. The 217.5 ft loop can be pulled into almost any shape but the bigger the "aperture" enclosed area the better it will work.

I have NOT tried this experimental design yet. I believe my calculations are correct and should work.

----- Original Message -----
From: RonW
To: SkyWires@yahoogroups.com
Sent: Thursday, January 27, 2005 7:32 AM
Subject: Re: [SkyWires] Digest Number 313

Hi Ace, can't get the link to load anything. ?? Ron AG4LH

> Hi Mel,
> Have you considered a Multi-Band Mini Super Loop Antenna ?
> It will work 10 - 80 mtrs with a tuner.
> You would need about 100 feet of horizontal space to hang it across
like a dipole.
>
> Construction Info is at
> http://www.bloomington.in.us/~wh2t/Super%20Loop%20Antenna.htm
>
> Ace - WH2T

1027. Re: [SkyWires] Digest Number 314

Yahoo group: SkyWires
Date: 2005-01-28 12:12:28 UTC
From: RonW
Topic: 1027 Message: 1027

Hi Ace, fyi, here is what I got from the page, thanks for the info, Ron.
"Forbidden

You don't have permission to access /~wh2t/Super Loop Antenna.htm on this server.

Additionally, a 403 Forbidden error was encountered while trying to use an ErrorDocument to handle the request.
Apache/2.0.40 Server at www.bloomington.in.us Port 80"

Message: 2
Date: Thu, 27 Jan 2005 12:40:40 -0500
From: "Dr.Ace Ratliff" <wh2t@...>
Subject: Re: Digest Number 313

Ron,
I just tried it and it works fine here.
Anyway here's what is on the webpage.
Ace - WH2T

Multi-Band Mini Super Loop Antenna Info

1028. Re: [SkyWires] Digest Number 314

Yahoo group: SkyWires
Date: 2005-01-29 02:39:27 UTC
From: David Shrum
Topic: 1027 Message: 1028

I didn't check it today but did check it yesterday and it did work for
me.
Dave N8PU

On Fri, 2005-01-28 at 07:12, RonW wrote:

> Hi Ace, fyi, here is what I got from the page, thanks for the info, Ron.
> "Forbidden
>
> You don't have permission to access /~wh2t/Super Loop Antenna.htm on this server.
>
> Additionally, a 403 Forbidden error was encountered while trying to use an ErrorDocument
to handle the request.
> Apache/2.0.40 Server at www.bloomington.in.us Port 80"
>
> Message: 2
> Date: Thu, 27 Jan 2005 12:40:40 -0500
> From: "Dr.Ace Ratliff" <wh2t@...>
> Subject: Re: Digest Number 313
>
> Ron,
> I just tried it and it works fine here.
> Anyway here's what is on the webpage.
> Ace - WH2T
>
> Multi-Band Mini Super Loop Antenna Info
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> Yahoo! Groups Links
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1030. Question about an awkward site.

Yahoo group: SkyWires
Date: 2005-02-08 10:44:05 UTC
From: Bob M
Topic: 1030 Message: 1030

Good evening

I've been a member for a while watching and reviewing a lot of what is going on in this group,

I'm relatively new to Ham radio and am a Novice in Australia on the Northern Queensland Coast so currently am limited to 80, 15, 10 on HF 2mtr vhf and 70cm uhf. (I also want to be able to cover the other bands as soon as I get my full call)

I have the VHF and UHF covered by building co-linear antennas.

I have had a rough dipole up that gave me limited access to Victoria, Tasmania, Sth. Australia and a rear trip across the Tasman to New Zealand.

I now have moved to a duplex block giving me access to a large tree 30-35' for the co linears

The block is like a right angle triangle with the point cut off.

The dimensions are as follows now also please allow for the house single level brick with metal roofing on the right hand boundary looking from the street.

Right hand useable boundary is 15-16 meters with a large 30' tree as front mounting point. Then to the rear right (southern) corner a Right angle to left 26.5 meter rear boundary.
Left rear corner is about 30-45 degree inwards for a usable 11.5 meters, from this point about 60 degrees right back to the front right corner at tree.... I hope this is understandable. There is a Power line coming into the property from the front left corner so I cannot bring the left front corner any more forward.

Now I am erecting 3 poles consisting of 8.5 meters 25mm ID pipe with 3.5 mtr 25mm OD wooded rods.There is a 1 mtr overlap between the pipe and wooden rods. They will be inserted 1 meter by 500mm hole into the ground in to a concreted pvc sleeved pipe. I am only allowed 11 meters in height without council approval.

Two will be at the rear corners and one at the front left point.

Now the feed point will be the rear right section.

This is where I need ALL the help and experience that you might be prepared to offer.

I can either erect a 4 sided sky wave. a tree sided sky wave. (Horizontal loop. with the dimensions and height which would be the better resonate antenna. and do I feed it with 1:1, 4:1 balun RG213 50ohm cable.

I also intend to run a half OCF dipole 13.5m + 27m with a 4:1 balun and RG213. At a height 2 meters below the loop. Now this will need to ren either N-S or E-W which I prefer as I can get a greater distance from front right corner to rear left corner over the Tree in the middle of the loop.
Thanks for taking the time to read, digest consider and offer me Ideas.
Regards
Bob M. VK4HAY

baysideq@...

1031. new member !

Yahoo group: SkyWires
Date: 2005-02-17 21:54:49 UTC
From: wavelength012000
Topic: 1031 Message: 1031

Hi to all,
just joined the group name is Tom qth Glasgow Scotland,have
aposer for the forum.Looking to install a horizontal delta loop but
due to the shape of my backyard it would not be equilatiral either
in a triangle or square the shape would be more rectangle or the
triangle would have two sides equal can accomadate a 40 meter band
delta what effect on performance would this layout have ?any thoughts
or ideas welcome.
thanks Tom mm3dnu

1032. Re: [SkyWires] Digest Number 318

Yahoo group: SkyWires
Date: 2005-02-18 15:15:51 UTC
From: Bob Jones
Topic: 1032 Message: 1032

Hi Tom,

I just installed a full wave 160 meter horizintal loop in a delta shape,with plans to pull the long side out to make a square.As with all horizontal wires the height is critical,mine is only 35 feet high as 1/2 wave height would be impossible.

A 40 meter loop would need to be 66 feet high for optimum performance but don't let that stop you.If you feed this antenna with balanced feed line it will perform OK on 40 but will really surprise you on the higher bands.

My loop works Ok on 160 for high angle contacts but very little low angle radiation is evident.It provides gain on 20 and above compared to a Butternut HF6V with 36 radials and ground mounted.I can work anything I can hear on 20 and above with 100 watts and it beats out the Butternut for DX on 17 and above.

Good luck and best wishes,

Bob
W0OXJ
----- Original Message -----
From: <SkyWires@yahoogroups.com>
To: <SkyWires@yahoogroups.com>
Sent: Friday, February 18, 2005 5:27 AM
Subject: [SkyWires] Digest Number 318

>
> There is 1 message in this issue.
>
> Topics in this digest:
>
> 1. new member !
> From: "wavelength012000" <galtt1@...>
>
>
> _____
> _____
>
> Message: 1
> Date: Thu, 17 Feb 2005 21:54:49 -0000
> From: "wavelength012000" <galtt1@...>
> Subject: new member !
>
>
> Hi to all,

> just joined the group name is Tom qth Glasgow Scotland,have
> aposer for the forum.Looking to install a horizontal delta loop but
> due to the shape of my backyard it would not be equilatiral either
> in a triangle or square the shape would be more rectangle or the
> triangle would have two sides equal can accomadate a 40 meter band
> delta what effect on performance would this layout have ?any thoughts
> or ideas welcome.
> thanks Tom mm3dnu
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> Yahoo! Groups Links
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1033. Re: new member...Loop Configuration

Yahoo group: SkyWires
Date: 2005-02-19 17:40:12 UTC
From: K0PYK
Topic: 1033 Message: 1033

Tom, MM3DNU

With respect to loop configuration...just put it up the best you can and with what you have. If we were in a perfect world it would make a difference. I do not know that you would be able to tell the difference. There could be a difference between vertical and horizontal orientation. I am of the feeling that when you put up wire...put up as much as you can, for the room available. I currently have a 40 meter vertical loop and and a 80 meter vertical loop. At first I was concerned about getting a delta loop up on 40, but could not get it high enough. I played with different shapes until I got the bottom a decent height off the ground. It now has 5 sides. No difference in performance on my end.

A good resource is www.cebik.com, There are a lot of articles on loops and all antennas for that matter.

http://www.cebik.com/horloop.html

Enjoy!!! Also, I like your name...

Tom, K0PYK

Do you Yahoo!?
Read only the mail you want - Yahoo! Mail SpamGuard.
http://promotions.yahoo.com/new_mail

1034. Dalton,Ga Hamfest Feb 26,05

Yahoo group: SkyWires
Date: 2005-02-20 23:02:54 UTC
From: flamecane
Topic: 1034 Message: 1034

Passing along an invitation to the Hamfest....If you need info let me know
Thanks David WI4L

1035. Half Mile Loop?

Yahoo group: SkyWires
Date: 2005-02-20 23:04:17 UTC
From: Kurt Barnhart
Topic: 1035 Message: 1035

Here is a question you might not hear too often. We have a weekend cottage in the mountains at 4,000 ASL. We have access to about 10 acres of woods and meadows, so we don't have too many limits on loop antenna length.

I have been working on configuring a multi-band loop for 160m to 6m. I want a wire antenna (not a tower) that will disappear visually in the trees. I will use green or gray insulated #14 or #12 wire and the loop will be about 30 to 40 feet above the ground, connected to the trees via Kevlar or Dacron ropes and insulators.

Considering that I could make a loop of anywhere from 520 feet to 3,000 feet, what would be the optimum length for 160m and 75m that would also work on 20m, 17m, 15m, 10m and 6m?

I will be using about 50 feet of ladder line as a feedline and I have a pretty good Palstar tuner that should tune almost anything. I will be running 100 watts most of the time.

Any other tips or suggestions would be appreciated.

-- Kurt, W6WRJ

1036. Re: [SkyWires] Half Mile Loop?

Yahoo group: SkyWires
Date: 2005-02-20 23:15:36 UTC
From: Erik Weaver, n0ew
Topic: 1035 Message: 1036

I probably got this link here, just last week:

http://www.cebik.com/horloop.html

>
>
> Here is a question you might not hear too often. We have a weekend
> cottage in the mountains at 4,000 ASL. We have access to about 10
> acres of woods and meadows, so we don't have too many limits on loop
> antenna length.
>
> I have been working on configuring a multi-band loop for 160m to 6m.
> I want a wire antenna (not a tower) that will disappear visually in
> the trees. I will use green or gray insulated #14 or #12 wire and the
> loop will be about 30 to 40 feet above the ground, connected to the
> trees via Kevlar or Dacron ropes and insulators.
>
> Considering that I could make a loop of anywhere from 520 feet to
> 3,000 feet, what would be the optimum length for 160m and 75m that
> would also work on 20m, 17m, 15m, 10m and 6m?
>
> I will be using about 50 feet of ladder line as a feedline and I have
> a pretty good Palstar tuner that should tune almost anything. I will
> be running 100 watts most of the time.
>
> Any other tips or suggestions would be appreciated.
>
> -- Kurt, W6WRJ
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> Yahoo! Groups Links
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Erik E. Weaver
erik@...
www.n0ew.org

1037. Radio

Yahoo group: SkyWires
Date: 2005-02-28 23:15:22 UTC
From: Felix E. Perez
Topic: 1037 Message: 1037

Hi i'm trying to get information in this radio and I have no clue
who makes it all I got is :
ERX-95T and the ERX-95TS

I would apreciated if anyone knows anything about this radio or
radios.
Thanks,
Felix

1038. Re: [SkyWires] Radio

Yahoo group: SkyWires
Date: 2005-02-28 23:28:19 UTC
From: Dr.Ace Ratliff
Topic: 1037 Message: 1038
Attachments: 1 described; binary payloads are missing from this source WARC

Hi Felix,
From what I found on Google it looks like it is an Export CB Radio with echo.
Ace - WH2T
----- Original Message -----
From: Felix E. Perez
To: SkyWires@yahoogroups.com
Sent: Monday, February 28, 2005 6:15 PM
Subject: [SkyWires] Radio

Hi i'm trying to get information in this radio and I have no clue
who makes it all I got is :
ERX-95T and the ERX-95TS

I would apreciated if anyone knows anything about this radio or
radios.
Thanks,
Felix

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a.. To visit your group on the web, go to:
http://groups.yahoo.com/group/SkyWires/

b.. To unsubscribe from this group, send an email to:
SkyWires-unsubscribe@yahoogroups.com

c.. Your use of Yahoo! Groups is subject to the Yahoo! Terms of Service.

1039. New QTH

Yahoo group: SkyWires
Date: 2005-03-02 20:36:09 UTC
From: Bill
Topic: 1039 Message: 1039

I am in the process of purchasing 5 acres in north central Florida. The land has been used as a pine tree farm and therefore has tall thin pine trees about every 5 feet and rows about 20 feet wide. The property is 630 X 330. Since no antennas are allowed in front of the house [and no towers at all] I will be limited to about 300X300 for wire antennas. [LOL] Would a horizontal loop be the best I can do on this property for HF operation? Interested in suggestions from anyone that has experience with large properties.

Bill

1040. Re: [SkyWires] New QTH

Yahoo group: SkyWires
Date: 2005-03-02 22:42:37 UTC
From: Erik Weaver, n0ew
Topic: 1039 Message: 1040

Hi Bill,

I have a hair under 2 acres to play with, nominally on the order of 200x400 feet on a corner lot. Towers are permitted, but mine is still laying disassembled behind my house, along with the beam.

For 2-meters I have a copper j-pole mounted on the roof above my shack. Works great.

For the high frequency HF bands I have a vertical. I think it tends to act much as a vertical dipole, or a reasonably well grounded vertical, because the metal pole (RatShack gray 1.25" TV masts) is grounded to the 8-foot grounding stake a couple feet away). Seems to work very well for 10-17 meters (feed point at 25-foot height). It would undoubtedly be improved by adding radials, but that is enough of a pain to install at 25-feet height I likely never will do so. Worked a lot of DX with it a couple years ago on 10-meters and it is a very low profile antenna (A-99 (?) by Solarcon as I recall). I haven't used it much since we began the decline into the lower portion of the solar cycle.

I also have a NVIS-style dipole behind the house fed with 300-Ohm twin lead. Roughly 18-feet above ground, and about 135-foot total length. Works well for state-wide nets and the like on 40- or 80-meters.

My other antenna is a three sided loop. All corners are supported by trees. Ladder line (450-Ohm) runs outside where it almost immediately begins to split into the antenna wire. From the window it runs up and outwards to a height of about 15- to 20-feet. The base is perhaps three feet apart and the top is perhaps 10-feet apart. Then one leg runs up to the tallest point of about 50-feet. The other leg runs to a height of about 40- 45-feet, at the 2nd highest tree. In all there is on the order of 230- to 250-feet of wire as I recall.

Next time I need a spring for supporting antennas from trees (etc.) I'll go to a truck stop, or truck/trailer supply house, and purchase springs made to pull the air lines from the trailer towards the tractor. I suspect they'll provide just about the perfect amount of tension, yet provide enough "cush" to give freely in the wind. Early on, before I knew better, I was told to "make certain I got a very heavy spring" for fear of it breaking. So I got garage door springs from Sears! WAY TO HEAVY AND TOO MUCH TENSION -- These basically provide no give, and one has broken (the spring, not the antenna wire). I can attest that loop-like antennas perform poorly and are _very_ difficult to tune when one leg is laying on the ground, heheheh!

This I affectionately call my "slooper" antenna. It generally gets better signal reports on the state-wide nets than the small NVIS-style dipole out

back. Recalling those nets meet on either 40- or 80-meters, you'll find it's height is a little better than the dipole (generally between 15% and 25% of a wavelength is considered correct for NVIS antenna height, with the upper end preferred).

I can't recall if I've used my slooper on the higher bands (10-17 meters). I certainly use it between 20- and 80-meters. I've never tried it on 160-meters. Australia was my very first contact, which is always a good sign!

If I were to work on improving it -- other than the obvious of increasing the height of each corner -- I think I'd extend the ladder line and therefore the feed point to where the legs run to the two taller trees. I might also construct a shielded twin lead with 125-Ohm coax to go through the window/wall to the outdoors (ARRL Antenna Book has a description of the proper solder scheme for various impedances, which are all multiples of the coax's nominal impedance).

It was simply much easier to install as is, which is the only reason for its current configuration: Lazy Monkey was in charge! Still, it seems to work reasonably well for me.

Wire for the slooper is bare #14 stranded copper antenna wire purchased from either the Wire Man (http://www.thewireman.com) or Cable Experts (http://www.cablexperts.com). The NVIS-style dipole is made from the "Silky Wire" sold by (I believe) the Wire Man, which is _great stuff_! Very light, very difficult to see (as is the #14 copper after it tarnished), and yet very strong. I especially like the Silky for portable antennas such as the full wavelength 80-meter loop my friend and I use for field day.

All of the above antennas are mounted on or around my house. The back half of the property is not used at all right now, except to grow weeds, heheheh!

I haven't put anything up in the back acre. I am considering push-up poles at each corner (only because towers are expensive). My understanding is these may be obtained up to 50- to 60-foot height, and with a 10-foot mast on top of that, 66-Feet height is obtainable, I believe.

With such poles in place I could string up a wire loop with (high quality marine grade) pulleys at the top of each pole. This would allow me to vary the height for either NVIS operation, or increase the height to attempt a lower take-off angle and better envelope for DX.

Before actually doing this I'll have to find out the specs of the actual metal used and determine whether they require guying, or at what height they may stand free (good time to consult with an engineer). Either they stand free or I'd need to increase the distance between the poles and the property line. I'm not too comfortable with a potential falling line that crosses my property line, which may preclude this design altogether. Still thinking on this point.

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There's my $0.02 -- It'll be interesting to see what other's suggest. I tend to lurk here more than I post, but I find this to be both an active and knowledgeable group.

Good luck and have fun!
73-Erik n0ew

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> anyone that has experience with large properties.
> Bill
> Yahoo! Groups Links

Erik E. Weaver
erik@...
www.n0ew.org

1041. Re: [SkyWires] New QTH

Yahoo group: SkyWires
Date: 2005-03-02 23:56:12 UTC
From: Bill Barrett
Topic: 1039 Message: 1041

Erik-

Thanks for taking the time to write up your antenna farm. My property has endless tall thin pine trees so the polls are there so to speak to support long wire antennas. I thought I might suspend a large loop between the rows of trees at a few points keeping the weight low at the support points. I hope these trees don't cause me problems with transmitting.

I am allowed to remove a considerable number of the trees so maybe some thinning might be in order. Like you, I prefer easy implementations and hope I can actually get a loop up for a while.

Bill

"Erik Weaver, n0ew" <erik@...> wrote:
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200x400 feet on a corner lot. Towers are permitted, but mine is still
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Erik E. Weaver
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www.n0ew.org

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Yahoo! Groups Links

To visit your group on the web, go to:
http://groups.yahoo.com/group/SkyWires/

To unsubscribe from this group, send an email to:
SkyWires-unsubscribe@yahoogroups.com

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Celebrate Yahoo!'s 10th Birthday!
Yahoo! Netrospective: 100 Moments of the Web

1042. Re: [SkyWires] New QTH

Yahoo group: SkyWires
Date: 2005-03-03 04:02:22 UTC
From: Erik Weaver, n0ew
Topic: 1039 Message: 1042

Hey Bill,

That "Silky Wire" I mentioned is very light... 1,000-feet is less than 1 lb. It has been very durable to my experience. Good combination!

Personally I wouldn't be too worried about the trees. I doubt the attenuation is measureable at HF.

-Erik

> Erik-
>
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> endless tall thin pine trees so the polls are there so to speak to support
> long wire antennas. I thought I might suspend a large loop between the
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>> Yahoo! Groups Links
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> Erik E. Weaver
> erik@...
> www.n0ew.org
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> To visit your group on the web, go to:
> http://groups.yahoo.com/group/SkyWires/
>
> To unsubscribe from this group, send an email to:
> SkyWires-unsubscribe@yahoogroups.com
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> ---
> Celebrate Yahoo!'s 10th Birthday!
> Yahoo! Netrospective: 100 Moments of the Web

Erik E. Weaver
erik@...
www.n0ew.org

1043. Re: Radio

Yahoo group: SkyWires
Date: 2005-03-04 16:25:39 UTC
From: Felix E. Perez
Topic: 1037 Message: 1043

there's any chance that you can send me the page where you found the
information I really apreciated.

--- In SkyWires@yahoogroups.com, "Dr.Ace Ratliff" <wh2t@b...> wrote:
> Hi Felix,
> From what I found on Google it looks like it is an Export CB
Radio with echo.
> Ace - WH2T
> ----- Original Message -----
> From: Felix E. Perez
> To: SkyWires@yahoogroups.com
> Sent: Monday, February 28, 2005 6:15 PM
> Subject: [SkyWires] Radio
>
>
>
> Hi i'm trying to get information in this radio and I have no
clue
> who makes it all I got is :
> ERX-95T and the ERX-95TS
>
> I would apreciated if anyone knows anything about this radio or
> radios.
> Thanks,
> Felix
>
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> --

> Yahoo! Groups Links
>
> a.. To visit your group on the web, go to:
> http://groups.yahoo.com/group/SkyWires/
>
> b.. To unsubscribe from this group, send an email to:
> SkyWires-unsubscribe@yahoogroups.com

>
> c.. Your use of Yahoo! Groups is subject to the Yahoo! Terms
of Service.
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>
> No virus found in this outgoing message.
> Checked by AVG Anti-Virus.
> Version: 7.0.300 / Virus Database: 266.5.2 - Release Date:
2/28/2005

1044. KN4LF Daily LF/MF/HF Radio Propagation Outlook #2005-011

Yahoo group: SkyWires
Date: 2005-03-10 19:34:25 UTC
From: Thomas Giella KN4LF
Topic: 1044 Message: 1044

The KN4LF Daily LF/MF/HF Radio Propagation Outlook #2005-011 has been published on 2000 UTC Thursday March 10, 2005 at http://www.kn4lf.com/kn4lf6.htm .

73 & GUD DX,
Thomas F. Giella, KN4LF
Retired Space & Atmospheric Weather Forecaster
Plant City, FL, USA
Grid Square EL87WX
Lat & Long 27 58 33.6397 N 82 09 52.4052 W
kn4lf@...

Contesting Propagation eReflector:
http://lists.contesting.com/mailman/listinfo/propagation
HC-DX Propagation Channel:
http://www.hard-core-dx.com/index.php?topic=Propagation
KN4LF Daily Solar Space Weather & Geomagnetic Data Archive:
http://www.kn4lf.com/kn4lf5.htm
KN4LF Daily LF/MF/HF Radio Propagation Outlook:
http://www.kn4lf.com/kn4lf6.htm
KN4LF HF/MF Radio Propagation Theory Notes: http://www.kn4lf.com/kn4lf8.htm
KN4LF Amateur & SWL Radio History: http://www.kn4lf.com/index.htm

--
No virus found in this outgoing message.
Checked by AVG Anti-Virus.
Version: 7.0.308 / Virus Database: 266.7.1 - Release Date: 3/9/2005

1045. Re: New QTH

Yahoo group: SkyWires
Date: 2005-03-11 05:21:04 UTC
From: nc9k
Topic: 1039 Message: 1045

Hello Bill,

I've been using both a 40M and 160M loop for the past year now. They are on 40 acres. I have been tuning both on 160 thru 10M including WARC using link couplers (the homemade one down to 160M and the Johnson KW Matchbox 80 - 10M). Both antenna's are up at 35ft. and fed with 450 ohm ladderline.

I run up to 1500W PEP into both antennas where band plans permit (the 40M loop on 160 and 80M has wild feed voltages and narrow bandwidth but is within a 1/2 S unit stateside of the 160M loop on 160 and 80M). The 160M loop (500 ft long - 95% velocity factor with the plastic coated wire) consistently outperforms the 40M loop on the upper HF bands except for the rarest of conditions on 20 through 10M (angle of radiation variations).

Each loop consists of #12 plastic coated stranded housewire supported by side-by-side 36" bungie cords attached to plastic electric fence insulators for the antenna wire to slide through. (I also have a 6 ft. safety rope alongside each bungie pair in case they ever blow in a storm. So far no failures!) The 160M loop has 6 supports in an egg shape and the 40M loop has 4 supports in a square shape. The loop endpoints are secured to egg insulators and each loop is corner fed. I cut all dangerous tree branches out of the way of each loop.

On 160M last month I worked a station running 100W SSB on 1840KC in Belize with the 160M loop. Alaska, Hawaii and all other states have been good contacts as well on 160M. On 80M I recently worked stations in Japan, Italy, and Germany SSB in the DX window with the 160M loop. On 17M I had pileups of stations waiting to work me when I fed 1500W into the 160M loop.

I had considered a 320M loop but realized its greater potential would not be realized unless I could get it at least 70 ft. up. When I move later this year or next to our 160 acre property I will put a 320M loop up about 150 ft high. I will also have a 500ft. loop there at the same height.

I would put up a 160M loop as high as I could at your QTH and hang on with all the DX you will work!

I used to run 50 foot high double-extended Zepps 80M and up. The loops I am using now perform better.

Best of fun,

73's Leland NC9K

--- In SkyWires@yahoogroups.com, "Bill" <w2pky@y...> wrote:
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1046. Re: [SkyWires] Re: New QTH

Yahoo group: SkyWires
Date: 2005-03-11 13:17:27 UTC
From: Bill Barrett
Topic: 1039 Message: 1046

LeLand-

Thanks so much for taking the time to respond to my inquiry. Your 160m loop sounds like a winner. My plans will probably include an antenna of that sort. Details of your construction technique is also very valuable. Perhaps we will work someday.

73;

Bill
W2PKY

nc9k <jasminemeese@...> wrote:

Hello Bill,

I've been using both a 40M and 160M loop for the past year now. They are on 40 acres. I have been tuning both on 160 thru 10M including WARC using link couplers (the homemade one down to 160M and the Johnson KW Matchbox 80 - 10M). Both antenna's are up at 35ft. and fed with 450 ohm ladderline.

I run up to 1500W PEP into both antennas where band plans permit (the 40M loop on 160 and 80M has wild feed voltages and narrow bandwidth but is within a 1/2 S unit stateside of the 160M loop on 160 and 80M). The 160M loop (500 ft long - 95% velocity factor with the plastic coated wire) consistently outperforms the 40M loop on the upper HF bands except for the rarest of conditions on 20 through 10M (angle of radiation variations).

Each loop consists of #12 plastic coated stranded housewire supported by side-by-side 36" bungie cords attached to plastic electric fence insulators for the antenna wire to slide through. (I also have a 6 ft. safety rope alongside each bungie pair in case they ever blow in a storm. So far no failures!) The 160M loop has 6 supports in an egg shape and the 40M loop has 4 supports in a square shape. The loop endpoints are secured to egg insulators and each loop is corner fed. I cut all dangerous tree branches out of the way of each loop.

On 160M last month I worked a station running 100W SSB on 1840KC in Belize with the 160M loop. Alaska, Hawaii and all other states have been good contacts as well on 160M. On 80M I recently worked stations in Japan, Italy, and Germany SSB in the DX window with the 160M loop. On 17M I had pileups of stations waiting to work me when I fed 1500W into the 160M loop.

I had considered a 320M loop but realized its greater potential
would not be realized unless I could get it at least 70 ft. up.
When I move later this year or next to our 160 acre property I will
put a 320M loop up about 150 ft high. I will also have a 500ft.
loop there at the same height.

I would put up a 160M loop as high as I could at your QTH and hang
on with all the DX you will work!

I used to run 50 foot high double-extended Zepps 80M and up. The
loops I am using now perform better.

Best of fun,

73's Leland NC9K

--- In SkyWires@yahoogroups.com, "Bill" <w2pky@y...> wrote:
>
> I am in the process of purchasing 5 acres in north central
Florida.
> The land has been used as a pine tree farm and therefore has tall
> thin pine trees about every 5 feet and rows about 20 feet wide.
The
> property is 630 X 330. Since no antennas are allowed in front of
the
> house [and no towers at all] I will be limited to about 300X300
for
> wire antennas. [LOL] Would a horizontal loop be the best I can do
on
> this poperty for HF operation? Interested in suggestions from
> anyone that has experience with large properties.
>
> Bill

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1047. Re: New QTH

Yahoo group: SkyWires
Date: 2005-03-11 15:46:54 UTC
From: nc9k
Topic: 1039 Message: 1047

Hello Bill,

My 160M loop cost $50- in materials. Branch clearing through the woods and support tree prep (more branch clearing) took 2 days and putting the antenna up by myself about 4 hours. I put it over water saturated mineral soil (septic field over iron ore). I don't know if ground conditions matter or not for a loop? Good question for someone who knows to address. I catch a net on 14.340KC at 9:30AM EST M-F. I catch daily nets on 3947KC 5PM EST and 3982.5KC evenings at 9PM EST. I float between 1835-1850KC when I get on 160M about once a week. All on the 160M loop. Hope to see you there.

73's Leland NC9K

--- In SkyWires@yahoogroups.com, Bill Barrett <w2pky@y...> wrote:
> LeLand-
>
> Thanks so much for taking the time to respond to my inquiry. Your 160m loop sounds like a winner. My plans will probably include an antenna of that sort. Details of your construction technique is also very valuable. Perhaps we will work someday.
>
> 73;
>
> Bill
> W2PKY
>
> nc9k <jasminemeese@h...> wrote:
>
> Hello Bill,
>
> I've been using both a 40M and 160M loop for the past year now.
> They are on 40 acres. I have been tuning both on 160 thru 10M
> including WARC using link couplers (the homemade one down to 160M
> and the Johnson KW Matchbox 80 - 10M). Both antenna's are up at
> 35ft. and fed with 450 ohm ladderline.
>
> I run up to 1500W PEP into both antennas where band plans permit
> (the 40M loop on 160 and 80M has wild feed voltages and narrow
> bandwidth but is within a 1/2 S unit stateside of the 160M loop on
> 160 and 80M). The 160M loop (500 ft long - 95% velocity factor with
> the plastic coated wire) consistently outperforms the 40M loop on
> the upper HF bands except for the rarest of conditions on 20 through

> 10M (angle of radiation variations).
>
> Each loop consists of #12 plastic coated stranded housewire
> supported by side-by-side 36" bungie cords attached to plastic
> electric fence insulators for the antenna wire to slide through.
(I
> also have a 6 ft. safety rope alongside each bungie pair in case
> they ever blow in a storm. So far no failures!) The 160M loop has
6
> supports in an egg shape and the 40M loop has 4 supports in a
square
> shape. The loop endpoints are secured to egg insulators and each
> loop is corner fed. I cut all dangerous tree branches out of the
> way of each loop.
>
> On 160M last month I worked a station running 100W SSB on 1840KC
in
> Belize with the 160M loop. Alaska, Hawaii and all other states
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> been good contacts as well on 160M. On 80M I recently worked
> stations in Japan, Italy, and Germany SSB in the DX window with
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> 160M loop. On 17M I had pileups of stations waiting to work me
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> I fed 1500W into the 160M loop.
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> I had considered a 320M loop but realized its greater potential
> would not be realized unless I could get it at least 70 ft. up.
> When I move later this year or next to our 160 acre property I
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> put a 320M loop up about 150 ft high. I will also have a 500ft.
> loop there at the same height.
>
> I would put up a 160M loop as high as I could at your QTH and hang
> on with all the DX you will work!
>
> I used to run 50 foot high double-extended Zepps 80M and up. The
> loops I am using now perform better.
>
> Best of fun,
>
> 73's Leland NC9K
>
>
>
> --- In SkyWires@yahoogroups.com, "Bill" <w2pky@y...> wrote:
> >
> > I am in the process of purchasing 5 acres in north central
> Florida.
> > The land has been used as a pine tree farm and therefore has

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> > thin pine trees about every 5 feet and rows about 20 feet wide.
> The
> > property is 630 X 330. Since no antennas are allowed in front of
> the
> > house [and no towers at all] I will be limited to about 300X300
> for
> > wire antennas. [LOL] Would a horizontal loop be the best I can
do
> on
> > this poperty for HF operation? Interested in suggestions from
> > anyone that has experience with large properties.
> >
> > Bill
>
>
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1048. NOISE on a delta loop

Yahoo group: SkyWires
Date: 2005-03-12 14:41:39 UTC
From: tom
Topic: 1048 Message: 1048

I have a problem and I feel this is just the group to help with it. The problem is a very high noise level on a Delta Loop cut for 6 meters. The level is between s6 and s9 on the meter on teh 706MIIG. The antenna is 18 feet high at the bottom. I have have had similar problems with a dipole at 25 feet. When listening to 10 thru 40 meters there is little or no noise.
I live in St. louis within 1.5 miles of the local channel 2 tower, and within 5 miles of other TV and FM/AM broadcast towers.
I really enjoy running 6 meters and with this noise it is all but impossible here in town to do. when camping i can run and have no noise but at home i can talk to some of the local guys but not over 20 miles. any help or ideas are appriciated.
thanks,
Tom, KB0QIP

1049. Re: [SkyWires] NOISE on a delta loop

Yahoo group: SkyWires
Date: 2005-03-12 15:19:19 UTC
From: Sarge
Topic: 1048 Message: 1049

What kind of noise? What modes? What times of day? Have you tried different antennas?

>
>
> I have a problem and I feel this is just the group to help with it.
> The problem is a very high noise level on a Delta Loop cut for 6
> meters. The level is between s6 and s9 on the meter on teh 706MIIG.
> The antenna is 18 feet high at the bottom. I have have had similar
> problems with a dipole at 25 feet. When listening to 10 thru 40
> meters there is little or no noise.
> I live in St. louis within 1.5 miles of the local channel 2 tower,
> and within 5 miles of other TV and FM/AM broadcast towers.
> I really enjoy running 6 meters and with this noise it is all but
> impossible here in town to do. when camping i can run and have no
> noise but at home i can talk to some of the local guys but not over
> 20 miles. any help or ideas are appriciated.
> thanks,
> Tom, KB0QIP

1050. Re: NOISE on a delta loop

Yahoo group: SkyWires
Date: 2005-03-13 05:19:59 UTC
From: nc9k
Topic: 1048 Message: 1050

Hello Tom,

I have a 706MKIIG that experiences input overload conditions.

First thing, turn off the 706MKIIG's noise blanker, automatic noise limiter and any DSP and see if that improves reception. Having them on definately causes interference in my rig in the presence of strong inband signals.

Your most likely strong signal culprit is the Channel 2 station overloading the broadband receiver input of the 706MKIIG. Try various input attenuation amounts with the radio, including external steppable inline pads. If you find a stepped attenuation level where the interference suddenly reduces you can deduce that the 706MKIIG receiver input is overloading. You might have to run a bandpass filter between the 706MKIIG and its 6M antenna to get relief. It will have to be capable of handling the full RF output of the 706MKIIG. A low pass PI network configuration antenna tuner might be all you need to reduce the TV2 signal getting into your rig. Because of the way it is built there is not much you can do internally with the rig to correct the problem.

Good luck, Leland NC9K

-- In SkyWires@yahoogroups.com, "Sarge" <sarge43@e...> wrote:
> What kind of noise? What modes? What times of day? Have you tried different
> antennas?
>
>
> > >
> > >
> > I have a problem and I feel this is just the group to help with it.
> > The problem is a very high noise level on a Delta Loop cut for 6
> > meters. The level is between s6 and s9 on the meter on teh 706MIIG.
> > The antenna is 18 feet high at the bottom. I have have had similar
> > problems with a dipole at 25 feet. When listening to 10 thru 40
> > meters there is little or no noise.
> > I live in St. louis within 1.5 miles of the local channel 2 tower,
> > and within 5 miles of other TV and FM/AM broadcast towers.
> > I really enjoy running 6 meters and with this noise it is all but
> > impossible here in town to do. when camping i can run and have

no
> > noise but at home i can talk to some of the local guys but not
over
> > 20 miles. any help or ideas are appriciated.
> > thanks,
> > Tom, KB0QIP

1051. Noise on Delta Loop

Yahoo group: SkyWires
Date: 2005-03-13 15:49:39 UTC
From: Thomas Giella KN4LF
Topic: 1051 Message: 1051

Is the delta loop mounted vertically and is it a grounded loop like a K9AYor an ungrounded closed delta loop? If the delta loop is mounted vertically then it's picking up more noise because the local noise field is vertically polarized. Also your loop receives either unidirectional or bidirectional depending on it's termination and may have a lobe aiming directly at a local noise source. The higher up in frequency that you hear the noise the closer you are to the noise source.

73 & GUD DX,
Thomas F. Giella, KN4LF
Retired Space & Atmospheric Weather Forecaster
Plant City, FL, USA
Grid Square EL87WX
Lat & Long 27 58 33.6397 N 82 09 52.4052 W
kn4lf@...

Contesting Propagation eReflector:
http://lists.contesting.com/mailman/listinfo/propagation
HC-DX Propagation Channel:
http://www.hard-core-dx.com/index.php?topic=Propagation
KN4LF Daily Solar Space Weather & Geomagnetic Data Archive:
http://www.kn4lf.com/kn4lf5.htm
KN4LF Daily LF/MF/HF Radio Propagation Outlook:
http://www.kn4lf.com/kn4lf6.htm
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1052. 4,6,8 or more WL 80m horizontal loop

Yahoo group: SkyWires
Date: 2005-03-14 13:07:31 UTC
From: Bostjan Voncina
Topic: 1052 Message: 1052

Hellow!
I have a space that has 6 high (20m) light towers in a radius that i can use to put on 4 till 10 WL or more long 80m horizontal loop.
What do you suggest ? The longer the better ?

If it comes to longer wires do you think the 4mm pvc Cu wire will be ok ? or should i go and get somethink even thicker ? Here we have strong winds (sometimes to 200km/h), but i dont want to make it too heavy.

Another question...can i use the loop with the tuner in my icom 746 ?
Or i need a tuner just for that ?
I should apply a ladder line as a feedline. How long should i make it ?

I'm really sorry for the many questions, but i realy dont want to mess this up and i want to set it right the first time.
Thank you in advance
Bostjan (Ian) S57WTT

1053. Re: [SkyWires] 4,6,8 or more WL 80m horizontal loop

Yahoo group: SkyWires
Date: 2005-03-14 17:34:34 UTC
From: Scott Erwin
Topic: 1052 Message: 1053

Make the lengths odd multiples of a wavelength, as even multiples will cause problems. A 3 times 160-meter loop using 1,590 feet of wire is a good choice for size. This eliminates a problem found on single wavelength loops where the 80-meter band is operating with an even wavelength causing some cancellation of the transmitted signal. I ran one of these large loops for a year and did note a slight improvement on 80-meters but could not tell any difference over the single wavelength loop I normally operate. As for wire size, using a large diameter wire will only add weight so only use the required wire needed for strength in the wind. You will need an antenna tuner with your modern transceiver and if you can easily change the feed line length you can find a place at the end of either ladder line or coax feed to provide a SWR of 3:1 or less so you can use the internal transceivers automatic antenna tuner. Here is a link to a site that details how to change feed line length to provide a low SWR at the end of the feed line. http://www.qsl.net/w5dxp/notuner.htm . With my one wavelength loop I have found that a single 4-foot length of ladder line inserted between the end of the feed line and my 4:1 Balun will provide a low SWR on the WARC bands and I have no problems with the non-WARC bands with the 4-foot length of feed line replaced with a 1-foot length of feed line.

--- Bostjan Voncina <s57wtt@...> wrote:

> Hellow!
> I have a space that has 6 high (20m) light towers in
> a radius that i
> can use to put on 4 till 10 WL or more long 80m
> horizontal loop.
> What do you suggest ? The longer the better ?
>
> If it comes to longer wires do you think the 4mm pvc
> Cu wire will be
> ok ? or should i go and get somethink even thicker ?
> Here we have
> strong winds (sometimes to 200km/h), but i dont want
> to make it too
> heavy.
>
> Another question...can i use the loop with the tuner

> in my icom 746 ?
> Or i need a tuner just for that ?
> I should apply a ladder line as a feedline. How long
> should i make it
> ?
>
> I'm really sorry for the many questions, but i realy
> dont want to mess
> this up and i want to set it right the first time.
> Thank you in advance
> Bostjan (Ian) S57WTT
>
>
>
>

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1054. Re: [SkyWires] 4,6,8 or more WL 80m horizontal loop

Yahoo group: SkyWires
Date: 2005-03-14 23:05:37 UTC
From: Dr.Ace Ratliff
Topic: 1052 Message: 1054
Attachments: 1 described; binary payloads are missing from this source WARC

Hi Scott,
Great advice.
Can you please clarify one sentence for me.
You wrote

"I ran one of these large loops for a year and did note a slight
improvement on 80-meters but could not tell any
difference over the single wavelength loop I normally
operate."

Thanks and 73,
Ace - WH2T

----- Original Message -----
From: Scott Erwin
To: SkyWires@yahoogroups.com
Sent: Monday, March 14, 2005 12:34 PM
Subject: Re: [SkyWires] 4,6,8 or more WL 80m horizontal loop

Make the lengths odd multiples of a wavelength, as
even multiples will cause problems. A 3 times
160-meter loop using 1,590 feet of wire is a good
choice for size. This eliminates a problem found on
single wavelength loops where the 80-meter band is
operating with an even wavelength causing some
cancellation of the transmitted signal. I ran one of
these large loops for a year and did note a slight
improvement on 80-meters but could not tell any
difference over the single wavelength loop I normally
operate. As for wire size, using a large diameter wire
will only add weight so only use the required wire
needed for strength in the wind. You will need an
antenna tuner with your modern transceiver and if you
can easily change the feed line length you can find a
place at the end of either ladder line or coax feed to
provide a SWR of 3:1 or less so you can use the
internal transceivers automatic antenna tuner. Here is
a link to a site that details how to change feed line
length to provide a low SWR at the end of the feed
line. http://www.qsl.net/w5dxp/notuner.htm . With my
one wavelength loop I have found that a single 4-foot
length of ladder line inserted between the end of the
feed line and my 4:1 Balun will provide a low SWR on
the WARC bands and I have no problems with the
non-WARC bands with the 4-foot length of feed line

replaced with a 1-foot length of feed line.
--- Bostjan Voncina <s57wtt@...> wrote:
>
> Hellow!
> I have a space that has 6 high (20m) light towers in
> a radius that i
> can use to put on 4 till 10 WL or more long 80m
> horizontal loop.
> What do you suggest ? The longer the better ?
>
> If it comes to longer wires do you think the 4mm pvc
> Cu wire will be
> ok ? or should i go and get somethink even thicker ?
> Here we have
> strong winds (sometimes to 200km/h), but i dont want
> to make it too
> heavy.
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> Another question...can i use the loop with the tuner
> in my icom 746 ?
> Or i need a tuner just for that ?
> I should apply a ladder line as a feedline. How long
> should i make it
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> I'm really sorry for the many questions, but i realy
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> Thank you in advance
> Bostjan (Ian) S57WTT
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1055. Re: [SkyWires] 4,6,8 or more WL 80m horizontal loop

Yahoo group: SkyWires
Date: 2005-03-15 01:13:21 UTC
From: Scott Erwin
Topic: 1052 Message: 1055

My Loop Sky wire I currently use is 520 feet of stranded, insulated 14-gage wire. At one time I had up and used a 3 times 160-meter loop Sky wire of the same wire which was 1,590 feet long at the same height of 60 feet. There was no improvement noted with the exception of 80 meters which I think was better but as I did not have the one-wavelength 520 foot long antenna up to compare it with I must include that it was my perception that the three-wavelength loop Sky wire was slightly better on 80 meters. None of the operators that I would talk with on regular schedules could tell any difference. I did make more DX contacts on 80 meters than what I would call normal the year I had the three-wavelength loop sky wire up and operating. The problem I had with the three-wavelength loop sky wire was the fact that it was hard to put up and maintain. It was constantly breaking due to the trees it was mounted in and that length of wire requires a lot of movement between trees that are all moving in different directions due to the fact there separated so far apart. I put the big loop up when all the leaves were off the trees and it was taken down and the one-wavelength loop put back up in its place the next year at about the same time. As for DX on 80 meters, I am in the process of putting a full size 1/4 wave vertical element up in a very tall tree just like last winter and I expect to have good results again this winter. The performance of the 80-meter vertical is so much better than even the three-wavelength loop sky wire. I can use the loop sky wire as the receive antenna when operating DX on 80 meters with the vertical for the low noise properties of the loop.

--- "Dr.Ace Ratliff" <wh2t@...> wrote:

> Hi Scott,
> Great advice.
> Can you please clarify one sentence for me.
> You wrote
>
> "I ran one of these large loops for a year and did
> note a slight
> improvement on 80-meters but could not tell any
> difference over the single wavelength loop I
> normally
> operate."

>
> Thanks and 73,
> Ace - WH2T
>
> ----- Original Message -----
> From: Scott Erwin
> To: SkyWires@yahoogroups.com
> Sent: Monday, March 14, 2005 12:34 PM
> Subject: Re: [SkyWires] 4,6,8 or more WL 80m
> horizontal loop
>
>
> Make the lengths odd multiples of a wavelength, as
> even multiples will cause problems. A 3 times
> 160-meter loop using 1,590 feet of wire is a good
> choice for size. This eliminates a problem found
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> these large loops for a year and did note a slight
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> place at the end of either ladder line or coax
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> line
> length to provide a low SWR at the end of the feed
> line. http://www.qsl.net/w5dxp/notuner.htm . With
> my
> one wavelength loop I have found that a single
> 4-foot
> length of ladder line inserted between the end of
> the
> feed line and my 4:1 Balun will provide a low SWR
> on
> the WARC bands and I have no problems with the

> non-WARC bands with the 4-foot length of feed line
> replaced with a 1-foot length of feed line.
> --- Bostjan Voncina <s57wtt@...> wrote:
> >
> > Hellow!
> > I have a space that has 6 high (20m) light
> towers in
> > a radius that i
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> > horizontal loop.
> > What do you suggest ? The longer the better ?
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> > If it comes to longer wires do you think the 4mm
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> > Bostjan (Ian) S57WTT
> >
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> Checked by AVG Anti-Virus.
> Version: 7.0.308 / Virus Database: 266.7.2 - Release
> Date: 3/11/2005
>

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1056. Re: [SkyWires] 4,6,8 or more WL 80m horizontal loop

Yahoo group: SkyWires
Date: 2005-03-15 02:01:01 UTC
From: Dr.Ace Ratliff
Topic: 1052 Message: 1056
Attachments: 1 described; binary payloads are missing from this source WARC

Hi,
After living on small city lots all of my adult life (other than during my military service) in 1994 I moved here to this rural mini farm and decided to experiment with some larger antennas since I now have the space. I am a rag chewer and very seldom attempt to work DX on the 160 or 75/80 meter bands.

I first made a 1 wavelength 160 meter loop, then a 2 wavelength 160 meter loop, and then a 3 wavelength 160 meter loop antennas. I never intend to again put up any loop antenna larger than 530 feet of wire for 160 meters. I have experimented on other frequencies with up to a 10 wavelength loop antenna. As far as I could tell, the 1 wavelength 160 meter loop worked as well as if not better than the 3 wavelength 160 meter loop antenna. And I liked the way it performed better than the 2 wavelength 160 meter loop.

Later I built a 1 wavelength 80 meter delta shaped horizontal loop coax fed antenna that uses a 75 ohm coax Q section in the feedline. It works better than any of the 1, 2, or 3 wavelength 160 meter loop antennas on the 80 meter band. But as I said before I am a rag chewer and very seldom attempt to work DX on the 160 or 75/80 meter bands.

I now use a 1 wavelength 80 meter delta shaped horizontal loop antenna and a 160 meter band 1/4 wave inverted L "vertical" wire antenna. Two loops are more than I want to maintain. If I could only have one antenna it would be a 1 wavelength 160 meter horizontal loop !
Ace - www.WH2T.com

----- Original Message -----
From: Scott Erwin
To: SkyWires@yahoogroups.com
Sent: Monday, March 14, 2005 8:13 PM
Subject: Re: [SkyWires] 4,6,8 or more WL 80m horizontal loop

My Loop Sky wire I currently use is 520 feet of
stranded, insulated 14-gage wire. At one time I had up
and used a 3 times 160-meter loop Sky wire of the same
wire which was 1,590 feet long at the same height of
60 feet. There was no improvement noted with the
exception of 80 meters which I think was better but as
I did not have the one-wavelength 520 foot long
antenna up to compare it with I must include that it
was my perception that the three-wavelength loop Sky
wire was slightly better on 80 meters. None of the
operators that I would talk with on regular schedules
could tell any difference. I did make more DX
contacts on 80 meters than what I would call normal
the year I had the three-wavelength loop sky wire up
and operating. The problem I had with the
three-wavelength loop sky wire was the fact that it

was hard to put up and maintain. It was constantly breaking due to the trees it was mounted in and that length of wire requires a lot of movement between trees that are all moving in different directions due to the fact there separated so far apart. I put the big loop up when all the leaves were off the trees and it was taken down and the one-wavelength loop put back up in its place the next year at about the same time. As for DX on 80 meters, I am in the process of putting a full size 1/4 wave vertical element up in a very tall tree just like last winter and I expect to have good results again this winter. The performance of the 80-meter vertical is so much better than even the three-wavelength loop sky wire. I can use the loop sky wire as the receive antenna when operating DX on 80 meters with the vertical for the low noise properties of the loop.

--- "Dr.Ace Ratliff" <wh2t@bloomington.in.us> wrote:

> Hi Scott,
> Great advice.
> Can you please clarify one sentence for me.
> You wrote
>
> "I ran one of these large loops for a year and did
> note a slight
> improvement on 80-meters but could not tell any
> difference over the single wavelength loop I
> normally
> operate."
>
> Thanks and 73,
> Ace - WH2T
>
> ----- Original Message -----
> From: Scott Erwin
> To: SkyWires@yahoogroups.com
> Sent: Monday, March 14, 2005 12:34 PM
> Subject: Re: [SkyWires] 4,6,8 or more WL 80m
> horizontal loop
>
>
> Make the lengths odd multiples of a wavelength, as
> even multiples will cause problems. A 3 times
> 160-meter loop using 1,590 feet of wire is a good
> choice for size. This eliminates a problem found
> on
> single wavelength loops where the 80-meter band is
> operating with an even wavelength causing some
> cancellation of the transmitted signal. I ran one
> of

> these large loops for a year and did note a slight
> improvement on 80-meters but could not tell any
> difference over the single wavelength loop I
> normally
> operate. As for wire size, using a large diameter
> wire
> will only add weight so only use the required wire
> needed for strength in the wind. You will need an
> antenna tuner with your modern transceiver and if
> you
> can easily change the feed line length you can
> find a
> place at the end of either ladder line or coax
> feed to
> provide a SWR of 3:1 or less so you can use the
> internal transceivers automatic antenna tuner.
> Here is
> a link to a site that details how to change feed
> line
> length to provide a low SWR at the end of the feed
> line. http://www.qsl.net/w5dxp/notuner.htm . With
> my
> one wavelength loop I have found that a single
> 4-foot
> length of ladder line inserted between the end of
> the
> feed line and my 4:1 Balun will provide a low SWR
> on
> the WARC bands and I have no problems with the
> non-WARC bands with the 4-foot length of feed line
> replaced with a 1-foot length of feed line.
> --- Bostjan Voncina <s57wtt@...> wrote:
> >
> > Hellow!
> > I have a space that has 6 high (20m) light
> towers in
> > a radius that i
> > can use to put on 4 till 10 WL or more long 80m
> > horizontal loop.
> > What do you suggest ? The longer the better ?
> >
> > If it comes to longer wires do you think the 4mm
> pvc
> > Cu wire will be
> > ok ? or should i go and get somethink even
> thicker ?
> > Here we have
> > strong winds (sometimes to 200km/h), but i dont
> want
> > to make it too

> > heavy.
> >
> > Another question...can i use the loop with the
> tuner
> > in my icom 746 ?
> > Or i need a tuner just for that ?
> > I should apply a ladder line as a feedline. How
> long
> > should i make it
> > ?
> >
> > I'm really sorry for the many questions, but i
> realy
> > dont want to mess
> > this up and i want to set it right the first
> time.
> > Thank you in advance
> > Bostjan (Ian) S57WTT
> >
> >
> >
> >
>
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1057. Re: 4,6,8 or more WL 80m horizontal loop

Yahoo group: SkyWires
Date: 2005-03-15 22:49:22 UTC
From: K0PYK
Topic: 1052 Message: 1057

Skywire members,
I read with interest your discussion of various wavelength loops. I am curious as to performance of a 80 meter or 160 meter loop for multiband performance. Presently I am using a 80 meter vertical loop on all bands with a 4-1 balun. It tunes fine with the internal tuner. At the cabin I have a 80 meter double extended zepp...332 feet long with a 4-1 balun and it tunes all the bands. So my observation so far with wire antennas is ..."the more wire the better". I do not know what the limitations are, with respect to...too much wire. I look forward to your comments.
Tom, K0PYK

_____
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1058. Butternut antenna group.

Yahoo group: SkyWires
Date: 2005-03-15 23:48:39 UTC
From: n4zou
Topic: 1058 Message: 1058

Your invited to join the Butternut-antenna group. the home page link is
http://groups.yahoo.com/group/Butternut-antennas/
This group is for the Butternut antenna user who wants to learn and
Exchange their Knowledge and 'secrets' about Butternut antennas. Learn
from fellow group members, just how the Butternut antenna works with
your Transceiver. Here you will find Information and Data on figuring
out how to plan and install your Butternut antenna. Post the Photos,
Drawings and related information about your Butternut antenna Projects
here to share with others. Share you favorite Link on the web about
Butternut Antennas. Research the groups Message Archive for the
specific Butternut antenna information that is available here.

1059. Re: [SkyWires] Re: 4,6,8 or more WL 80m horizontal loop

Yahoo group: SkyWires
Date: 2005-03-16 04:10:05 UTC
From: K.Currie
Topic: 1052 Message: 1059

I have a two wave leingth 160m loop and I really like it,. I had a 160m diapole before but this is mutch better. I use 450 ohm ladder line to feed it , and a MFJ989C tonner some times, some times I use a link coupled tuner that I built my self. Both work good but I like the home brew because it has no ballun , but a little harder to tune on some bands. The loop is much better in my location then the diapole was.
Keith
----- Original Message -----
From: K0PYK
To: SkyWires@yahoogroups.com
Sent: Tuesday, March 15, 2005 4:49 PM
Subject: [SkyWires] Re: 4,6,8 or more WL 80m horizontal loop

Skywire members,
I read with interest your discussion of various
wavelength loops. I am curious as to performance of a
80 meter or 160 meter loop for multiband performance.
Presently I am using a 80 meter vertical loop on all
bands with a 4-1 balun. It tunes fine with the
internal tuner. At the cabin I have a 80 meter double
extended zepp...332 feet long with a 4-1 balun and it
tunes all the bands. So my observation so far with
wire antennas is ..."the more wire the better". I do
not know what the limitations are, with respect
to...too much wire. I look forward to your comments.
Tom, K0PYK

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1060. Re: [SkyWires] Re: 4,6,8 or more WL 80m horizontal loop

Yahoo group: SkyWires
Date: 2005-03-16 05:21:40 UTC
From: Dr.Ace Ratliff
Topic: 1052 Message: 1060
Attachments: 1 described; binary payloads are missing from this source WARC

Hi Tom,

All of the following statements reflect my own personal experience , other people's experience may vary. I use the internal tuner in my Yaesu FT-920 for up to 100 watts and a MFJ-989C Tuner when using QRO. I have used several antenna tuners including a Barker & Williamson, Homebrews and others . All of the antennas I reference here were or are used for multiband operation (6 - 160 mtr bands using antenna tuners) with the exception of a 75 meter band Double Extended Zepp Antenna that would not load up on 160 meters due to the feedline length. I know people that had 75 meter band Double Extended Zepp Antennas that would load up fine on 160 meters and worked great.
My Double Extended Zepp Antenna was 303 feet long , I trimmed it to this length to make it resonant on 20 meters without using the tuner. It was 14 AWG Teflon insulated wire. I fed it with 450 ohm ladder line from the antenna to just outside the shack then I used a homebrew 4:1 balun
http://www.bloomington.in.us/~wh2t/balun.html
and went from it into the window with a few feet of RG-8 coax to the antenna tuner.
It was a very good antenna with the exception that mine wouldn't tune up on 160 meters.

My observation has NOT been ..."the more wire the better".
I made a 160 mtr band 1/4 wavelength inverted L "vertical" antenna, then a 160 mtr band 3/8 wavelength inverted L antenna, then a 160 mtr band 1/2 wavelength inverted L antenna, then a 160 mtr band 3/4 wavelength inverted L antenna. I discovered, stick with the 1/4 wavelength inverted L antenna.

I have used a 1 wavelength 160 meter loop, then a 2 wavelength 160 meter loop, and then a 3 wavelength 160 meter loop antennas. I never intend to again put up any loop antenna larger than 530 feet of wire for 160 meters. I have experimented on other frequencies with up to a 10 wavelength loop antenna. As far as I could tell, the 1 wavelength 160 meter loop worked as well as if not better than the 3 wavelength 160 meter loop antenna. And I liked the way the 1 wavelength 160 meter loop performed better than the 2 wavelength 160 meter loop.

Later I built a 1 wavelength 80 meter delta shaped horizontal loop coax fed antenna that uses a 75 ohm coax Q section in the feedline. It works better than any of the 1, 2, or 3 wavelength 160 meter loop antennas on the 80 meter band. But as I said before I am a rag chewer and very seldom attempt to work DX on the 160 or 75/80 meter bands.
I currently use a 80 Meter Full Wave Delta shaped horizontal Loop antenna on the 6 thru 75 Meter bands with a tuner. I am very pleased with it! I also currently use a 160 Meter band 1/4 wave inverted L "vertical" wire antenna. It will tune 6 thru 160 meter bands!

Two loops are more than I want to maintain.
If I could only have one antenna it would be a 1 wavelength 160 meter horizontal loop and a good antenna tuner !
Ace - www.WH2T.com

----- Original Message -----
From: K0PYK
To: SkyWires@yahoogroups.com
Sent: Tuesday, March 15, 2005 5:49 PM
Subject: [SkyWires] Re: 4,6,8 or more WL 80m horizontal loop

Skywire members,
I read with interest your discussion of various
wavelength loops. I am curious as to performance of a
80 meter or 160 meter loop for multiband performance.
Presently I am using a 80 meter vertical loop on all
bands with a 4-1 balun. It tunes fine with the
internal tuner. At the cabin I have a 80 meter double
extended zepp...332 feet long with a 4-1 balun and it
tunes all the bands. So my observation so far with
wire antennas is ..."the more wire the better". I do
not know what the limitations are, with respect
to...too much wire. I look forward to your comments.
Tom, K0PYK

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1061. Re: [SkyWires] Re: 4,6,8 or more WL 80m horizontal loop

Yahoo group: SkyWires
Date: 2005-03-16 13:22:06 UTC
From: Dave
Topic: 1052 Message: 1061

I started out with a 540' loop and when the woodlot behind the shack was cleared, I increased it to 1000'. Both were fed with the same 450 ohm twinlead at about 30-40 feet.

My on the air time is usually on an early Saturday 80M morning net with check-ins from Eastern Canada down to Washington DC.

I've noticed over the last couple of years that the larger loop just didn't seem to be as good as the smaller but put it down to band conditions or the sun spot cycle.

It wasn't until I ran the loops thru EZNEC that I found out the problem. The larger loop had a small null toward the eastern US. Modeling the smaller configuration showed a bit of a gain the desired direction (9db theoretical difference!). Not so small.

Reducing the loop to the original dimensions has given a definite increase to signal levels on both ends.

The moral of the story is, despite all the claims of 'bigger is better', you can't always know for sure unless you do the plots with one of the antenna software programs like EZNEC.

Dave
VE1VQ

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1062. 4,6,8 or more WL 80m horizontal loop

Yahoo group: SkyWires
Date: 2005-03-16 16:38:52 UTC
From: Lake Hodges Radio
Topic: 1052 Message: 1062

Dave,

I have always heard that 1,046 feet was a good size for 75 meters. (1005 / 3.840) x 4

46 feet difference is not much, but would that have been better than your 1,000 foot loop?

Art Bell's loop for 75 meters is 1,595 feet -->> http://free.prohosting.com/ae7op/images/plot2.jpg

-- Kurt, N6MD
San Diego

At 05:22 AM 03/16/2005, Dave wrote:
>I started out with a 540' loop and when the woodlot behind the shack was >cleared, I increased it to 1000'. Both were fed with the same 450 ohm >twinlead
>at about 30-40 feet.
>My on the air time is usually on an early Saturday 80M morning net with >check-ins from Eastern Canada down to Washington DC.
>I've noticed over the last couple of years that the larger loop just >didn't seem
>to be as good as the smaller but put it down to band conditions or the sun >spot
>cycle.
>It wasn't until I ran the loops thru EZNEC that I found out the problem. The >larger loop had a small null toward the eastern US. Modeling the smaller >configuration showed a bit of a gain the desired direction (9db theoretical >difference!). Not so small.

1063. Re: [SkyWires] 4,6,8 or more WL 80m horizontal loop

Yahoo group: SkyWires
Date: 2005-03-16 18:47:39 UTC
From: Dr.Ace Ratliff
Topic: 1052 Message: 1063
Attachments: 1 described; binary payloads are missing from this source WARC

Hi Kurt,
I know you didn't ask me, But here's my observations for our other reader's benefit.
I had a 3 wavelength 160 meter loop antenna it was 1587 feet, I used a 1.9Mhz design freq. Art Bell's loop is 1595 feet and up higher than mine was. As far as I could tell, the 1 wavelength 160 meter loop worked as well as if not better than the 3 wavelength 160 meter loop antenna on 80/160 meters.

Later I built a 1 wavelength 80 meter delta shaped horizontal loop coax fed antenna, It will not load up on 160 meters.Experimenting , I first fed this antenna with all 50 ohm RG-8 coax , then I tried feeding it using all RG-11 75 ohm coax. It made NO difference.It now uses a 75 ohm coax Q section at the antenna feedpoint in the 50 ohm RG-8 coax feedline. It made a BIG difference on 80 meters! It also works quite a bit better than any of the 1, 2, or 3 wavelength 160 meter loop antennas on the 80 meter band.
But as I said several times before I am a rag chewer and very seldom attempt to work DX on the 160 or 75/80 meter bands. Although I have worked all 50 states with the 80 meter delta shaped horizontal loop coax fed antenna.

One last thing, I NEVER use a balun at a loop antennas feedpoint.
73, Ace - www.WH2T.com

----- Original Message -----
From: Lake Hodges Radio
To: SkyWires@yahoogroups.com
Sent: Wednesday, March 16, 2005 11:38 AM
Subject: [SkyWires] 4,6,8 or more WL 80m horizontal loop

Dave,

I have always heard that 1,046 feet was a good size for 75 meters. (1005 / 3.840) x 4

46 feet difference is not much, but would that have been better than your 1,000 foot loop?

Art Bell's loop for 75 meters is 1,595 feet -->>
http://free.prohosting.com/ae7op/images/plot2.jpg

-- Kurt, N6MD
San Diego

At 05:22 AM 03/16/2005, Dave wrote:

I started out with a 540' loop and when the woodlot behind the shack was
cleared, I increased it to 1000'. Both were fed with the same 450 ohm twinlead
at about 30-40 feet.
My on the air time is usually on an early Saturday 80M morning net with
check-ins from Eastern Canada down to Washington DC.
I've noticed over the last couple of years that the larger loop just didn't seem

to be as good as the smaller but put it down to band conditions or the sun spot cycle.
It wasn't until I ran the loops thru EZNEC that I found out the problem. The larger loop had a small null toward the eastern US. Modeling the smaller configuration showed a bit of a gain the desired direction (9db theoretical difference!). Not so small.

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1064. Re: [SkyWires] 4,6,8 or more WL 80m horizontal loop

Yahoo group: SkyWires
Date: 2005-03-16 22:57:35 UTC
From: Dave
Topic: 1052 Message: 1064

Lake Hodges Radio wrote:

>
> Dave,
>
> I have always heard that 1,046 feet was a good size for 75 meters. (1005
> / 3.840) x 4
>
> 46 feet difference is not much, but would that have been better than
> your 1,000 foot loop?

I didn't model anything larger. I did the physical measurements between available trees for smaller ones (and ran the plots for those) but settled on the 540' version in the end as that gave me the best theoretical signal level to the eastern seaboard.

I can't imagine that the few extra feet would make any difference.

One thing I didn't try was to shift the feed point on the plot to see if that made a difference to the pattern of the large loop. Easy to do on the computer but not so easy to do with the actual antenna.

Both loops made/make use of available trees and aren't the classic square shape.

Dave
VE1VQ

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1065. Re: [SkyWires] 4,6,8 or more WL 80m horizontal loop

Yahoo group: SkyWires
Date: 2005-03-16 23:06:53 UTC
From: Mel Vance
Topic: 1052 Message: 1065

> One thing I didn't try was to shift the feed point on the plot to see
> if that made a difference to the pattern of the large loop. Easy to
> do on the computer but not so easy to do with the actual antenna.
>
> Both loops made/make use of available trees and aren't the classic
> square shape.
>
On a 1-wave 80mtr rectangle loop I had up, feed point did make a difference...feed on a 'short' side resulted in a hole in coverage on 20mtr. Due to the heavy NVIS mode I had, do not think it would change anything on 80mtr on the rectangle loop.

Shape does play a role in the pattern, and as the shape gets strange, feed point will play a
role, also.

Mel
N7OKL

1066. 4,6,8 or more WL 80m horizontal loop

Yahoo group: SkyWires
Date: 2005-03-16 23:18:52 UTC
From: Lake Hodges Radio
Topic: 1052 Message: 1066
Attachments: 1 described; binary payloads are missing from this source WARC

At 02:57 PM 03/16/2005, Dave wrote:
>Both loops made/make use of available trees and aren't the classic square
>shape.

Thanks, Dave.

I have access to about five acres of woods and meadows located about 3,800 feet above sea level near San Diego.

I have been planning to tie ropes in the tallest available trees to make five outside supports for a large loop.

So, the perimeter of the wire loop will be on the inside of the circle of tall trees with the supporting trees in a circle outside the wire perimeter with ropes pulling the loop outward to form an irregular wire pentagon. I've been planning on a 1,040 or 1,050 foot loop for 3.840 MHz and 1.920 Mhz.

I will be feeding the loop with ladder line and an MFJ tuner.

Do you think this will work? I will be running only 100 watts. I will use insulated 14 gauge or 12 gauge wire from Home Depot. Will I have a problem if the insulated wire touches some leaves or small tree branches in the meadow when the wind blows?

See below. The wire is red and the ropes are black.

Thanks,

Kurt, N6MD
Emacs!

1067. Re: [SkyWires] 4,6,8 or more WL 80m horizontal loop

Yahoo group: SkyWires
Date: 2005-03-17 00:33:09 UTC
From: Dave
Topic: 1052 Message: 1067

Mel,

I've been quite happy with my loops over the years. They've worked much better than the various random wires and dipoles I've had. Fed with twin lead from a home brew balanced tuner. Support rope over the trees to two foot bungee cord for wind absorption (four places) and a fifth (fixed) point on the end of a barn.

Dave
VE1VQ

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1068. Re: [SkyWires] 4,6,8 or more WL 80m horizontal loop

Yahoo group: SkyWires
Date: 2005-03-17 00:52:15 UTC
From: Dave
Topic: 1052 Message: 1068

> Do you think this will work? I will be running only 100 watts. I will
> use insulated 14 gauge or 12 gauge wire from Home Depot. Will I have a
> problem if the insulated wire touches some leaves or small tree branches
> in the meadow when the wind blows?

Hello Kurt,

You should have no trouble from branches and leaves with insulated wire and that power level.

I've found the price from Home Depot is about the same in the US compared to here in Canada (compensated for the $exchange) I keep a spare 500' roll of #14 stranded in case of loop breakage from the wind but it hasn't happened yet. A support line or section of bungee cord has always been the first to let go.

I used #12 for a while but found the extra weight caused problems.

For a few years, I used electric fence stuff (stranded nylon with a few stands of aluminum wire woven in. That was nice and light but I had to depend on a mechanical connection. In the last couple of years the price on that has sky rocketed. I did find some at a cheaper price but it turned out to have stainless steel instead of aluminum

You might notice a difference in tuner settings from dry to rain conditions but should be nothing major that the tuner can't handle.

On my set up, the wire does not touch any part of the tree but is supported by nylon rope thru the tree to a two foot bungee cord (with hooks). The rope is tied to one hook and the other to a pulley or nylon swivel (salt water fishing supply places all around here). The loop wire is run around the pulley or through the swivel. The lower end of the rope (next to the ground) is either tied off to a concrete block or to another tree.

With the wire not touching any part of the tree the effects of rain vs. dry is minimized.

Dave
VE1VQ

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1069. 4,6,8 or more WL 80m horizontal loop

Yahoo group: SkyWires
Date: 2005-03-17 06:26:24 UTC
From: Lake Hodges Radio
Topic: 1052 Message: 1069

At 04:52 PM 03/16/2005, Dave wrote:
>The rope is tied to one hook and the other to a pulley or nylon swivel
>(salt water fishing
>supply places all around here). The loop wire is run around the pulley or
>through the swivel.

The pulleys are a great idea! I will try that!

Thanks,

-- Kurt, N6MD

1070. Re: [SkyWires] 4,6,8 or more WL 80m horizontal loop

Yahoo group: SkyWires
Date: 2005-03-17 15:57:08 UTC
From: Dr.Ace Ratliff
Topic: 1052 Message: 1070
Attachments: 1 described; binary payloads are missing from this source WARC

FYI,
My 272 ft , 80 mtr loop is made of 8 gauge BARE solid copper wire "ground wire type". It touches several tree limbs and lots of leaves in the summer. I regularly run over a KW into it. I can see almost NO difference between dry, wet, or ice conditions. The MFJ-989C antenna tuner might tune just a small amount differently.
Ace - www.WH2T.com

----- Original Message -----
From: Dave
To: SkyWires@yahoogroups.com
Sent: Wednesday, March 16, 2005 7:52 PM
Subject: Re: [SkyWires] 4,6,8 or more WL 80m horizontal loop

> Do you think this will work? I will be running only 100 watts. I will
> use insulated 14 gauge or 12 gauge wire from Home Depot. Will I have a
> problem if the insulated wire touches some leaves or small tree branches
> in the meadow when the wind blows?

Hello Kurt,

You should have no trouble from branches and leaves with insulated wire and that power level.

I've found the price from Home Depot is about the same in the US compared to here in Canada (compensated for the $exchange) I keep a spare 500' roll of #14 stranded in case of loop breakage from the wind but it hasn't happened yet. A support line or section of bungee cord has always been the first to let go.

I used #12 for a while but found the extra weight caused problems.

For a few years, I used electric fence stuff (stranded nylon with a few stands of aluminum wire woven in. That was nice and light but I had to depend on a mechanical connection. In the last couple of years the price on that has sky rocketed. I did find some at a cheaper price but it turned out to have stainless steel instead of aluminum

You might notice a difference in tuner settings from dry to rain conditions but should be nothing major that the tuner can't handle.

On my set up, the wire does not touch any part of the tree but is supported by nylon rope thru the tree to a two foot bungee cord (with hooks). The rope is tied to one hook and the other to a pulley or nylon swivel (salt water fishing supply places all around here). The loop wire is run around the pulley or through the swivel. The lower end of the rope (next to the ground) is either tied off to a concrete block or to another tree.

With the wire not touching any part of the tree the effects of rain vs. dry is minimized.

Dave
VE1VQ

[This E-mail scanned for viruses by Declude Anti-Virus]

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Yahoo! Groups Links

a.. To visit your group on the web, go to:
http://groups.yahoo.com/group/SkyWires/

b.. To unsubscribe from this group, send an email to:
SkyWires-unsubscribe@yahoogroups.com

c.. Your use of Yahoo! Groups is subject to the Yahoo! Terms of Service.

1071. Re: [SkyWires] 4,6,8 or more WL 80m horizontal loop

Yahoo group: SkyWires
Date: 2005-03-17 23:11:14 UTC
From: Dave
Topic: 1052 Message: 1071

Kurt,

For pulleys you only need a two or three inch one. Anything larger will have a bigger groove giving more chance of the wire slipping out.

Lowes used to carry a small one that was good quality. I can't remember the name of the manufacturer (seems to me that it started with 'EVER...') but do remember it was located in CT. I called the plant to find out who in Canada handled them but, at the time, no one did. I don't remember seeing any in Home Depot but it was several years ago when I looked.

Dave
VE1VQ

[This E-mail scanned for viruses by Declude Anti-Virus]

1072. KN4LF Daily LF/MF/HF Radio Propagation Outlook #2005-012

Yahoo group: SkyWires
Date: 2005-03-25 03:29:14 UTC
From: Thomas Giella KN4LF
Topic: 1072 Message: 1072

The KN4LF Daily LF/MF/HF Radio Propagation Outlook #2005-012 has been
published on 0000 UTC Friday March 24, 2005 at
http://www.kn4lf.com/kn4lf6.htm .

73 & GUD DX,
Thomas F. Giella, KN4LF
Retired Space & Atmospheric Weather Forecaster
Plant City, FL, USA
Grid Square EL87WX
Lat & Long 27 58 33.6397 N 82 09 52.4052 W
kn4lf@...

Contesting Propagation eReflector:
http://lists.contesting.com/mailman/listinfo/propagation
HC-DX Propagation Channel:
http://www.hard-core-dx.com/index.php?topic=Propagation
KN4LF Daily Solar Space Weather & Geomagnetic Data Archive:
http://www.kn4lf.com/kn4lf5.htm
KN4LF Daily LF/MF/HF Radio Propagation Outlook:
http://www.kn4lf.com/kn4lf6.htm
KN4LF HF/MF Radio Propagation Theory Notes: http://www.kn4lf.com/kn4lf8.htm
KN4LF Amateur & SWL Radio History: http://www.kn4lf.com/index.htm

--
No virus found in this outgoing message.
Checked by AVG Anti-Virus.
Version: 7.0.308 / Virus Database: 266.8.0 - Release Date: 3/21/2005

1073. A 4.1 balun or a 1.1??

Yahoo group: SkyWires
Date: 2005-03-25 18:38:22 UTC
From: radioman1044
Topic: 1073 Message: 1073

Hello,
New to the group here so here it goes. I am running a 160 meter loop up 50 feet and now have it fed with 60 feet of 300 ohm twinlead running down into the shack to the back of the might fine junk 986 4.1 balun. It Really plays great on all the bands and tunes easy. I have heard that i really sould have a 1.1 balun on it if I want to work the upper bands. I have a nice and DX engineering 10 kw 1.1 tuner balun, that I have tried in place of the internal 4.1 on the 986 and don't seem see much of a differance on receive or transmitt.
I
have also heard that the 4.1 balun in the 986 is junk. I don't know! On 160 meters the internal 4.1 balun dosent get hot or even warm with a kw out. But I notice the BIG 1.1 gets a little warm with the same power out. I have also tried 450 ohm ladder line and really don't see much differance.
So what do you think 4.1 or 1.1??
73 Larry

1074. feed point query ?

Yahoo group: SkyWires
Date: 2005-03-25 22:38:21 UTC
From: wavelength012000
Topic: 1074 Message: 1074

hi to all,
would like to ask the the group if using a rectangular
shaped loop what is the optimuim feed point?the lowest band of
operation would be 40 meters.Feed point on the short side or the long
side ? Any hints tips welcome
Tom MM3DNU UK

1075. Re: A 4.1 balun or a 1.1??

Yahoo group: SkyWires
Date: 2005-03-25 22:48:21 UTC
From: N3YEA , Jeff
Topic: 1073 Message: 1075

Hello Larry,
After reading DX Engineering's technical info. on baluns
I purchased one of their 4:1 "big boys" - and think that it is the
best purchase I made for my loop. They have some good information on
their website ..
http://www.dxengineering.com/TechArticles.asp?ID={785E3CE7-211B-47E2-
A1DA-41A22BFD37ED}

just a happy Loop-er..
73 !
Jeff - N3YEA

--- In SkyWires@yahoogroups.com, "radioman1044" <lgwsaw@n...> wrote:
>
> Hello,
> New to the group here so here it goes. I am running a 160 meter
loop
> up 50 feet and now have it fed with 60 feet of 300 ohm twinlead
> running down into the shack to the back of the might fine junk 986
> 4.1 balun. It Really plays great on all the bands and tunes easy.
I
> have heard that i really sould have a 1.1 balun on it if I want to
> work the upper bands. I have a nice and DX engineering 10 kw 1.1
> tuner balun, that I have tried in place of the internal 4.1 on the
> 986 and don't seem see much of a differance on receive or
transmitt.
> I
> have also heard that the 4.1 balun in the 986 is junk. I don't
know!
> On 160 meters the internal 4.1 balun dosent get hot or even warm
> with a kw out. But I notice the BIG 1.1 gets a little warm with
the
> same power out. I have also tried 450 ohm ladder line and really
> don't see much differance.
> So what do you think 4.1 or 1.1??
> 73 Larry

1076. Re: [SkyWires] feed point query ?

Yahoo group: SkyWires
Date: 2005-03-25 22:57:05 UTC
From: Mel Vance
Topic: 1074 Message: 1076

> hi to all,
> would like to ask the the group if using a rectangular
> shaped loop what is the optimuim feed point?the lowest band of
> operation would be 40 meters.Feed point on the short side or the long
> side ? Any hints tips welcome
> Tom MM3DNU UK
>
I have used one for 80mtrs.......

Feed point was short side, West end........

Live near Seattle, WA (Microsofts back yard).

On 80/40, did not seem to matter. Both bands showed very NVIS properties.

On the higher bands, best signal seemed to be on a broad arc from South-East to North-East. Could work North and South, but not as well. West was a very poor, overall. Hawaii and Johnston Atoll were OK, but beyond that, forget it.

When I am able to put another one back up, will be attempting to put in multiple feed points,
selected by relays, giving feed from East narrow end, South long side, and West narrow end as needed. Hope this will let me move the pattern to fill holes.

BTW...I feed my loop through a tuner and coax. I feel that gives less visual impact, very important here in this residential area.

Mel
N7OKL

1077. Re: [SkyWires] A 4.1 balun or a 1.1??

Yahoo group: SkyWires
Date: 2005-03-26 16:45:06 UTC
From: Scott Erwin
Topic: 1073 Message: 1077

Here is a link to an article dealing with the typical
"T" network antenna tuner and internal 4:1 Balun. This
article should answer all your questions.
http://www.eham.net/articles/9751
--- radioman1044 <lgwsaw@...> wrote:
>
> Hello,
> New to the group here so here it goes. I am running
> a 160 meter loop
> up 50 feet and now have it fed with 60 feet of 300
> ohm twinlead
> running down into the shack to the back of the might
> fine junk 986
> 4.1 balun. It Really plays great on all the bands
> and tunes easy. I
> have heard that i really sould have a 1.1 balun on
> it if I want to
> work the upper bands. I have a nice and DX
> engineering 10 kw 1.1
> tuner balun, that I have tried in place of the
> internal 4.1 on the
> 986 and don't seem see much of a differance on
> receive or transmitt.
> I
> have also heard that the 4.1 balun in the 986 is
> junk. I don't know!
> On 160 meters the internal 4.1 balun dosent get hot
> or even warm
> with a kw out. But I notice the BIG 1.1 gets a
> little warm with the
> same power out. I have also tried 450 ohm ladder
> line and really
> don't see much differance.
> So what do you think 4.1 or 1.1??
> 73 Larry
>
>
>
>

Do you Yahoo!?
Yahoo! Sports - Sign up for Fantasy Baseball.
http://baseball.fantasysports.yahoo.com/

1078. Re: A 4.1 balun or a 1.1??

Yahoo group: SkyWires
Date: 2005-03-27 17:48:31 UTC
From: radioman1044
Topic: 1073 Message: 1078

-THanks for all the good information ,,,, you have gotten me on the
right trac.... thanks
Larry

In SkyWires@yahoogroups.com, Scott Erwin <n4zou@y...> wrote:
> Here is a link to an article dealing with the typical
> "T" network antenna tuner and internal 4:1 Balun. This
> article should answer all your questions.
> http://www.eham.net/articles/9751
> --- radioman1044 <lgwsaw@n...> wrote:
> >
> > Hello,
> > New to the group here so here it goes. I am running
> > a 160 meter loop
> > up 50 feet and now have it fed with 60 feet of 300
> > ohm twinlead
> > running down into the shack to the back of the might
> > fine junk 986
> > 4.1 balun. It Really plays great on all the bands
> > and tunes easy. I
> > have heard that i really sould have a 1.1 balun on
> > it if I want to
> > work the upper bands. I have a nice and DX
> > engineering 10 kw 1.1
> > tuner balun, that I have tried in place of the
> > internal 4.1 on the
> > 986 and don't seem see much of a differance on
> > receive or transmitt.
> > I
> > have also heard that the 4.1 balun in the 986 is
> > junk. I don't know!
> > On 160 meters the internal 4.1 balun dosent get hot
> > or even warm
> > with a kw out. But I notice the BIG 1.1 gets a
> > little warm with the
> > same power out. I have also tried 450 ohm ladder
> > line and really
> > don't see much differance.
> > So what do you think 4.1 or 1.1??
> > 73 Larry
> >
> >
> >
> >
>

>
>
> _____
> Do you Yahoo!?
> Yahoo! Sports - Sign up for Fantasy Baseball.
> http://baseball.fantasysports.yahoo.com/

1079. RJELOOP4, G4FGQ

Yahoo group: SkyWires
Date: 2005-03-28 20:39:17 UTC
From: Ron McConnell
Topic: 1079 Message: 1079

From rec.radio.amateur.antenna:

This new freeware program, RJELOOP4, by Reg Edwards, G4FGQ,
details below, should be of interest to SkyWires@yahoogroups.com.
Looks made to order.

<http://www.btinternet.com/~g4fgq.regp>

While you are at it, just go ahead and download
all of Reg's programs into a folder.

Cheers, 73,

Ron McC.
w2iol@...

Ronald C. McConnell, PhD

WGS-84: N 40º 46' 57.9" +/-0.1"
W 74º 41' 21.3" +/-0.1"
FN20ps.77GU96 +/-
V +5058 H +1504

<http://home.earthlink.net/~rcmcc>

Imagine if we had only Roman numerals for mathematics...
- RCMcC, w2iol

==========
RJELOOP4
This program predicts approximate performance of general purpose,
multiband, horizontal loop antennas of given perimeter of loop.
It is not intended for precision predictions of operating data.

A loop is a continuous wire without loading coil or capacitor.
It can be of any shape provided the area enclosed by the loop
is not less than 2/3rds of that of a circle of the same perimeter,
ie., it is not too irregular.

It is the sort of antenna which is forced on the amateur
by the shape of his back garden and the pre-determined location
of trees, poles, buildings or anything else from which an antenna wire
can be suspended.

Analysis includes a high or low impedance feedline, a choke balun
and an L-tuner. The antenna is most efficient when the perimeter
is a whole number of wavelengths. It is least efficient
when the perimeter is an odd-number of 1/2-wavelengths.

But operation is not limited to being at, or near to,
resonant frequencies.

Download in a few seconds program RJELOOP4
from website below and run immediately.

Regards from Reg Edwards

G4FGQ

g4fgq.regp@...
For Free Radio Design Software go to

<http://www.btinternet.com/~g4fgq.regp>

1080. Does anybody else also hate the new Yahoo groups format?

Yahoo group: SkyWires
Date: 2005-03-31 03:03:08 UTC
From: exemptfromlife
Topic: 1080 Message: 1080

Does anybody else also hate the new Yahoo groups format?

I really really hate this new format for yahoo groups. Maybe I'm just getting old, but it seems to have really hosed it up.

Anybody else have an opinion?

Thanks.

Walter
Skywire's group Founder

1081. Re: [SkyWires] Does anybody else also hate the new Yahoo groups format?

Yahoo group: SkyWires
Date: 2005-03-31 03:57:38 UTC
From: Myamiphil
Topic: 1080 Message: 1081

already sent my opinion in.....

It sucks!!!!

Phil

--- exemptfromlife <junkmail@...> wrote:
>
> Does anybody else also hate the new Yahoo groups
> format?
>
>
> I really really hate this new format for yahoo
> groups. Maybe I'm just
> getting old, but it seems to have really hosed it
> up.
>
> Anybody else have an opinion?
>
> Thanks.
>
> Walter
> Skywire's group Founder?
>
>
>
>
>

Do You Yahoo!?
Tired of spam? Yahoo! Mail has the best spam protection around
http://mail.yahoo.com

1082. Re: Does anybody else also hate the new Yahoo groups format?

Yahoo group: SkyWires
Date: 2005-03-31 13:27:53 UTC
From: vagt6
Topic: 1080 Message: 1082

Not so bad once I got used to it.

In a month you'll forget all about the "old" format!

1083. The KN4LF Daily LF/MF/HF Radio Propagation Outlook #2005-013

Yahoo group: SkyWires
Date: 2005-03-31 18:11:35 UTC
From: Thomas Giella KN4LF
Topic: 1083 Message: 1083

The KN4LF Daily LF/MF/HF Radio Propagation Outlook #2005-013 has been published on 1800 UTC Thursday March 31, 2005 at http://www.kn4lf.com/kn4lf6.htm .

73 & GUD DX,
Thomas F. Giella, KN4LF
Retired Space & Atmospheric Weather Forecaster
Plant City, FL, USA
Grid Square EL87WX
Lat & Long 27 58 33.6397 N 82 09 52.4052 W
kn4lf@...

Contesting Propagation eReflector:
http://lists.contesting.com/mailman/listinfo/propagation
HC-DX Propagation Channel:
http://www.hard-core-dx.com/index.php?topic=Propagation
KN4LF Daily Solar Space Weather & Geomagnetic Data Archive:
http://www.kn4lf.com/kn4lf5.htm
KN4LF Daily LF/MF/HF Radio Propagation Outlook:
http://www.kn4lf.com/kn4lf6.htm
KN4LF HF/MF Radio Propagation Theory Notes: http://www.kn4lf.com/kn4lf8.htm
KN4LF Amateur & SWL Radio History: http://www.kn4lf.com/index.htm

--
No virus found in this outgoing message.
Checked by AVG Anti-Virus.
Version: 7.0.308 / Virus Database: 266.8.6 - Release Date: 3/30/2005

1084. Re: Does anybody else also hate the new Yahoo groups format?

Yahoo group: SkyWires
Date: 2005-03-31 19:37:18 UTC
From: n3brs
Topic: 1080 Message: 1084

I don't believe that. The old system had body to it, it looked much
better. This system uses a lot more space that could be used for
something else. The old system may be gone but it will NOT be forgotten.

--- In SkyWires@yahoogroups.com, "vagt6" <costcontrolc@j...> wrote:
>
> Not so bad once I got used to it.
>
> In a month you'll forget all about the "old" format!

1085. Re: [SkyWires] Re: Does anybody else also hate the new Yahoo groups format?

Yahoo group: SkyWires
Date: 2005-04-02 04:26:03 UTC
From: Myamiphil
Topic: 1080 Message: 1085

www.myway.com uses the same layout software.. and
format...so its not Yahoo unique... has all the stuff
Yahoo has, but no advos but alas no groups
either....but its got amil and all the other stuff
Yahoo has....

Phil

--- n3brs <no_reply@yahoogroups.com> wrote:
>
> I don't believe that. The old system had body to
> it, it looked much
> better. This system uses a lot more space that could
> be used for
> something else. The old system may be gone but it
> will NOT be forgotten.
>
>
> --- In SkyWires@yahoogroups.com, "vagt6"
> <costcontrolc@j...> wrote:
> >
> > Not so bad once I got used to it.
> >
> > In a month you'll forget all about the "old"
> format!
>
>
>
>

_____
Do you Yahoo!?
Yahoo! Mail - You care about security. So do we.
http://promotions.yahoo.com/new_mail

1086. Re: Does anybody else also hate the new Yahoo groups format?

Yahoo group: SkyWires
Date: 2005-04-02 07:27:05 UTC
From: exemptfromlife
Topic: 1080 Message: 1086

Glad to here I'm not the only one. I thought I was just getting old and cranky.. :-)

--- In SkyWires@yahoogroups.com, "exemptfromlife" <junkmail@a...> wrote:
>
> Does anybody else also hate the new Yahoo groups format?
>
>
> I really really hate this new format for yahoo groups. Maybe I'm just
> getting old, but it seems to have really hosed it up.
>
> Anybody else have an opinion?
>
> Thanks.
>
> Walter
> Skywire's group Founder

1087. Re: [SkyWires] Re: Does anybody else also hate the new Yahoo groups format?

Yahoo group: SkyWires
Date: 2005-04-02 14:30:11 UTC
From: David Shrum
Topic: 1080 Message: 1087

I don't think your are getting old, I know I'm not. (I wish). Now the cranky part, that just might be happening on this end, but if ask if I am I will deny it. :)
Dave N8PU

exemptfromlife wrote:

>Glad to here I'm not the only one. I thought I was just getting old and
>cranky.. :-)
>
>
>--- In SkyWires@yahoogroups.com, "exemptfromlife" <junkmail@a...> wrote:
>
>
>>Does anybody else also hate the new Yahoo groups format?
>>
>>
>>I really really hate this new format for yahoo groups. Maybe I'm just
>>getting old, but it seems to have really hosed it up.
>>
>>Anybody else have an opinion?
>>
>>Thanks.
>>
>>Walter
>>Skywire's group Founder?
>>
>>

1088. Re: [SkyWires] Re: Does anybody else also hate the new Yahoo groups format?

Yahoo group: SkyWires
Date: 2005-04-05 13:59:08 UTC
From: Scott Schreiber
Topic: 1080 Message: 1088

I usually read my mail in a mail client, so there is
no format change, but I went to the site to have a
look. It's not so bad. If you go to the messages
section, then click on "simple" as your view option,
it displays the same info as it always did in an easy
to read slightly larger font.

I like that you can sort the messages by thread now.
That is an improvement.

But hey, we all have opinions, right?
;-)
73
Scott - N8VCL

_____
Do you Yahoo!?
Yahoo! Personals - Better first dates. More second dates.
http://personals.yahoo.com

1089. First time loop user here.

Yahoo group: SkyWires
Date: 2005-04-07 13:51:21 UTC
From: wb9vwz
Topic: 1089 Message: 1089

Been reading this group for several months. Finally got up my first loop, a 20 meter version fed with 300 ohm RS tv twinlead, a 4:1 balun, coax to tuner hence to a 100 watt rig. Not as high as I would like (~20 ft) but it will have to do for now.

When I cut the antenna I intentionally made it about 5% longer (wire: 12 guage stranded insulated). With my tuner I can tune all frequencies from 20 thru 10. Don't know yet how well it transmits. It will tune 30 and 40, but I think it is probably an outdoor dummy load on those bands....

Now for my questions. Is it worth the time and effort to trim the loop for resonance on 20? Since I don't have one of those nifty MFJ units I have to use the old fashioned measure, trim, measure, trim routine. With the shack on the second floor it gives me a good workout.

I plan to build an 80 meter version later this summer installed from the roof peak (2 story house) to some trees in the backyard. The XYL is not favorable about overhead wires in her terratory so how small a wire can I reasonably use? Obviously, the smaller the wire the less visual impact and the less strength.

Thanks for your input, and if you hear me on the air, give me a shout.

John
K9JAD

1090. Re: [SkyWires] First time loop user here.

Yahoo group: SkyWires
Date: 2005-04-07 14:11:59 UTC
From: k0ndn@aol.com
Topic: 1089 Message: 1090

I used 14 gauge insulated for my 160m loop and most people never see it unless I point it out to them. good luck with the xyl hi hi

1091. skywire and 2m

Yahoo group: SkyWires
Date: 2005-04-07 17:39:52 UTC
From: williamherbertdavis
Topic: 1091 Message: 1091

I am new to the whole amateur radio field. Is these skywire antennas just for the HF bands or can you use it for the 2m bands also? and can someone please explain the diffrence between the RG8 50 ohm and RG6 75 ohm coaxial cables and if there are any problems that can arrise from tx/rx on the 75 ohm cable. Thanx

73
William Davis

1092. KN4LF Daily LF/MF/HF Radio Propagation Outlook #2005-014 has been

Yahoo group: SkyWires
Date: 2005-04-07 19:35:35 UTC
From: Thomas Giella KN4LF
Topic: 1092 Message: 1092

The KN4LF Daily LF/MF/HF Radio Propagation Outlook #2005-014 has been
published on 1900 UTC Thursday April 7, 2005 at
http://www.kn4lf.com/kn4lf6.htm .

73 & GUD DX,
Thomas F. Giella, KN4LF
Retired Space & Atmospheric Weather Forecaster
Plant City, FL, USA
Grid Square EL87WX
Lat & Long 27 58 33.6397 N 82 09 52.4052 W
kn4lf@...

Contesting Propagation eReflector:
http://lists.contesting.com/mailman/listinfo/propagation
HC-DX Propagation Channel:
http://www.hard-core-dx.com/index.php?topic=Propagation
KN4LF Daily Solar Space Weather & Geomagnetic Data Archive:
http://www.kn4lf.com/kn4lf5.htm
KN4LF Daily LF/MF/HF Radio Propagation Outlook:
http://www.kn4lf.com/kn4lf6.htm
KN4LF HF/MF Radio Propagation Theory Notes: http://www.kn4lf.com/kn4lf8.htm
KN4LF Amateur & SWL Radio History: http://www.kn4lf.com/index.htm

--
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Checked by AVG Anti-Virus.
Version: 7.0.308 / Virus Database: 266.9.4 - Release Date: 4/6/2005

1093. Re: [SkyWires] First time loop user here.

Yahoo group: SkyWires
Date: 2005-04-10 00:34:42 UTC
From: Erik Weaver, n0ew
Topic: 1089 Message: 1093

Silky Wire is the smallest / strongest I have used, and I do like it (very hard to see yet very durable):

http://thewireman.com/antennap.html

Product nubmer: 520
'Silky' 18 AWG, 19 strand, tinned, 40% copper-clad steel. popular as a portable easy-to-use dipole wire.
Prices: Per Foot= $0.11; per 100-ft $0.09; per 500-ft $0.086; per 1000-ft $0.081

On the other hand, I have #14 stranded copper up for my loop. After a short time it tarnishes and is very diffucult to see, but somewhat easier to see than the silky. I have generally had the to point it out to people, and even when I'm looking up to verify it is still up, even _I_ have a trouble finding it at times!

I'd not bother tuning the wire myself. But I'm lazy and use a tuner ;)

73 Erik n0ew
erik@...
www.n0ew.org

1094. Re: [SkyWires] First time loop user here.

Yahoo group: SkyWires
Date: 2005-04-10 01:02:55 UTC
From: brian f. stauffer
Topic: 1089 Message: 1094

Erik,

Just curious- I have been interested in the Silky Wire. My concern though, how strong is it (Pull Strength)? I presently am using 18AWG (bought it cheaply as an experiment) and it is not sufficiently strong for me. This is for ~ 1000 ft. Loop. I realise
that 14 AWG would be better, but is also more expensive. As much as like FLEX-Weave, the cost at that length for insulated is about USD .171/ft !

Thanx...
_____???__???
brian f. stauffer
meteorologist,
discerning skies weather services
aptos, ca. usa
wxmonn@...
_____????____

----- Original Message -----
From: "Erik Weaver, n0ew" <erik@...>
To: <SkyWires@yahoogroups.com>
Sent: Saturday, April 09, 2005 17:34
Subject: Re: [SkyWires] First time loop user here.

>
>
> Silky Wire is the smallest / strongest I have used, and I do like it (very
> hard to see yet very durable):
>
> http://thewireman.com/antennap.html
>
> Product nubmer: 520
> 'Silky' 18 AWG, 19 strand, tinned, 40% copper-clad steel. popular as a
> portable easy-to-use dipole wire.
> Prices: Per Foot= $0.11; per 100-ft $0.09; per 500-ft $0.086; per
> 1000-ft $0.081
>
> On the other hand, I have #14 stranded copper up for my loop. After a
> short time it tarnishes and is very diffucult to see, but somewhat easier
> to see than the silky. I have generally had the to point it out to people,
> and even when I'm looking up to verify it is still up, even _I_ have a
> trouble finding it at times!
>
>
> I'd not bother tuning the wire myself. But I'm lazy and use a tuner ;)
>

> 73 Erik n0ew
> erik@...
> www.n0ew.org
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> Yahoo! Groups Links
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> --
> No virus found in this incoming message.
> Checked by AVG Anti-Virus.
> Version: 7.0.308 / Virus Database: 266.9.5 - Release Date: 07-Apr-05
>
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1095. Re: [SkyWires] First time loop user here.

Yahoo group: SkyWires
Date: 2005-04-10 01:19:28 UTC
From: Erik Weaver, n0ew
Topic: 1089 Message: 1095

I've not used it over the size of a full wavelength 80-meter loop (roughly 280 feet). Certainly not 1,000 feet length.

As for as foot-pounds of pressure until it breaks I'd suggest you ask the Wire Man, I have no idea. It says it weighs less than one pound for 1,000 feet so I don't think it'd have very much stress on it, even at 1,000 feet.

Don't think that helped much, sorry.
-Erik
erik@...
www.n0ew.org

1096. how much windload??

Yahoo group: SkyWires
Date: 2005-04-10 04:28:44 UTC
From: chasm@texas.net
Topic: 1089 Message: 1096

does anyone know how much windload the ALPHA DELTA DX-CC dipole presents???
am wondering just how strong my end poles/masts/dacron ties need to be esp down here in Houston.

in fact, is the amount so negligible that it is virtually never shown for any dipole or sloper??? but is for beams, etc...

I have similar questions for Windom's...

thanks
chas
K5DAM

...

1097. Static bleed off

Yahoo group: SkyWires
Date: 2005-04-14 00:41:27 UTC
From: cloud_burner77
Topic: 1097 Message: 1097

Hello everyone, I would highly suggest with a loop antenna, to
install
in the feedline an arrestor to bleed off the static and protect from
lightning. Static bleed off is not talked about much and can be very
dangerous. I use a devise that can be found at www.arraysolutions.com

1098. Re: [SkyWires] Static bleed off

Yahoo group: SkyWires
Date: 2005-04-14 01:56:34 UTC
From: John Isella
Topic: 1097 Message: 1098

Interesting post and point you make here. I was not able to locate the device you mention. Could you give directions or product name.

JI

On Apr 13, 2005, at 8:41 PM, cloud_burner77 wrote:

>
>
> Hello everyone, I would highly suggest with a loop antenna, to
> install
> in the feedline an arrestor to bleed off the static and protect from
> lightning. Static bleed off is not talked about much and can be very
> dangerous. I use a devise that can be found at www.arraysolutions.com
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> Yahoo! Groups Links
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1099. Re: [SkyWires] Static bleed off

Yahoo group: SkyWires
Date: 2005-04-14 02:30:14 UTC
From: Dr.Ace Ratliff
Topic: 1097 Message: 1099
Attachments: 1 described; binary payloads are missing from this source WARC

Hi Group,
I found Static and Surge Suppression Inductors at
http://www.arraysolutions.com/Products/staticsurgecoils.htm#top%20of%20page

for $35.00 each or a person could very easily wind their own . Although these are for Large vertical antennas such as any 160 meter full sized vertical.
Any loop antenna is already at DC ground potential so static bleed off should not be a concern .

I have 2 web pages that mention the Static problem.
http://www.bloomington.in.us/~wh2t/invertedl.html

And

http://www.bloomington.in.us/~wh2t/Jpole.htm

They give the following info.

IMPORTANT NOTE:
End fed wire antennas can develop very high static voltages on them.
This static voltage can easily be high enough to knock the front end out of sensitive receivers.
To overcome this problem, I suggest you connect a resistor from the coax center to shield where the antenna wire connects to the coax.
Only use a non-inductive resistor, carbon resistors work fine.
Don't use wire wound or metal film resistors.
The resistance value is not critical.
I suggest about a 56K ohm 1/2 watt resistor for receive only or if transmitting with up to 100 watts.
If you will be transmitting with high power "QRO", I suggest using about a 1 Meg ohm 1/2 watt resistor.

IMPORTANT NOTE for SWL Receivers:
End fed wire antennas can develop very high static voltages on them.
This static voltage can easily be high enough to knock the front end out of sensitive receivers.
To overcome this problem, I suggest you connect a resistor from the antenna wire to ground near the back of the receiver.
Only use a non-inductive resistor, carbon resistors work fine.
Don't use wire wound or metal film resistors.
The resistance value is not critical.
I suggest about a 56K ohm 1/2 watt resistor for receive only or if transmitting with up to 100 watts.
If you will be transmitting with high power "QRO", I suggest using about a 1 Meg ohm 1/2 watt resistor.

Ace - WH2T

----- Original Message -----
From: John Isella
To: SkyWires@yahoogroups.com
Sent: Wednesday, April 13, 2005 8:56 PM
Subject: Re: [SkyWires] Static bleed off

Interesting post and point you make here. I was not able to locate the
device you mention. Could you give directions or product name.

JI

On Apr 13, 2005, at 8:41 PM, cloud_burner77 wrote:

>
>
> Hello everyone, I would highly suggest with a loop antenna, to
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> in the feedline an arrestor to bleed off the static and protect from
> lightning. Static bleed off is not talked about much and can be very
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> Yahoo! Groups Links
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Yahoo! Groups Links

a.. To visit your group on the web, go to:
http://groups.yahoo.com/group/SkyWires/

b.. To unsubscribe from this group, send an email to:
SkyWires-unsubscribe@yahoogroups.com

c.. Your use of Yahoo! Groups is subject to the Yahoo! Terms of Service.

1100. SHORTWAVE RADIO ANTENNA ..PERFECT FOR LIMITED OR RESTRICTED SPACE 4 SALE

Yahoo group: SkyWires
Date: 2005-04-14 02:34:11 UTC
From: peanutpaster
Topic: 1100 Message: 1100

Hi I make and sell a shortwave antenna on ebay called a super helical.
The
antenna works really well for the ammount of space it takes up. It is
roughly 65 feet of wire but when set up only takes up about 7 or 8
feet of space. It is perfect for indoors and can be hidden. You can
read more about it and check it out on this link. If no listing
appears check back soon for I list these often.
http://search.ebay.com/_W0QQsassZpeanutpaster

1101. Re: [SkyWires] Static bleed off

Yahoo group: SkyWires
Date: 2005-04-14 07:52:06 UTC
From: John Isella
Topic: 1097 Message: 1101

Thanks for this info.

In these references, and in my thoughts, this situation will not occur with a loop antenna since it is a DC short, or nearly so taking wire resistance into consideration. In the case of open ended, long wire, end fed, or what ever terminology is used to describe an antenna with a center radiating element which is a DC open to ground this static buildup would occur and be a problem. With a loop antenna this would not occur and would not be a problem, one of the reasons a loop is known to be a low noise design. Anyone think otherwise?

JI K1KSC

On Apr 13, 2005, at 10:30 PM, Dr.Ace Ratliff wrote:

> Hi Group,
> I found Static and Surge Suppression Inductors at
> http://www.arraysolutions.com/Products/
> staticsurgecoils.htm#top%20of%20page
>
> for $35.00 each or a person could very easily wind their own .
> Although these are for Large vertical antennas such as any 160 meter
> full sized vertical.
> Any loop antenna is already at DC ground potential so static bleed
> off should not be a concern .
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> I have 2 web pages that mention the Static problem.
>
> http://www.bloomington.in.us/~wh2t/invertedl.html
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> http://www.bloomington.in.us/~wh2t/Jpole.htm
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> They give the following info.
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> IMPORTANT NOTE:
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> This static voltage can easily be high enough to knock the front end
> out of sensitive receivers.
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> coax center to shield where the antenna wire connects to the coax.
> Only use a non-inductive resistor, carbon resistors work fine.
> Don't use wire wound or metal film resistors.
> The resistance value is not critical.
> I suggest about a 56K ohm 1/2 watt resistor for receive only or if

> transmitting with up to 100 watts.
> If you will be transmitting with high power "QRO", I suggest using
> about a 1 Meg ohm 1/2 watt resistor.
>
> IMPORTANT NOTE for SWL Receivers:
> End fed wire antennas can develop very high static voltages on them.
> This static voltage can easily be high enough to knock the front end
> out of sensitive receivers.
> To overcome this problem, I suggest you connect a resistor from the
> antenna wire to ground near the back of the receiver.
> Only use a non-inductive resistor, carbon resistors work fine.
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> transmitting with up to 100 watts.
> If you will be transmitting with high power "QRO", I suggest using
> about a 1 Meg ohm 1/2 watt resistor.
>
>
>
> Ace - WH2T
>
> ----- Original Message -----
> From: John Isella
> To: SkyWires@yahoogroups.com
> Sent: Wednesday, April 13, 2005 8:56 PM
> Subject: Re: [SkyWires] Static bleed off
>
> Interesting post and point you make here. I was not able to locate the
> device you mention. Could you give directions or product name.
>
> JI
>
>
> On Apr 13, 2005, at 8:41 PM, cloud_burner77 wrote:
>
> >
> >
> > Hello everyone, I would highly suggest with a loop antenna, to
> > install
> > in the feedline an arrestor to bleed off the static and protect from
> > lightning. Static bleed off is not talked about much and can be very
> > dangerous. I use a devise that can be found at www.arraysolutions.com
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> > Yahoo! Groups Links

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> Yahoo! Groups Links
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> • To visit your group on the web, go to:
> http://groups.yahoo.com/group/SkyWires/
>
> • To unsubscribe from this group, send an email to:
> SkyWires-unsubscribe@yahoogroups.com
>
> • Your use of Yahoo! Groups is subject to the Yahoo! Terms of
> Service.
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>
> No virus found in this outgoing message.
> Checked by AVG Anti-Virus.
> Version: 7.0.308 / Virus Database: 266.9.8 - Release Date: 4/13/2005

1102. Re: Static bleed off

Yahoo group: SkyWires
Date: 2005-04-14 11:01:09 UTC
From: cloud_burner77
Topic: 1097 Message: 1102

Be careful here, my 450 ft double loop has knocked me to the ground several times last year when I unhooked my ladder line and touched the ends accidently, its like being hit with an electric fence, If you dont think loops have static ask w6obb and all the otheres who lost icom pros in the recieve mode due to static. This device from Array solutions keeps the loop DC grounded at all times, but important here, if your running high power over 600 watts be sure to order the model to handle higher power and the cost is approxamently $72.00 for that model. Thanks everyone, Cloud_burner77--- In SkyWires@yahoogroups.com, John Isella <jjisella@c...> wrote:
> Thanks for this info.
>
> In these references, and in my thoughts, this situation will not occur
> with a loop antenna since it is a DC short, or nearly so taking wire
> resistance into consideration. In the case of open ended, long wire,
> end fed, or what ever terminology is used to describe an antenna with a
> center radiating element which is a DC open to ground this static
> buildup would occur and be a problem. With a loop antenna this would
> not occur and would not be a problem, one of the reasons a loop is
> known to be a low noise design. Anyone think otherwise?
>
> JI K1KSC
>
>
>
>
> On Apr 13, 2005, at 10:30 PM, Dr.Ace Ratliff wrote:
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> > Hi Group,
> > I found Static and Surge Suppression Inductors at
> > http://www.arraysolutions.com/Products/
> > staticsurgecoils.htm#top%20of%20page
> >
> > for $35.00 each or a person could very easily wind their own .
> > Although these are for Large vertical antennas such as any 160 meter
> > full sized vertical.
> > Any loop antenna is already at DC ground potential so static

bleed
> > off should not be a concern .
> >
> > I have 2 web pages that mention the Static problem.
> >
> > http://www.bloomington.in.us/~wh2t/invertedl.html
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> > And
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> > http://www.bloomington.in.us/~wh2t/Jpole.htm
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> > out of sensitive receivers.
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> > Don't use wire wound or metal film resistors.
> > The resistance value is not critical.
> > I suggest about a 56K ohm 1/2 watt resistor for receive only or
if
> > transmitting with up to 100 watts.
> > If you will be transmitting with high power "QRO", I suggest
using
> > about a 1 Meg ohm 1/2 watt resistor.
> >
> > IMPORTANT NOTE for SWL Receivers:
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> > I suggest about a 56K ohm 1/2 watt resistor for receive only or
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> > transmitting with up to 100 watts.
> > If you will be transmitting with high power "QRO", I suggest

using
> > about a 1 Meg ohm 1/2 watt resistor.
> >
> >
> >
> > Ace - WH2T
> >
> > ----- Original Message -----
> > From: John Isella
> > To: SkyWires@yahoogroups.com
> > Sent: Wednesday, April 13, 2005 8:56 PM
> > Subject: Re: [SkyWires] Static bleed off
> >
> > Interesting post and point you make here. I was not able to
locate the
> > device you mention. Could you give directions or product name.
> >
> > JI
> >
> >
> > On Apr 13, 2005, at 8:41 PM, cloud_burner77 wrote:
> >
> > >
> > >
> > > Hello everyone, I would highly suggest with a loop antenna, to
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> > > Yahoo! Groups Links
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> > Yahoo! Groups Links
> >
> > ☐ To visit your group on the web, go to:
> > http://groups.yahoo.com/group/SkyWires/
> >
> > ☐ To unsubscribe from this group, send an email to:
> > SkyWires-unsubscribe@yahoogroups.com
> >
> > ☐ Your use of Yahoo! Groups is subject to the Yahoo!
Terms of
> > Service.
> >
> >
> > No virus found in this outgoing message.
> > Checked by AVG Anti-Virus.
> > Version: 7.0.308 / Virus Database: 266.9.8 - Release Date:
4/13/2005

1103. Re: [SkyWires] Static bleed off

Yahoo group: SkyWires
Date: 2005-04-14 11:08:09 UTC
From: Dave
Topic: 1097 Message: 1103

My loop enters the shack through two threaded 1/4 inch steel rods inside two pieces of pvc tubing. I normally keep a 350 ohm resistor (nothing special about the value, just something I had on hand) bridging the loop when not in use.

Without the resistor, I've been able to draw arcs during a snow storm from the loop to a nearby ground (using an insulated screw driver and a clip lead). All from static buildup.

The loop may be balanced but can still collect a static charge. If your rig is connected than the charge will discharge through the receiver front end.

A couple of years ago I observed a very interesting thing. I had a clip lead shorting the loop where it enters the shack. Every once in a while, the clip lead would swing toward an outlet box mounted in the wall nearby. Turned out to be an approaching thunder storm that I hadn't heard. The clip lead moved in time with the lightning strikes.

Dave
VE1VQ

[This E-mail scanned for viruses by Declude Anti-Virus]

1104. Re: [SkyWires] Re: Static bleed off

Yahoo group: SkyWires
Date: 2005-04-14 11:13:29 UTC
From: John Isella
Topic: 1097 Message: 1104

That's why I ask, lets talk about the details here so we all gain a better understanding. My thoughts are that with a system that has a loop antenna where the antenna is feed with one side grounded, at a tuner for instance, there should not be any significant buildup on the loop. When you disconnected the antenna how long was it floating prior to your touching it? What were the configurations where these other folks had damage to their rigs? It sounds like the feed configuration you are talking about result in the loop floating or in any event not grounded at one side. Is this correct? If it is, where perhaps a tuner is used which couples the loop in such a way that the loop is floating then I would agree in concept that you would get static buildup.

JI K1KSC

On Apr 14, 2005, at 7:01 AM, cloud_burner77 wrote:

>
>
> Be careful here, my 450 ft double loop has knocked me to the ground
> several times last year when I unhooked my ladder line and touched
> the ends accidently, its like being hit with an electric fence, If
> you dont think loops have static ask w6obb and all the otheres who
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> $72.00 for that model. Thanks everyone, Cloud_burner77--- In
> SkyWires@yahoogroups.com, John Isella <jjisella@c...> wrote:
>> Thanks for this info.
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> occur
>> with a loop antenna since it is a DC short, or nearly so taking
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> wire,
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>> center radiating element which is a DC open to ground this static
>> buildup would occur and be a problem. With a loop antenna this
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>> not occur and would not be a problem, one of the reasons a loop
> is
>> known to be a low noise design. Anyone think otherwise?
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>> JI K1KSC

>>
>>
>>
>>
>> On Apr 13, 2005, at 10:30 PM, Dr.Ace Ratliff wrote:
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>>> Hi Group,
>>> I found Static and Surge Suppression Inductors at
>>> http://www.arraysolutions.com/Products/
>>> staticsurgecoils.htm#top%20of%20page
>>>
>>> for $35.00 each or a person could very easily wind their own .
>>> Although these are for Large vertical antennas such as any 160
> meter
>>> full sized vertical.
>>> Any loop antenna is already at DC ground potential so static
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>>> off should not be a concern .
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>>> out of sensitive receivers.
>>> To overcome this problem, I suggest you connect a resistor from
> the
>>> coax center to shield where the antenna wire connects to the
> coax.
>>> Only use a non-inductive resistor, carbon resistors work fine.
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>>> transmitting with up to 100 watts.
>>> If you will be transmitting with high power "QRO", I suggest
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>>> antenna wire to ground near the back of the receiver.
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>>> transmitting with up to 100 watts.
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>>> about a 1 Meg ohm 1/2 watt resistor.
>>>
>>>
>>>
>>> Ace - WH2T
>>>
>>> ----- Original Message -----
>>> From: John Isella
>>> To: SkyWires@yahoogroups.com
>>> Sent: Wednesday, April 13, 2005 8:56 PM
>>> Subject: Re: [SkyWires] Static bleed off
>>>
>>> Interesting post and point you make here. I was not able to
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>>> device you mention. Could you give directions or product name.
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>>> JI
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>>> On Apr 13, 2005, at 8:41 PM, cloud_burner77 wrote:
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>>>> Hello everyone, I would highly suggest with a loop antenna, to
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>>> Yahoo! Groups Links
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>>> • To visit your group on the web, go to:
>>> http://groups.yahoo.com/group/SkyWires/
>>>
>>> • To unsubscribe from this group, send an email to:
>>> SkyWires-unsubscribe@yahoogroups.com
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>>> • Your use of Yahoo! Groups is subject to the Yahoo!
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>>> Version: 7.0.308 / Virus Database: 266.9.8 - Release Date:
> 4/13/2005
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> Yahoo! Groups Links
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1105. Re: [SkyWires] Static bleed off

Yahoo group: SkyWires
Date: 2005-04-14 12:00:09 UTC
From: Jim Dunstan
Topic: 1097 Message: 1105

At 03:52 AM 04/14/2005 -0400, you wrote:
>Thanks for this info.
>
>In these references, and in my thoughts, this situation will not occur
>with a loop antenna since it is a DC short, or nearly so taking wire
>resistance into consideration. In the case of open ended, long wire, end
>fed, or what ever terminology is used to describe an antenna with a center
>radiating element which is a DC open to ground this static buildup would
>occur and be a problem. With a loop antenna this would not occur and would
>not be a problem, one of the reasons a loop is known to be a low noise
>design. Anyone think otherwise?
>
>JI K1KSC

I think otherwise .... hi. I have seen 6" sparks drawn off the feed line (open wire) which feeds a rhombic antenna ... which is a kind of horizontal loop.

Well, lets see ..... take a 1000 ft of wire and suspend it above the ground. Wait for the right environmental conditions .... some thunder clouds in the near distance, some wind, some dust, etc .... and the wire will become charged in relation to the earth and it will be possible to draw sparks as long as 6 inches between the wire and ground.

Now, join the ends of the same 1000 ft of wire suspended above the ground to form a loop and wait for the same environmental conditions. The loop will build the same static charge more or less as the straight wire.

The question is, will the static charge be dangerous to your equipment? The answer depends on how you connect to the wire (feed the antenna). If you you feed one end directly to your radio the charge will find its way to ground through some circuitous route with the potential for damage. If you break the wire in the middle (a dipole) and feed it directly with coax. then one half of the wire will be at DC ground potential and the other half will feed directly to your radio. This is the case with the 1/4 wave vertical as well. With the dipole most people feeding with coax will use a balun which will put both sides at DC ground. However if you use a current balun formed by coiling the coax you will not get this benefit of DC ground!

Now instead of configuring the wire as a dipole, join the ends to form the loop. Now the entire wire will be DC ground when fed with coax. The only reason now to use a balun will be for purposes of 'balance'.

Now if you use open wire feed line and terminate the line in a 'link' then the whole antenna is isolated from DC ground. I would not bring my finger

too close to the feedline/link when there are environmental static conditions, regardless of whether the antenna is a dipole or a loop!

Jim Dunstan
Thunder Bay, ON

1106. Re: [SkyWires] Static bleed off

Yahoo group: SkyWires
Date: 2005-04-14 12:16:25 UTC
From: Jim Dunstan
Topic: 1097 Message: 1106

At 08:00 AM 04/14/2005 -0400, you wrote:

>Now if you use open wire feed line and terminate the line in a 'link' then
>the whole antenna is isolated from DC ground. I would not bring my finger
>too close to the feedline/link when there are environmental static
>conditions, regardless of whether the antenna is a dipole or a
>loop!

PS

Back in the dark ages our solution to the above situation was to use common auto spark plugs, one connected on each side of the open wire line to ground. We also had a huge knife switch to put the feedline directly to ground when electrical storms were close. When environmental conditions were very bad .... eg a dust storm ... the plugs sounded like they were in a car; "snap, snap, snap, snap" . If they were in my motorcycle I would be going 50mph hi hi.

Jim Dunstan
Thunder Bay, ON

1107. Re: [SkyWires] Static bleed off

Yahoo group: SkyWires
Date: 2005-04-14 14:06:59 UTC
From: Scott Erwin
Topic: 1097 Message: 1107

If you use ladder line and the 4:1 Balun in your
antenna tuner or even an external Balun and you have
the Balun properly hooked up to ground like you should
be doing anyway the static will be draining to the
earth ground constantly. A neon bulb from the link
coil to tuner ground will not effect the operation of
the balanced antenna tuner and will drain off the
static as well. As for feeding with coax, if your
station is properly grounded then your loop is also
grounded.
--- cloud_burner77 <kol_171@...> wrote:
>
> Hello everyone, I would highly suggest with a loop
> antenna, to
> install
> in the feedline an arrestor to bleed off the static
> and protect from
> lightning. Static bleed off is not talked about much
> and can be very
> dangerous. I use a devise that can be found at
> www.arraysolutions.com
>
>
>
>

Do you Yahoo!?
Yahoo! Mail - Find what you need with new enhanced search.
http://info.mail.yahoo.com/mail_250

1108. Re: [SkyWires] Static bleed off

Yahoo group: SkyWires
Date: 2005-04-14 15:28:38 UTC
From: katkey007@aol.com
Topic: 1097 Message: 1108

At the club, we call it "Blue Lightning." I've seen some pretty dramatic flashes from our dipoles, windoms, end-feds, etc. during almost any kind of weather condition. Windy days and dry snowfalls seem to be the worst, but not exclusively. Think about a wire antenna as the secondary of a transformer...just sitting there in an electro-magnetic (or electro-static) field absorbing energy. Antennas are transformers that do not discriminate between radio signals and Natures energy.
At one time or another, ALL of our wire antennas have bit one of the operators...that's usually followed by some words we learned in our adolescence.
ALL of our antennas are now connected to metal, GROUNDED, boxes that have the following:
1: a 50K ohm, or higher, carbon bleeder resistor
2: an NE-2 neon gas tube
3: a fairly heavy toggle switch (for non-use times)
BTW: I use steel surface mount electrical boxes with blank plates for the switches and a brass stud for the ground connection.
But...there's another advantage to grounding wire antennas when not in use. When there is an electrical storm in the area, it is very advisable to NOT have anything nearby which can develop a charge. In lightning pre-strikes, the plasma leaders and streamers and very happy to find items on the Earth that have pre-existing charges on them. The likelihood of the REAL strike following the path to the charged item is greatly enhanced under these conditions. When your antennas are completely grounded...it is somewhat like placing the area under them (your home?) below (electrical) ground and actually protecting (somewhat) the area below (cone of silence???). It's not an absolute thing, but certainly a step in the right direction.
Bob, N1KPR

http://www.geocities.com/amdxlog/index.html

1109. KN4LF Daily LF/MF/HF Radio Propagation Outlook #2005-015

Yahoo group: SkyWires
Date: 2005-04-14 17:25:20 UTC
From: Thomas Giella KN4LF
Topic: 1109 Message: 1109

The KN4LF Daily LF/MF/HF Radio Propagation Outlook #2005-015 has been published on 1700 UTC Thursday April 14, 2005 at http://www.kn4lf.com/kn4lf6.htm .

73 & GUD DX,
Thomas F. Giella, KN4LF
Retired Space & Atmospheric Weather Forecaster
Plant City, FL, USA
Grid Square EL87WX
Lat & Long 27 58 33.6397 N 82 09 52.4052 W
kn4lf@...

Contesting Propagation eReflector:
http://lists.contesting.com/mailman/listinfo/propagation
HC-DX Propagation Channel:
http://www.hard-core-dx.com/index.php?topic=Propagation
KN4LF Daily Solar Space Weather & Geomagnetic Data Archive:
http://www.kn4lf.com/kn4lf5.htm
KN4LF Daily LF/MF/HF Radio Propagation Outlook:
http://www.kn4lf.com/kn4lf6.htm
KN4LF HF/MF Radio Propagation Theory Notes: http://www.kn4lf.com/kn4lf8.htm
KN4LF Amateur & SWL Radio History: http://www.kn4lf.com/index.htm

--
No virus found in this outgoing message.
Checked by AVG Anti-Virus.
Version: 7.0.308 / Virus Database: 266.9.9 - Release Date: 4/13/2005

1110. Re: [SkyWires] Static bleed off

Yahoo group: SkyWires
Date: 2005-04-14 18:34:35 UTC
From: garth conover
Topic: 1097 Message: 1110

Keep in mind RF Ground and DC ground are not the same thing
----- Original Message -----
From: Scott Erwin<mailto:n4zou@...>
To: SkyWires@yahoogroups.com<mailto:SkyWires@yahoogroups.com>
Sent: Thursday, April 14, 2005 10:06 AM
Subject: Re: [SkyWires] Static bleed off

If you use ladder line and the 4:1 Balun in your
antenna tuner or even an external Balun and you have
the Balun properly hooked up to ground like you should
be doing anyway the static will be draining to the
earth ground constantly. A neon bulb from the link
coil to tuner ground will not effect the operation of
the balanced antenna tuner and will drain off the
static as well. As for feeding with coax, if your
station is properly grounded then your loop is also
grounded.
--- cloud_burner77 <kol_171@...m> wrote:
>
> Hello everyone, I would highly suggest with a loop
> antenna, to
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> in the feedline an arrestor to bleed off the static
> and protect from
> lightning. Static bleed off is not talked about much
> and can be very
> dangerous. I use a devise that can be found at
> www.arraysolutions.com
>
>
>
>

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http://info.mail.yahoo.com/mail_250<http://info.mail.yahoo.com/mail_250>

Yahoo! Groups Links

a.. To visit your group on the web, go to:
http://groups.yahoo.com/group/SkyWires/<http://groups.yahoo.com/group/SkyWires/>

b.. To unsubscribe from this group, send an email to:
SkyWires-unsubscribe@yahoogroups.com<mailto:SkyWires-unsubscribe@yahoogroups.com?subject=U

nsubscribe>

c.. Your use of Yahoo! Groups is subject to the Yahoo! Terms of Service<http://docs.yahoo.com/info/terms/>.

1111. Re: [SkyWires] Static bleed off

Yahoo group: SkyWires
Date: 2005-04-14 18:52:22 UTC
From: Mel Vance
Topic: 1097 Message: 1111

> In these references, and in my thoughts, this situation will not occur
> with a loop antenna since it is a DC short, or nearly so taking wire
> resistance into consideration. In the case of open ended, long wire,
> end fed, or what ever terminology is used to describe an antenna with
> a center radiating element which is a DC open to ground this static
> buildup would occur and be a problem. With a loop antenna this would
> not occur and would not be a problem, one of the reasons a loop is
> known to be a low noise design. Anyone think otherwise?
>
In a loop fed direct with coax by a grounded radio, yes.....the loop is at ground potential though the shield on the coax.

From what I have seen on lists, most are feeding their loops with bal feed line through a tuner. Many systems keep the entire feed line and loop isolated from ground. This can let a massive charge potential to develop. Steps must be taken to remove the charge to prevent damage to radios and other equipment.

There are bal tuners that maintain a ground on the feedline and antenna. Depending on how they do this, the system could still develop a dangerous charge potential.

I feel that you must look at your situation and your true risk. If you get lots of electrical
activity in your area, make sure to provide a path to ground and disconnect the feedline(s) when not in use. In areas with very little electrical activity, you may be able to get away with
just providing a bleed path. If in doubt, disconnect and ground your feedline.....best idea any
way.......there is no such thing as being too safe......

Mel
N7OKL

1112. Re: [SkyWires] Static bleed off

Yahoo group: SkyWires
Date: 2005-04-14 19:12:46 UTC
From: garth conover
Topic: 1097 Message: 1112

Again DC Chassis Ground is not and never will be the same Point out of the box ! ! ! !
Take your radio off line completely. Unplug it disconnect everything, just like when you rook it out of the box for the first time. Take an analog VOM ie Simpson 260. Switch to ohms R x 100 Position. Measure across Case/chassis Ground to the center conductor of your SO-239, BNC or the appropriate leg of your balanced feedline terminal. Now switch your leads, If you see DC short in both directions your radio did not work in the first place. Please post the results of this very simple test for all to see.
----- Original Message -----
From: Mel Vance<mailto:icra@...>
To: SkyWires@yahoogroups.com<mailto:SkyWires@yahoogroups.com>
Sent: Thursday, April 14, 2005 2:52 PM
Subject: Re: [SkyWires] Static bleed off

> In these references, and in my thoughts, this situation will not occur
> with a loop antenna since it is a DC short, or nearly so taking wire
> resistance into consideration. In the case of open ended, long wire,
> end fed, or what ever terminology is used to describe an antenna with
> a center radiating element which is a DC open to ground this static
> buildup would occur and be a problem. With a loop antenna this would
> not occur and would not be a problem, one of the reasons a loop is
> known to be a low noise design. Anyone think otherwise?
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just providing a bleed path. If in doubt, disconnect and ground your feedline.....best idea any
way.......there is no such thing as being too safe......

Mel
N7OKL

Yahoo! Groups Links

a.. To visit your group on the web, go to:
http://groups.yahoo.com/group/SkyWires/<http://groups.yahoo.com/group/SkyWires/>

b.. To unsubscribe from this group, send an email to:
SkyWires-unsubscribe@yahoogroups.com<mailto:SkyWires-unsubscribe@yahoogroups.com?subject=Unsubscribe>

c.. Your use of Yahoo! Groups is subject to the Yahoo! Terms of Service<http://docs.yahoo.com/info/terms/>.

1113. Re: [SkyWires] Static bleed off

Yahoo group: SkyWires
Date: 2005-04-14 20:27:02 UTC
From: garth conover
Topic: 1097 Message: 1113

Spark Plug Static ground info plus a whole lot more.

http://www.msnusers.com/N2BMP/Documents/Shortwave%20Info%20A%2B%2FUnderstanding%20Shortwave%20Radio%20Listening.doc<http://www.msnusers.com/N2BMP/Documents/Shortwave%20Info%20A+/Understanding%20Shortwave%20Radio%20Listening.doc>

1114. Re: [SkyWires] Static bleed off

Yahoo group: SkyWires
Date: 2005-04-14 21:22:23 UTC
From: Mel Vance
Topic: 1097 Message: 1114

> Again DC Chassis Ground is not and never will be the same Point out of
> the box ! ! ! ! Take your radio off line completely. Unplug it
> disconnect everything, just like when you rook it out of the box for
> the first time. Take an analog VOM ie Simpson 260. Switch to ohms R x
> 100 Position. Measure across Case/chassis Ground to the center
> conductor of your SO-239, BNC or the appropriate leg of your balanced
> feedline terminal. Now switch your leads, If you see DC short in both
> directions your radio did not work in the first place. Please post the
> results of this very simple test for all to see.

You are missing what is being said........

In the case above, you HAVE NO ANTENNA......Yes, with no antenna, there is no path to ground from the center of the connector......Check between the barrel of your radio connector and the radio ground connection....should be an almost perfect short, right? Well,
that ground connection goes to your ground rod.......or it should if you have your station set
up correctly.....

Now, look at a coax feed loop antenna....it is basically a short across the antenna connector.
If you check the same points you talked about above, WITH THE ANTENNA CONNECTED,
you should measure a resistive short.....the resistance of the wire used to make the loop, and the coax.

Baluns, tuners, ect may change this....example: a link tuner has no direct connection from the radio to the antenna...it uses coupling to pass the RF.

But, if you look at the antenna, there is a direct path between the antenna feed point to allow
a charge to pass....as long as this direct path is maintained to the radio ground....direct feed
with coax will do this, a balun or tuner may not.

Mel
N7OKL

1115. Re: Static bleed off

Yahoo group: SkyWires
Date: 2005-04-14 22:35:10 UTC
From: cloud_burner77
Topic: 1097 Message: 1115

-Hello folks, ALWAYS unhook the feed line before the storm, Some people are unhooked all the time except when there on the air. In some parts of the country on a nice day with a light wind, static can build up on the loop, and while the rigs recieving, with out the proper protection In Line, it can come through and blow your rig, if any one doesnt believe this, ask Art Bell, This will be all you will here from me about this,Theres a diffrence between static and lightning and lightning while operating will no double blow your rig nomatter what protection, unless you unhook,
SkyWires@yahoogroups.com, "Mel Vance" <icra@g...> wrote:
> > Again DC Chassis Ground is not and never will be the same Point out of
> > the box ! ! ! ! Take your radio off line completely. Unplug it
> > disconnect everything, just like when you rook it out of the box for
> > the first time. Take an analog VOM ie Simpson 260. Switch to ohms R x
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> > conductor of your SO-239, BNC or the appropriate leg of your balanced
> > feedline terminal. Now switch your leads, If you see DC short in both
> > directions your radio did not work in the first place. Please post the
> > results of this very simple test for all to see.
>
> You are missing what is being said........
>
> In the case above, you HAVE NO ANTENNA......Yes, with no antenna, there is no path to
> ground from the center of the connector......Check between the barrel of your radio
> connector and the radio ground connection....should be an almost perfect short, right? Well,
> that ground connection goes to your ground rod.......or it should if you have your station set
> up correctly.....
>
> Now, look at a coax feed loop antenna....it is basically a short across the antenna connector.
> If you check the same points you talked about above, WITH THE ANTENNA CONNECTED,
> you should measure a resistive short.....the resistance of the wire used to make the loop,
> and the coax.

>
> Baluns, tuners, ect may change this....example: a link tuner has
no direct connection from
> the radio to the antenna...it uses coupling to pass the RF.
>
> But, if you look at the antenna, there is a direct path between
the antenna feed point to allow
> a charge to pass....as long as this direct path is maintained to
the radio ground....direct feed
> with coax will do this, a balun or tuner may not.
>
> Mel
> N7OKL

1116. Re: [SkyWires] Static bleed off

Yahoo group: SkyWires
Date: 2005-04-14 21:53:26 UTC
From: chasm@texas.net
Topic: 1097 Message: 1116

On Thu, 14 Apr 2005 16:27:02 -0400, "garth conover" <EWRTSA@...> wrote:

>Spark Plug Static ground info plus a whole lot more.
>
>
>http://www.msnusers.com/N2BMP/Documents/Shortwave%20Info%20A%2B%2FUnderstanding%20Shortwave%20Radio%20Listening.doc<http://www.msnusers.com/N2BMP/Documents/Shortwave%20Info%20A+/Understanding%20Shortwave%20Radio%20Listening.doc>

nothing here. it downloads but my Word.xp.doc if you get what I am saying
here.... does not see the document.

can you paste it to the list?
or to me?
thanks
chas

...

1117. Re: [SkyWires] Static bleed off

Yahoo group: SkyWires
Date: 2005-04-15 07:43:55 UTC
From: garth conover
Topic: 1097 Message: 1117

All well and fine! but the !00,000 volts does not travel down the braid or go to the barrel on the chassis it travels down your wire or radiator then to the center conductor to your front end. One must bleed this off one way or the other. Spark plug, Commercial static arrestor or a hand built 100uh or so RF invisible static choke from your center conductor/radiator to ground. Then and only then will you have an true RF/Chassis ground for DC static buildup. . Tune in a station and then hook up the wire choke, you will see no change in your signal on rcv. or transmit if you do transmit. But then take the Simpson and measure the same points I mentioned, WoW as if by magic, Center Conductors to RF/Chassis Ground. DC short to RF and to Chassis ground but it still can hear with no degradation whatsoever of the received signal. If you see any downturn in signal strength you need more turns. Same theory is behind feeding 5K Vdc to the plate of a tube. Big wire choke between the tube and the transformer/Power supply etc. but the RF output from that same point of connection does not see the Power Supply, it will see only the loading circuits and then the antenna.
Solid state amps do the same thing. The Collector Voltage on a class C FM amp is the same Place the DC power goes to. Put thru a correctly valued coil/Choke the RF out of the transistor does not see the power supply.
Direct hits in my backyard so close I can smell the ozone and all my fronts ends still work, DX100, DX160, DX 200, 384, Panasonic's 4800 & 4900, Sat. 800, R75, Drake 2-B, AOR AR 8000. Sony Air-8, Sony ICF 80/RFQ80, Panasonic RF's 1600, 1700, 2900 Hitachi World Space KH-WS1 Plus about 25 different Scanners Starting from The Electra/Bearcat III to The Radio Shack 2006. Tranceivers to include Icom 251A, IC 726R. Yaesu 102, Swan 250C, Vertex VXA 700 Aviation HT. Last but not least 4 Motorola Maxtracs set up with P. Supplies as Base Radios on 146, 450 and 900 Mhz and they all have their ears on and are listened to and transmitted with virtually on a daily basis. So If I am missing something good for me. If something is missing me for the past 25 years, I am sure it is due to what I do to protect this motley assortment of radios and I will continue on my merry way for sure for another 25 years no doubt about it.
In conclusion: there are way too many variables in equipment and setups to say well your ok if you do this and this, if you are using this tuner with feedline type X to antenna type blah blah with Balun xyz at the feedpoint or in the tuner.
Always, Always, Always provide a direct RF/Chassis DC ground and you will never be in doubt or trouble, Period.

----- Original Message -----
From: Mel Vance<mailto:icra@...>
To: SkyWires@yahoogroups.com<mailto:SkyWires@yahoogroups.com>
Sent: Thursday, April 14, 2005 5:22 PM
Subject: Re: [SkyWires] Static bleed off

> Again DC Chassis Ground is not and never will be the same Point out of
> the box ! ! ! ! Take your radio off line completely. Unplug it
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> directions your radio did not work in the first place. Please post the
> results of this very simple test for all to see.

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In the case above, you HAVE NO ANTENNA......Yes, with no antenna, there is no path to ground from the center of the connector......Check between the barrel of your radio connector and the radio ground connection....should be an almost perfect short, right? Well,
that ground connection goes to your ground rod.......or it should if you have your station set
up correctly.....

Now, look at a coax feed loop antenna....it is basically a short across the antenna connector.
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Baluns, tuners, ect may change this....example: a link tuner has no direct connection from the radio to the antenna...it uses coupling to pass the RF.

But, if you look at the antenna, there is a direct path between the antenna feed point to allow
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with coax will do this, a balun or tuner may not.

Mel
N7OKL

Yahoo! Groups Links

a.. To visit your group on the web, go to:
http://groups.yahoo.com/group/SkyWires/<http://groups.yahoo.com/group/SkyWires/>

b.. To unsubscribe from this group, send an email to:
SkyWires-unsubscribe@yahoogroups.com<mailto:SkyWires-unsubscribe@yahoogroups.com?subject=Unsubscribe>

c.. Your use of Yahoo! Groups is subject to the Yahoo! Terms of
Service<http://docs.yahoo.com/info/terms/>.

1118. Re: [SkyWires] Static bleed off

Yahoo group: SkyWires
Date: 2005-04-15 18:05:29 UTC
From: Mel Vance
Topic: 1097 Message: 1118

> All well and fine! but the !00,000 volts does not travel down the
> braid or go to the barrel on the chassis it travels down your wire or
> radiator then to the center conductor to your front end. One must
> bleed this off one way or the other. Spark plug, Commercial static

To the other list users...sorry....very sorry....very, very sorry....this will be the last post on
this by me to the list.....enough is enough is enough is enough.....

To Mr. Conover.....A LOOP IS A SHORT TO GROUND, AS LONG AS YOU DO NOT
INTERRUPT THE PATH WITH A BALUN OR TUNER THAT WILL NOT PASS THE
CHARGE AND YOU HAVE YOUR RADIO PROPERLY GROUNDED!!!!!!!!!!!!!! A CHARGE
WILL AND DOES FLOW ON THE BRAID AND WILL FLOW TO GROUND!!!!!!!!

Pick up a copy of World Radio, April 2005 (year 34, issue 10) and look on page 10. An article by Steve Cerwin, WA5FRF on the Loop Skywire (he calls it The Long Wire Loop).

"The antenna has a feed point that presents a short at DC for elimination of static buildup and rain noise and also provides excellent rejection of out-of-band signals, giving very quiet
receive performance."

Elsewhere, he states....."The loop appears as a short at DC and has a low lightning profile compared to a tower, giving some measure of lightning protection. The combination of the DC short and harmonic resonant nature of the long wire loop minimizes out-of-band noise pickup, making the antenna very quit on receive."

Mel
N7OKL

1119. Article on the skywire

Yahoo group: SkyWires
Date: 2005-04-15 18:14:07 UTC
From: Mel Vance
Topic: 1119 Message: 1119

World Radio April,2005 has an article on the Loop Sky Wire (He calls it The Long Wire Loop) by Steve Cerwin, WA5FRF.

Some good info, some things I do not totally agree with, some things I do not totally understand........

Mel
N7OKL

1120. Re: [SkyWires] suggestions for small yard with restrictions

Yahoo group: SkyWires
Date: 2005-04-15 21:06:31 UTC
From: charles allison
Topic: 1120 Message: 1120

Hi all,

One of our friends has just had to move to Houston and wants to get on the air. They may have some deed restrictions on antennas and their back yard is perhaps 70 by 30 feet. We are trying to see what we can come up with in the way of a low NVIS type of antenna for 80m and 40m and hopefully higher bands too. He runs 100 Watts and would like to communicate with friends within about 250 miles. I would like to put it about 6 feet up around the fence and then onto the roof or edge of the roof to minimize visual impact in case of any restrictions.

I'm considering doing a loop, preferrable 1 wave length if possible, out of 14awg stranded insulated wire from the local Lowes. I have some new 450 ladder line available and have Dr. Ace's 4:1 home made balun instructions and construction materials. I also have a 4:1 commercially made low cost voltage balun. My construction approach requires making screw terminals for the wire/ladder line in case there are some trees there. If there are, we might be able to string the antenna up into them some - assuming they are more than 6 or 8 ft tall. It might have to be 1 wavelength at 40m and just tuning for 80 but 80 will be of most interest.

The basic layout will be to bring down the ladder line from the edge of the house to the balun and a ground stake. Soil there is gumbo muck - they are almost in the flood plane of an old muddy river, the Brazos. Windows are aluminum so I expect we will have to run coax through the wall rather than bringing in ladder line. Installation time will need to be minimized as I and his other friends will not be able to be there very long.

He will have to buy a tuner. probably a low cost mfj.

I don't know what the typical wiring speed of light is but I'm going to assume it will be about 92% or 95% resulting in a shortning of the loop rather than 1005/F. Normal operating frequency on 80 m is about 3855khz.

I would appreciate any suggestions on approaches or 'gotcha's to watch out for. I might be able to set up the antenna here and check it with an mfj 269 analyzer but there are problems in doing that here before I go.

best regards,

Charles
wb5izd

1121. Re: [SkyWires] suggestions for small yard with restrictions

Yahoo group: SkyWires
Date: 2005-04-15 21:35:34 UTC
From: Mark Bayern
Topic: 1120 Message: 1121

I'm certainly interested in what you manage to come up with. I currently am in a new gated community with _strict_ regulations. We bought into this place before I realized we'd be getting back into amateur radio. To make it more interesting I'm one of the members of the Architectural Control Committee so my property gets serious scrutiny by everyone who doesn't like the rules that we're enforcing.

I really need a low visual impact HF antenna. <smile>

Mark AD5SS

1122. Re: [SkyWires] suggestions for small yard with restrictions

Yahoo group: SkyWires
Date: 2005-04-15 22:40:19 UTC
From: Scott Erwin
Topic: 1120 Message: 1122

A full size 40-meter loop requires 140 feet of wire
and would easily fit in your back yard. As for wire, I
would get a small roll of aluminum electric fence wire
and enough of the insulators to install the fence wire
to the top of the fence. I am assuming it is a wood
panel privacy fence. Put the wire on top in plan
sight. If nosy neighbors ask about it just tell them
its part of your burglar alarm system. They will
believe you in an instant, as there are systems that
include wire fence sensors as a part of the burglar
alarm system. You can get away with running that fence
wire around the front of the house as well if you run
it around the roofline. Just tell it also detects a
ladder placed on the side of the house. In that case
you may be able to install a full size 80-meter loop
with 272 feet of wire. The reason to use the electric
fence wire is that it's the same stuff used on burglar
alarm systems guarding a fence. If you can't get the
loop out of the back yard place a switch opposite the
feed point of the loop. Opening this switch will allow
you to load the 40-meter loop up on 80-meters.
--- charles allison <charles@...> wrote:
> Hi all,
>
> One of our friends has just had to move to Houston
> and wants to get on the
> air. They may have some deed restrictions on
> antennas and their back yard
> is perhaps 70 by 30 feet. We are trying to see what
> we can come up with in
> the way of a low NVIS type of antenna for 80m and
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> in case of any restrictions.
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> wavelength at 40m and just
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> almost in the flood plane of an old muddy river, the
> Brazos. Windows are
> aluminum so I expect we will have to run coax
> through the wall rather than
> bringing in ladder line. Installation time will
> need to be minimized as I
> and his other friends will not be able to be there
> very long.
>
> He will have to buy a tuner. probably a low cost
> mfj.
>
> I don't know what the typical wiring speed of light
> is but I'm going to
> assume it will be about 92% or 95% resulting in a
> shortning of the loop
> rather than 1005/F. Normal operating frequency on
> 80 m is about 3855khz.
>
> I would appreciate any suggestions on approaches or
> 'gotcha's to watch out
> for. I might be able to set up the antenna here and
> check it with an mfj
> 269 analyzer but there are problems in doing that
> here before I go.
>
>
> best regards,
>
> Charles
> wb5izd
>
>

>
>
>
>
>

_____
Do you Yahoo!?
Yahoo! Mail - Find what you need with new enhanced search.
http://info.mail.yahoo.com/mail_250

1123. Re: [SkyWires] suggestions for small yard with restrictions

Yahoo group: SkyWires
Date: 2005-04-15 22:50:41 UTC
From: Jim Dunstan
Topic: 1120 Message: 1123

At 04:35 PM 04/15/2005 -0500, you wrote:
>I'm certainly interested in what you manage to come up with. I
>currently am in a new gated community with _strict_ regulations. We
>bought into this place before I realized we'd be getting back into
>amateur radio. To make it more interesting I'm one of the members of
>the Architectural Control Committee so my property gets serious
>scrutiny by everyone who doesn't like the rules that we're enforcing.
>
>I really need a low visual impact HF antenna. <smile>
>
>Mark AD5SS

Hi Mark,

If your property is a house or a side-by-side type unit that has a roof that provides some attic space you might want to try a 'hi-capacity' antenna. I am going to try building one this summer in the attic of my garage; more out of curiosity rather than necessity. The antenna has some very interesting characteristics:

- Small ... 6'x6' base and 3' tall for 20M
- High efficiency!
- Very little electromagnetic interaction with metal objects (minimal RFI)

The Gap Antenna Co. markets one (20-17-15-12-10) called 'SuperC' and has a lot of info on it and the theory behind the design on its Internet Site. It sounds like the kind of antenna that provides both a low visual and RFI profile. Your AC Committee certainly wouldn't see anything ... hi hi.

Jim Dunstan, VE3CI
Thunder Bay, ON

1124. Re: suggestions for small yard with restrictions

Yahoo group: SkyWires
Date: 2005-04-20 11:06:46 UTC
From: bambazonke01
Topic: 1120 Message: 1124

--- In SkyWires@yahoogroups.com, Mark Bayern <mbayern@g...> wrote:
> Why don't you try the DCTL loop for 40 m.Size is about 48 inches square. Mine works gangbusters from INSIDE the house with only 10 watts SSB. See my construction details in the pictures section.
Jim VE3DDY

1125. Re: [SkyWires] Re: suggestions for small yard with restrictions

Yahoo group: SkyWires
Date: 2005-04-20 12:32:46 UTC
From: Mark Bayern
Topic: 1120 Message: 1125

?? Misquote! I did not recommend the DCTL -- someone else (Jim?
EE3DDY) recommended it to me.

Mark

On 4/20/05, bambazonke01 <bambazonke@...m> wrote:
>
>
> --- In SkyWires@yahoogroups.com, Mark Bayern <mbayern@g...> wrote:
> > Why don't you try the DCTL loop for 40 m.Size is about 48 inches
> square. Mine works gangbusters from INSIDE the house with only 10
> watts SSB. See my construction details in the pictures section.
> Jim VE3DDY
>

1126. KN4LF Daily LF/MF/HF Radio Propagation Outlook #2005-016

Yahoo group: SkyWires
Date: 2005-04-21 23:44:22 UTC
From: Thomas Giella KN4LF
Topic: 1126 Message: 1126

The KN4LF Daily LF/MF/HF Radio Propagation Outlook #2005-016 has been published on 2200 UTC Thursday April 21, 2005 at http://www.kn4lf.com/kn4lf6.htm .

73 & GUD DX,
Thomas F. Giella, KN4LF
Retired Space & Atmospheric Weather Forecaster
Plant City, FL, USA
Grid Square EL87WX
Lat & Long 27 58 33.6397 N 82 09 52.4052 W
kn4lf@...

Contesting Propagation eReflector:
http://lists.contesting.com/mailman/listinfo/propagation
HC-DX Propagation Channel:
http://www.hard-core-dx.com/index.php?topic=Propagation
KN4LF Daily Solar Space Weather & Geomagnetic Data Archive:
http://www.kn4lf.com/kn4lf5.htm
KN4LF Daily LF/MF/HF Radio Propagation Outlook:
http://www.kn4lf.com/kn4lf6.htm
KN4LF HF/MF Radio Propagation Theory Notes: http://www.kn4lf.com/kn4lf8.htm
KN4LF Amateur & SWL Radio History: http://www.kn4lf.com/index.htm

--
No virus found in this outgoing message.
Checked by AVG Anti-Virus.
Version: 7.0.308 / Virus Database: 266.10.1 - Release Date: 4/20/2005

1127. Antenna & Transmatch Manual x NØEW

Yahoo group: SkyWires
Date: 2005-04-22 19:23:59 UTC
From: Garth M.Conover
Topic: 1127 Message: 1127

Found this link recently posted @ the
<HamRadioHelpGroup@yahoogroups.com>

It sure is a long read but worth the time to go through:

<http://n0ew.radiomonkey.org/book/k0s_field_manual.pdf>

1129. Re: incredibly low rate

Yahoo group: SkyWires
Date: 2005-04-29 21:39:32 UTC
From: n8pu
Topic: 1129 Message: 1129

pvxun332ljlat Has been banned, and original will/is deleated.
Dave

--- In SkyWires@yahoogroups.com, "pvxun332ljlat" <pvxun332ljlat@y...>
wrote:
> I received the best rate possible using

1130. Re: [SkyWires] how much windload??

Yahoo group: SkyWires
Date: 2005-04-30 16:53:13 UTC
From: chasm@texas.net
Topic: 1089 Message: 1130

On Sat, 09 Apr 2005 23:28:44 -0500, chasm@... wrote:

>
>does anyone know how much windload the ALPHA DELTA DX-CC dipole presents???
>am wondering just how strong my end poles/masts/dacron ties need to be esp down
>here in Houston.

answer is 1.5sqft.

thanks to all
K5DAM

...

1131. source of pulleys

Yahoo group: SkyWires
Date: 2005-05-02 18:49:12 UTC
From: Dave
Topic: 779 Message: 1131

Traveling to the US in a few weeks and wonder if anyone can tell me the name/location of a home building supply/hardware outlet where I can pick up some decent quality 2/2.5 inch plastic/nylon pulleys for my loop. I'll be in the northeast area as far south as Maryland and as far west as the NJ/PA border.

Thanks,
Dave
VE1VQ

[This E-mail scanned for viruses by Declude Anti-Virus]

1132. Re: [SkyWires] source of pulleys

Yahoo group: SkyWires
Date: 2005-05-02 18:59:31 UTC
From: Sarge
Topic: 779 Message: 1132

Home Depot, Lowes, Ace harware, to name a few.

1133. Re: [SkyWires] source of pulleys

Yahoo group: SkyWires
Date: 2005-05-02 19:36:05 UTC
From: Lake Hodges Radio
Topic: 779 Message: 1133

Some of the best antenna pulleys are at www.radioworks.com

Marine rated, resistant to corrosion.

Kurt, N6MD

1134. Re: [SkyWires] source of pulleys

Yahoo group: SkyWires
Date: 2005-05-03 13:24:15 UTC
From: Dave
Topic: 779 Message: 1134

Sarge wrote:
> Home Depot, Lowes, Ace harware, to name a few.

I've looked in HD but not the others. I give them a try.
Thanks.

[This E-mail scanned for viruses by Declude Anti-Virus]

1135. Re: [SkyWires] source of pulleys

Yahoo group: SkyWires
Date: 2005-05-03 13:28:35 UTC
From: The Smokingman
Topic: 779 Message: 1135

I would think that a boating/sailing supply place would have them also.
----- Original Message -----
From: Dave <ve1vq@...>
To: SkyWires@yahoogroups.com
Subject: Re: [SkyWires] source of pulleys
Date: Tue, 03 May 2005 10:24:15 -0300

>
> Sarge wrote:
> > Home Depot, Lowes, Ace harware, to name a few.
>
> I've looked in HD but not the others. I give them a try.
> Thanks.
>
> ---
> [This E-mail scanned for viruses by Declude Anti-Virus]
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> Yahoo! Groups Links
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1136. Re: [SkyWires] source of pulleys

Yahoo group: SkyWires
Date: 2005-05-03 13:42:20 UTC
From: desmoface@aol.com
Topic: 779 Message: 1136

Thats where I got mine.

-----Original Message-----
From: The Smokingman <smokingman@...>
To: SkyWires@yahoogroups.com
Sent: Tue, 03 May 2005 08:28:35 -0500
Subject: Re: [SkyWires] source of pulleys

I would think that a boating/sailing supply place would have them also.
----- Original Message -----
From: Dave <ve1vq@...>
To: SkyWires@yahoogroups.com
Subject: Re: [SkyWires] source of pulleys
Date: Tue, 03 May 2005 10:24:15 -0300

1137. Re: [SkyWires] source of pulleys

Yahoo group: SkyWires
Date: 2005-05-03 13:52:53 UTC
From: Dave
Topic: 779 Message: 1137

The Smokingman wrote:
> I would think that a boating/sailing supply place would have them also.

We have a lot of marine/fishing supply places here in Nova Scotia but all of the pulleys I've seen are larger and much heavier than what I need for the loop. Usually made of stainless steel (hence the weight).

Wanted a half decent one made of nylon or some such material. Saw some made by a company in CT some years back but can't remember the mfg's name or where I saw them. Even spoke with the manufacturer about a Canadian source (nothing at the time). Tried a GOOGLE search but nothing found.

This will give me a excuse to stop at every home supply/hardware store that I see along the way.

Dave
VE1VQ

[This E-mail scanned for viruses by Declude Anti-Virus]

1139. Re: [SkyWires] Important Information

Yahoo group: SkyWires
Date: 2005-05-03 22:30:05 UTC
From: David Shrum
Topic: 1139 Message: 1139

Original message deleted and gixpvfdx@... is banned.
Dave N8PU

gixpvfdx wrote:

1140. Re: Important Information

Yahoo group: SkyWires
Date: 2005-05-04 12:20:46 UTC
From: vagt6
Topic: 1139 Message: 1140

Thanks for the diligence, Dave.

Cheers for good moderators!

1141. OT-Kenwood TS-900 value

Yahoo group: SkyWires
Date: 2005-05-15 19:42:47 UTC
From: Mel Vance
Topic: 1141 Message: 1141

Off topic......

Have a Kenwoo TS-900 w/ matching VFO and power supply/speaker.....

Only one I have seen sold was on E-bay for $900 with out the VFO. Know E-bay is almost always twice the real value or more....

What would be a true value on this rig? Have a dealer offering to buy, but neither of us know the true current value. I think the offer is low, but he will no move on the price with out
a better idea.

Due to weight, cost of shipping is rather high, and I have not found a ham willing to buy at
even the price the dealer is offering.

Any help?

Reply direct....no need to clutter the list for an off topic discussion.....

Mel
N7OKL

1142. Feeder as vertical radiator

Yahoo group: SkyWires
Date: 2005-05-18 17:02:30 UTC
From: subriaus
Topic: 1142 Message: 1142

Hi
Just joined the group and pleased to see so many using the loop.

I am using a 80M skyloop abt 20Mts up feeding it with 450 Ohm to a balanced Z-match and it´s a terrific antenna.

On lower bands it´s more of a NVIS antenna although 40M DX is doable. Read in the Antenna handbook thats it´s possible to use the feeder as a vertical radiator on the lower bands with the loop as a capacity hat.
I have tried with some ground radials as it looks good, but question is this.I am able to get a good load on lower bands

The feeder enters the shack via a window to the turner. The feeder acting as a vertical radiator has a power of some 400W and this does not sound healthy at all, sitting a few feet away from it.

So how do I come up with a solution to run the feeder to a remote turner that can tune both balanced (for the higher bands) and a "GP" style on the lower bands.Was thinking of running coax from the remote turner to the shack.
Or is it safe to use the feeder into shack.
Anyone tried this ?

Thanks
Frank
SM5QU

1143. Re: [SkyWires] Feeder as vertical radiator

Yahoo group: SkyWires
Date: 2005-05-18 17:59:16 UTC
From: Jim Dunstan
Topic: 1142 Message: 1143

At 05:02 PM 5/18/2005 +0000, you wrote:
>Hi
>Just joined the group and pleased to see so many using the loop.
>
>I am using a 80M skyloop abt 20Mts up feeding it with 450 Ohm to a
>balanced Z-match and it´s a terrific antenna.
>
>On lower bands it´s more of a NVIS antenna although 40M DX is doable.
>Read in the Antenna handbook thats it´s possible to use the feeder
>as a vertical radiator on the lower bands with the loop as a capacity
>hat.
>I have tried with some ground radials as it looks good, but question is
>this.I am able to get a good load on lower bands
>
>The feeder enters the shack via a window to the turner. The feeder
>acting as a vertical radiator has a power of some 400W and this
>does not sound healthy at all, sitting a few feet away from it.
>
>So how do I come up with a solution to run the feeder to a remote
>turner that can tune both balanced (for the higher bands) and a "GP"
>style on the lower bands.Was thinking of running coax from the remote
>turner to the shack.
>Or is it safe to use the feeder into shack.
>Anyone tried this ?
>
>Thanks
>Frank
>SM5QU

Hi Frank,

If you feed the loop as a balanced antenna with open wire feed line there will be negligible radiation from the feed line. The only problem you will have is simply mechanical in getting it through the wall or window to the operating position and your z-match. The second consideration with this installation will be grounding for safety in case of electrical storms etc. RF in the shack will not be a major problem ... even with 400W output.

However, if you decide to use the antenna as a vertical fed against ground .... eg. tie the feed line connectors in parallel and treat the whole antenna as a top loaded vertical you will indeed have RF in the shack area. This will work well with 100W. ..... however running 400 watts my liven things up in the shack hi hi.

I used a similar system many hears ago. I had an inverted V antenna on the roof of a second story house. The feed line was 300 TV twin lead going

down to the shack in the basement. I used the antenna in the normal balanced arrangement for all bands except 160M. On 160M I feed the antenna as a vertical .... 60' of feed line to a 100' inv erted V on top. I used a water pipe in the basement as ground. With this arrangement I participated in a morning round table on 160M with no problem ... running 100W AM.

Keep the tuner as close as possible to the entry to the shack and provide the best possible ground system. Whether you can get away with 400W output is something else.

Good luck

Jim Dunstan
Thunder Bay, ON

1144. Help with Delta Skywire

Yahoo group: SkyWires
Date: 2005-05-20 07:50:58 UTC
From: verbli
Topic: 1144 Message: 1144

I am trying different antennas at my QTH and has arrived at the Skywire.

I would like the antenna to cover 80m and up. I have only room for
abt. 60m in a delta shape. (3x20m) The antenna will be installed at
10-11m above ground at one corner, but the ground slopes a little so
at the two other corners the hight is 7m above ground. The feed is
with homebrew ladder line at abt 550ohm or standard 450ohm line. Tuned
in the shack. The three supports are already there, but I may be able
to widen/extend it some by putting up another support

My questions are:

Would I be able to tune this antenna without to much feedline loss at
80m? What loss figures should I expect?

Will it have less noise pickup than a doublet?

How will it perform compared to a doublet (abt G5RV size)?

Thanks in advance,

Verner
LA5YNA

1145. Re: [SkyWires] Help with Delta Skywire

Yahoo group: SkyWires
Date: 2005-05-20 17:38:12 UTC
From: JimMcSkate@aol.com
Topic: 1144 Message: 1145

Verner,
The preferred skywire shape is one that encloses the most area: a perfect circle is best, but a horizontal delta should perform OK for you. I started with a delta for 40m, but then figured out how to add a fourth support. Actually, I started with an end-fed Zepp, then a doublet, then a Delta, then the four-corner Skywire.

I did not notice a significant improvement on the fundamental band when I added the fourth support to the delta loop, but I noticed the performance on the upper bands was much improved. Since it's a loop, the noise pickup is much lower than a doublet. I use my 40 meter loop on 160 through 10 meters - it's the best antenna I've every played with.

One of the math professors on this list may be able to help with the loss calculations - I am more of a cut-and-try engineer. I know that balanced open wire/twin lead is lower loss than coax, and my setup (300 ohm twinlead) works well.

73,

Jim McAward
WA2LGN
Blue Point, NY
-----Original Message-----
From: verbli <verbli@...>
To: SkyWires@yahoogroups.com
Sent: Fri, 20 May 2005 07:50:58 -0000
Subject: [SkyWires] Help with Delta Skywire

I am trying different antennas at my QTH and has arrived at the Skywire.

I would like the antenna to cover 80m and up. I have only room for
abt. 60m in a delta shape. (3x20m) The antenna will be installed at
10-11m above ground at one corner, but the ground slopes a little so
at the two other corners the hight is 7m above ground. The feed is
with homebrew ladder line at abt 550ohm or standard 450ohm line. Tuned
in the shack. The three supports are already there, but I may be able
to widen/extend it some by putting up another support

My questions are:

Would I be able to tune this antenna without to much feedline loss at
80m? What loss figures should I expect?

Will it have less noise pickup than a doublet?

How will it perform compared to a doublet (abt G5RV size)?

Thanks in advance,

Verner
LA5YNA

Yahoo! Groups Links

1146. RE: [SkyWires] Help with Delta Skywire

Yahoo group: SkyWires
Date: 2005-05-21 12:04:05 UTC
From: Greg Walls
Topic: 1144 Message: 1146

I have a question regarding the delta: Were I to install one the sides would not be equal because of property constraints. How will this affect the performance?

73

Greg

W4GHW

From: SkyWires@yahoogroups.com [mailto:SkyWires@yahoogroups.com] On Behalf Of JimMcSkate@...
Sent: Friday, May 20, 2005 1:38 PM
To: SkyWires@yahoogroups.com
Subject: Re: [SkyWires] Help with Delta Skywire

Verner,

The preferred skywire shape is one that encloses the most area: a perfect circle is best, but a horizontal delta should perform OK for you. I started with a delta for 40m, but then figured out how to add a fourth support. Actually, I started with an end-fed Zepp, then a doublet, then a Delta, then the four-corner Skywire.

I did not notice a significant improvement on the fundamental band when I added the fourth support to the delta loop, but I noticed the performance on the upper bands was much improved. Since it's a loop, the noise pickup is much lower than a doublet. I use my 40 meter loop on 160 through 10 meters - it's the best antenna I've every played with.

One of the math professors on this list may be able to help with the loss calculations - I am more of a cut-and-try engineer. I know that balanced open wire/twin lead is lower loss than coax, and my setup (300 ohm twinlead) works well.

73,

Jim McAward

WA2LGN

Blue Point, NY
-----Original Message-----
From: verbli <verbli@...>
To: SkyWires@yahoogroups.com
Sent: Fri, 20 May 2005 07:50:58 -0000

Subject: [SkyWires] Help with Delta Skywire

I am trying different antennas at my QTH and has arrived at the Skywire.

I would like the antenna to cover 80m and up. I have only room for

abt. 60m in a delta shape. (3x20m) The antenna will be installed at

10-11m above ground at one corner, but the ground slopes a little so

at the two other corners the hight is 7m above ground. The feed is

with homebrew ladder line at abt 550ohm or standard 450ohm line. Tuned

in the shack. The three supports are already there, but I may be able

to widen/extend it some by putting up another support

My questions are:

Would I be able to tune this antenna without to much feedline loss at

80m? What loss figures should I expect?

Will it have less noise pickup than a doublet?

How will it perform compared to a doublet (abt G5RV size)?

Thanks in advance,

Verner

LA5YNA

Yahoo! Groups Links

http://groups.yahoo.com/group/SkyWires/

SkyWires-unsubscribe@yahoogroups.com
<mailto:SkyWires-unsubscribe%40yahoogroups.com>

http://docs.yahoo.com/info/terms/

Yahoo! Groups Links

* To visit your group on the web, go to:
http://groups.yahoo.com/group/SkyWires/

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<http://docs.yahoo.com/info/terms/> Service.

1147. Re: Help with Delta Skywire

Yahoo group: SkyWires
Date: 2005-05-21 17:19:39 UTC
From: verbli
Topic: 1144 Message: 1147

--- In SkyWires@yahoogroups.com, JimMcSkate@a... wrote:
>the noise pickup is much lower than a doublet. I use my 40 meter loop
>on 160 through 10 meters - it's the best antenna I've every played >with.

Jim, thanks, I put up the delta today.

Have not had the chance to QSO yet, but it sure sounds promising on
receive. My noise is down by abt. one S point compared to my doublet.

Will get back with more of my findings later.

Jim, do you just tune it up on the lower bands or do you feed it as a
vertical?

Thanks,

Verner
LA5YNA

1148. Re: [SkyWires] Re: Help with Delta Skywire

Yahoo group: SkyWires
Date: 2005-05-22 04:13:17 UTC
From: JimMcSkate@aol.com
Topic: 1144 Message: 1148

Verner,

I tune the antenna on the lower bands by driving ONE LEG of the feedline and leaving the other leg open. I drive this configuration against a good ground. I can never be sure of how much power is radiated from the feedline, and how much from the loop itself. My tuner easily matches this to unity on 80m, and to about 3:1 on 160m... I run a 29 year old Kenwood with 6146B tube finals, which has no trouble with higher SWRs.

The "standard" way to use a Skywire Loop on the lower bands is to short the feedline legs together and drive the antenna like an inverted L vertical. In my experience, this put a LOT of RF in the shack, into the house telephones, into the baby monitor, into the toaster, etc. Driving one side of the feedline somehow balances the equation and puts the RF into the air instead of into various household electronic devices.

Glad you got your Loop up there... I hope you have great luck with it!

73,

Jim
WA2LGN

In a message dated 5/21/2005 1:20:56 PM Eastern Standard Time,
verbli@... writes:

>
> Jim, do you just tune it up on the lower bands or do you feed it as a
> vertical?
>
> Thanks,
>

1149. Re: [SkyWires] Help with Delta Skywire

Yahoo group: SkyWires
Date: 2005-05-22 04:29:25 UTC
From: JimMcSkate@aol.com
Topic: 1144 Message: 1149

Greg,
Just follow the "largest enclosed area" rule and you should be OK - if you are fortunate to be able to add additional support(s) to round out your delta it will help. The supports don't need to be much if you build lightly - a piece of monofilament fishing line tossed over a treetop can serve to pull your delta into more of a loop. A funny-shaped loop that encloses the most area you can get will work just fine. Of course, funny shapes have radiation patterns that are harder to model using ezNEC on your computer, but last I checked, the ionosphere doesn't use ezNEC.

By the way, I am using cheap-o hookup wire - 18 or 20 gauge stranded insulated wire, Radio Shack 300 ohm twinlead, and it's survived two nasty New York winters and gets out better than the tribander I once swung.

I am very impressed with this antenna design, in no small part because it's a delightfully inexact science. Oh, and because it's stealthy. And also because it really works.

73, & hope this helps...
Jim
WA2LGN

In a message dated 5/21/2005 8:11:42 AM Eastern Standard Time,
gwalls@... writes:

> I have a question regarding the delta: Were I to install one the sides
> would not be equal because of property constraints. How will this affect the
> performance?
>
>
>
> 73
>
> Greg
>
> W4GHW
>
>

1150. Re: Help with Delta Skywire

Yahoo group: SkyWires
Date: 2005-05-24 01:57:38 UTC
From: Tracy
Topic: 1144 Message: 1150

> A funny-shaped loop that encloses the most area you
> can get will work just fine.

I had a 160m loop that 'pinched' in the center, at one point only 45 feet apart. Must have looked like a 'bow tie' from the sky. Worked gangbusters on 160, and was noticably directional on the lower bands.

Great group, thanks for making it open. I've always loved loops, and I just recently put up another one for 20m. It's a monobander, fed with coax into a 2:1 commercial balun. It's triangular, fed at the apex about 35 feet with the bottom section horizontal at about 15 feet. The antenna actually acts as two of the guy wires for a push-up pole.

The match is unbelievable and I can hear things I never knew were out there. When I first hooked it up, I thought something was wrong because there was no noise level. I turned up the volume to hear the 'static.' Then when I tuned a little and came across a signal, it almost blew my ears out.

I would encourage anyone to put up a skywire loop or loop of any kind!
Tracy N4LGH

1151. Re: Help with Delta Skywire

Yahoo group: SkyWires
Date: 2005-05-24 10:06:41 UTC
From: verbli
Topic: 1144 Message: 1151

--- In SkyWires@yahoogroups.com, JimMcSkate@a... wrote:
> I tune the antenna on the lower bands by driving ONE LEG of the
>feedline and leaving the other leg open. I drive this configuration
>against a good ground.

Jim,

What do you do with the other feedline end? Is it just disconnected at the tuner in the shack?

Have had several QSO's on my loop now. It seems compareable to a doublet on the bands I have tried, or maybe slightly down. BUT it is quieter so currently I feel it is more useable for me than the doublet. I'll keep it up a while and see. Not had any qso's on 80m yet. But local (North Europe) incoming signals are good. But how (if)I get out with only 3x20m on 80m, I dont know yet.

73
Verner, LA5YNA

1152. Re: [SkyWires] Re: Help with Delta Skywire

Yahoo group: SkyWires
Date: 2005-05-24 19:07:15 UTC
From: JimMcSkate@aol.com
Topic: 1144 Message: 1152

Verner,
I connect one leg of the feedline to the tuner, and leave the other leg unconnected. The tuner and transmitter are well grounded, using two 2 meter grounding rods plus a cold water pipe. I have tried to short both feedline legs together, which is the common way of driving the feedline as a vertical with the loop as a capacitance hat, but I had little success with this configuration... there was a lot of RF in the shack (received burns off the knobs of my rig) plus many electronic devices in my house (phones, television, etc.) were affected.

For a diagram, see www.qsl.net/wa2lgn. (I realize I need to update the page... I am still bald but my children are a year older now!)

73,
Jim
WA2LGN

-----Original Message-----
From: verbli <verbli@...>
To: SkyWires@yahoogroups.com
Sent: Tue, 24 May 2005 10:06:41 -0000
Subject: [SkyWires] Re: Help with Delta Skywire

--- In SkyWires@yahoogroups.com, JimMcSkate@a... wrote:
> I tune the antenna on the lower bands by driving ONE LEG of the
>feedline and leaving the other leg open. I drive this configuration
>against a good ground.

Jim,

What do you do with the other feedline end? Is it just disconnected at the tuner in the shack?

Have had several QSO's on my loop now. It seems compareable to a doublet on the bands I have tried, or maybe slightly down. BUT it is quieter so currently I feel it is more useable for me than the doublet. I'll keep it up a while and see. Not had any qso's on 80m yet. But local (North Europe) incoming signals are good. But how (if)I get out with only 3x20m on 80m, I dont know yet.

73
Verner, LA5YNA

Yahoo! Groups Links

1153. Re: [SkyWires] Re: Help with Delta Skywire

Yahoo group: SkyWires
Date: 2005-05-24 20:34:32 UTC
From: KD5NWA
Topic: 1144 Message: 1153

Earth ground is a electrical safety ground, it make a very poor
counterpoise. The counterpoise should be hooked up at the antenna feed
point, a choke balun will also help keep the RF from coming down the
outside of the coax and into the shack.

At 02:07 PM 5/24/2005, you wrote:
>Verner,
>I connect one leg of the feedline to the tuner, and leave the other leg
>unconnected. The tuner and transmitter are well grounded, using two 2
>meter grounding rods plus a cold water pipe. I have tried to short both
>feedline legs together, which is the common way of driving the feedline as
>a vertical with the loop as a capacitance hat, but I had little success
>with this configuration... there was a lot of RF in the shack (received
>burns off the knobs of my rig) plus many electronic devices in my house
>(phones, television, etc.) were affected.
>
>For a diagram, see <http://www.qsl.net/wa2lgn>www.qsl.net/wa2lgn. (I
>realize I need to update the page... I am still bald but my children are a
>year older now!)
>
>73,
>Jim
>WA2LGN
>
>-----Original Message-----
>From: verbli <verbli@...>
>To: SkyWires@yahoogroups.com
>Sent: Tue, 24 May 2005 10:06:41 -0000
>Subject: [SkyWires] Re: Help with Delta Skywire
>
>
>--- In <mailto:SkyWires%40yahoogroups.com>SkyWires@yahoogroups.com,
>JimMcSkate@a... wrote:
> > I tune the antenna on the lower bands by driving ONE LEG of the
> >feedline and leaving the other leg open. I drive this configuration
> >against a good ground.
>
>Jim,
>
>What do you do with the other feedline end? Is it just disconnected at
>the tuner in the shack?
>
>Have had several QSO's on my loop now. It seems compareable to a
>doublet on the bands I have tried, or maybe slightly down. BUT it is
>quieter so currently I feel it is more useable for me than the

>doublet. I'll keep it up a while and see. Not had any qso's on 80m
>yet. But local (North Europe) incoming signals are good. But how (if)I
>get out with only 3x20m on 80m, I dont know yet.
>
>
>73
>Verner, LA5YNA
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>Yahoo! Groups Links
>
><http://groups.yahoo.com/group/SkyWires/>http://groups.yahoo.com/group/SkyWires/
>
><mailto:SkyWires-unsubscribe%40yahoogroups.com>SkyWires-unsubscribe@yahoogroups.com
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>Yahoo! Groups Links
> * To visit your group on the web, go to:
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> <http://groups.yahoo.com/group/SkyWires/>http://groups.yahoo.com/group/SkyWires/
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Cecil Bayona
KD5NWA
www.qrpradio.com

'Never argue with an idiot. They drag you down to their level then beat you
with experience.'

1154. Re: [SkyWires] Re: Help with Delta Skywire

Yahoo group: SkyWires
Date: 2005-05-24 23:13:35 UTC
From: JimMcSkate@aol.com
Topic: 1144 Message: 1154

What would the physical manifestation be of a counterpoise in a basement station? What I seem to make do with is the cold water pipe and ground rods...
Thanks,
Jim
WA2LGN

In a message dated 5/24/2005 4:38:15 PM Eastern Standard Time, KD5NWA@... writes:

> Earth ground is a electrical safety ground, it make a very poor
> counterpoise.

1155. Re: Help with Delta Skywire

Yahoo group: SkyWires
Date: 2005-05-25 10:08:17 UTC
From: verbli
Topic: 1144 Message: 1155

--- In SkyWires@yahoogroups.com, JimMcSkate@a... wrote:
> I connect one leg of the feedline to the tuner, and leave the other
>leg unconnected. The tuner and transmitter are well grounded, using

Jim,

Yes, I get the picture now. Had a look at your web site too.

Also I have tried the 3x20m delta skywire on 80m. It goes out well enough. I was well over S9 last night on a local (300km) qso (100w). That was the same as the guy I worked, he used a dipole. I was worried that I would loose to much in the feedline due to SWR. But it seems to be useable without running it as a vertical or random wire.

So I'll stick with it for a while.

Now I'll have to find out where to put the feed point for maximum coverage to my prefered areas (DX). Also I may put up another support to open up the loop a bit more and possibly add a few meter more wire.

Thanks,

Verner
LA5YNA

1156. Re: [SkyWires] Re: Help with Delta Skywire

Yahoo group: SkyWires
Date: 2005-05-25 22:05:06 UTC
From: Jim Dunstan
Topic: 1144 Message: 1156

At 07:13 PM 5/24/2005 -0400, you wrote:
>What would the physical manifestation be of a counterpoise in a basement
>station? What I seem to make do with is the cold water pipe and ground rods...
>Thanks,
>Jim
>WA2LGN
>
>In a message dated 5/24/2005 4:38:15 PM Eastern Standard Time,
>KD5NWA@... writes:
>
>>Earth ground is a electrical safety ground, it make a very poor
>>counterpoise.

In the end it is whatever works. Years ago I had a basement station ....
in fact I have had several hi hi .... In this particular station my
operating position was in the basement. I had a 30' pop-up TV mast mounted
at the peak of the 2 story house. The mast supported the center of a 100'
inverted Vee fed with 300 ohm TV twinlead. The twinlead came down the side
of the house to the basement window. I fed the whole thing as a vertical
on 160M using the hot water heating pipes as the ground/ground plane.

The system worked like gang busters with 100W AM. Checked in to a farmers
160M early morning net (after milking the cows I guess).

Jim Dunstan
Thunder Bay, ON

1157. Re: [SkyWires] an initial success story

Yahoo group: SkyWires
Date: 2005-05-26 12:22:36 UTC
From: charles allison
Topic: 1157 Message: 1157

Hi all,

About a month ago I asked for suggestions for doing a stealth loop for a friend living on a small lot in an antenna restricted neighborhood. I was intrigued by the suggestion to use electric fence wire and standoffs so as to be able to claim it was part of a fence or security system sensor as well as to be invisible from the street.

We ran 17ga aluminum fence wire under the eaves of the house about 8 ft off the ground. The total length was in the general vacinity of about 250 feet. We kept it about a foot from the house edge and about 6 inches from the various sections of metal gutters. At the back of the house by the ham shack we used a center insulator made from a scrap of 1/4" plexiglass with two 1/4-20 bolts to hold the wire and the 450 ohm feed line. The feed line was about 12 ft long and went over to a 4:1 balun and coax. We also put in an 8 ft ground rod at the coax entrance to the house and used 8" so239 barrel connector through the wall at the edge of the window.

While the loop is intended to handle all hf bands and be general purpose as the only antenna at present, most of the use is for a small 80m early morning regional net composed of a few mutual friends who meet every weekday morning.

We use a 15ft high 80m loop as an nvis antenna along with a g5rv inverted vee for regional communications on 80 and 40m.

Since we installed the new stealth antenna for our friend, most of the net days have been bad to very bad with a few being very good. So far the new stealth antenna, located about 200 miles to our north east has been doing better at communicating with us than the others located about 150 to 300 miles to our north. Today, it even did better than another local ham located 20 miles away which usually has the best signal. Conditions were so bad today that we weren't even sure if someone else was in there or not and none were armchair copy as when conditions are ok to good.

Net results are that the 80 meter stealth loop is not only virtually invisible but it is functioning rather well. It is even surpassing more conventional antennas in performance for it's primary use. It's far exceeded our hopes for a usable functioning antenna. And the net expenses were under $25 for everything except the old 4:1 balun which was one of the least expensive commercial ones available when it was new.

Thanks guys for the suggestions and if you encounter similar requirements, don't hesitate to try this approach. It can work well.

best regards,

Charles
wb5izd

1158. Skywire and antenna tuner for ts520s

Yahoo group: SkyWires
Date: 2005-06-04 00:02:28 UTC
From: kc9gyi
Topic: 1158 Message: 1158

Well I have up a horizontal loop about 312' long and am pleased with the results so far. My problem is getting all the balls in the air at the same time so to speak. I have hooked up the radio to a coax to a ten tec 227 tuner. Then about 12' out the window to a choke. It has approximately 20' wound around a paint can and taped, placed up under the eve of the roof about 12' off the ground. Paint can removed. The 520 has the plate, load, and drive knobs plus I am dealing with a tuner and a SWR meter with 20W, 200W, and 1kw
readings
My problem is that I thought that when you tuned a tuner that you were suppose to hear a louder sound coming from the speaker when you got close to tuned. I realize that the longwire has quieter sounds. Not as much noise as with other antennas. I would appreciate any help anyone could give. It seems that the load is set at different places for different bands but I'm not sure if I am putting out the full wattage the radio will do or not. When I get the meter set and broadcast the needle on the cross hair needle is on the bottom. I'm a new ham and a new General. It is probably me and the radio and the learning curve I'm having with the radio not that it isn't working. Thanks 73s Ed KC9GYI

1159. Re: [SkyWires] Skywire and antenna tuner for ts520s

Yahoo group: SkyWires
Date: 2005-06-04 02:41:59 UTC
From: Jim Dunstan
Topic: 1158 Message: 1159

At 12:02 AM 6/4/2005 +0000, you wrote:
>Well I have up a horizontal loop about 312' long and am pleased with
>the results so far. My problem is getting all the balls in the air at
>the same time so to speak. I have hooked up the radio to a coax to a
>ten tec 227 tuner. Then about 12' out the window to a choke. It has
>approximately 20' wound around a paint can and taped, placed up under
>the eve of the roof about 12' off the ground. Paint can removed. The
>520 has the plate, load, and drive knobs plus I am dealing with a
>tuner and a SWR meter with 20W, 200W, and 1kw
>readings
>My problem is that I thought that when you tuned a tuner that you were
>suppose to hear a louder sound coming from the speaker when you got
>close to tuned. I realize that the longwire has quieter sounds. Not as
>much noise as with other antennas. I would appreciate any help anyone
>could give. It seems that the load is set at different places for
>different bands but I'm not sure if I am putting out the full wattage
>the radio will do or not. When I get the meter set and broadcast the
>needle on the cross hair needle is on the bottom. I'm a new ham and a
>new General. It is probably me and the radio and the learning curve
>I'm having with the radio not that it isn't working. Thanks 73s Ed
>KC9GYI

Hi Ed,

The way to deal with 'all the ball in the air' is to first look at them one at a time and learn how they work. The 'balls' are 1. TS520 xcvr 2. SWR meter 3. Antenna tuner and last but not least, 4. the antenna.

1. The TS520 is designed to feed a 50 ohm coax line connected to a 50 ohm load. The easiest way to practice tuning (adjusting the plate, load, and drive) is to connect the output to a 50 ohm dummy load. The 520 output is in the 100 watt range (be happy with 50-60W). The plate is always adjusted for minimum plate current and the load and drive carefully adjusted for output. So, get a dummy load (buy or borrow) and practice. Jot down the settings for your favorite band/frequency.

2. Now connect the TS520 to the dummy load via the SWR meter. Your meter has 20,200,1000 watt ranges. Set it to 200W and you won't have to change it again unless you get a linear amplifier and increase your output. Now learn how to set and read it for SWR .... which should be at 1.1:1 when you feed the dummy load.

3. Now connect the TS520 to the dummy load via the SWR meter and tuner. Now practice adjusting both the 520 and the tuner for the same output power level and xcvr settings.

4. Now, after you are thoroughly familiar with the way each of the units work and are adjusted you can remove the dummy load and replace it with the antenna. Ideally an antenna fed with 50 ohm coax should represent a 50 ohm resistive load, or close to it. If the antenna is a lot higher or lower in impedance there will be a high SWR and you will experience losses and your TS520 won't be too happy. The objective of the tuner is to correct this mismatch to a level acceptable to your XCVR. As a general rule of thumb your SWR should not be higher than about 2:1. The tube amp in your 520 is more forgiving than more modern solid state amps and you might be able to operate at 3:1 (but cut the power output to no more than about 25w output under these conditions).

If you can't get 2:1 or at least 3:1 on the SWR meter then you will have to work on the antenna.

Have fun practicing Ed

73 Jim

PS You can't tune by 'ear'. The SWR meter is for this purpose.

Jim Dunstan, VE3CI
Thunder Bay, ON

1160. Skywire and ts520

Yahoo group: SkyWires
Date: 2005-06-04 03:31:04 UTC
From: kc9gyi
Topic: 1160 Message: 1160

Thanks Jim for the reply. I have just one more question. I have a Ten Tec 227 antenna tuner. In the manual it talks about using a SWR bridge. Is a piece of equipment that I should consider getting? I just checked on a dummy load the last couple of days. And will have one by Monday afternoon. Thanks again and 73s Ed KC9GYI

1161. Re: [SkyWires] Skywire and ts520

Yahoo group: SkyWires
Date: 2005-06-04 04:04:17 UTC
From: Dr.Ace Ratliff
Topic: 1160 Message: 1161
Attachments: 1 described; binary payloads are missing from this source WARC

Hello Ed,
I know I am not Jim , But I don't think he will mind if I answer this question.
A SWR bridge is the same thing as a SWR meter.
Good Luck with the antenna.
Ace - WH2T

----- Original Message -----
From: kc9gyi
To: SkyWires@yahoogroups.com
Sent: Friday, June 03, 2005 10:31 PM
Subject: [SkyWires] Skywire and ts520

Thanks Jim for the reply. I have just one more question. I have a Ten
Tec 227 antenna tuner. In the manual it talks about using a SWR
bridge. Is a piece of equipment that I should consider getting? I just
checked on a dummy load the last couple of days. And will have one by
Monday afternoon. Thanks again and 73s Ed KC9GYI

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1162. Re: Skywire and antenna tuner for ts520s

Yahoo group: SkyWires
Date: 2005-06-04 12:19:33 UTC
From: Hal
Topic: 1158 Message: 1162

This message is for Jim and Ace.. Wow, I wish I had you guys to answer questions like this one when I first started.. THe 520 does have a learning curve. It took me a while to get everything down but as Jim said it is a very forgiving radio. I miss mine now it sounded better then any rig I've owned to date. Once you tune it up a few time it becomes very easy to do plus tubes are way cheaper then solid state finals.. Hope you enjoy the 520.

Hal
ACØAX

1163. Re: [SkyWires] Skywire and ts520

Yahoo group: SkyWires
Date: 2005-06-04 12:36:46 UTC
From: Jim Dunstan
Topic: 1160 Message: 1163

At 03:31 AM 6/4/2005 +0000, you wrote:
>Thanks Jim for the reply. I have just one more question. I have a Ten
>Tec 227 antenna tuner. In the manual it talks about using a SWR
>bridge. Is a piece of equipment that I should consider getting? I just
>checked on a dummy load the last couple of days. And will have one by
>Monday afternoon. Thanks again and 73s Ed KC9GYI

Hi Ed,

The SWR meter you have measures forward power and reflected power. The SWR is the ratio between the two. You try to get it as low as possible .. eg less than 2:1. The problem with this approach is that your adjustments have to be made 'live' eg with power transmitted. If you use an SWR bridge, also known as a 'noise bridge' it is possible to adjust the antenna tuner with no power being transmitted.

The noise bridge has an internal means of generating low level noise across the whole HF and VHF spectrum. It has a couple of dials that you can adjust to balance out the noise to its lowest level 'by ear'. You can then read the dials and they will tell you the impedance of the antenna and whether it is inductive (too long) or capacitive (too short). The bridge is not a device that you use a lot unless you are someone who does a lot of experimenting with antennas or other circuits.

The bridge will have 2 connectors .... one for the antenna and one for the receiver. In your case you have a transceiver .... you must be very careful to use it only as a receiver when you have the bridge connected. If you should press the PTT button on your mike you will almost certainly blow the delicate components in the bridge. In short, a bridge is a 'passive' device used primarily while you are designing and building your antenna. Once the antenna is satisfactory you remove the bridge and connect the SWR meter, tuner, antenna setup to the transceiver and monitor your transmissions with the SWR meter. The bridge will be in the drawer most of the time.

Here is an example. Say you want to transmit on a particular frequency on 75M .... a local net perhaps. Tune your receiver to that frequency. Turn on the noise bridge and you should hear an immediate increase in the background noise. Set the resistance dial to between 50 and 75 ohms and the reactance dial to 0 (eg no inductive or capacitive). Now adjust your antenna tuner to reduce the noise to zero or as low as you can.

Now remove the bridge from the circuit and put in the SWR meter. The combination tuner/antenna should be an acceptable load for your transmitter. Before removing the bridge you should do the same thing on all the frequencies and bands you want to operate. The best strategy for

someone starting out is to design the antenna for a particular band then go on from there.

Jim

Jim Dunstan
Thunder Bay, ON

1164. Re: [SkyWires] Skywire and ts520

Yahoo group: SkyWires
Date: 2005-06-04 13:38:08 UTC
From: JimMcSkate@aol.com
Topic: 1160 Message: 1164

The TS520 has a "tune" function (on the mode switch on the left of the panel) which puts 5 or 10 watts out the back. I set the switch to "tune" then flip the "send" switch to both tune up the radio AND to set the antenna tuner. This way you can spend some time tweaking without worrying about toasting your finals.

You'll find that the tuning of the transmitter is affected by the tuning of the tuner, so it takes some time to get the "hang" of it. Now, I can tune the whole setup in a few seconds - just took some practice.

Best of 73,
Jim
WA2LGN

1165. Re: Skywire and antenna tuner for ts520s

Yahoo group: SkyWires
Date: 2005-06-04 21:27:52 UTC
From: oldlongbeard
Topic: 1158 Message: 1165

--- In SkyWires@yahoogroups.com, "kc9gyi" <kc9gyi@y...> wrote:
> Well I have up a horizontal loop about 312' long and am pleased with
> the results so far.>>>?..... <snip>

One more thing to add; after you have done all the other suggested items (all excellent, by the way). You can REPEAT the entire tuning procedure on the Kenwood. If the antenna tuner only brings you to a 3:1 or so SWR, the output network in the 520 will act as "another tuner." You may even be able to load the old girl into your antenna on several bands with NO external antenna tuner in line at all. The Old Timers did it all the time.

Glad to see another loop user!! AND 520 user!!!!!

73- Greg Schippers, KC8HXO

1166. ts520

Yahoo group: SkyWires
Date: 2005-06-04 22:04:02 UTC
From: kc9gyi
Topic: 1166 Message: 1166

Thanks for all the help. I am making some contacts. I worked a guy in L.A. this morning from Indiana. Wasn't a strong contact but we both got each others call signs while the band was in.I'm going to use these suggestions and learn tune this rig and get out. I'm real pleased with the radio and the antenna, especially the stealth part of it. 73s Ed

1167. RE: [SkyWires] ts520

Yahoo group: SkyWires
Date: 2005-06-05 03:36:31 UTC
From: D. Scott MacKenzie
Topic: 1166 Message: 1167

My brother had a 520S and I had a 820S...I still have my 820S. Good radios....just can't bear the thought of getting rid of it - even though I now have an ICOM 756Pro. The 820S was responsible for my DXCC and WAS.... Both are excellent rigs to learn and use. Audio quality is excellent, and really enjoyable...
-----Original Message-----
From: SkyWires@yahoogroups.com [mailto:SkyWires@yahoogroups.com]On Behalf Of kc9gyi
Sent: Saturday, June 04, 2005 6:04 PM
To: SkyWires@yahoogroups.com
Subject: [SkyWires] ts520

Thanks for all the help. I am making some contacts. I worked a guy in L.A. this morning from Indiana. Wasn't a strong contact but we both got each others call signs while the band was in.I'm going to use these suggestions and learn tune this rig and get out. I'm real pleased with the radio and the antenna, especially the stealth part of it. 73s Ed

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1168. Using 75 ohm coax

Yahoo group: SkyWires
Date: 2005-06-05 20:31:52 UTC
From: Hal
Topic: 1168 Message: 1168

I have a question for the list.
Can you use RG-6 coax to feed the loop and still using it on all bands with a tuner. My last loop came crashing down with a few trees in a storm we had. It was feed with ladder line, but where I want to put this loop is too far away for what length of ladder line I have.

Hal
ACØAX

1169. Re: [SkyWires] Using 75 ohm coax

Yahoo group: SkyWires
Date: 2005-06-05 22:20:17 UTC
From: Dr.Ace Ratliff
Topic: 1168 Message: 1169
Attachments: 1 described; binary payloads are missing from this source WARC

Hi Hal,
RG-6 coax will work fine with 100 watts , I would be cautious about QRO operation.
Line loss will be greater than with ladder line.
I am feeding my 272' horizontal loop antenna with coax.
Ace - www.WH2T.com

----- Original Message -----
From: Hal
To: SkyWires@yahoogroups.com
Sent: Sunday, June 05, 2005 3:31 PM
Subject: [SkyWires] Using 75 ohm coax

I have a question for the list.
Can you use RG-6 coax to feed the loop and still using it on all
bands with a tuner. My last loop came crashing down with a few trees
in a storm we had. It was feed with ladder line, but where I want to
put this loop is too far away for what length of ladder line I have.

Hal
ACØAX

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1170. Re: Using 75 ohm coax

Yahoo group: SkyWires
Date: 2005-06-05 22:37:50 UTC
From: Hal
Topic: 1168 Message: 1170

I never run more then 100 watts anyhow.. I thought about using the ladder line that I have and putting a 4:1 voltage balun then running the rg-6 the rest of the way. But that sounds like more work then I really want to do.

Hal
ACØAX
--- In SkyWires@yahoogroups.com, "Dr.Ace Ratliff" <wh2t@b...> wrote:
> Hi Hal,
> RG-6 coax will work fine with 100 watts , I would be cautious about QRO operation.
> Line loss will be greater than with ladder line.
> I am feeding my 272' horizontal loop antenna with coax.
> Ace - www.WH2T.com
>
> ----- Original Message -----
> From: Hal
> To: SkyWires@yahoogroups.com
> Sent: Sunday, June 05, 2005 3:31 PM
> Subject: [SkyWires] Using 75 ohm coax
>
>
> I have a question for the list.
> Can you use RG-6 coax to feed the loop and still using it on all
> bands with a tuner. My last loop came crashing down with a few trees
> in a storm we had. It was feed with ladder line, but where I want to
> put this loop is too far away for what length of ladder line I have.
>
> Hal
> ACØAX
>
>
>
>
>
>

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Service.
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>
> No virus found in this outgoing message.
> Checked by AVG Anti-Virus.
> Version: 7.0.323 / Virus Database: 267.6.2 - Release Date: 6/4/2005

1171. Re: [SkyWires] Re: Using 75 ohm coax

Yahoo group: SkyWires
Date: 2005-06-05 22:45:18 UTC
From: Dr.Ace Ratliff
Topic: 1168 Message: 1171
Attachments: 1 described; binary payloads are missing from this source WARC

Either way will work.
----- Original Message -----
From: Hal
To: SkyWires@yahoogroups.com
Sent: Sunday, June 05, 2005 5:37 PM
Subject: [SkyWires] Re: Using 75 ohm coax

I never run more then 100 watts anyhow.. I thought about using the
ladder line that I have and putting a 4:1 voltage balun then running
the rg-6 the rest of the way. But that sounds like more work then I
really want to do.

Hal
ACØAX
--- In SkyWires@yahoogroups.com, "Dr.Ace Ratliff" <wh2t@b...> wrote:
> Hi Hal,
> RG-6 coax will work fine with 100 watts , I would be cautious
about QRO operation.
> Line loss will be greater than with ladder line.
> I am feeding my 272' horizontal loop antenna with coax.
> Ace - www.WH2T.com
>
> ----- Original Message -----
> From: Hal
> To: SkyWires@yahoogroups.com
> Sent: Sunday, June 05, 2005 3:31 PM
> Subject: [SkyWires] Using 75 ohm coax
>
>
> I have a question for the list.
> Can you use RG-6 coax to feed the loop and still using it on all
> bands with a tuner. My last loop came crashing down with a few trees
> in a storm we had. It was feed with ladder line, but where I want to
> put this loop is too far away for what length of ladder line I have.
>
> Hal
> ACØAX
>
>
>
>
>
>

> Yahoo! Groups Links
>
> a.. To visit your group on the web, go to:
> http://groups.yahoo.com/group/SkyWires/
>
> b.. To unsubscribe from this group, send an email to:
> SkyWires-unsubscribe@yahoogroups.com
>
> c.. Your use of Yahoo! Groups is subject to the Yahoo! Terms of
Service.
>
>
> No virus found in this outgoing message.
> Checked by AVG Anti-Virus.
> Version: 7.0.323 / Virus Database: 267.6.2 - Release Date: 6/4/2005

Yahoo! Groups Links

a.. To visit your group on the web, go to:
http://groups.yahoo.com/group/SkyWires/

b.. To unsubscribe from this group, send an email to:
SkyWires-unsubscribe@yahoogroups.com

c.. Your use of Yahoo! Groups is subject to the Yahoo! Terms of Service.

1172. want to build some loops

Yahoo group: SkyWires
Date: 2005-06-06 00:26:13 UTC
From: Sarge
Topic: 1172 Message: 1172

I need pointers and info and calulators or formulas and lots and lots of advise.
While I'm not totally unobstructed here, I do have 3 acres immediate to the house to play with.
I'd like to build one first for 6 meter SSB work. Then I'd like to go with an 80meter or 160meter. I want full wave or half wave loops.

any help is most appreciated,

Sarge W5SRG

1173. Re: [SkyWires] want to build some loops

Yahoo group: SkyWires
Date: 2005-06-06 00:36:58 UTC
From: Dr.Ace Ratliff
Topic: 1172 Message: 1173
Attachments: 1 described; binary payloads are missing from this source WARC

Hi Sarge ,
For 6 mtr SSB , I would make a Vertically oriented , Horizontally polarized , Diamond shaped , full wave loop. Hang it from the top corner . Use a spreader about 7 ' 3/4 " across , PVC pipe works great.
Feed the bottom corner.
Ace - www.WH2T.com

----- Original Message -----
From: Sarge
To: SkyWires@yahoogroups.com
Sent: Sunday, June 05, 2005 7:26 PM
Subject: [SkyWires] want to build some loops

I need pointers and info and calulators or formulas and lots and lots of advise.
While I'm not totally unobstructed here, I do have 3 acres immediate to the house to play with.
I'd like to build one first for 6 meter SSB work. Then I'd like to go with an 80meter or 160meter. I want full wave or half wave loops.

any help is most appreciated,

Sarge W5SRG

Yahoo! Groups Links

a.. To visit your group on the web, go to:
http://groups.yahoo.com/group/SkyWires/

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SkyWires-unsubscribe@yahoogroups.com

c.. Your use of Yahoo! Groups is subject to the Yahoo! Terms of Service.

1174. Re: [SkyWires] want to build some loops

Yahoo group: SkyWires
Date: 2005-06-06 01:16:16 UTC
From: Sarge
Topic: 1172 Message: 1174

OK. How long is the wire? Can I feed direct with coax either 50 or 75 ohm? I don't have a tuner for 6 meters.

Hi Sarge ,
For 6 mtr SSB , I would make a Vertically oriented , Horizontally polarized , Diamond shaped , full wave loop. Hang it from the top corner . Use a spreader about 7 ' 3/4 " across , PVC pipe works great.
Feed the bottom corner.
Ace - www.WH2T.com

1175. Re: [SkyWires] want to build some loops

Yahoo group: SkyWires
Date: 2005-06-06 03:45:01 UTC
From: Dr.Ace Ratliff
Topic: 1172 Message: 1175
Attachments: 1 described; binary payloads are missing from this source WARC

What is the design frequency ?

----- Original Message -----
From: Sarge
To: SkyWires@yahoogroups.com
Sent: Sunday, June 05, 2005 8:16 PM
Subject: Re: [SkyWires] want to build some loops

OK. How long is the wire? Can I feed direct with coax either 50 or 75 ohm? I don't have a tuner for 6 meters.

Hi Sarge ,
For 6 mtr SSB , I would make a Vertically oriented , Horizontally polarized , Diamond shaped , full wave loop. Hang it from the top corner . Use a spreader about 7 ' 3/4 " across , PVC pipe works great.
Feed the bottom corner.
Ace - www.WH2T.com

Yahoo! Groups Links

a.. To visit your group on the web, go to:
http://groups.yahoo.com/group/SkyWires/

b.. To unsubscribe from this group, send an email to:
SkyWires-unsubscribe@yahoogroups.com

c.. Your use of Yahoo! Groups is subject to the Yahoo! Terms of Service.

1176. Re: [SkyWires] want to build some loops

Yahoo group: SkyWires
Date: 2005-06-06 04:05:45 UTC
From: chasm@texas.net
Topic: 1172 Message: 1176

idle curiosity... why not discuss loops on this elist???

I always thought of this list as a long wire or dipole or sloper elist.

fwiw
chas
--
K5DAM Houston EL29

1177. Re: [SkyWires] want to build some loops

Yahoo group: SkyWires
Date: 2005-06-06 04:13:20 UTC
From: Sarge
Topic: 1172 Message: 1177

50.125 got a formula? is it 1005/f mhz ?

What is the design frequency ?

----- Original Message -----
From: Sarge
To: SkyWires@yahoogroups.com
Sent: Sunday, June 05, 2005 8:16 PM
Subject: Re: [SkyWires] want to build some loops

OK. How long is the wire? Can I feed direct with coax either 50 or 75 ohm? I don't have a tuner for 6 meters.

Hi Sarge ,
For 6 mtr SSB , I would make a Vertically oriented , Horizontally polarized , Diamond shaped , full wave loop. Hang it from the top corner . Use a spreader about 7 ' 3/4 " across , PVC pipe works great.
Feed the bottom corner.
Ace - www.WH2T.com

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b.. To unsubscribe from this group, send an email to:
SkyWires-unsubscribe@yahoogroups.com

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No virus found in this outgoing message.
Checked by AVG Anti-Virus.
Version: 7.0.323 / Virus Database: 267.6.2 - Release Date: 6/4/2005

1178. Re: [SkyWires] want to build some loops

Yahoo group: SkyWires
Date: 2005-06-06 04:15:38 UTC
From: Sarge
Topic: 1172 Message: 1178

what elist would you suggest? I thought a skywire was mostly a full wave loop. Am I wrong?

> idle curiosity... why not discuss loops on this elist???
>
>
> I always thought of this list as a long wire or dipole or sloper elist.
>
> fwiw
> chas
> --
> K5DAM Houston EL29
>
>
>
> Yahoo! Groups Links
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>

1179. Re: [SkyWires] want to build some loops

Yahoo group: SkyWires
Date: 2005-06-06 04:26:44 UTC
From: Dr.Ace Ratliff
Topic: 1172 Message: 1179
Attachments: 1 described; binary payloads are missing from this source WARC

YES
----- Original Message -----
From: Sarge
To: SkyWires@yahoogroups.com
Sent: Sunday, June 05, 2005 11:13 PM
Subject: Re: [SkyWires] want to build some loops

50.125 got a formula? is it 1005/f mhz ?

What is the design frequency ?

----- Original Message -----
From: Sarge
To: SkyWires@yahoogroups.com
Sent: Sunday, June 05, 2005 8:16 PM
Subject: Re: [SkyWires] want to build some loops

OK. How long is the wire? Can I feed direct with coax either 50 or 75 ohm? I don't have a tuner for 6 meters.

Hi Sarge ,
For 6 mtr SSB , I would make a Vertically oriented , Horizontally polarized , Diamond shaped , full wave loop. Hang it from the top corner . Use a spreader about 7 ' 3/4 " across , PVC pipe works great.
Feed the bottom corner.
Ace - www.WH2T.com

No virus found in this outgoing message.
Checked by AVG Anti-Virus.
Version: 7.0.323 / Virus Database: 267.6.2 - Release Date: 6/4/2005

Yahoo! Groups Links

a.. To visit your group on the web, go to:
http://groups.yahoo.com/group/SkyWires/

b.. To unsubscribe from this group, send an email to:
SkyWires-unsubscribe@yahoogroups.com

c.. Your use of Yahoo! Groups is subject to the Yahoo! Terms of Service.

1180. Re: [SkyWires] want to build some loops

Yahoo group: SkyWires
Date: 2005-06-06 04:38:57 UTC
From: Sarge
Topic: 1172 Message: 1180

will it feed with just 50 ohm coax and be right?

YES
----- Original Message -----
From: Sarge
To: SkyWires@yahoogroups.com
Sent: Sunday, June 05, 2005 11:13 PM
Subject: Re: [SkyWires] want to build some loops

50.125 got a formula? is it 1005/f mhz ?

What is the design frequency ?

----- Original Message -----
From: Sarge
To: SkyWires@yahoogroups.com
Sent: Sunday, June 05, 2005 8:16 PM
Subject: Re: [SkyWires] want to build some loops

OK. How long is the wire? Can I feed direct with coax either 50 or 75 ohm? I don't have a tuner for 6 meters.

Hi Sarge ,
For 6 mtr SSB , I would make a Vertically oriented , Horizontally polarized , Diamond shaped , full wave loop. Hang it from the top corner . Use a spreader about 7 ' 3/4 " across , PVC pipe works great.
Feed the bottom corner.
Ace - www.WH2T.com

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Checked by AVG Anti-Virus.
Version: 7.0.323 / Virus Database: 267.6.2 - Release Date: 6/4/2005

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b.. To unsubscribe from this group, send an email to:
SkyWires-unsubscribe@yahoogroups.com

c.. Your use of Yahoo! Groups is subject to the Yahoo! Terms of Service.

No virus found in this outgoing message.
Checked by AVG Anti-Virus.
Version: 7.0.323 / Virus Database: 267.6.2 - Release Date: 6/4/2005

1181. Re: [SkyWires] want to build some loops

Yahoo group: SkyWires
Date: 2005-06-06 05:17:04 UTC
From: Dr.Ace Ratliff
Topic: 1172 Message: 1181
Attachments: 1 described; binary payloads are missing from this source WARC

On the higher frequency bands a full wave loop antenna can be oriented as a vertical diamond or vertical cube. Fed at the top or bottom corner of a diamond this antenna has horizontal polarization.
Let me clearly state this Fact.
"A vertically oriented horizontally polarized one wavelength loop antenna with the bottom of the loop 1/2 wave length above ground is a FINE antenna".

Do NOT put the bottom of the vertically oriented loop more than 1/2 wave length above ground for DX contacts.

If you feed the Full wave Loop antenna direct with a single piece of coax you can only adjust add/prune the antenna till the VSWR gets down to about 1.7:1 at resonance , so you will probably want to use a tuner if you want to cover an entire HF band . And Yes the tuner in the radio will work fine as long as you are not using a linear amplifier. The impedance of a Full Wave Loop antenna is theoretically in the vicinity of 100 ohms. That is why I use a 75 ohm "Q section" to provide a perfect match to the 50 ohm coax. My Loop antenna is flat 1:1 VSWR around 3.875 Mhz and rises to about 2:1 SWR at 3.75 and 4 Mhz . So I cover the entire 75 meter phone band without using a tuner.

Here is How I Do It.

IMPORTANT - Connect the shield of a "Short Piece" of 75 ohm coax to one end of the loop antenna , Connect the center of the 75 ohm coax to the other end of the loop antenna. The length of the 75 ohm coax is most important. It will be used as a Q section.
To determine the length to use, Use this formula "Length in feet = 246 x VF / Freq in Mhz"
VF = the Velocity Factor of the coax. So multiply 246 by the Velocity Factor of the coax , Then divide by the frequency .

If you use RG59 or RG11 with a Velocity Factor of 0.66 , For the 75 meter band the Piece of 75 ohm coax should be about 42 feet long , It doesn't need to be exact . RG59 and RG11 coax usually have a Velocity Factor of 0.66 , Foam dielectric coax such as RG6 might have a Velocity Factor of 0.81 or more.

Put a PL259 coax connector on the unused end of the 75 ohm coax, Screw a PL258 double female coax connector onto this PL259 coax connector. Then connect 50 ohm coax to the other side of the PL258 double female coax connector, Use any length 50 ohm coax needed to reach your Transceiver.

Ace - WH2T

----- Original Message -----
From: Sarge
To: SkyWires@yahoogroups.com
Sent: Sunday, June 05, 2005 11:38 PM
Subject: Re: [SkyWires] want to build some loops

will it feed with just 50 ohm coax and be right?

YES
----- Original Message -----
From: Sarge
To: SkyWires@yahoogroups.com
Sent: Sunday, June 05, 2005 11:13 PM
Subject: Re: [SkyWires] want to build some loops

50.125 got a formula? is it 1005/f mhz ?

What is the design frequency ?

----- Original Message -----
From: Sarge
To: SkyWires@yahoogroups.com
Sent: Sunday, June 05, 2005 8:16 PM
Subject: Re: [SkyWires] want to build some loops

OK. How long is the wire? Can I feed direct with coax either 50 or 75 ohm? I don't have a tuner for 6 meters.

Hi Sarge ,
For 6 mtr SSB , I would make a Vertically oriented , Horizontally polarized , Diamond shaped , full wave loop. Hang it from the top corner . Use a spreader about 7 ' 3/4 " across , PVC pipe works great.
Feed the bottom corner.
Ace - www.WH2T.com

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Checked by AVG Anti-Virus.
Version: 7.0.323 / Virus Database: 267.6.2 - Release Date: 6/4/2005

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Checked by AVG Anti-Virus.
Version: 7.0.323 / Virus Database: 267.6.2 - Release Date: 6/4/2005

Yahoo! Groups Links

a.. To visit your group on the web, go to:
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b.. To unsubscribe from this group, send an email to:
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c.. Your use of Yahoo! Groups is subject to the Yahoo! Terms of Service.

1182. Re: [SkyWires] want to build some loops

Yahoo group: SkyWires
Date: 2005-06-06 05:30:43 UTC
From: Sarge
Topic: 1172 Message: 1182

Great! Got it, thank you very much.

On the higher frequency bands a full wave loop antenna can be oriented as a vertical diamond or vertical cube. Fed at the top or bottom corner of a diamond this antenna has horizontal polarization.
Let me clearly state this Fact.
"A vertically oriented horizontally polarized one wavelength loop antenna with the bottom of the loop 1/2 wave length above ground is a FINE antenna".

Do NOT put the bottom of the vertically oriented loop more than 1/2 wave length above ground for DX contacts.

If you feed the Full wave Loop antenna direct with a single piece of coax you can only adjust add/prune the antenna till the VSWR gets down to about 1.7:1 at resonance , so you will probably want to use a tuner if you want to cover an entire HF band . And Yes the tuner in the radio will work fine as long as you are not using a linear amplifier. The impedance of a Full Wave Loop antenna is theoretically in the vicinity of 100 ohms. That is why I use a 75 ohm "Q section" to provide a perfect match to the 50 ohm coax. My Loop antenna is flat 1:1 VSWR around 3.875 Mhz and rises to about 2:1 SWR at 3.75 and 4 Mhz . So I cover the entire 75 meter phone band without using a tuner.

Here is How I Do It.

IMPORTANT - Connect the shield of a "Short Piece" of 75 ohm coax to one end of the loop antenna , Connect the center of the 75 ohm coax to the other end of the loop antenna. The length of the 75 ohm coax is most important. It will be used as a Q section.
To determine the length to use, Use this formula "Length in feet = 246 x VF / Freq in Mhz"
VF = the Velocity Factor of the coax. So multiply 246 by the Velocity Factor of the coax , Then divide by the frequency .

If you use RG59 or RG11 with a Velocity Factor of 0.66 , For the 75 meter band the Piece of 75 ohm coax should be about 42 feet long , It doesn't need to be exact . RG59 and RG11 coax usually have a Velocity Factor of 0.66 , Foam dielectric coax such as RG6 might have a Velocity Factor of 0.81 or more.

Put a PL259 coax connector on the unused end of the 75 ohm coax, Screw a PL258 double female coax connector onto this PL259 coax connector. Then connect 50 ohm coax to the other side of the PL258 double female coax connector, Use any length 50 ohm coax needed to reach your Transceiver.

Ace - WH2T

----- Original Message -----
From: Sarge
To: SkyWires@yahoogroups.com
Sent: Sunday, June 05, 2005 11:38 PM

Subject: Re: [SkyWires] want to build some loops

will it feed with just 50 ohm coax and be right?

YES
----- Original Message -----
From: Sarge
To: SkyWires@yahoogroups.com
Sent: Sunday, June 05, 2005 11:13 PM
Subject: Re: [SkyWires] want to build some loops

50.125 got a formula? is it 1005/f mhz ?

What is the design frequency ?

----- Original Message -----
From: Sarge
To: SkyWires@yahoogroups.com
Sent: Sunday, June 05, 2005 8:16 PM
Subject: Re: [SkyWires] want to build some loops

OK. How long is the wire? Can I feed direct with coax either 50 or 75 ohm? I don't have a tuner for 6 meters.

Hi Sarge ,
For 6 mtr SSB , I would make a Vertically oriented , Horizontally polarized , Diamond shaped , full wave loop. Hang it from the top corner . Use a spreader about 7 ' 3/4 " across , PVC pipe works great.
Feed the bottom corner.
Ace - www.WH2T.com

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Checked by AVG Anti-Virus.
Version: 7.0.323 / Virus Database: 267.6.2 - Release Date: 6/4/2005

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Yahoo! Groups Links

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b.. To unsubscribe from this group, send an email to:
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1183. Re: [SkyWires] want to build some loops

Yahoo group: SkyWires
Date: 2005-06-06 05:37:09 UTC
From: chasm@texas.net
Topic: 1172 Message: 1183

the list owner must have deleted this

>idle curiosity... why not discuss loops on this elist???

> To subscribe to this group, send an email to:
> loopantennas-subscribe@yahoogroups.com

>I always thought of this list as a long wire or dipole or sloper elist.

ends
chas

On Sun, 5 Jun 2005 23:15:38 -0500, "Sarge" <sarge43@...> wrote:

>what elist would you suggest? I thought a skywire was mostly a full wave
>loop. Am I wrong?
>
>
>> idle curiosity... why not discuss loops on this elist???
>>
>>
>> I always thought of this list as a long wire or dipole or sloper elist.
>>
>> fwiw
>> chas
>> --
>> K5DAM Houston EL29
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>> Yahoo! Groups Links
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>Yahoo! Groups Links
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K5DAM Houston EL29

1184. RE: [SkyWires] want to build some loops

Yahoo group: SkyWires
Date: 2005-06-06 04:47:02 UTC
From: D. Scott MacKenzie
Topic: 1172 Message: 1184

It will feed with 50 ohm coax, with an SWR of approximately 1.5. If you want to make it perfect 1:1 - you can trim to the lowest SWR, then make a simple transformer. But most times, I just leave it be.... it works just fine...
-----Original Message-----
From: SkyWires@yahoogroups.com [mailto:SkyWires@yahoogroups.com]On Behalf Of Sarge
Sent: Monday, June 06, 2005 12:39 AM
To: SkyWires@yahoogroups.com
Subject: Re: [SkyWires] want to build some loops

will it feed with just 50 ohm coax and be right?

YES
----- Original Message -----
From: Sarge
To: SkyWires@yahoogroups.com
Sent: Sunday, June 05, 2005 11:13 PM
Subject: Re: [SkyWires] want to build some loops

50.125 got a formula? is it 1005/f mhz ?

What is the design frequency ?

----- Original Message -----
From: Sarge
To: SkyWires@yahoogroups.com
Sent: Sunday, June 05, 2005 8:16 PM
Subject: Re: [SkyWires] want to build some loops

OK. How long is the wire? Can I feed direct with coax either 50 or 75 ohm? I don't have a tuner for 6 meters.

Hi Sarge ,
For 6 mtr SSB , I would make a Vertically oriented ,
Horizontally polarized , Diamond shaped , full wave loop. Hang it from the top corner . Use a spreader about 7 ' 3/4 " across , PVC pipe works great.
Feed the bottom corner.
Ace - www.WH2T.com

No virus found in this outgoing message.
Checked by AVG Anti-Virus.
Version: 7.0.323 / Virus Database: 267.6.2 - Release Date: 6/4/2005

No virus found in this outgoing message.
Checked by AVG Anti-Virus.
Version: 7.0.323 / Virus Database: 267.6.2 - Release Date: 6/4/2005

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Yahoo! Groups Links

a.. To visit your group on the web, go to:
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b.. To unsubscribe from this group, send an email to:
SkyWires-unsubscribe@yahoogroups.com

c.. Your use of Yahoo! Groups is subject to the Yahoo! Terms of Service.

1185. Re: [SkyWires] want to build some loops

Yahoo group: SkyWires
Date: 2005-06-06 06:17:39 UTC
From: Dr.Ace Ratliff
Topic: 1172 Message: 1185
Attachments: 1 described; binary payloads are missing from this source WARC

It has been my experience that I could only trim the antenna until the VSWR dropped to 1.7:1 using all 50 or all 75 ohm coax. I agree it will work just fine.
As far as making a simple transformer that is exactly what I suggested, a coaxial impedance transformer.
Ace - WH2T

----- Original Message -----
From: D. Scott MacKenzie
To: SkyWires@yahoogroups.com
Sent: Sunday, June 05, 2005 11:47 PM
Subject: RE: [SkyWires] want to build some loops

It will feed with 50 ohm coax, with an SWR of approximately 1.5. If you want to make it perfect 1:1 - you can trim to the lowest SWR, then make a simple transformer. But most times, I just leave it be.... it works just fine...
-----Original Message-----
From: SkyWires@yahoogroups.com [mailto:SkyWires@yahoogroups.com]On Behalf Of Sarge
Sent: Monday, June 06, 2005 12:39 AM
To: SkyWires@yahoogroups.com
Subject: Re: [SkyWires] want to build some loops

will it feed with just 50 ohm coax and be right?

YES
----- Original Message -----
From: Sarge
To: SkyWires@yahoogroups.com
Sent: Sunday, June 05, 2005 11:13 PM
Subject: Re: [SkyWires] want to build some loops

50.125 got a formula? is it 1005/f mhz ?

What is the design frequency ?

----- Original Message -----
From: Sarge
To: SkyWires@yahoogroups.com
Sent: Sunday, June 05, 2005 8:16 PM
Subject: Re: [SkyWires] want to build some loops

OK. How long is the wire? Can I feed direct with coax either 50 or 75 ohm? I don't have a tuner for 6 meters.

Hi Sarge ,
For 6 mtr SSB , I would make a Vertically oriented , Horizontally polarized , Diamond shaped , full wave loop. Hang it from the top corner . Use a spreader about 7 ' 3/4 "

across , PVC pipe works great.
Feed the bottom corner.
Ace - www.WH2T.com

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Version: 7.0.323 / Virus Database: 267.6.2 - Release Date: 6/4/2005

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c.. Your use of Yahoo! Groups is subject to the Yahoo! Terms of Service.

1186. Re: [SkyWires] Using 75 ohm coax

Yahoo group: SkyWires
Date: 2005-06-06 06:42:03 UTC
From: VK4TUX
Topic: 1168 Message: 1186

Get some more ladder line. You lose to much in feedline loss with coax in a tuner load side setup.

Adrian

de VK4TUX
----- Original Message -----
From: Hal
To: SkyWires@yahoogroups.com
Sent: Monday, June 06, 2005 6:31 AM
Subject: [SkyWires] Using 75 ohm coax

I have a question for the list.
Can you use RG-6 coax to feed the loop and still using it on all
bands with a tuner. My last loop came crashing down with a few trees
in a storm we had. It was feed with ladder line, but where I want to
put this loop is too far away for what length of ladder line I have.

Hal
ACØAX

Yahoo! Groups Links

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1187. new member

Yahoo group: SkyWires
Date: 2005-06-06 13:32:37 UTC
From: john
Topic: 1187 Message: 1187

73 john

1190. Re: [SkyWires] want to build some loops

Yahoo group: SkyWires
Date: 2005-06-06 14:24:49 UTC
From: Jim Dunstan
Topic: 1172 Message: 1190

At 11:05 PM 6/5/2005 -0500, you wrote:
>idle curiosity... why not discuss loops on this elist???
>
>
>I always thought of this list as a long wire or dipole or sloper elist.
>
>fwiw
>chas
>--
>K5DAM Houston EL29

Hi,

I believe this list started as an off shoot of the 'loop antenna' list. On that list most of the participants were primarily interested in small tuned loops and there were a number that were more interested in large primarily horizontal loops. After some antagonism the group with the large (one wavelength and up) loop interest started this user group.

I follow both groups and the 'loopantenna' list and the 'skywires' list have stayed primarily on those 2 tracks. However, this group is pretty open and I don't think anyone will object to someone posting something concerning long wires or dipoles. After all wire is wire and there are a lot of parallels .... especially concerning the feed systems of dipoles and loops. For example, feeding a loop or a dipole as a vertical element against ground is pretty much the same proposition hi hi.

Jim

Jim Dunstan, VE3CI
Thunder Bay, ON

1191. Re: [SkyWires] want to build some loops

Yahoo group: SkyWires
Date: 2005-06-06 14:40:28 UTC
From: Jim Dunstan
Topic: 1172 Message: 1191

At 12:17 AM 6/6/2005 -0500, you wrote:
> On the higher frequency bands a full wave loop antenna can be oriented
> as a vertical diamond or vertical cube. Fed at the top or bottom corner
> of a diamond this antenna has horizontal polarization.
>
>Let me clearly state this Fact.
>"A vertically oriented horizontally polarized one wavelength loop antenna
>with the bottom of the loop 1/2 wave length above ground is a FINE antenna".
>
>Do NOT put the bottom of the vertically oriented loop more than 1/2 wave
>length above ground for DX contacts.

Hi,

The best DX antenna I ever had was a 20M, 1 wavelength vertical loop (square config), mounted on 30' of TV tubing. Actually I also had a similar reflector element up there as well. I turned the whole thing with an armstrong rotor (pipe wrench). I worked DXCC on 20M with 100W of AM. I had the whole thing in a little house trailer. I always think back to that station with nostalgia (DX100 heathkit transmitter and HQ129 receiver).

I fed that antenna with 300 ohm TV twin lead to a balun (an air core balun made of special air-dux coils). I don't remember using an antenna tuner (this was back in 1958-59).

Jim

Jim Dunstan, VE3CI
Thunder Bay, ON

1192. collinear vert dipole

Yahoo group: SkyWires
Date: 2005-06-06 17:32:32 UTC
From: Mel Vance
Topic: 1172 Message: 1192

Well.....since it seems that this should be OK to ask here, at the risk of getting jumped on,
will ask a question that I have not gotten an answer to else where......

If you do not like me asking it here, flame me direct....no need to tie up the list with that kind
of stuff.....

Am looking to build a kite supported antenna....due to the variable wind directions around here, want to use vert dipoles to prevent the signal being directed in an unfavorable direction.

With the max legal height for the kite before I would need to notify the FAA, should be able
to fit parallel collinear dipoles for the bands 40 and above.

Know that it is not hard to add the phasing sections and additional 1/2 wave elements, but never having played around with building one myself, do have questions as to how it affects the feedpoint....

What does it do to the feedpoint as you add sections? Does it change the R and/or J? Plan to use rg6 (have it to use.....due to wind generated static, do not think bare wire bal feed line
would be a good idea), will I still be able to get an accurate reading of the antenna feedponit
at the end of the coax on a 50ohm antenna analyzer?

Used to know what happens with these beasts, but have forgotten, and the antenna books I have on hand mention collinear dipoles, but do not give any details on them......have not found any useful info on-line......

Mel
N7OKL

1193. Power

Yahoo group: SkyWires
Date: 2005-06-07 00:32:48 UTC
From: nn5g
Topic: 1193 Message: 1193

Howdy all.... I recently put up a horizontal loop and am very satisfied with it. I will ultimately work my way up to a skywire. I am in the process of adding an amp to the equation. I currently feed the loop with RG-59/U, but need to determine if the RG-59 is able to handle 5-600 watts. I know there are tables for this, but can't remember where they are. Anyone out there able to help? Thanks, Paul NN5G

1194. Re: [SkyWires] collinear vert dipole

Yahoo group: SkyWires
Date: 2005-06-07 13:08:19 UTC
From: JimMcSkate@aol.com
Topic: 1172 Message: 1194

My ham club tried a kite supported longwire antenna a number of years ago, and it was kind of a bust because of static noise - field day in these parts can be humid.

But you raise an interesting possibility - use two kites of significant lifting power, space their stakes a few hundred feet apart, and raise a horizontal loop! The loop will be much less prone to the sort of static that affected the kite raised longwire, methinks.

Say you have the kits up 200' with wire going up to both kites and horizontal wire connecting the kites... perhaps use a third kite in the middle of the horizontal element span to support it... then connect the loop at the bottom, as near to the ground as you'd like. Drive that with ladder line and you'll have an interesting experiment to report on.

My sister used to work in a sail loft, and I got the scraps to make kites with when I was a kid. Can't say I ever tried something this ambitious...

I've drawn it on my whiteboard; maybe one of the scientists on the list could comment on the three-kite configuration and speculate on performance??

73,
Jim
WA2LGN

PS: I had no idea there was a schism on this list - I for one am happy to read about antennas, loop or longwire... I learn from everyone and everything, which is why I like this list so much.

-----Original Message-----
From: Mel Vance <icra@...>
To: SkyWires@yahoogroups.com
Sent: Mon, 06 Jun 2005 10:32:32 -0700
Subject: [SkyWires] collinear vert dipole

Well.....since it seems that this should be OK to ask here, at the risk of
getting jumped on,
will ask a question that I have not gotten an answer to else where......

If you do not like me asking it here, flame me direct....no need to tie up the
list with that kind
of stuff.........

Am looking to build a kite supported antenna....due to the variable wind
directions around
here, want to use vert dipoles to prevent the signal being directed in an
unfavorable
direction.

With the max legal height for the kite before I would need to notify the FAA,
should be able

to fit parallel collinear dipoles for the bands 40 and above.

Know that it is not hard to add the phasing sections and additional 1/2 wave elements, but
never having played around with building one myself, do have questions as to how it affects
the feedpoint....

What does it do to the feedpoint as you add sections? Does it change the R and/or J? Plan
to use rg6 (have it to use.....due to wind generated static, do not think bare wire bal feed line
would be a good idea), will I still be able to get an accurate reading of the antenna feedponit
at the end of the coax on a 50ohm antenna analyzer?

Used to know what happens with these beasts, but have forgotten, and the antenna books I
have on hand mention collinear dipoles, but do not give any details on them......have not
found any useful info on-line......

Mel
N7OKL

Yahoo! Groups Links

1195. Re: [SkyWires] collinear vert dipole

Yahoo group: SkyWires
Date: 2005-06-07 17:27:18 UTC
From: Mel Vance
Topic: 1172 Message: 1195

> But you raise an interesting possibility - use two kites of
> significant lifting power, space their stakes a few hundred feet
> apart, and raise a horizontal loop! The loop will be much less prone
> to the sort of static that affected the kite raised longwire,
> methinks.
>
I thought of a loop also.....will try that in the future.....was wanting to try the vert first to cut
down on the level of complications at first.....also, was looking to run 2 rigs at the same time....20SSB and 30CW/DATA with a single feedline though a band splitter....

A major problem that you will encounter with a kite supported antenna is static build up on the system....could be what you had with your kite longwire.....a bleed resister is needed.....
it is worst with bare wire, but even insulated wire builds a rather large charge.....melted about 2 feet of wire when it discharged as I was bringing in the kite on my kite supported longwire experiment......

Doing research on kites for lifting, looks like a vented sled is the way to go.....there is one
that I have found that is around $60 and is recommended to be flown with (and my mind goes blank....) 200lbs line or better.....Also, have plans for building one of similar size
yourself.....and sources for the rip-stop fabric and 'bulk' kite line....even some with breaking
strength in the 1200lbs range.....

Anyone interested in discussing kite designs and kite supported antennas, would be glad to do so off list to keep from upsetting anyone for OT stuff.....

Still trying to find out about how adding phasing sections and collinear elements alters the
feedpoint of a dipole.....

Mel
N7OKL

1196. Re: [SkyWires] collinear vert dipole

Yahoo group: SkyWires
Date: 2005-06-07 17:37:49 UTC
From: NØATH
Topic: 1172 Message: 1196

Sounds to me like you were about 200 years behind Franklin,

Dave / NØATH
----- Original Message -----
From: Mel Vance
To: SkyWires@yahoogroups.com
Sent: Tuesday, June 07, 2005 12:27 PM
Subject: Re: [SkyWires] collinear vert dipole

> But you raise an interesting possibility - use two kites of
> significant lifting power, space their stakes a few hundred feet
> apart, and raise a horizontal loop! The loop will be much less prone
> to the sort of static that affected the kite raised longwire,
> methinks.
>
I thought of a loop also.....will try that in the future.....was wanting to try the vert first to cut
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Anyone interested in discussing kite designs and kite supported antennas, would be glad to do so off list to keep from upsetting anyone for OT stuff.....

Still trying to find out about how adding phasing sections and collinear elements alters the
feedpoint of a dipole.....

Mel
N7OKL

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1197. Re: [SkyWires] collinear vert dipole

Yahoo group: SkyWires
Date: 2005-06-07 18:36:08 UTC
From: The Smokingman
Topic: 1172 Message: 1197

You realise of course you also have a kite borne lightning rod. I have been watching the discovery channel and when they want to attract lightning they raise a wire into the air with either a kite or a small model rocket. Most of the time lightning will come out of nowhere and strike the wire. Then they record the niformation with high voltage equipment.
----- Original Message -----
From: NØATH <n0ath@...>
To: SkyWires@yahoogroups.com
Subject: Re: [SkyWires] collinear vert dipole
Date: Tue, 7 Jun 2005 12:37:49 -0500

>
> Sounds to me like you were about 200 years behind Franklin,
>
> Dave / NØATH
> ----- Original Message -----
> From: Mel Vance
> To: SkyWires@yahoogroups.com
> Sent: Tuesday, June 07, 2005 12:27 PM
> Subject: Re: [SkyWires] collinear vert dipole
>
>
> > But you raise an interesting possibility - use two kites of
> > significant lifting power, space their stakes a few hundred feet
> > apart, and raise a horizontal loop! The loop will be much less prone
> > to the sort of static that affected the kite raised longwire,
> > methinks.
> >
> I thought of a loop also.....will try that in the
> future........was wanting to try the vert first to cut
> down on the level of complications at first.....also, was
> looking to run 2 rigs at the same
> time....20SSB and 30CW/DATA with a single feedline though a band
> splitter....
>
> A major problem that you will encounter with a kite supported
> antenna is static build up on
> the system....could be what you had with your kite
> longwire.....a bleed resister is needed.....
> it is worst with bare wire, but even insulated wire builds a
> rather large charge.....melted
> about 2 feet of wire when it discharged as I was bringing in the
> kite on my kite supported
> longwire experiment......
>
> Doing research on kites for lifting, looks like a vented sled is

> the way to go.....there is one
> that I have found that is around $60 and is recommended to be
> flown with (and my mind
> goes blank....) 200lbs line or better.....Also, have plans
> for building one of similar size
> yourself.....and sources for the rip-stop fabric and 'bulk' kite
> line....even some with breaking
> strength in the 1200lbs range.....
>
> Anyone interested in discussing kite designs and kite supported
> antennas, would be glad to
> do so off list to keep from upsetting anyone for OT stuff.....
>
> Still trying to find out about how adding phasing sections and
> collinear elements alters the
> feedpoint of a dipole......
>
> Mel
> N7OKL
>
>
>
> ---
> Yahoo! Groups Links
>
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> http://groups.yahoo.com/group/SkyWires/
>
> b.. To unsubscribe from this group, send an email to:
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1198. Re: [SkyWires] collinear vert dipole

Yahoo group: SkyWires
Date: 2005-06-08 02:18:56 UTC
From: Andy
Topic: 1172 Message: 1198

Some of the "Live-Wires" have been experimenting with kite-lifted antennas.
Dave Hatch, N9ZRT (n9zrt@...) has done it several times, but I think he
is mainly looking at the "fun" factor rather than theory.

See http://groups.yahoo.com/group/Live-Wire/ .

Regards,
Andy

> Am looking to build a kite supported antenna....

1199. Re: [SkyWires] collinear vert dipole

Yahoo group: SkyWires
Date: 2005-06-09 18:46:59 UTC
From: John_SusanH@att.net
Topic: 1172 Message: 1199

---------- Original message from "Mel Vance" <icra@...>: ----------

Well.....since it seems that this should be OK to ask here, at the risk of getting jumped on,
will ask a question that I have not gotten an answer to else where......

If you do not like me asking it here, flame me direct....no need to tie up the list with that kind
of stuff.........

Am looking to build a kite supported antenna....due to the variable wind directions around here, want to use vert dipoles to prevent the signal being directed in an unfavorable direction.

With the max legal height for the kite before I would need to notify the FAA, should be able
to fit parallel collinear dipoles for the bands 40 and above.

Know that it is not hard to add the phasing sections and additional 1/2 wave elements, but never having played around with building one myself, do have questions as to how it affects the feedpoint....

What does it do to the feedpoint as you add sections? Does it change the R and/or J? Plan to use rg6 (have it to use.....due to wind generated static, do not think bare wire bal feed line
would be a good idea), will I still be able to get an accurate reading of the antenna feedponit
at the end of the coax on a 50ohm antenna analyzer?

Used to know what happens with these beasts, but have forgotten, and the antenna books I have on hand mention collinear dipoles, but do not give any details on them......have not found any useful info on-line......

Mel
N7OKL

I recently put up a horizontal dipole collinear consisting of two 40 meter dipoles seperated with a 30 foot rope and fed (each one) with 45 feet of ladder line that is commoned to 68 feet of RG6. I routinely check into the California Amateur Radio Emergency Services net (Bay area) from near Mt. Rainier (Wa. state) and the signal reports I get are 1 1/2 to 2 S-units better than my hex beam. Collinears do work. 73 jon ad7aw

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1200. Loop Report

Yahoo group: SkyWires
Date: 2005-06-12 06:11:03 UTC
From: Hal
Topic: 1200 Message: 1200

I'm happy to announce that I got my new loop up today. My first QSO with it was with an Australian Station and I received a 559 report. And that was at midnight my local time on 20 meters. So I would have to say "Yep, It works."
Right now its just fed with RG-6 but I'm going to change it to RG-8 or RG-8x sometime this week.

Hal
ACØAX

1201. Re: [SkyWires] Loop Report

Yahoo group: SkyWires
Date: 2005-06-12 06:13:52 UTC
From: VK4TUX
Topic: 1200 Message: 1201

That was me Hal hihi :)
----- Original Message -----
From: Hal
To: SkyWires@yahoogroups.com
Sent: Sunday, June 12, 2005 4:11 PM
Subject: [SkyWires] Loop Report

I'm happy to announce that I got my new loop up today. My first QSO
with it was with an Australian Station and I received a 559 report.
And that was at midnight my local time on 20 meters. So I would have
to say "Yep, It works."
Right now its just fed with RG-6 but I'm going to change it to RG-8 or
RG-8x sometime this week.

Hal
ACØAX

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1202. Re: Loop Report

Yahoo group: SkyWires
Date: 2005-06-12 06:15:17 UTC
From: Hal
Topic: 1200 Message: 1202

Thats just too Funny..

--- In SkyWires@yahoogroups.com, "VK4TUX" <vk4tux@a...> wrote:
> That was me Hal hihi :)
> ----- Original Message -----
> From: Hal
> To: SkyWires@yahoogroups.com
> Sent: Sunday, June 12, 2005 4:11 PM
> Subject: [SkyWires] Loop Report
>
>
> I'm happy to announce that I got my new loop up today. My first QSO
> with it was with an Australian Station and I received a 559 report.
> And that was at midnight my local time on 20 meters. So I would have
> to say "Yep, It works."
> Right now its just fed with RG-6 but I'm going to change it to RG-8 or
> RG-8x sometime this week.
>
> Hal
> ACØAX
>
>
>
>
>

> Yahoo! Groups Links

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>
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Service.

1203. Re: [SkyWires] Loop Report

Yahoo group: SkyWires
Date: 2005-06-13 00:30:54 UTC
From: Sarge
Topic: 1200 Message: 1203

Cool! What size is it and whats it made from?

I'm happy to announce that I got my new loop up today. My first QSO
with it was with an Australian Station and I received a 559 report.
And that was at midnight my local time on 20 meters. So I would have
to say "Yep, It works."
Right now its just fed with RG-6 but I'm going to change it to RG-8 or
RG-8x sometime this week.

Hal
AC?AX

1204. Re: Loop Report

Yahoo group: SkyWires
Date: 2005-06-13 01:02:48 UTC
From: Hal
Topic: 1200 Message: 1204

My loop is made from 14 AWG THNN wire. Its cut for 40 meters as I don't have enough space for an 80 meter one. I have about 15 feet if 450 ohm ladderline then a 4:1 balun. I was using RG-6 but tried some RG-58 that I had today works fine.

I did find one strange thing.. On 40m I can tune up in the lower half of the band but in the Phone sub-band the best I can tune up is a 2 to 1 SWR. The rest of the bands are all 1.7 to 1 or lower.

Hal
ACØAX
--- In SkyWires@yahoogroups.com, "Sarge" <sarge43@e...> wrote:
> Cool! What size is it and whats it made from?
>
> I'm happy to announce that I got my new loop up today. My first QSO
> with it was with an Australian Station and I received a 559 report.
> And that was at midnight my local time on 20 meters. So I would have
> to say "Yep, It works."
> Right now its just fed with RG-6 but I'm going to change it to RG-8 or
> RG-8x sometime this week.
>
> Hal
> ACØAX

1205. Re: [SkyWires] Re: Loop Report

Yahoo group: SkyWires
Date: 2005-06-13 03:17:47 UTC
From: Dr.Ace Ratliff
Topic: 1200 Message: 1205
Attachments: 1 described; binary payloads are missing from this source WARC

Hal ,
It sounds like your loop is a little long.
Ace - WH2T

----- Original Message -----
From: Hal
To: SkyWires@yahoogroups.com
Sent: Sunday, June 12, 2005 8:02 PM
Subject: [SkyWires] Re: Loop Report

My loop is made from 14 AWG THNN wire. Its cut for 40 meters as I
don't have enough space for an 80 meter one. I have about 15 feet if
450 ohm ladderline then a 4:1 balun. I was using RG-6 but tried some
RG-58 that I had today works fine.

I did find one strange thing.. On 40m I can tune up in the lower half
of the band but in the Phone sub-band the best I can tune up is a 2 to
1 SWR. The rest of the bands are all 1.7 to 1 or lower.

Hal
ACØAX

1206. RE: [SkyWires] Re: Loop Report

Yahoo group: SkyWires
Date: 2005-06-13 03:50:08 UTC
From: Mark Schoonover
Topic: 1200 Message: 1206

Put the ladderline back on, and use a true balanced line tuner. You'll be amazed at how much better a loop will work by not using coax, or a toroidal balun.

73

Mark
KA6WKE

Hal <mailto:kc0bdw@...> wrote:
> My loop is made from 14 AWG THNN wire. Its cut for 40
> meters as I don't have enough space for an 80 meter one.
> I have about 15 feet if 450 ohm ladderline then a 4:1
> balun. I was using RG-6 but tried some RG-58 that I had
> today works fine.
>
> I did find one strange thing.. On 40m I can tune up in
> the lower half of the band but in the Phone sub-band the
> best I can tune up is a 2 to 1 SWR. The rest of the bands
> are all 1.7 to 1 or lower.
>
> Hal
> ACØAX
> --- In SkyWires@yahoogroups.com, "Sarge" <sarge43@e...>
> wrote:
>> Cool! What size is it and whats it made from?
>>
>> I'm happy to announce that I got my new loop up today.
>> My first QSO with it was with an Australian Station and
>> I received a 559 report. And that was at midnight my
>> local time on 20 meters. So I would have to say "Yep, It
>> works." Right now its just fed with RG-6 but I'm going
>> to change it to RG-8 or RG-8x sometime this week.
>>
>> Hal
>> ACØAX

1207. Re: Loop Report

Yahoo group: SkyWires
Date: 2005-06-14 03:02:34 UTC
From: Hal
Topic: 1200 Message: 1207

Well I have solved my problem on 40 meters. The way I solved it was by changing the length of the coax for the CW band or the Phone Band. Not the best solution but it works. It might also be my tuner, which is a Z100 autotuner. I never had this problem with my mfj-949e. Which is not working right now as the inductor coil arced one day. But that is a different story.

ACØAX
Hal
--- In SkyWires@yahoogroups.com, "Hal" <kc0bdw@h...> wrote:
> I'm happy to announce that I got my new loop up today. My first QSO
> with it was with an Australian Station and I received a 559 report.
> And that was at midnight my local time on 20 meters. So I would have
> to say "Yep, It works."
> Right now its just fed with RG-6 but I'm going to change it to RG-8 or
> RG-8x sometime this week.
>
> Hal
> ACØAX

1208. Re: Loop Report

Yahoo group: SkyWires
Date: 2005-06-17 12:14:53 UTC
From: bambazonke01
Topic: 1200 Message: 1208

--- In SkyWires@yahoogroups.com, "Hal" <kc0bdw@h...> wrote:
> Well I have solved my problem on 40 meters. The way I solved it was
by
> changing the length of the coax for the CW band or the Phone Band.

Hi all,
Lets go back to basics and remember that the impedance of a loop is
about 230 ohms.
The way to match it up is to connect a 1/4 wave length of 75 ohm
coax to the antenna cut for the lowest frequency (in this case 40 M
and remember to calculate the length using the velocity factor of the
particular coax). From the end of the 75 ohm coax connect to 50 0hm
coax of any length to the rig.
Forget open wire lines and things like baluns. Go with the coax
matching section. Using other ideas systems to attempt a match can
produce high voltages at the tuner with flash over possibilities.
ACE has a good reference to a reduced size loop that works well but
you should research the calculations and fully understand how and why
it works.
Those long lengths of wire in a loop can pick up a lot of Static
voltage so
it is a great idea to connect a 2.5 mH Rf choke to ground at the
transceiver. The size of the choke is about 2 inches long and has
several "Pie sections".
This choke will not affect the rig or antenna operation. It can
burn out however if you have a nearby lightning strike so remember
your grounding relays as well.
73
Jim VE3DDY

1209. RE: [SkyWires] Re: Loop Report

Yahoo group: SkyWires
Date: 2005-06-17 14:35:29 UTC
From: Mark Schoonover
Topic: 1200 Message: 1209

bambazonke01 <mailto:jimandruth@...> wrote:
> --- In SkyWires@yahoogroups.com, "Hal" <kc0bdw@h...>
> wrote:
>> Well I have solved my problem on 40 meters. The way I
>> solved it was by changing the length of the coax for the
>> CW band or the Phone Band.

Much Snipped.

> Forget open wire lines and things like baluns. Go with
> the coax matching section. Using other ideas systems to
> attempt a match can produce high voltages at the tuner
> with flash over possibilities.

Using coax as a matching section is fine for a monoband loop. You can't run this loop on higher bands, it all depends upon the requirements for the antenna. Using balanced line, and a Z-Match tuner is the best approach to multiband use of a loop. Even on the band it's designed for, you'll notice slightly better performance with the loop. The Z-Match tuner provides a much higher Q than the coax transformer approach. Easily verifiable by noting the bandwidth at resonance. With my 80m loop, b/w on 20m was about 100 KC. This loop was fed with about 40' of 450 ohm ladderline into a homebrew Z-Match. The Z-Match I chose used an air core inductor which handles really odd impedances better than torroidal cores. Don't have to worry about saturation, heating, etc.

I guess what it all boils down to is the loop going to be monoband, or multiband.

HTH & 73

Mark
KA6WKE

1211. RE: [SkyWires] Re: Loop Report

Yahoo group: SkyWires
Date: 2005-06-17 22:31:10 UTC
From: Jim Dunstan
Topic: 1200 Message: 1211

At 07:35 AM 6/17/2005 -0700, you wrote:
>bambazonke01 <mailto:jimandruth@...> wrote:
> > --- In SkyWires@yahoogroups.com, "Hal" <kc0bdw@h...>
> > wrote:
> >> Well I have solved my problem on 40 meters. The way I
> >> solved it was by changing the length of the coax for the
> >> CW band or the Phone Band.
>
>Much Snipped.
>
> > Forget open wire lines and things like baluns. Go with
> > the coax matching section. Using other ideas systems to
> > attempt a match can produce high voltages at the tuner
> > with flash over possibilities.
>
>Using coax as a matching section is fine for a monoband loop. You can't run
>this loop on higher bands, it all depends upon the requirements for the
>antenna. Using balanced line, and a Z-Match tuner is the best approach to
>multiband use of a loop. Even on the band it's designed for, you'll notice
>slightly better performance with the loop. The Z-Match tuner provides a much
>higher Q than the coax transformer approach. Easily verifiable by noting the
>bandwidth at resonance. With my 80m loop, b/w on 20m was about 100 KC. This
>loop was fed with about 40' of 450 ohm ladderline into a homebrew Z-Match.
>The Z-Match I chose used an air core inductor which handles really odd
>impedances better than torroidal cores. Don't have to worry about
>saturation, heating, etc.
>
>I guess what it all boils down to is the loop going to be monoband, or
>multiband.
>
>HTH & 73
>
>Mark
>KA6WKE

Hi all .... Mark,

I couldn't agree more. I have used various sizes of loops as well as dipoles, extended double zep, and straight zeps. The absolute best way to feed them is with open wire line and a Z-match antenna tuner. The system maintains balance and feeds just about all frequencies. The efficiency is much better than the balun/coax/tuner route and unlike the coax matching section approach, facilitates multi-band operation.

Unfortunately the Z-match tuner is not very common these days (commercially) but rather easy to build. There are some really good

articles on the Web .... The model I am using is a 100W model (commercial) manufactured in the UK (years ago) ... the KWezee match .... tunes all bands with no band switching !!! The Web articles show the construction of a more robust model. By the way, I have never had a flash in the my more modest tuner .... I usually run about 20-50W output .... however I have gone up to over 100W , but not that often .... I'm not afraid of the power, just the neighbors (considerate) hi hi.

Jim Dunstan, VE3CI
Thunder Bay, ON

1212. RE: [SkyWires] Re: Loop Report

Yahoo group: SkyWires
Date: 2005-06-17 22:35:24 UTC
From: KD5NWA
Topic: 1200 Message: 1212

I'm a big fan of Z-Match tuners, I've been looking for one of those on EBay
but you don't see many showing up on the States.

At 05:31 PM 6/17/2005, you wrote:
>At 07:35 AM 6/17/2005 -0700, you wrote:
>>bambazonke01 <mailto:jimandruth@...> wrote:
>> > --- In SkyWires@yahoogroups.com, "Hal" <kc0bdw@h...>
>> > wrote:
>> >> Well I have solved my problem on 40 meters. The way I
>> >> solved it was by changing the length of the coax for the
>> >> CW band or the Phone Band.
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>>Much Snipped.
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>> > attempt a match can produce high voltages at the tuner
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>>
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>>this loop on higher bands, it all depends upon the requirements for the
>>antenna. Using balanced line, and a Z-Match tuner is the best approach to
>>multiband use of a loop. Even on the band it's designed for, you'll notice
>>slightly better performance with the loop. The Z-Match tuner provides a much
>>higher Q than the coax transformer approach. Easily verifiable by noting the
>>bandwidth at resonance. With my 80m loop, b/w on 20m was about 100 KC. This
>>loop was fed with about 40' of 450 ohm ladderline into a homebrew Z-Match.
>>The Z-Match I chose used an air core inductor which handles really odd
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>>saturation, heating, etc.
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>>I guess what it all boils down to is the loop going to be monoband, or
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>>HTH & 73
>>
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>Hi all .... Mark,
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>feed them is with open wire line and a Z-match antenna tuner. The system
>maintains balance and feeds just about all frequencies. The efficiency is

>much better than the balun/coax/tuner route and unlike the coax matching
>section approach, facilitates multi-band operation.
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>Unfortunately the Z-match tuner is not very common these days
>(commercially) but rather easy to build. There are some really good
>articles on the Web .... The model I am using is a 100W model (commercial)
>manufactured in the UK (years ago) ... the KWezee match .... tunes all
>bands with no band switching !!! The Web articles show the construction
>of a more robust model. By the way, I have never had a flash in the my
>more modest tuner .... I usually run about 20-50W output .... however I
>have gone up to over 100W , but not that often .... I'm not afraid of the
>power, just the neighbors (considerate) hi hi.
>
>Jim Dunstan, VE3CI
>Thunder Bay, ON
>
>----------
>Yahoo! Groups Links
> * To visit your group on the web, go to:
> *
> <http://groups.yahoo.com/group/SkyWires/>http://groups.yahoo.com/group/SkyWires/
>
> *
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> *
> <mailto:SkyWires-unsubscribe@yahoogroups.com?subject=Unsubscribe>SkyWires-unsubscribe@ya
hoogroups.com
>
> *
> * Your use of Yahoo! Groups is subject to the
> <http://docs.yahoo.com/info/terms/>Yahoo! Terms of Service.
>No virus found in this incoming message.
>Checked by AVG Anti-Virus.
>Version: 7.0.323 / Virus Database: 267.7.3/15 - Release Date: 6/14/2005

Cecil Bayona
KD5NWA
www.qrpradio.com

'Never argue with an idiot. They drag you down to their level then beat you
with experience.'

1213. RE: [SkyWires] Re: Loop Report

Yahoo group: SkyWires
Date: 2005-06-17 22:43:28 UTC
From: Mark Schoonover
Topic: 1200 Message: 1213

Here's the Z-Match tuner I built for about $60USD. Most of the variable caps I got from the swapmeet, and I purchased the dual ganged one from Oceanstate Electronics. It's pretty easy to build, took about 5 hours from start to finish. Here's the URL:
http://www4.tpgi.com.au/users/ldbutler/SingleCoilVK5BRCct.htm
<http://www4.tpgi.com.au/users/ldbutler/SingleCoilVK5BRCct.htm>

73

Mark
KA6WKE

-----Original Message-----
From: KD5NWA [mailto:KD5NWA@...]
Sent: Friday, June 17, 2005 3:35 PM
To: SkyWires@yahoogroups.com
Subject: RE: [SkyWires] Re: Loop Report

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At 05:31 PM 6/17/2005, you wrote:

At 07:35 AM 6/17/2005 -0700, you wrote:

bambazonke01 < <mailto:jimandruth@...>
mailto:jimandruth@...> wrote:
> --- In SkyWires@yahoogroups.com, "Hal" <kc0bdw@h...>
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>> solved it was by changing the length of the coax for the
>> CW band or the Phone Band.

Much Snipped.

> Forget open wire lines and things like baluns. Go with
> the coax matching section. Using other ideas systems to
> attempt a match can produce high voltages at the tuner
> with flash over possibilities.

Using coax as a matching section is fine for a monoband loop. You can't run this loop on higher bands, it all depends upon the requirements for the antenna. Using balanced line, and a Z-Match tuner is the best approach to multiband use of a loop. Even on the band it's designed for, you'll notice slightly better performance with the loop. The Z-Match tuner provides a much higher Q than the coax transformer approach. Easily verifiable by noting the bandwidth at resonance. With my 80m loop, b/w on 20m was about 100 KC. This

loop was fed with about 40' of 450 ohm ladderline into a homebrew Z-Match. The Z-Match I chose used an air core inductor which handles really odd impedances better than torroidal cores. Don't have to worry about saturation, heating, etc.

I guess what it all boils down to is the loop going to be monoband, or multiband.

HTH & 73

Mark
KA6WKE

Hi all .... Mark,

I couldn't agree more. I have used various sizes of loops as well as dipoles, extended double zep, and straight zeps. The absolute best way to feed them is with open wire line and a Z-match antenna tuner. The system maintains balance and feeds just about all frequencies. The efficiency is much better than the balun/coax/tuner route and unlike the coax matching section approach, facilitates multi-band operation.

Unfortunately the Z-match tuner is not very common these days (commercially) but rather easy to build. There are some really good articles on the Web .... The model I am using is a 100W model (commercial) manufactured in the UK (years ago) ... the KWezee match .... tunes all bands with no band switching !!! The Web articles show the construction of a more robust model. By the way, I have never had a flash in the my more modest tuner .... I usually run about 20-50W output .... however I have gone up to over 100W , but not that often .... I'm not afraid of the power, just the neighbors (considerate) hi hi.

Jim Dunstan, VE3CI
Thunder Bay, ON

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<http://groups.yahoo.com/group/SkyWires/>

*

* To unsubscribe from this group, send an email to:

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<mailto:SkyWires-unsubscribe@yahoogroups.com?subject=Unsubscribe>

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Cecil Bayona
KD5NWA
www.qrpradio.com <http://www.qrpradio.com/>

'Never argue with an idiot. They drag you down to their level then beat you
with experience.'

_____

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* To unsubscribe from this group, send an email to:
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1214. question on coax...

Yahoo group: SkyWires
Date: 2005-06-18 01:27:55 UTC
From: Mel Vance
Topic: 1214 Message: 1214

OK...I know that most here favor open line or ladder line.....need to ask about coax for my
kite supported antenna experiment.....

Going througn the feed line I have on hand, have nothing that will be long enough, so will need to patch together several chunks.....have some with BNC's on them....what would it do if I used a T connector to join 2 runs together....IE....use to 'ports' and left the 3rd open......

Will this cause a problem?

Have a bunch of old computer networking RG-58 on hand and several of the T adapters on hand....

Before I spend lots of money I do not have on new feed line, want to make sure I have a kite that will handle the load.....

Mel
N7OKL

1215. Re: [SkyWires] question on coax...

Yahoo group: SkyWires
Date: 2005-06-18 02:32:17 UTC
From: Richards
Topic: 1214 Message: 1215

Mel -- I'm not a negative guy, and I like a challenge, and even more, I like helping others solve problems. I mean this to be a thoughtful, serious message, and do not mean to be pessimistic common negative, or sarcastic in any way.

Yet, I'm having a real hard time imagining how you are going to accomplish this feat. I'm thinking about the weight of the wire, its length and mass. I am thinking about the size of the kite, and how big it must be to handle the wavelengths you want to work with, and carry sufficient wire to do that. I'm thinking about how the wind changes, so frequently and so dramatically. I'm thinking about how you are going to control the kites while in flight, and operate your radio at the same time. I'm wondering where you will find the room to do this without getting tangled up in the rest of civilization and its artifacts. I'm wondering how long you're going to be able to keep the kites up, in a stable configuration and position. I'm wondering what you will do when the wind shifts dramatically, as it does in my location, without warning, and with great frequency. And I am wondering how you will gather it all back in at the end of the day?

This kite things sounds kind of fantastic. Am I way off base? Could you take a moment to explain how this will all work, and how you're going to manage it? It is a fascinating comment interesting and intriguing notion, but I just can't fathom how you're going to pull it off!

Happy trails to you. (I will understand if you just ignore this post and continue with your project... but I am serious in my inquiry and do wish you all the best in this endeavor.)

Best Regards. ///// Richards //////
==========

Mel Vance wrote:

>OK...I know that most here favor open line or ladder line.....need to ask about coax for my
>kite supported antenna experiment.....
>
>

1216. Re: [SkyWires] question on coax...

Yahoo group: SkyWires
Date: 2005-06-18 02:36:44 UTC
From: Jim Dunstan
Topic: 1214 Message: 1216

At 06:27 PM 6/17/2005 -0700, you wrote:
>OK...I know that most here favor open line or ladder line.......need to
>ask about coax for my
>kite supported antenna experiment.......
>
>Going througn the feed line I have on hand, have nothing that will be long
>enough, so will
>need to patch together several chunks.....have some with BNC's on
>them....what would it do
>if I used a T connector to join 2 runs together....IE....use to 'ports'
>and left the 3rd open......
>
>Will this cause a problem?

Hi,

I have used a T connector to splice coax line many times and have never
noticed any difference from a straight through type connector. I have a
lot of T connectors in my junk box hi hi.

Jim Dunstan, VE3CI
Thunder Bay, ON

1217. Re: [SkyWires] question on coax...

Yahoo group: SkyWires
Date: 2005-06-18 02:40:59 UTC
From: Bill Wright
Topic: 1214 Message: 1217

Sorry to butt in fellas. I remember years ago a project that was an off shoot of a military emergency antenna system using a box kite. The box kite is fairly stable and supposedly will work. Don't know for how long but it should allow you to raise a 14 gauge lanyard. I do think that you may not want to do this if you your weather is changing. Might end up duplicating Ben Franklin's lightning experiment.
my 2 cents.
73
Bill

Richards <jruing@...> wrote:
Mel -- I'm not a negative guy, and I like a challenge, and even more, I like helping others solve problems. I mean this to be a thoughtful, serious message, and do not mean to be pessimistic common negative, or sarcastic in any way.

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Happy trails to you. (I will understand if you just ignore this post and continue with your project... but I am serious in my inquiry and do wish you all the best in this endeavor.)

Best Regards. ///// Richards //////
==========

Mel Vance wrote:

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>kite supported antenna experiment.....

>
>

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1218. Re: [SkyWires] question on coax...

Yahoo group: SkyWires
Date: 2005-06-18 03:40:08 UTC
From: Mel Vance
Topic: 1214 Message: 1218

> Sorry to butt in fellas. I remember years ago a project that was an
> off shoot of a military emergency antenna system using a box kite.
> The box kite is fairly stable and supposedly will work. Don't know for
> how long but it should allow you to raise a 14 gauge lanyard. I do
> think that you may not want to do this if you your weather is
> changing. Might end up duplicating Ben Franklin's lightning
> experiment. my 2 cents. 73 Bill
>
Kinda done the Ben Franklin thing....was testing a kite supported longwire...almost an end fed inverted V in shape...still a random longwire...after disconnecting everything to retrieve
the kite, enough wind generated static built up that, when the end touched the ground, 2 feet
of the wire vaporized......

Lesson I learned...keep the static discharge resistor in place until the whole thing is down......

Mel
N7OKL

1219. Re: [SkyWires] question on coax...

Yahoo group: SkyWires
Date: 2005-06-18 04:14:11 UTC
From: Mel Vance
Topic: 1214 Message: 1219

> Mel -- I'm not a negative guy, and I like a challenge, and even more,
> I like helping others solve problems. I mean this to be a thoughtful,
> serious message, and do not mean to be pessimistic common negative, or
> sarcastic in any way.

Not at all...I am still figuring things out and revising my ideas.....already have run into things
I need to re-think.....And, I seem to be coming to the conclusion that there is no 1 answer....looks like I will need different kites for different wind speeds....

You may be picturing a smaller kite than I am trying to use....this is a fair sized kite....designed for 'lifting'...recommended by more than one kite shop....they use them mostly for lifting teddy bears and dropping them on parachutes.....based on what I saw today, it may still be too small for the 5-15MPH wind at the time...part of why I intend to do
side by side comparrisons on test kites to find something with more lift......

The area I intend to fly is Ft. Casey...a former costal defense installation....1000's of feet of
clear flying area....winds tend to be fairly constant out of the South (longwires tend to be
directive North leaving very few contact opportunities...why I am looking at a vert dipole) and do vary in strength. The kite designs I am looking at do not require a huge amount of playing to keep them up....also, will be anchored to the rear bumped of my van where the rig will be operated from, so will be able to look at the kite from time to time.....

Am also referring to some web sites I found searching for kite supported antennas...there are a few sites out there, so I am really just re-inventing what others have done..only thing I
think I am trying different is a vert dipole...others seem to be sticking to lots of radials and a
1/4 wave vert or longwires....I am trying to avoid having to use a bunch of radials as this is a
popular park and do not want trip hazards.

May also try a delta loop and see how that does...would need more line anchor points and may not work in the park.....

If any one is interested in more discussion on kite supported antennas, we may want to move it off the list....some others may not be interested.....

Hope I hit all the points you brought up....

Mel
N7OKL

1220. Kite testing

Yahoo group: SkyWires
Date: 2005-06-18 15:17:56 UTC
From: Mel Vance
Topic: 1220 Message: 1220

Will be attempting to get a kite supported antenna in the air today....

For those that are interested, will be starting to get the kite up starting around 11AM West
coast (1800Z if my math is correct)...IF I can get a vert dipole up, look for me on 28.4 or around 14.250 sometime after that for on the air testing.....Will attempt the 10mtr antenna first as it will have the most wire in the air. If it works, will try a few contacts before attempting to get the 20mtr version up.....

Due to limited power (will be on battery only...no recharge ability), will not be active on the
air for huge amounts of time...As RX uses less power, you may try calling me....may be up and listening....expect the soonest I could be on the air would be around noon (1900Z).....may be on 20 by around 12:30-1PM (1930-2000Z)..should be flying for at least 4 hours.....

Mel
N7OKL

1221. Re: [SkyWires] Kite testing

Yahoo group: SkyWires
Date: 2005-06-18 20:36:19 UTC
From: willie hawkins
Topic: 1220 Message: 1221

hi mel good to see someone else putting kite in air
been playing with kites for about 4months the idea for
me came from zl2ms peter he now does regular test with
kites on 160m 80m 40m so far alls good ok good luck
happy dx cheers
willie zl2agd

--- Mel Vance <icra@...> wrote:

> Will be attempting to get a kite supported antenna
> in the air today....
>
> For those that are interested, will be starting to
> get the kite up starting around 11AM West
> coast (1800Z if my math is correct)...IF I can get a
> vert dipole up, look for me on 28.4 or
> around 14.250 sometime after that for on the air
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> first as it will have the most wire in the air. If
> it works, will try a few contacts before
> attempting to get the 20mtr version up.....
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> Due to limited power (will be on battery only...no
> recharge ability), will not be active on the
> air for huge amounts of time...As RX uses less
> power, you may try calling me....may be up
> and listening....expect the soonest I could be on
> the air would be around noon
> (1900Z).....may be on 20 by around 12:30-1PM
> (1930-2000Z)..should be flying for at least 4
> hours.....
>
> Mel
> N7OKL
>
>

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Rekindle the Rivalries. Sign up for Fantasy Football
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1222. Re: [SkyWires] question on coax...

Yahoo group: SkyWires
Date: 2005-06-18 23:34:44 UTC
From: Richards
Topic: 1214 Message: 1222

Thanks for the additional gloss, Mel. It gives me
a lot more insight into what you are doing.

I, for one, hope you keep the discussion public, as it
is fascinating, if not fantastic. Good luck.

Happy trails. /////////////// Richards ///////////////
==========

>If any one is interested in more discussion on kite supported antennas, we may want to
>move it off the list....some others may not be interested.....
>
>
>

1223. kite flop....

Yahoo group: SkyWires
Date: 2005-06-18 23:41:02 UTC
From: Mel Vance
Topic: 1223 Message: 1223

Well.....over 3 hours of trying and could not even get a kite in the air let alone run an antenna up.......

When you do not need it, there is more than 20MPH wind....when you do...nothing....

Will see if any wind develops in the next few days........

Now....start cutting up garbage bags and make some test kites to see if I can find something
better than what I have......

Mel
N7OKL

1226. Topo Map

Yahoo group: SkyWires
Date: 2005-07-06 01:41:30 UTC
From: KE5CTY Bob
Topic: 1226 Message: 1226

Does anyone know where I can get a Topo map for my locator EM12CX, I went to ac6v to find one but can find everything but a Topo..

I am trying to see what my terrain is actually like around here for antenna design and mapping purposes. I know we are on a hill, but don't know how high compared to the surrounding area.

I thought a Topo would help.

7&3 fer nw,
Bob
KE5CTY (old calls WB5ZQU - WY5L)
10X# 37210
FP#-1141
http://www.qsl.net/ke5cty/
Code may be taking a back seat for now, but the pioneering spirit that put the code there in the first place is out front of it all.

1227. RE: [SkyWires] Topo Map

Yahoo group: SkyWires
Date: 2005-07-06 03:42:05 UTC
From: D. Scott MacKenzie
Topic: 1226 Message: 1227

http://www.topozone.com/

Good source for topo maps at a variety of detail levels

de KBOFHP
-----Original Message-----
From: SkyWires@yahoogroups.com [mailto:SkyWires@yahoogroups.com]On Behalf
Of KE5CTY Bob
Sent: Tuesday, July 05, 2005 9:42 PM
To: Amateur_Radio@Yahoogroups; dx-list@yahoogroups.com;
SkyWires@yahoogroups. Com; cq-contest@...
Subject: [SkyWires] Topo Map

Does anyone know where I can get a Topo map for my locator EM12CX, I
went to ac6v to find one but can find everything but a Topo..

I am trying to see what my terrain is actually like around here for
antenna design and mapping purposes. I know we are on a hill, but don't
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1228. Re: [SkyWires] Topo Map

Yahoo group: SkyWires
Date: 2005-07-06 13:24:38 UTC
From: ROBERT W BETTS
Topic: 1226 Message: 1228

Bob:
I wanted to do the same thing. I ended up going to the local airport where the private pilots file flight plans and bought a "chart" (map) of the area. What's neat about it is that it has the beacons and other frequencies listed.
I did find some maps while surfing a .gov site (sorry, forget the URL - will post later if I find it), but as I recall, it wasn't that obscure. The thing is that having the aircraft map on the wall really added ambience to the shack (wifey opinions not withstanding).
Bob, N1KPR

KE5CTY Bob <rtnmi@...> wrote:
Does anyone know where I can get a Topo map for my locator EM12CX, I
went to ac6v to find one but can find everything but a Topo..

I am trying to see what my terrain is actually like around here for
antenna design and mapping purposes. I know we are on a hill, but don't
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Bob
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Code may be taking a back seat for now, but the pioneering spirit that
put the code there in the first place is out front of it all.

Yahoo! Groups Links

1229. Re: [SkyWires] Topo Map

Yahoo group: SkyWires
Date: 2005-07-06 14:16:25 UTC
From: Richards
Topic: 1226 Message: 1229

Gee Bob... I figure... the louder the XYL complains
about the decor, the more appropriate it is for the shack.... ;-)

Just my take. /////////////// Richards ///////////////
==========

ROBERT W BETTS wrote:

> The thing is that having the aircraft map on the wall really added
> ambience to the shack (wifey opinions not withstanding).
>

1230. RE: [SkyWires] Topo Map

Yahoo group: SkyWires
Date: 2005-07-06 14:34:46 UTC
From: Bruce Wilson
Topic: 1226 Message: 1230

I don't believe anyone has mentioned NASA World Wind (Google it) for displaying USGS topo maps (and other satellite imaging). You need a fast computer and a broadband network connection to run it effectively.

A similar program, Google Earth, has turned on downloads again (earth.google.com), but this application doesn't appear to do topo maps.

Both are free.

--
Dr. Bruce Wilson
Department of Chemistry
Utah Valley State College
Office: Bruce.Wilson@... 1-801-863-7138, SB 220a
Mobile: b.e.wilson@... 1-801-360-8089

1231. RE: [SkyWires] Topo Map

Yahoo group: SkyWires
Date: 2005-07-06 14:31:48 UTC
From: Greg Walls
Topic: 1226 Message: 1231

You can order maps from USGS. http://www.usgs.gov/pubprod/

There is also a very good program from a company called Maptech that you can buy that has maps on CDs. It is useful to plot elevation differences and to calculate line of site points. http://www.maptech.com/

Hope this helps..

73

Greg

W4GHW

From: SkyWires@yahoogroups.com [mailto:SkyWires@yahoogroups.com] On Behalf Of ROBERT W BETTS
Sent: Wednesday, July 06, 2005 9:25 AM
To: SkyWires@yahoogroups.com
Subject: Re: [SkyWires] Topo Map

Bob:

I wanted to do the same thing. I ended up going to the local airport where the private pilots file flight plans and bought a "chart" (map) of the area. What's neat about it is that it has the beacons and other frequencies listed.

I did find some maps while surfing a .gov site (sorry, forget the URL - will post later if I find it), but as I recall, it wasn't that obscure. The thing is that having the aircraft map on the wall really added ambience to the shack (wifey opinions not withstanding).

Bob, N1KPR

KE5CTY Bob <rtnmi@...> wrote:

Does anyone know where I can get a Topo map for my locator EM12CX, I went to ac6v to find one but can find everything but a Topo..

I am trying to see what my terrain is actually like around here for antenna design and mapping purposes. I know we are on a hill, but don't know how high compared to the surrounding area.

I thought a Topo would help.

7&3 fer nw,
Bob

KE5CTY (old calls WB5ZQU - WY5L)
10X# 37210
FP#-1141
http://www.qsl.net/ke5cty/
Code may be taking a back seat for now, but the pioneering spirit that
put the code there in the first place is out front of it all.

Yahoo! Groups Links

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<http://groups.yahoo.com/gads?t=ms&k=Loop+antenna&w1=Loop+antenna&w2=Craft+h
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dio+sales&c=6&s=124&.sig=qpi3T9XuPIlPia_QNg9RcQ> antenna

Craft
<http://groups.yahoo.com/gads?t=ms&k=Craft+hobby&w1=Loop+antenna&w2=Craft+ho
bby&w3=Hobby+and+craft+supply&w4=Hobby+supply&w5=Ham+radio+outlet&w6=Ham+rad
io+sales&c=6&s=124&.sig=DrrvgzJEgXiseucsz9k3gQ> hobby

Hobby
<http://groups.yahoo.com/gads?t=ms&k=Hobby+and+craft+supply&w1=Loop+antenna&
w2=Craft+hobby&w3=Hobby+and+craft+supply&w4=Hobby+supply&w5=Ham+radio+outlet
&w6=Ham+radio+sales&c=6&s=124&.sig=pfXF93P7BHuWiIje-Ju-mg> and craft supply

Hobby
<http://groups.yahoo.com/gads?t=ms&k=Hobby+supply&w1=Loop+antenna&w2=Craft+h
obby&w3=Hobby+and+craft+supply&w4=Hobby+supply&w5=Ham+radio+outlet&w6=Ham+ra
dio+sales&c=6&s=124&.sig=lp0qS4TwWJIkksHAI_SdzA> supply

Ham
<http://groups.yahoo.com/gads?t=ms&k=Ham+radio+outlet&w1=Loop+antenna&w2=Cra
ft+hobby&w3=Hobby+and+craft+supply&w4=Hobby+supply&w5=Ham+radio+outlet&w6=Ha
m+radio+sales&c=6&s=124&.sig=wkOeXww86YsjQje9bRhfCw> radio outlet

Ham
<http://groups.yahoo.com/gads?t=ms&k=Ham+radio+sales&w1=Loop+antenna&w2=Craf
t+hobby&w3=Hobby+and+craft+supply&w4=Hobby+supply&w5=Ham+radio+outlet&w6=Ham
+radio+sales&c=6&s=124&.sig=SwWiUBNzm6cfqw1KcPHmOw> radio sales

---

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_____

1232. Re: [SkyWires] Topo Map

Yahoo group: SkyWires
Date: 2005-07-06 15:24:27 UTC
From: ROBERT W BETTS
Topic: 1226 Message: 1232

Philosophically, that's quite true. Interior decorating ideas, thoughts, designs, and plans, made by women and men, are pretty much the reciprocal of one another. That's why we (men) are relegated to a room called "The Shack."
BTW: Weekly vacuuming of the floor is optional.
Bob

Richards <jruing@...> wrote:
Gee Bob... I figure... the louder the XYL complains
about the decor, the more appropriate it is for the shack.... ;-)

Just my take. /////////// Richards ///////////
==========

ROBERT W BETTS wrote:

> The thing is that having the aircraft map on the wall really added
> ambience to the shack (wifey opinions not withstanding).
>

Yahoo! Groups Links

1233. Hello Everyone.

Yahoo group: SkyWires
Date: 2005-07-09 21:05:31 UTC
From: n6aq
Topic: 1233 Message: 1233

I look forward to participating in the discussion here.

Thank you N6AQ

http://www.n6aq.com/index.php

1234. Re: [SkyWires] Hello Everyone.

Yahoo group: SkyWires
Date: 2005-07-09 21:54:13 UTC
From: David Shrum
Topic: 1233 Message: 1234

Welcome aboard.
Dave N8PU

n6aq wrote:

>I look forward to participating in the discussion here.
>
>Thank you N6AQ
>
>http://www.n6aq.com/index.php
>
>
>

1235. feedthrough connectors

Yahoo group: SkyWires
Date: 2005-07-14 13:23:35 UTC
From: johntr@myway.com
Topic: 1235 Message: 1235

Anyone know of a source of feed through connectors so I can bring ladder line through a wall to the tuner?
Thanks w5wlb

_____
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1236. Re: [SkyWires] feedthrough connectors

Yahoo group: SkyWires
Date: 2005-07-14 15:36:45 UTC
From: larry
Topic: 1235 Message: 1236

Just a thought... why not drill two holes in a window frame, then install two plastic spacer and feed you feedline through the spacers...
My dad used that idea when he installed my first random wire antenna....
Larry ve3fxq

----- Original Message -----
From: johntr@...
To: hfpack@yahoogroups.com
Cc: skywires@yahoogroups.com
Sent: Thursday, July 14, 2005 9:23 AM
Subject: [SkyWires] feedthrough connectors

Anyone know of a source of feed through connectors so I can bring ladder line through a wall to the tuner?
Thanks w5wlb

_____
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1237. Re: [SkyWires] feedthrough connectors

Yahoo group: SkyWires
Date: 2005-07-14 16:21:16 UTC
From: Jim Dunstan
Topic: 1235 Message: 1237

At 09:23 AM 7/14/2005 -0400, you wrote:

>Anyone know of a source of feed through connectors so I can bring ladder
>line through a wall to the tuner?
>Thanks w5wlb

Hi,

I have a 3" thick window frame made of aluminum with foam sandwiched in between the two sides. I have a 20M dipole (bent) out on the balcony which I feed with 300ohm twinlead to my antenna tuner (it also works on 15M). I use a Kenwood TS-50 transceiver up to full power .... but mostly about 25W on PSK. It works great.

When I started out I simply brought the 300 ohm line through the doorway to the tuner which is located just on the other side of the window frame. This was an inconvenient arrangement and I faced the same question you pose; how can I bring the balanced line through the window frame? I also have a small receiving loop on the balcony which I use for SWL, which is also fed with 300 ohm balanced line to the antenna tuner.

I drilled a small hole, approximately 3/8", through the frame. I then pulled a short length of 110V rubber covered, 2 wire (#16) power cord (I call it zip cord), through the frame. I have about 1 ft on the inside that goes directly to my balanced antenna tuner. On the outside I have about 6" terminated in a 2 pole power connector (female). On the end of the 300 ohm twinlead installed a 2 pole power connector (male). I plug the 300 ohm line directly into the 1.5 ft zip cord which in turn is connected to my tuner. I can easily unplug the dipole and plug in my receiving loop (I just have to remember which one is connected hi hi).

PS ... If I want to undo the operation I found simple pressure fit metal caps that press fit into the holes.

I have not done any rigorous testing, but I have noticed no difference in performance between a direct connection of 300 ohm line to the tuner and one with a 1.5 ft piece of zip cord. If my tuner was a greater distance from the window I would re-attach 300 ohm line on the inside for the run to the tuner. In my case it is unnecessary since the tuner is right at the window.

I have 2 locations .... the one I just described was my city apartment on the 9th flr in Toronto. My other location is a house in a small city (Thunder Bay) where I have several antennas. One of them is balanced line (the rest are coax). The balanced line comes down to a basement window (wood frame). I used the same system here, running a short length of #16 zip cord through the frame. In this case I continue the balanced line on

the inside to my antenna tuner .... about 12 ft. Again it operates flawlessly .... and I operate at the 100W level maximum.

If you want to use heavier insulated balanced cable you could look for the stuff the telephone people use to run from the pole to the house. I find it a stiffer cable and more difficult to use. In any case your only looking at 1 to 2 ft.

By the way before I came up with this simple interim solution I was also looking for some kind of ceramic tubes etc for running through the window frame. But this simple method worked so well I never changed it.

Jim Dunstan, VE3CI
Thunder Bay, ON

1238. Re: [SkyWires] feedthrough connectors

Yahoo group: SkyWires
Date: 2005-07-14 19:22:28 UTC
From: ROBERT W BETTS
Topic: 1235 Message: 1238

John:
I used to use a piece of 1" x 2" trim pine cut to snugly fit in the window frame while the window is opened. It rested on the sill and had 2 threaded rods going through it with washers and thumb nuts (wing nuts) on each end, spaced properly. I'd close the window on it and place another board vertically from the top of the bottom sash to the top of the top sash for security ... otherwise you can't lock the window.
Bob

<johntr@...> wrote:

Anyone know of a source of feed through connectors so I can bring ladder line through a wall to the tuner?
Thanks w5wlb

_____
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Yahoo! Groups Links

1239. Heathkit RF Sig Gen

Yahoo group: SkyWires
Date: 2005-07-14 21:11:52 UTC
From: Bill Wright
Topic: 1239 Message: 1239

All
Does anyone have or know of a source to obtain a Heathkit RF Sig Generator?
I think it was ranged from100Khz to about 100 Mhz. I don't remember the model maybe RF 102 or something like that. I am pretty sure it is a tube type.
I sure would like to get one of these generators.
73
Bill
KD5YYK

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1240. Re: [SkyWires] feedthrough connectors

Yahoo group: SkyWires
Date: 2005-07-15 02:24:36 UTC
From: Richards
Topic: 1235 Message: 1240

Hmmmm--- Many times, you will void the window warranties if you drill through the window frame or still.

Instead.....
I like the idea of bringing it through a window, but in a different way and with no destructive alteration:

Simply open the window, and feed the flat latter line under the window. Purchase some rubber foam or other rubber material to use as a gasket, and lay it on the windowsill under the window, and over the ladder line. Just close the window on it all. If you get a thin enough foam or rubber material, but not too thin, you can still close and lock the window as usual, but still be able to accommodate the added insulation and ladder line between the sash and window. That is the real beauty of latter line; it is flat and easily fits under a window without creating a draft. The foam will insure against any draft - probably be better sealed than before!

Just my take. ////////////// Richards ///////////////
==========

larry wrote:

> Just a thought... why not drill two holes in a window frame, then
> install two plastic spacer and feed you feedline through the spacers...
>
>

1241. Re: [SkyWires] feedthrough connectors

Yahoo group: SkyWires
Date: 2005-07-15 02:40:34 UTC
From: Richards
Topic: 1235 Message: 1241

Bob--- I say "Nuts! You are working too hard this time!"

(said in good humor, of course...)

I just lay the ladder line down flat under the window and on the sash.
A little foam
laid over the sash from end to end (over the ladder line and all across
the sash) seals it
without messing up the lock thing - just do not get too much foam and
just smash the window down to seal. A little Elmer's glue can hold it
in place if necessary, although my good friend just uses a staple gun to
nail the sucker in place... (making me shudder about the window
warranties, again...)

Just my take. /////////////// Richards /////////////////
==========

ROBERT W BETTS wrote:

> John:
> I used to use a piece of 1" x 2" trim pine cut to snugly fit in the
> window frame
>

1242. RE: [SkyWires] Heathkit RF Sig Gen

Yahoo group: SkyWires
Date: 2005-07-15 02:46:08 UTC
From: Mark Schoonover
Topic: 1239 Message: 1242

Bill,

I'm pretty sure I have one of these! IIRC, it doesn't work very well. I've only plugged it in once, and have not touched it since. It's an IG-102, and goes to 220 Mhz. If you'd like a photo of it, I could send one out your way over the weekend. I might even have the manual, but all that stuff is packed up right now. I'm in the middle of a remodel, so most of my ham stuff is in boxes.

Let me know.

73

Mark
KA6WKE

-----Original Message-----
From: Bill Wright [mailto:chief6226@...]
Sent: Thursday, July 14, 2005 2:12 PM
To: SkyWires@yahoogroups.com
Subject: [SkyWires] Heathkit RF Sig Gen

All
Does anyone have or know of a source to obtain a Heathkit RF Sig Generator?
I think it was ranged from100Khz to about 100 Mhz. I don't remember the model maybe RF 102 or something like that. I am pretty sure it is a tube type.
I sure would like to get one of these generators.
73
Bill
KD5YYK

Start <http://us.rd.yahoo.com/evt=34442/*http://www.yahoo.com/r/hs> your day with Yahoo! - make it your home page <?---- LSpots keywords ?><?---- HM ADS ?>

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1243. RE: [SkyWires] Heathkit RF Sig Gen

Yahoo group: SkyWires
Date: 2005-07-15 03:25:56 UTC
From: Bill Wright
Topic: 1239 Message: 1243

Mark
Thanks for the comeback. I am interested in finding one of these sig gens for my own use. I am not a Heath collector. So I am not willing to pay collectors prices. I have seen what some guys want on some of the ham boards. So before we go any farther, what value are you placing on this sig gen? Whether it works is not an issue, just complete. I have been a tech for most of my life, so fixing things so they work is not a problem.
73
Bill

Mark Schoonover <ka6wke@...> wrote:
Bill,

I'm pretty sure I have one of these! IIRC, it doesn't work very well. I've only plugged it in once, and have not touched it since. It's an IG-102, and goes to 220 Mhz. If you'd like a photo of it, I could send one out your way over the weekend. I might even have the manual, but all that stuff is packed up right now. I'm in the middle of a remodel, so most of my ham stuff is in boxes.

Let me know.

73

Mark
KA6WKE
-----Original Message-----
From: Bill Wright [mailto:chief6226@...]
Sent: Thursday, July 14, 2005 2:12 PM
To: SkyWires@yahoogroups.com
Subject: [SkyWires] Heathkit RF Sig Gen

All
Does anyone have or know of a source to obtain a Heathkit RF Sig
Generator?
I think it was ranged from100Khz to about 100 Mhz. I don't remember
the model maybe RF 102 or something like that. I am pretty sure it is a
tube type.
I sure would like to get one of these generators.
73
Bill
KD5YYK

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1244. Re: [SkyWires] feedthrough connectors

Yahoo group: SkyWires
Date: 2005-07-15 13:00:33 UTC
From: charles allison
Topic: 1235 Message: 1244

Hi,

I've not done it since I have no ladder line coming in at present, but I was thinking that the so-239 bulkhead connectors might work, if spaced at a decent spacing. I've found them in 4" to 12" lengths. Just run one leg of the ladder line to a separate connector center. I was planning on making up a 2x4 with the bulkhead connectors mounted through it to fit across the bottom of the window so as to keep the airconditioning in and the heat out. However, at the moment, I've got almost as many unused coax cables coming thru the wall as I have in use so I've not done the window mount bulkheads yet. Spacing for the bulkheads would seem at first thought to be about the same as the spacing for open air ladder line of the same impedance assuming the outer shells are floating. I guess it's even possible that the spacing and grounding conditions of the shells may not be relevent.

best regards,

Charles
wb5izd

> 1. feedthrough connectors
> From: "" <johntr@...>
>
> Message: 1
> Date: Thu, 14 Jul 2005 09:23:35 -0400 (EDT)
> From: "" <johntr@...>
> Subject: feedthrough connectors
>
>
> Anyone know of a source of feed through connectors so I can bring ladder line through a wall to the tuner?
> Thanks w5wlb
>
>
>
>
> _____
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>

1245. feedthrough connectors

Yahoo group: SkyWires
Date: 2005-07-15 15:57:48 UTC
From: johntr@myway.com
Topic: 1235 Message: 1245

Thanks guys for all the ideas for a feed thru connector method.
w5wlb

_____
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1246. Re: [SkyWires] feedthrough connectors

Yahoo group: SkyWires
Date: 2005-07-15 23:14:45 UTC
From: ROBERT W BETTS
Topic: 1235 Message: 1246

Haha, you are right. But then, I love to build stuff ... sometimes it works...
Actually, it's an old trick that hams invented long before me and it was usually for coax, but occasionally ribbon or ladder line. If you have several coax cables to get to the other side of the window, the faux sash is a pretty good solution....and it doesn't damage or change the actual window. But you are right, for just one ribbon cable, running it under the sash is far simpler...that's how my outdoor thermometer is wired.
Bob

Richards <jruing@...> wrote:
Bob--- I say "Nuts! You are working too hard this time!"

(said in good humor, of course...)

1247. Re: [SkyWires] feedthrough connectors

Yahoo group: SkyWires
Date: 2005-07-17 02:35:10 UTC
From: Richards
Topic: 1235 Message: 1247

But seriously folks... do you have a digital photo of that faux sash?
Otherwise I will have to just imagine it from your description.

I think it would be a good idea - as you say - for coax cables.

////////////// JH Richards ////////////////
==================================

>Haha, you are right. But then, I love to build stuff ... sometimes it works...
>Actually, it's an old trick that hams invented long before me and it was usually for coax,
but occasionally ribbon or ladder
>
>

1248. Re: [SkyWires] feedthrough connectors

Yahoo group: SkyWires
Date: 2005-07-17 02:58:22 UTC
From: ROBERT W BETTS
Topic: 1235 Message: 1248

Well, I would, but at the moment it's under the back of the air conditioner, keeping it level.
Just cut a suitable board the full width of the opening...nice and tight fit, and then do your thing with feed thru's...In the fall I'll photograph it....lol.
Bob

Richards <jruing@...> wrote:
But seriously folks... do you have a digital photo of that faux sash?
Otherwise I will have to just imagine it from your description.

I think it would be a good idea - as you say - for coax cables.

////////////// JH Richards /////////////////
==================================

>Haha, you are right. But then, I love to build stuff ... sometimes it works...
>Actually, it's an old trick that hams invented long before me and it was usually for coax, but occasionally ribbon or ladder
>
>

Yahoo! Groups Links

1249. Re: [SkyWires] feedthrough connectors

Yahoo group: SkyWires
Date: 2005-07-18 16:34:48 UTC
From: Richards
Topic: 1235 Message: 1249

OK - no problem.

Absolutely... by all means.... do NOT mess with the
air conditioner at this time... nope... it has been wayyyyy
too hot in my bailiwick to chance it... and I suppose it has
been the same in yours. (Really, it has been very
hot in Michigan this summer.)

I will just have to imagine it. ///////// Richards ////////
==========

ROBERT W BETTS wrote:

> Well, I would, but at the moment it's under the back of the air
> conditioner, keeping it level.
>

1250. Re: [SkyWires] feedthrough connectors

Yahoo group: SkyWires
Date: 2005-07-18 18:48:03 UTC
From: ROBERT W BETTS
Topic: 1235 Message: 1250

Okay, JR, thanks for the advice. I was wondering why it was so hot in here....been miserable for the past 2 1/2 weeks....yuck.
Anyhow, I put a diagram of an "Antenna Feed-thru Panel" on my Web site, pretty much the way my old ones were built. Just go to the site and click the "pink link" (hummm) and the "pink link" will take you to the drawing.
Bob
http://www.geocities.com/amdxlog/index.html

Richards <jruing@...> wrote:
OK - no problem.

Absolutely... by all means.... do NOT mess with the
air conditioner at this time... nope... it has been wayyyyy
too hot in my bailiwick to chance it... and I suppose it has
been the same in yours. (Really, it has been very
hot in Michigan this summer.)

I will just have to imagine it. ///////// Richards ////////
==========

ROBERT W BETTS wrote:

> Well, I would, but at the moment it's under the back of the air
> conditioner, keeping it level.
>

1251. Re: [SkyWires] feedthrough connectors

Yahoo group: SkyWires
Date: 2005-07-19 00:35:37 UTC
From: Richards
Topic: 1235 Message: 1251

Oh... WOW!.... that is fabulous. This really helps (as I
explain to the little Mrs. how this works...and get her endorsement...)

Thanks!

//// JH Richards /////
==========

ROBERT W BETTS wrote:

> I put a diagram of an "Antenna Feed-thru Panel" on my Web site,
>

1253. Re: feedthrough connectors

Yahoo group: SkyWires
Date: 2005-07-19 18:41:26 UTC
From: wb9vwz
Topic: 1235 Message: 1253

Small thought - with the double hung window and the 1x4 spacer, the upper sash of the lower window does not properly seal against the sash of the upper window because the window is not fully closed. This provides access by small insects and, of course, heat.

You will need to put some foam or other material to block that opening.

John
K9JAD

1254. Re: [SkyWires] Re: feedthrough connectors

Yahoo group: SkyWires
Date: 2005-07-19 18:49:58 UTC
From: ROBERT W BETTS
Topic: 1235 Message: 1254

Sorry I neglected to mention that. I use the kits that come with air conditioners. They have foam strips that can be pushed between the sashes to stop any air flow, hot or cold, and of course bugs.
Bob

wb9vwz <wb9vwz@...> wrote:
Small thought - with the double hung window and the 1x4 spacer, the
upper sash of the lower window does not properly seal against the sash
of the upper window because the window is not fully closed. This
provides access by small insects and, of course, heat.

You will need to put some foam or other material to block that opening.

John
K9JAD

Yahoo! Groups Links

1255. Re: [SkyWires] Re: feedthrough connectors

Yahoo group: SkyWires
Date: 2005-07-19 23:09:56 UTC
From: Dr.Ace Ratliff
Topic: 1235 Message: 1255
Attachments: 1 described; binary payloads are missing from this source WARC

Hi All,
I have been following the discussion.
Here's an alternate method I have used in the past to run coax thru a double sash window. It works great if you are only using one coax up to a few coaxes.
Start with the window(s) closed. For each RG-8 type coax drill a vertical 1/2 inch hole thru the seam where the upper and lower sashes meet (to the distant left or right of the center window lock). Don't go all the way to the left or right side of the window. The drill bit should be in front of the glass when you start drilling.

Half of the hole will be drilled thru the bottom of the top sash. And the other half of the hole will be drilled thru the top of the bottom sash.

Now with the window open, from outside the house, push the end of the coax up thru the vertical hole (the PL-259 will fit thru also as long as the window is open). After you get enough of the coax in the house to meet your need, close the window. It will form a seal around the coax, and since the coax runs up thru the hole no water can drip in.

If the hole(s) is temporarily not in use, you can put a cork stopper in it (corks are available at hardware stores). If you decide to repair the hole(s) because you are moving, selling, renting the house etc. Wood putty should be an easy fix. Plus the empty vertical holes are much more difficult to notice than horizontal holes.

Just my 2 cents. Ace - WH2T

----- Original Message -----
From: ROBERT W BETTS
To: SkyWires@yahoogroups.com
Sent: Tuesday, July 19, 2005 1:49 PM
Subject: Re: [SkyWires] Re: feedthrough connectors

Sorry I neglected to mention that. I use the kits that come with air conditioners. They have foam strips that can be pushed between the sashes to stop any air flow, hot or cold, and of course bugs.
Bob

wb9vwz <wb9vwz@yahoo.com> wrote:
Small thought - with the double hung window and the 1x4 spacer, the
upper sash of the lower window does not properly seal against the sash
of the upper window because the window is not fully closed. This
provides access by small insects and, of course, heat.

You will need to put some foam or other material to block that opening.

John
K9JAD

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1256. Re: [SkyWires] Re: feedthrough connectors

Yahoo group: SkyWires
Date: 2005-07-19 23:28:22 UTC
From: Richards
Topic: 1235 Message: 1256

Neat idea Dr. Ace -- Yet, I offer the following gloss thereon....

1) Can you use a 1/4 inch hole and get a tighter fit on the
coax - 1/5 seems wider than necessary.

2) Great idea -really - unless it voids the window warranty....

3) XYL may not like the cables to run up to the middle of the
window and than back down -- your mileage on this might
vary considering what your XYL considers important.

4) This procedure makes it more difficult to open the window
when XYL says we are going al fresco, and disses the air
conditioner. The sash item can stay put while the window
is opened.

5) Simple - yet genius - that you mentioned it running up -
even if it drops from the roof line - concerning the NO DRIP
aspect. That part of the description bears remembering
in any case !!

Thanks. //// Richards /////
==========

Dr.Ace Ratliff wrote:

> Hi All,
> I have been following the discussion.
> Here's an alternate method I have used in the past to run coax thru a
> double sash window.

1257. Re: [SkyWires] Re: feedthrough connectors

Yahoo group: SkyWires
Date: 2005-07-20 00:13:03 UTC
From: ROBERT W BETTS
Topic: 1235 Message: 1257

Ace:
That is very clever. I'm going to put that in my notebook.
But, since we've recently rennovated the old place, would you mind calling my wife and tell her it's okay? Just kidding.
Thanks for the tip.
Bob

"Dr.Ace Ratliff" <wh2t@...> wrote:
Hi All,
I have been following the discussion.
Here's an alternate method I have used in the past to run coax thru a double sash window.
It works great if you are only using one coax up to a few coaxes.

1258. Re: [SkyWires] Re: feedthrough connectors

Yahoo group: SkyWires
Date: 2005-07-20 02:37:21 UTC
From: Harold Burton
Topic: 1235 Message: 1258

----- Original Message -----
From: "Richards" <jruing@...>
To: <SkyWires@yahoogroups.com>
Sent: Tuesday, July 19, 2005 6:28 PM
Subject: Re: [SkyWires] Re: feedthrough connectors

> 1) Can you use a 1/4 inch hole and get a tighter fit on the
> coax - 1/5 seems wider than necessary.

1/5 inch is .20, 1/4 inch is .25, just a reminder.

Harold
KD5SAK

1259. Re: [SkyWires] Re: feedthrough connectors

Yahoo group: SkyWires
Date: 2005-07-20 03:04:01 UTC
From: Richards
Topic: 1235 Message: 1259

YUP -- You are correct. In fact, I made a stupid
error, as I intended to type 1/2 and NOT 1/5.

Cannot quite say why I did that...

Thanks for the polite reply. /// JHR ///
==========

1) Can you use a 1/4 inch hole and get a tighter fit on the
>coax - 1/5 seems wider than necessary.
>
>
>1/5 inch is .20, 1/4 inch is .25, just a reminder.

1260. Re: [SkyWires] Re: feedthrough connectors

Yahoo group: SkyWires
Date: 2005-07-20 03:58:30 UTC
From: Harold Burton
Topic: 1235 Message: 1260

----- Original Message -----
From: "Richards" <jruing@...>
To: <SkyWires@yahoogroups.com>
Sent: Tuesday, July 19, 2005 10:04 PM
Subject: Re: [SkyWires] Re: feedthrough connectors

> YUP -- You are correct. In fact, I made a stupid
> error, as I intended to type 1/2 and NOT 1/5.
>
> Cannot quite say why I did that...
>
> Thanks for the polite reply. /// JHR ///

I can understand that sort of typo, I have to carefully keep an eye on
both my typing fingers or I get'em too. (G)

Harold
KD5SAK

1261. Re: [SkyWires] Re: feedthrough connectors

Yahoo group: SkyWires
Date: 2005-07-20 05:01:48 UTC
From: Dr.Ace Ratliff
Topic: 1235 Message: 1261
Attachments: 1 described; binary payloads are missing from this source WARC

Hi again everyone,
I said drill a half inch hole because I know it has worked very well for me.
RG-8 type coax is about .405" diameter.
7/16" = 0.4375 inches and might work even better , But I am not sure the PL-259 will fit between the glass and the wood with the window open. You could start with a small hole and enlarge it as necessary.
RG-58 type coax is about 0.2" or 5 mm diameter.
The outer diameter of RG-8X is typically about 0.24".
Also, I didn't have any trouble opening or closing the window as long as there was adequate slack in the coax.
As for the XYL , if the coax is installed near the side of the window and you have draperies/curtains they can be adjusted to hide the coax.
73, Ace - WH2T
----- Original Message -----
From: Richards
To: SkyWires@yahoogroups.com
Sent: Tuesday, July 19, 2005 10:04 PM
Subject: Re: [SkyWires] Re: feedthrough connectors

YUP -- You are correct. In fact, I made a stupid
error, as I intended to type 1/2 and NOT 1/5.

Cannot quite say why I did that...

Thanks for the polite reply. /// JHR ///
==========

1) Can you use a 1/4 inch hole and get a tighter fit on the
>coax - 1/5 seems wider than necessary.
>
>
>1/5 inch is .20, 1/4 inch is .25, just a reminder.

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1262. 80 metre loop

Yahoo group: SkyWires
Date: 2005-07-25 04:07:52 UTC
From: ve6pg
Topic: 1262 Message: 1262

HI FROM TIM..I'M THINKING ABOUT PUTTING UP A FULL WAVE LOOP FOR 80.THAT IS,IT WOULD HAVE THE DIMS OF A LOOP FOR 80,BUT WITH MY OPEN WIRE LINE,I SHOULD BE ABLE TO USE IT UP TO ABT 6 METRES..HOME BREW LADDER LINE IS ABT 45 FT.,AND IS PRESENTLY FEEDING MY 80 METRE DIPOLE,WHICH TUNES ALL BANDS,WITH THE EXCEPTION OF 20 METRES..ANY THOUGHTS ON THE LOOP I'VE DESCRIBED?..YOU EXPERIENCES ARE APPRECIATED. BTW,THE 80 METRE DIPOLE TUNES GREAT ON 160,WITH THE K1JJ TUNER.BIG COPPER COIL,NO BALUN,IT USES LINK COUPLING..BEST TUNER THAT I'VE EVER USED..73..TIM..SK.

1263. Re: [SkyWires] 80 metre loop

Yahoo group: SkyWires
Date: 2005-07-25 11:13:56 UTC
From: Dr.Ace Ratliff
Topic: 1262 Message: 1263
Attachments: 1 described; binary payloads are missing from this source WARC

Hi Tim,
My 272' 80 meter Full Wave Delta loop.
Works 6 thru 8o meters using a tuner.
Ace - WH2T

----- Original Message -----
From: ve6pg
To: SkyWires@yahoogroups.com
Sent: Sunday, July 24, 2005 11:07 PM
Subject: [SkyWires] 80 metre loop

HI FROM TIM..I'M THINKING ABOUT PUTTING UP A FULL WAVE LOOP FOR
80.THAT IS,IT WOULD HAVE THE DIMS OF A LOOP FOR 80,BUT WITH MY OPEN
WIRE LINE,I SHOULD BE ABLE TO USE IT UP TO ABT 6 METRES..HOME BREW
LADDER LINE IS ABT 45 FT.,AND IS PRESENTLY FEEDING MY 80 METRE
DIPOLE,WHICH TUNES ALL BANDS,WITH THE EXCEPTION OF 20 METRES..ANY
THOUGHTS ON THE LOOP I'VE DESCRIBED?..YOU EXPERIENCES ARE APPRECIATED.
BTW,THE 80 METRE DIPOLE TUNES GREAT ON 160,WITH THE K1JJ TUNER.BIG
COPPER COIL,NO BALUN,IT USES LINK COUPLING..BEST TUNER THAT I'VE EVER
USED..73..TIM..SK.

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1264. Re: [SkyWires] 80 metre loop

Yahoo group: SkyWires
Date: 2005-07-25 21:13:36 UTC
From: Frank Sellers
Topic: 1262 Message: 1264

Which way are you going to orient it?

Frank N6AQ
http://www.n6aq.com/index.php

--- ve6pg <ve6pg@...> wrote:

> HI FROM TIM..I'M THINKING ABOUT PUTTING UP A FULL
> WAVE LOOP FOR
> 80.THAT IS,IT WOULD HAVE THE DIMS OF A LOOP FOR
> 80,BUT WITH MY OPEN
> WIRE LINE,I SHOULD BE ABLE TO USE IT UP TO ABT 6
> METRES..HOME BREW
> LADDER LINE IS ABT 45 FT.,AND IS PRESENTLY FEEDING
> MY 80 METRE
> DIPOLE,WHICH TUNES ALL BANDS,WITH THE EXCEPTION OF
> 20 METRES..ANY
> THOUGHTS ON THE LOOP I'VE DESCRIBED?..YOU
> EXPERIENCES ARE APPRECIATED.
> BTW,THE 80 METRE DIPOLE TUNES GREAT ON 160,WITH THE
> K1JJ TUNER.BIG
> COPPER COIL,NO BALUN,IT USES LINK COUPLING..BEST
> TUNER THAT I'VE EVER
> USED..73..TIM..SK.
>
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>

Frank N6AQhttp://www.n6aq.com/index.php

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1265. Re: [SkyWires] 80 metre loop

Yahoo group: SkyWires
Date: 2005-07-25 22:11:30 UTC
From: tim smith
Topic: 1262 Message: 1265

frank..loop will be horizontal to the ground..raised
about 30 feet up,..fed with homebrew 600 ohm
ladderline,and tuned thru k1jj tuner..tim..sk..

--- Frank Sellers <n6aq@...> wrote:

> Which way are you going to orient it?
>
> Frank N6AQ
> http://www.n6aq.com/index.php
>
> --- ve6pg <ve6pg@...> wrote:
>
> > HI FROM TIM..I'M THINKING ABOUT PUTTING UP A FULL
> > WAVE LOOP FOR
> > 80.THAT IS,IT WOULD HAVE THE DIMS OF A LOOP FOR
> > 80,BUT WITH MY OPEN
> > WIRE LINE,I SHOULD BE ABLE TO USE IT UP TO ABT 6
> > METRES..HOME BREW
> > LADDER LINE IS ABT 45 FT.,AND IS PRESENTLY FEEDING
> > MY 80 METRE
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> > K1JJ TUNER.BIG
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> Frank N6AQhttp://www.n6aq.com/index.php
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1266. RE: [SkyWires] 80 metre loop

Yahoo group: SkyWires
Date: 2005-07-25 22:31:58 UTC
From: Jeff - N3YEA
Topic: 1262 Message: 1266

Sounds close to mine, only here it's fed with 450 Ohm Ladder line into a DX Engineering 4:1 Balun - LOVE IT ! .. Outperforms the Gap Titan DX easily and tunes 10 thru 80 meters. Never tried it on 6.

73 , de
Jeff - N3YEA

-----Original Message-----
From: SkyWires@yahoogroups.com [mailto:SkyWires@yahoogroups.com] On Behalf Of tim smith
Sent: Monday, July 25, 2005 6:12 PM
To: SkyWires@yahoogroups.com
Subject: Re: [SkyWires] 80 metre loop

frank..loop will be horizontal to the ground..raised about 30 feet up,..fed with homebrew 600 ohm ladderline,and tuned thru k1jj tuner..tim..sk..

--- Frank Sellers <n6aq@...> wrote:

> Which way are you going to orient it?
>
> Frank N6AQ
> http://www.n6aq.com/index.php
>
> --- ve6pg <ve6pg@...> wrote:
>
> > HI FROM TIM..I'M THINKING ABOUT PUTTING UP A FULL
> > WAVE LOOP FOR
> > 80.THAT IS,IT WOULD HAVE THE DIMS OF A LOOP FOR
> > 80,BUT WITH MY OPEN
> > WIRE LINE,I SHOULD BE ABLE TO USE IT UP TO ABT 6
> > METRES..HOME BREW
> > LADDER LINE IS ABT 45 FT.,AND IS PRESENTLY FEEDING
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> > K1JJ TUNER.BIG
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> Frank N6AQhttp://www.n6aq.com/index.php
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1267. RE: [SkyWires] 80 metre loop

Yahoo group: SkyWires
Date: 2005-07-26 03:16:15 UTC
From: tim smith
Topic: 1262 Message: 1267

OK JEFF..WELL,IT SHOULD WERK FB ON 6..MY DIPOLE WITH
OPEN WIRE WERKS LIKE A BOMB ON 6.HEARS VERY WELL,AND
DX IS GREAT. I REGULARLY WERK GUYS IN NY
STATE,OHIO,MICH.,PENN. ON GROUND WAVE,FROM MY QTH IN
TORONTO,100 WATTS FT847...TIM...SK..

--- Jeff - N3YEA <n3yea@...> wrote:

> Sounds close to mine, only here it's fed with 450
> Ohm Ladder line into a
> DX Engineering 4:1 Balun - LOVE IT ! .. Outperforms
> the Gap Titan DX easily
> and tunes 10 thru 80 meters. Never tried it on 6.
>
> 73 , de
> Jeff - N3YEA
>
>
>
> -----Original Message-----
> From: SkyWires@yahoogroups.com
> [mailto:SkyWires@yahoogroups.com] On Behalf
> Of tim smith
> Sent: Monday, July 25, 2005 6:12 PM
> To: SkyWires@yahoogroups.com
> Subject: Re: [SkyWires] 80 metre loop
>
> frank..loop will be horizontal to the ground..raised
> about 30 feet up,..fed with homebrew 600 ohm
> ladderline,and tuned thru k1jj tuner..tim..sk..
>
> --- Frank Sellers <n6aq@...> wrote:
>
> > Which way are you going to orient it?
> >
> > Frank N6AQ
> > http://www.n6aq.com/index.php
> >
> > --- ve6pg <ve6pg@...> wrote:
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> > > HI FROM TIM..I'M THINKING ABOUT PUTTING UP A
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> > > WAVE LOOP FOR
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> > > 80,BUT WITH MY OPEN

> > > WIRE LINE,I SHOULD BE ABLE TO USE IT UP TO ABT 6
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1268. 17 / 6 Meter Loop

Yahoo group: SkyWires
Date: 2005-07-30 01:52:05 UTC
From: n4onl
Topic: 1268 Message: 1268

Hi everyone.
I've been on the air recently with a Cobra Ultralight antenna since i can't put up a low frequency loop. But I've grown an unexpected fondness for 17 meters, would like to give 6 meters a try, and think I can fairly easily put up a center supported 17 meter skywire loop out of the top of my tree to play with. It would be about 40' high.

Now heres the idea, according to the ARRL antenna book a 40 meter skywire loop has gain (over a dipole) and retains a decently omni pattern on 15 meters (3rd harmonic 0f 40m / 3 wave size loop). It just so happens that 17 meters 3rd harmonic hits 6 meters right near the SSB section at the bottom of the band. So theoritically I could scale it down and maintain the same pattern and gain on 6 meters with a 17m loop.

I already heve plenty of BuryFlex (9913 type) coax for the 6 meter KU4AB 6 meter loop (http://ku4ab.com/_wsn/page2.html) I was until today planning on putting up for 6m. Since I'd only be using the 17m loop at or near reasonate freqs/for these 2 bands, I am thinking about coax feeding it with that coax. The tuner in my 746 (classic/non pro) SHOULD take care of any mismatch, which I'm thinking should be small. I have a Daiwa CNW-419 tuner that can be used if needed, its inline now just being used as a wattmeter.

Can anyone forsee problems with this concept?

Any input/comments appreciated.

73
mike

(FYI I scrapped the slinky loop idea before building one, figured it would be too problematic after more research. Currently using a Cobra Ultralite Jr. (http://www.k1jek.com/) 73' linear loaded dipole for 160-6 meters fed through a SGC 237 auto coupler, abt 20' ladder line connecting them, low/sloping. Hey, it got me on the air! And seems to be doing a decent job considering my limitations/restrictions on antennas.)

1269. Re: [SkyWires] 17 / 6 Meter Loop

Yahoo group: SkyWires
Date: 2005-07-30 02:26:56 UTC
From: tim smith
Topic: 1268 Message: 1269

Hmmm..I would be more inclined to but a loop as large as possible,be it for 20,17 whatever,and feed it with open wire line. this way you will be able to tune all bands,say from 20-6. the tuner in your rig will only make the finals happy,and you wont see the benefits of a loop when it comes to the increased receive.if you can,get a tuner that accepts open wire line,and use that. this is the best way to go. dont be afraid of open wire line,it has no line loss,and after 30 yrs of building antennas,i have only one antenna with coax,and that is a vertical for 160. let us know how you make out. tim...sk..

--- n4onl <umrk@...> wrote:

> Hi everyone.
> I've been on the air recently with a Cobra
> Ultralight antenna since i
> can't put up a low frequency loop. But I've grown an
> unexpected
> fondness for 17 meters, would like to give 6 meters
> a try, and think I
> can fairly easily put up a center supported 17 meter
> skywire loop out
> of the top of my tree to play with. It would be
> about 40' high.
>
> Now heres the idea, according to the ARRL antenna
> book a 40 meter
> skywire loop has gain (over a dipole) and retains a
> decently omni
> pattern on 15 meters (3rd harmonic 0f 40m / 3 wave
> size loop). It just
> so happens that 17 meters 3rd harmonic hits 6 meters
> right near the
> SSB section at the bottom of the band. So
> theoritically I could scale
> it down and maintain the same pattern and gain on 6
> meters with a 17m
> loop.
>
> I already heve plenty of BuryFlex (9913 type) coax
> for the 6 meter
> KU4AB 6 meter loop (
> http://ku4ab.com/_wsn/page2.html) I was until

> today planning on putting up for 6m. Since I'd only
> be using the 17m
> loop at or near reasonate freqs/for these 2 bands, I
> am thinking about
> coax feeding it with that coax. The tuner in my 746
> (classic/non pro)
> SHOULD take care of any mismatch, which I'm thinking
> should be small.
> I have a Daiwa CNW-419 tuner that can be used if
> needed, its inline
> now just being used as a wattmeter.
>
> Can anyone forsee problems with this concept?
>
> Any input/comments appreciated.
>
> 73
> mike
>
> (FYI I scrapped the slinky loop idea before building
> one, figured it
> would be too problematic after more research.
> Currently using a Cobra
> Ultralite Jr. (http://www.k1jek.com/) 73' linear
> loaded dipole for
> 160-6 meters fed through a SGC 237 auto coupler, abt
> 20' ladder line
> connecting them, low/sloping. Hey, it got me on the
> air! And seems to
> be doing a decent job considering my
> limitations/restrictions on
> antennas.)
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1270. Re: 17 / 6 Meter Loop

Yahoo group: SkyWires
Date: 2005-07-30 05:35:18 UTC
From: n4onl
Topic: 1268 Message: 1270

Hi Tim, Thanks for the reply.

17 meters is about as large as is practicle as I judge it, and is the band I'm most interested in. Also 10' spreaders will make them easier to find locally. 20 would need about 13' spreaders.

I don't want to tune all the bands from 20-6 with a loop. A loop for 17 and 6m would make me happy, especially if I gain some performance (and omni pattern on 17m) over the other antennas on those bands. Heck last go around being active on HF I was stuck on 10 meters only, I now have orders of magnitude more frequencies to use with the Cobra antenna (160-6 meters).

I bought the SGC for that antenna to bring coax into the shack, and have autotuning. I dont want to use a manual tuner. I don't have to. I dont want to buy another 327 right now. I'm currently putting my dollars into getting a HF mobile setup for the truck. I have a 706, a used screwdriver antenna on the way, and looking at auto controllers for it (turbo tuner?).

All any tuner does is make the finals happy and keep the power out up (SWR protection from curtting in). A friend calls tuners/couplers foolers, and I agree. Resonant single band antennas will preform better, in my meager experience. Going from 1.8 to 54 mhz on one antenna is a comprimise. The Cobra antenna is my comprimise.

The proposed loop for 17 and 6 meters would be resonant on those bands, not needing open wire feedline and wide range tuner to keep the finals happy, wouldn't ir? Just some SWR tweaking, possibly. A loop for 18.13 mhs has its third harmonic on 54.39 mhz, just above the 6 meter SSB section of the band, which is what I'm after. IMHO SSB Rulez! (160 to 2m SSB is my goal) B)

I'm not afraid of open wire line, I choose to use it only where needed, and in this case since I dont want to tune 1.8-54 mhz continously with one antenna I don't see the need for it. If there is a need for it with a 17m loop, as proposed, please enlighten me.

As I see it the little line loss at these frequencies wouldn't make much difference between coax and open wire, if any, in signal at the other end. As long as they hear me, mission acomplished.

Its not that I have fear of ladder line, its that I have nothing against good coax, when ran at reasonable SWR levels. At reasonable swr levels on the feedline, how does open wire beat coax?

The Cobra antenna, is basically a 40 meter antenna by size, but I use it on 160 and 75 also, with deminished efficency, with ladder line to the coupler, and unbalanced coax to my unbalanced rig. But it does what I intend it to do, talk to local friends on 75 and 160.

A place for everything and everything in its place.

I may start rounding up parts this weekend. It will be a while before I can get anything up in the tree, I have to get everything ready for 3 antennas going up in it, (dual band vert, 144 horiz omni, and something for 6m) and round up a tree climber to put them up there for me. The tentative date is before winter. The nount is done, the pole is ready, as are the 440/144 antennas. 6 meter antenna in the tree is up in the air,and getting a loop up for 17m would be a bonus! B)

73
mike

--- In SkyWires@yahoogroups.com, tim smith <ve6pg@y...> wrote:
> Hmmm..I would be more inclined to but a loop as large
> as possible,be it for 20,17 whatever,and feed it with
> open wire line. this way you will be able to tune all
> bands,say from 20-6. the tuner in your rig will only
> make the finals happy,and you wont see the benefits of
> a loop when it comes to the increased receive.if you
> can,get a tuner that accepts open wire line,and use
> that. this is the best way to go. dont be afraid of
> open wire line,it has no line loss,and after 30 yrs of
> building antennas,i have only one antenna with
> coax,and that is a vertical for 160. let us know how
> you make out. tim...sk..

1273. Re: [SkyWires] Group Information

Yahoo group: SkyWires
Date: 2005-07-31 02:46:26 UTC
From: David Shrum
Topic: 1272 Message: 1273

The original message has already been deleted and the sender banned, for what ever that good that will do; considering the user name.
Dave N8PU

Frank Sellers wrote:

>Whats up with this spam garbage?
>
>Frank N6AQ
>http://www.n6aq.com/index.php
>
>--- zptkwnazttho <zptkwnazttho@...> wrote:
>
>
>
>

1274. Re: 17 / 6 Meter Loop

Yahoo group: SkyWires
Date: 2005-08-03 04:22:13 UTC
From: ve6pg
Topic: 1268 Message: 1274

ok on the loop,this is what makes things fun..btw,on the ONTARIO SWAPSHOP,a guy has the remote tuner thingy for the screwdriver..seemed good price to me.do a google for "ontario swapshop".this is probably the longest running swap net.great to listen to,and all the stuff is listed on the internet.with the american dollar stronger than our's,you can get some great deals.shipping for most of the stuff listed is canada post mailed,so you wont get dinged in shipping..give it a try..73..tim...sk..

--- In SkyWires@yahoogroups.com, "n4onl" <umrk@b...> wrote:
> Hi Tim, Thanks for the reply.
>
> 17 meters is about as large as is practicle as I judge it, and is the
> band I'm most interested in. Also 10' spreaders will make them easier
> to find locally. 20 would need about 13' spreaders.
>
> I don't want to tune all the bands from 20-6 with a loop. A loop for
> 17 and 6m would make me happy, especially if I gain some performance
> (and omni pattern on 17m) over the other antennas on those bands. Heck
> last go around being active on HF I was stuck on 10 meters only, I now
> have orders of magnitude more frequencies to use with the Cobra
> antenna (160-6 meters).
>
> I bought the SGC for that antenna to bring coax into the shack, and
> have autotuning. I dont want to use a manual tuner. I don't have to. I
> dont want to buy another 327 right now. I'm currently putting my
> dollars into getting a HF mobile setup for the truck. I have a 706, a
> used screwdriver antenna on the way, and looking at auto controllers
> for it (turbo tuner?).
>
> All any tuner does is make the finals happy and keep the power out up
> (SWR protection from curtting in). A friend calls tuners/couplers
> foolers, and I agree. Resonant single band antennas will preform
> better, in my meager experience. Going from 1.8 to 54 mhz on one
> antenna is a comprimise. The Cobra antenna is my comprimise.
>
> The proposed loop for 17 and 6 meters would be resonant on those
> bands, not needing open wire feedline and wide range tuner to keep the
> finals happy, wouldn't ir? Just some SWR tweaking, possibly. A loop
> for 18.13 mhs has its third harmonic on 54.39 mhz, just above the 6
> meter SSB section of the band, which is what I'm after. IMHO SSB
> Rulez! (160 to 2m SSB is my goal) B)
>
> I'm not afraid of open wire line, I choose to use it only where
> needed, and in this case since I dont want to tune 1.8-54 mhz

> continously with one antenna I don't see the need for it. If there is
> a need for it with a 17m loop, as proposed, please enlighten me.
>
> As I see it the little line loss at these frequencies wouldn't make
> much difference between coax and open wire, if any, in signal at the
> other end. As long as they hear me, mission acomplished.
>
> Its not that I have fear of ladder line, its that I have nothing
> against good coax, when ran at reasonable SWR levels. At reasonable
> swr levels on the feedline, how does open wire beat coax?
>
> The Cobra antenna, is basically a 40 meter antenna by size, but I use
> it on 160 and 75 also, with deminished efficency, with ladder line to
> the coupler, and unbalanced coax to my unbalanced rig. But it does
> what I intend it to do, talk to local friends on 75 and 160.
>
> A place for everything and everything in its place.
>
> I may start rounding up parts this weekend. It will be a while before
> I can get anything up in the tree, I have to get everything ready
> for 3 antennas going up in it, (dual band vert, 144 horiz omni, and
> something for 6m) and round up a tree climber to put them up there for
> me. The tentative date is before winter. The nount is done, the pole
> is ready, as are the 440/144 antennas. 6 meter antenna in the tree is
> up in the air,and getting a loop up for 17m would be a bonus! B)
>
> 73
> mike
>
>
> --- In SkyWires@yahoogroups.com, tim smith <ve6pg@y...> wrote:
> > Hmmm..I would be more inclined to but a loop as large
> > as possible,be it for 20,17 whatever,and feed it with
> > open wire line. this way you will be able to tune all
> > bands,say from 20-6. the tuner in your rig will only
> > make the finals happy,and you wont see the benefits of
> > a loop when it comes to the increased receive.if you
> > can,get a tuner that accepts open wire line,and use
> > that. this is the best way to go. dont be afraid of
> > open wire line,it has no line loss,and after 30 yrs of
> > building antennas,i have only one antenna with
> > coax,and that is a vertical for 160. let us know how
> > you make out. tim...sk..

1275. Re: 17 / 6 Meter Loop

Yahoo group: SkyWires
Date: 2005-08-04 00:13:18 UTC
From: n4onl
Topic: 1268 Message: 1275

--- In SkyWires@yahoogroups.com, "ve6pg" <ve6pg@y...> wrote:
>
> ok on the loop,this is what makes things fun..btw,on the ONTARIO
> SWAPSHOP,a guy has the remote tuner thingy for the screwdriver..seemed
> good price to me.do a google for "ontario swapshop".this is probably
> the longest running swap net.great to listen to,and all the stuff is
> listed on the internet.with the american dollar stronger than
> our's,you can get some great deals.shipping for most of the stuff
> listed is canada post mailed,so you wont get dinged in shipping..give
> it a try..73..tim...sk..

Thanks Tim,
I picked up some FG fishing poles yesterday, and ordered some antenna wire and 75 ohm coax (Q section). I will give it a try and post results, but it may take a bit of time. The screwdriver ant. for mobile is on the back burner for now (it should be here tomorrow). I need to design and make a mount for the poles, probably with the help of KB4WXD (Machinist and welder, and partner in crime! ;))

(more about ladder line vs. coax below...)

> > As I see it the little line loss at these frequencies wouldn't make
> > much difference between coax and open wire, if any, in signal at the
> > other end. As long as they hear me, mission acomplished.

(to all in genreal...)

Ladder line vs. coax
("little line loss", I may have miss spoke)

"Ladder line performance degrades significantly when wet, and a better type of balanced line should be considered in environments that are commonly subject to rain, fog, frost, snow, ice etc. Using XLZIZL to explore the impact of wet ladder line, at 3.6MHz the loss on the 9.85m of Wireman 554 would increase from 1.7dB dry to 9dB wet."
http://www.vk1od.net/G5RV/

Figure 8. ... ("Fig 8: Wet Wireman 554 ladder line - 15.15m RG58C/U - tuner") http://www.vk1od.net/G5RV/LossRG58w.gif

OTOH Buryflex (http://www.davisrf.com/ham1/coax.htm#buryflex) is rated for 1.1 db loss at 50mhz/100 ft. compared to ladder lines dry loss of 1.7 db loss per 9.85m @ 3.6 mhz. (as stated above), roughly 32 ft., approx. 4x the loss of buryflex at the same length and Buryflex at 50mhz, not 3.6 mhz. 100' of wet ladder line at 3.6 mhz would be approx 14 db loss. Whew! Talk about turning QRO into QRP!

According to fig. 8 (above) at, 18 mhz wet ladder line would have approx. 7 db loss/32', compared to Buryflex's 0.52 db loss for 3 times the length at 10 mhz. (probably about 0.3 db loss at 3.6 mhz. for Buryflex), Of course wet buryflex's losses might go up a bit, but I seriously doubt, IF it does it would come close to 14 db./100'.

IOW, if the above data is accurate, ladder line is not always your friend.. I don't know about where you live, but here its often wet (rain, fog, frost, snow, ice etc.) here during the fall and winter months, when I'm more apt to stay inside and operate.

Food for thought.
(or discussion)

73
mike.

1276. Should I use the extra length

Yahoo group: SkyWires
Date: 2005-08-04 01:12:45 UTC
From: Paul
Topic: 1276 Message: 1276

Articles I've read show the total length of a skyware (horizontal loop) to be about 270 feet for 80M and 143 feet for 40M. I'd only be interested in 40M and up, but my masts - doing double duty, would give a total of about 200 feet around.

I can make the loop that big - bigger than needed for 40M, less than needed for 80M - or, by lengthening the support line for the skywire, I can rig an exact 143 foot square "inside" the area bounded by the four masts.

Will the extra 70 feet just give my tuners more work to do - so keeping to 143 feet is best, or aside from the additional wire cost, is there no down side to giving the loop an extra 70 feet.

Thanks and 73,
Paul

1277. Re: [SkyWires] Re: 17 / 6 Meter Loop

Yahoo group: SkyWires
Date: 2005-08-04 05:32:55 UTC
From: tim smith
Topic: 1268 Message: 1277

...COMERCIAL LADDER LINE (read cheap)does have loss when wet,rain,snow fog.etc..but homebrew ladder line doesnt have these figures.homebrew ladder line is usually made from 12-14 ga wire,even #10. your typical ladder line is maybe 16ga. as well,it is also known as window line,because it has retangular holes punched out,to reduce the wind load and general weight. and,it is generally junk. do yourself a favour,buy the 12ga wire,make some spreaders,and put it together...if you space it 4-6" apart,your antenna and rig will love you..p.s.,the reason ladder line is prone to loss,etc is that the "windows" are'nt wide enough,and water,etc bridges the feeders...tim...sk..

--- n4onl <umrk@...> wrote:

> --- In SkyWires@yahoogroups.com, "ve6pg"
> <ve6pg@y...> wrote:
> >
> > ok on the loop,this is what makes things
> fun..btw,on the ONTARIO
> > SWAPSHOP,a guy has the remote tuner thingy for the
> screwdriver..seemed
> > good price to me.do a google for "ontario
> swapshop".this is probably
> > the longest running swap net.great to listen
> to,and all the stuff is
> > listed on the internet.with the american dollar
> stronger than
> > our's,you can get some great deals.shipping for
> most of the stuff
> > listed is canada post mailed,so you wont get
> dinged in shipping..give
> > it a try..73..tim...sk..
>
> Thanks Tim,
> I picked up some FG fishing poles yesterday, and
> ordered some antenna
> wire and 75 ohm coax (Q section). I will give it a
> try and post
> results, but it may take a bit of time. The
> screwdriver ant. for
> mobile is on the back burner for now (it should be
> here tomorrow). I
> need to design and make a mount for the poles,

> probably with the help
> of KB4WXD (Machinist and welder, and partner in
> crime! ;))
>
>
> (more about ladder line vs. coax below...)
>
>
> > > As I see it the little line loss at these
> frequencies wouldn't make
> > > much difference between coax and open wire, if
> any, in signal at the
> > > other end. As long as they hear me, mission
> acomplished.
>
> (to all in genreal...)
>
> Ladder line vs. coax
> ("little line loss", I may have miss spoke)
>
> "Ladder line performance degrades significantly when
> wet, and a better
> type of balanced line should be considered in
> environments that are
> commonly subject to rain, fog, frost, snow, ice etc.
> Using XLZIZL to
> explore the impact of wet ladder line, at 3.6MHz the
> loss on the 9.85m
> of Wireman 554 would increase from 1.7dB dry to 9dB
> wet."
> http://www.vk1od.net/G5RV/
>
> Figure 8. ... ("Fig 8: Wet Wireman 554 ladder line -
> 15.15m RG58C/U -
> tuner") http://www.vk1od.net/G5RV/LossRG58w.gif
>
>
> OTOH Buryflex (
> http://www.davisrf.com/ham1/coax.htm#buryflex) is
> rated for 1.1 db loss at 50mhz/100 ft. compared to
> ladder lines dry
> loss of 1.7 db loss per 9.85m @ 3.6 mhz. (as stated
> above), roughly 32
> ft., approx. 4x the loss of buryflex at the same
> length and Buryflex
> at 50mhz, not 3.6 mhz. 100' of wet ladder line at
> 3.6 mhz would be
> approx 14 db loss. Whew! Talk about turning QRO
> into QRP!
>

> According to fig. 8 (above) at, 18 mhz wet ladder
> line would have
> approx. 7 db loss/32', compared to Buryflex's 0.52
> db loss for 3 times
> the length at 10 mhz. (probably about 0.3 db loss at
> 3.6 mhz. for
> Buryflex), Of course wet buryflex's losses might go
> up a bit, but I
> seriously doubt, IF it does it would come close to
> 14 db./100'.
>
> IOW, if the above data is accurate, ladder line is
> not always your
> friend.. I don't know about where you live, but
> here its often wet
> (rain, fog, frost, snow, ice etc.) here during the
> fall and winter
> months, when I'm more apt to stay inside and
> operate.
>
> Food for thought.
> (or discussion)
>
> 73
> mike.
>
>
>
>

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1278. RF AMMETERS

Yahoo group: SkyWires
Date: 2005-08-06 04:08:07 UTC
From: ve6pg
Topic: 1278 Message: 1278

HI FROM TIM...I LOOKING FOR PLANS FOR RF AMMETERS,TO BE USED IN MY
ANTENNA INSTALATIONS USING H/BREW OPEN WIRE...ANY IDEAS?....SK...

1279. Re: [SkyWires] RF AMMETERS

Yahoo group: SkyWires
Date: 2005-08-06 05:46:04 UTC
From: frank
Topic: 1278 Message: 1279

Hi Tim

I am using a current indicator in my open wire feeder. The description in on this page
http://www.tematra.se/files/atu.pdf
from a radcom newspaper.
The page itself is in swedish but the article is in english so let me know if You need some help.
.

73/Frank/SM5QU
----- Original Message -----
From: ve6pg
To: SkyWires@yahoogroups.com
Sent: Saturday, August 06, 2005 6:08 AM
Subject: [SkyWires] RF AMMETERS

HI FROM TIM...I LOOKING FOR PLANS FOR RF AMMETERS,TO BE USED IN MY
ANTENNA INSTALATIONS USING H/BREW OPEN WIRE...ANY IDEAS?....SK...

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b.. To unsubscribe from this group, send an email to:
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1280. Re: RF AMMETERS

Yahoo group: SkyWires
Date: 2005-08-06 12:17:51 UTC
From: bambazonke01
Topic: 1278 Message: 1280

--- In SkyWires@yahoogroups.com, "ve6pg" <ve6pg@y...> wrote:
> HI FROM TIM...I LOOKING FOR PLANS FOR RF AMMETERS,TO BE USED IN MY
> ANTENNA INSTALATIONS USING H/BREW OPEN WIRE...ANY IDEAS?....SK...

If you are using open wire feeders then you can use a small
flashlight bulb with 6 to 8 inch leads attached. Tap the leads along
ONE SIDE of the open wire feeder. Don't cut the feeder, just connect
the leads 12 to 15 inches apart on the one side only. The bulb now
measures voltage developed across the current flowing in that section
of the open wire.
Again, the leads just clip and bridge over a length on to one leg only
and not across the two lines. Don't cut the leg . make sure the
insulation is removed or the copper is clean.
Jim VE3DDY

1281. Re: [SkyWires] RF AMMETERS

Yahoo group: SkyWires
Date: 2005-08-06 12:53:05 UTC
From: larry
Topic: 1278 Message: 1281

greetings
I just came back from that website, pointed out below.. I love that circuit...
I can use plastic water pipe for the coils... but I have a question.. probably more later, how to do wrap the coil so nicely, which just neetly spaced coil turns....??
Larry ve3fxq

----- Original Message -----
From: frank
To: SkyWires@yahoogroups.com
Sent: Saturday, August 06, 2005 1:46 AM
Subject: Re: [SkyWires] RF AMMETERS

Hi Tim

I am using a current indicator in my open wire feeder. The description in on this page
http://www.tematra.se/files/atu.pdf
from a radcom newspaper.
The page itself is in swedish but the article is in english so let me know if You need some help.
.

73/Frank/SM5QU
----- Original Message -----
From: ve6pg
To: SkyWires@yahoogroups.com
Sent: Saturday, August 06, 2005 6:08 AM
Subject: [SkyWires] RF AMMETERS

HI FROM TIM...I LOOKING FOR PLANS FOR RF AMMETERS,TO BE USED IN MY
ANTENNA INSTALATIONS USING H/BREW OPEN WIRE...ANY IDEAS?....SK...

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1282. Re: [SkyWires] RF AMMETERS

Yahoo group: SkyWires
Date: 2005-08-06 15:04:55 UTC
From: Scott Erwin
Topic: 1278 Message: 1282

Use string or rope the appropriate diameter as a
spacer between the copper or aluminum wire turns.
After you have the wire wound and tied down at both
ends simply remove the string or rope spacer material.
I wrote a detailed article on antenna tuner use and
operation and included information on how to make and
use light bulbs amp meters to check for a balanced
condition on the feed line and a relative loss check
through the tuner. The article link is
http://www.eham.net/articles/9751

--- larry <larya@...> wrote:

> greetings
> I just came back from that website, pointed out
> below.. I love that circuit...
> I can use plastic water pipe for the coils... but I
> have a question.. probably more later, how to do
> wrap the coil so nicely, which just neetly spaced
> coil turns....??
> Larry ve3fxq
>
> ----- Original Message -----
> From: frank
> To: SkyWires@yahoogroups.com
> Sent: Saturday, August 06, 2005 1:46 AM
> Subject: Re: [SkyWires] RF AMMETERS
>
>
> Hi Tim
>
> I am using a current indicator in my open wire
> feeder. The description in on this page
> http://www.tematra.se/files/atu.pdf
> from a radcom newspaper.
> The page itself is in swedish but the article is
> in english so let me know if You need some help.
> .
>
> 73/Frank/SM5QU
> ----- Original Message -----
> From: ve6pg
> To: SkyWires@yahoogroups.com
> Sent: Saturday, August 06, 2005 6:08 AM
> Subject: [SkyWires] RF AMMETERS

>
>
> HI FROM TIM...I LOOKING FOR PLANS FOR RF
> AMMETERS,TO BE USED IN MY
> ANTENNA INSTALATIONS USING H/BREW OPEN
> WIRE...ANY IDEAS?....SK...
>
>
>
>
>

> YAHOO! GROUPS LINKS
>
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>
> b.. To unsubscribe from this group, send an
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>
> c.. Your use of Yahoo! Groups is subject to
> the Yahoo! Terms of Service.
>
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>

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>

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1283. Re: [SkyWires] RF AMMETERS

Yahoo group: SkyWires
Date: 2005-08-06 15:33:43 UTC
From: tim smith
Topic: 1278 Message: 1283

SCOTT...THAT IS A GREAT ARTICLE,I'VE REFERRED TO IT NUMEROUS TIMES...AS IN THE PREVIOUS POST REGARDING THE METERS,I WILL MAKE THIS METER ASSY,AS I WANT A DEDICATED SYSTEM. ALL MY TUNERS ARE HOME BREW,AND THEY ALL INCORPORATE LINK COUPLING. I FIND THIS IS THE BEST SYSTEM,AND IN YOUR ARTICLE THE PIX OF THE JOHNSON MATCHBOX HAS JUST THAT.AS MANY KNOW,THE JOHNSON MATCHBOX IS STILL THE ONE THAT IS REFERRED TO,AFTER ALL THESE YEARS. LINK COUPLING IS IN MY OPINION THE BEST,AS MODERN TUNERS THAT USE BALUNS MAY INDICATE/TUNE FOR MIN.SWR,BUT MORE TIMES THAN NOT,THE SYSTEM IS NOT BALANCED..BUILD YOUR OWN TUNER AND OPEN WIRE LINE,AND SEE THE DIFFERENCE!
...TIM...SK..

--- Scott Erwin <n4zou@...> wrote:

> Use string or rope the appropriate diameter as a
> spacer between the copper or aluminum wire turns.
> After you have the wire wound and tied down at both
> ends simply remove the string or rope spacer
> material.
> I wrote a detailed article on antenna tuner use and
> operation and included information on how to make
> and
> use light bulbs amp meters to check for a balanced
> condition on the feed line and a relative loss check
> through the tuner. The article link is
> http://www.eham.net/articles/9751
>
>
> --- larry <larya@...> wrote:
>
> > greetings
> > I just came back from that website, pointed out
> > below.. I love that circuit...
> > I can use plastic water pipe for the coils... but
> I
> > have a question.. probably more later, how to do
> > wrap the coil so nicely, which just neetly spaced
> > coil turns....??
> > Larry ve3fxq
> >
> > ----- Original Message -----
> > From: frank

> > To: SkyWires@yahoogroups.com
> > Sent: Saturday, August 06, 2005 1:46 AM
> > Subject: Re: [SkyWires] RF AMMETERS
> >
> >
> > Hi Tim
> >
> > I am using a current indicator in my open wire
> > feeder. The description in on this page
> > http://www.tematra.se/files/atu.pdf
> > from a radcom newspaper.
> > The page itself is in swedish but the article is
> > in english so let me know if You need some help.
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> >
> > 73/Frank/SM5QU
> > ----- Original Message -----
> > From: ve6pg
> > To: SkyWires@yahoogroups.com
> > Sent: Saturday, August 06, 2005 6:08 AM
> > Subject: [SkyWires] RF AMMETERS
> >
> >
> > HI FROM TIM...I LOOKING FOR PLANS FOR RF
> > AMMETERS,TO BE USED IN MY
> > ANTENNA INSTALATIONS USING H/BREW OPEN
> > WIRE...ANY IDEAS?....SK...
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>

> > YAHOO! GROUPS LINKS
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> > the Yahoo! Terms of Service.
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> _____
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> protection around
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1284. 80 meter Loop Question

Yahoo group: SkyWires
Date: 2005-08-07 17:43:24 UTC
From: Bryan
Topic: 1284 Message: 1284

Greetings,

I have been away from posting for sometime. I do copy the mail here periodicly.

I have been working on an 80 meter loop design. my 160meter loop came down when a 50ft tree fell in my yard. Thank God it didnt take out the house.

I have posted a PAINT document in the FILE section with my call sign as part of the file name.. If you all could look at it and comment I would appreciate it.

Im mainly asking if this antenna would be efficent in this layout. just by way of more information the ladder line in the picture is about 35-40ft long and coax is about 20ft of 9913. the loop itself is 278ft total length.

all comments welcome..

73's Bryan kc8hps

1285. Wire Gauge for QRO

Yahoo group: SkyWires
Date: 2005-08-07 17:44:41 UTC
From: professormobesser
Topic: 1285 Message: 1285

What thoughts do folks have about the appropriate wire gauge to use for a loop skywire when running 600 watts of peak RF output power?

I'd like to put up a stealthy system made from #22 stranded, black-plastic-insulated copper wire. Such wire comes in nice, inexpensive 90 foot rolls from Radio Shack for about 5 bucks each. With three of those rolls, I could have a 270 foot loop; about a full wavelength on 75 meters. And it would sure be stealthy.

But would #22 copper wire get too hot when conducting 600 watts of RF?

As I recall, RF mainly flows on the surface of the conductor. Of course, the surface area of #22 would be smaller than the surface area of #14. But pure copper should have better conductivity than the typical #14 stranded bare copperweld, especially after the surface of the copperweld has been exposed to the elements for a few days.

Any thoughts, theories or empirical data on this?

1286. Re: [SkyWires] Wire Gauge for QRO

Yahoo group: SkyWires
Date: 2005-08-07 18:24:26 UTC
From: Frank Sellers
Topic: 1285 Message: 1286

Also keep in mind that the smaller the wire the smaller the bandwidth. Also is this a permanent installation?

Frank N6AQ
http://www.n6aq.com/index.php

professormobesser <professormobesser@...> wrote:
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Any thoughts, theories or empirical data on this?

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Frank N6AQhttp://www.n6aq.com/index.php

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1287. Re: [SkyWires] 80 meter Loop Question

Yahoo group: SkyWires
Date: 2005-08-07 18:26:26 UTC
From: Frank Sellers
Topic: 1284 Message: 1287

I was unable to find the attachment, ON4UN puts out a great low band antenna book, also what is it you will be using this antenna for? Ragchewing or DX?

Frank N6AQ
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73's Bryan kc8hps

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1288. Re: Wire Gauge for QRO

Yahoo group: SkyWires
Date: 2005-08-07 20:23:00 UTC
From: professormobesser
Topic: 1285 Message: 1288

I'm not too worried about bandwidth. My amp is an Ameritron AL-811 which can easily handle 3:1 SWR. And when running barefoot, the rig has an internal tuner.

I'd call the installation semi-permanent. The main thing I'm concerned about is the power-handling capability of 22 gauge copper wire.

--- In SkyWires@yahoogroups.com, Frank Sellers <n6aq@y...> wrote:
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> Frank N6AQ
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1289. Re: [SkyWires] Digest Number 394 stealth wire

Yahoo group: SkyWires
Date: 2005-08-08 11:04:49 UTC
From: RonW
Topic: 1289 Message: 1289

You may want to consider 532 or 534, much better than RS;
http://thewireman.com/antennap.html

-----Original Message-----
From: SkyWires@yahoogroups.com
Sent: Aug 8, 2005 5:06 AM
To: SkyWires@yahoogroups.com
Subject: [SkyWires] Digest Number 394

There are 5 messages in this issue.

Topics in this digest:

1. 80 meter Loop Question
From: "Bryan" <kc8hps_2003@...>
2. Wire Gauge for QRO
From: "professormobesser" <professormobesser@...>
3. Re: Wire Gauge for QRO
From: Frank Sellers <n6aq@...>
4. Re: 80 meter Loop Question
From: Frank Sellers <n6aq@...>
5. Re: Wire Gauge for QRO
From: "professormobesser" <professormobesser@...>

Message: 1
Date: Sun, 07 Aug 2005 17:43:24 -0000
From: "Bryan" <kc8hps_2003@...>
Subject: 80 meter Loop Question

Greetings,

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about 35-40ft long and coax is about 20ft of 9913. the loop itself is

278ft total length.

all comments welcome..

73's Bryan kc8hps

Message: 2
Date: Sun, 07 Aug 2005 17:44:41 -0000
From: "professormobesser" <professormobesser@...>
Subject: Wire Gauge for QRO

What thoughts do folks have about the appropriate wire gauge to use
for a loop skywire when running 600 watts of peak RF output power?

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the copperweld has been exposed to the elements for a few days.

Any thoughts, theories or empirical data on this?

Message: 3
Date: Sun, 7 Aug 2005 11:24:26 -0700 (PDT)
From: Frank Sellers <n6aq@...>
Subject: Re: Wire Gauge for QRO

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Frank N6AQhttp://www.n6aq.com/index.php

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[This message contained attachments]

Message: 4
Date: Sun, 7 Aug 2005 11:26:26 -0700 (PDT)
From: Frank Sellers <n6aq@...>
Subject: Re: 80 meter Loop Question

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http://mail.yahoo.com

[This message contained attachments]

Message: 5
Date: Sun, 07 Aug 2005 20:23:00 -0000
From: "professormobesser" <professormobesser@...>
Subject: Re: Wire Gauge for QRO

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I'd call the installation semi-permanent. The main thing I'm
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wire.

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1290. 300FT LOOP..TUNER FOR 6 METRES?

Yahoo group: SkyWires
Date: 2005-08-08 21:49:09 UTC
From: ve6pg
Topic: 1290 Message: 1290

..ANYBODY HAVE ANY IDEAS FOR A TUNER FOR BALANCED LINE FROM A 300FT HORIZONTAL LOOP,FOR 6 METRES?.THIS CAN BE A DEDICATED TUNER FOR 6,NOT NECESSARY TO HAVE BAND SWITCHING...TNX..TIM...SK..

1291. Re: Digest Number 394 stealth wire

Yahoo group: SkyWires
Date: 2005-08-10 01:41:00 UTC
From: professormobesser
Topic: 1289 Message: 1291

Thanks for the suggestion. Being copper-clad stranded steel, this stuff would be stronger than #22 stranded copper, and more resistant to stretching.

As far as the power handling capability is concerned, I wrote to LB Cebik, and he says the #22 plastic insulted copper, being air cooled, should probably be fine for 600 watts PEP SSB, or 500 watts CW. AM or RTTY might be a different story, however.

--- In SkyWires@yahoogroups.com, RonW <cntrline@m...> wrote:
> You may want to consider 532 or 534, much better than RS;
> http://thewireman.com/antennap.html
>
> -----Original Message-----
> From: SkyWires@yahoogroups.com
> Sent: Aug 8, 2005 5:06 AM
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> Date: Sun, 07 Aug 2005 17:43:24 -0000
> From: "Bryan" <kc8hps_2003@y...>

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1292. cleaning aluminum

Yahoo group: SkyWires
Date: 2005-08-11 13:49:27 UTC
From: johntr@myway.com
Topic: 1292 Message: 1292

What is the best way to clean aluminum antenna elements?
this old vertical I picked up is encrusted with what looks like dried salt spray . Most of it chips right off.
Thanks
w5wlb

_____
No banners. No pop-ups. No kidding.
Make My Way your home on the Web - http://www.myway.com

1293. Re: [SkyWires] cleaning aluminum

Yahoo group: SkyWires
Date: 2005-08-11 13:54:29 UTC
From: tim smith
Topic: 1292 Message: 1293

...MAROON COLOURED SCOTCH-BRITE PADS WORK GREAT. ALSO
TRY A MILD ACID,DONT WORRY,HOUSEHOLD TYPE,"CLR"
...SK..

--- <johntr@...> wrote:

>
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> What is the best way to clean aluminum antenna
> elements?
> this old vertical I picked up is encrusted with what
> looks like dried salt spray . Most of it chips right
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Yahoo! Mail for Mobile
Take Yahoo! Mail with you! Check email on your mobile phone.
http://mobile.yahoo.com/learn/mail

1294. Re: [SkyWires] cleaning aluminum

Yahoo group: SkyWires
Date: 2005-08-11 17:58:25 UTC
From: Scott Erwin
Topic: 1292 Message: 1294

That?s aluminum oxide. You will need to clean all that off, as it will affect the performance of the antenna. RF flows on the surface of the aluminum and the oxide will cause problems. You might consider joining the yahoo group Butternut-antennas at http://groups.yahoo.com/group/Butternut-antennas/ . Even if it's not a Butternut vertical you will find lots of information and help about vertical antennas in general. One file available goes into detail about refurbishing Butternut HF vertical antennas including cleaning and polishing aluminum tubing. You can follow a link from the group site that makes Butternut antenna manuals available for a free download and these antenna manuals for the HF verticals go into great detail on installing ground systems under HF verticals appropriate for any model of HF vertical antenna.

--- <johntr@...> wrote:

>
>
> What is the best way to clean aluminum antenna
> elements?
> this old vertical I picked up is encrusted with what
> looks like dried salt spray . Most of it chips right
> off.
> Thanks
> w5wlb
>
>
>
> _____
> No banners. No pop-ups. No kidding.
> Make My Way your home on the Web -
> http://www.myway.com
>
>
>

_____
Do You Yahoo!?
Tired of spam? Yahoo! Mail has the best spam protection around
http://mail.yahoo.com

1295. 300FT LOOP ON 6

Yahoo group: SkyWires
Date: 2005-08-13 16:55:21 UTC
From: ve6pg
Topic: 1295 Message: 1295

..300FT LOOP IS WORKING FB ON 6..H/BREW OPEN WIRE LINE,AND LOOP AT
25FT..LOTS OF GAIN,HEARING LOTS OF STUFF THE LOCAL BIG-GUNS ON 6 ARENT
HEARING..TRY IT..!...SK..

1296. Re: [SkyWires] 300FT LOOP ON 6

Yahoo group: SkyWires
Date: 2005-08-14 05:51:12 UTC
From: Dr.Ace Ratliff
Topic: 1295 Message: 1296
Attachments: 1 described; binary payloads are missing from this source WARC

Hi,
My 272' horizontal loop works well on 6 mtrs.
My 1/4 wave 160 mtr inverted L also works well on 6 mtrs.
Ace - WH2T

----- Original Message -----
From: ve6pg
To: SkyWires@yahoogroups.com
Sent: Saturday, August 13, 2005 11:55 AM
Subject: [SkyWires] 300FT LOOP ON 6

..300FT LOOP IS WORKING FB ON 6..H/BREW OPEN WIRE LINE,AND LOOP AT
25FT..LOTS OF GAIN,HEARING LOTS OF STUFF THE LOCAL BIG-GUNS ON 6 ARENT
HEARING..TRY IT..!...SK..

1297. RE: [SkyWires] 300FT LOOP ON 6

Yahoo group: SkyWires
Date: 2005-08-14 16:00:11 UTC
From: Mark Schoonover
Topic: 1295 Message: 1297

Yes they will. When you're using very large loops on much higher frequencies, they tend to act more like rhombics than simple loops. Many good reads can be found here: http://www.cebik.com/radio.html <http://www.cebik.com/radio.html>

73 & have a blast with loops!
Mark
KA6WKE

-----Original Message-----
From: Dr.Ace Ratliff [mailto:wh2t@...]
Sent: Saturday, August 13, 2005 10:51 PM
To: SkyWires@yahoogroups.com
Subject: Re: [SkyWires] 300FT LOOP ON 6

Hi,
My 272' horizontal loop works well on 6 mtrs.
My 1/4 wave 160 mtr inverted L also works well on 6 mtrs.
Ace - WH2T

----- Original Message -----
From: ve6pg <mailto:ve6pg@...>
To: SkyWires@yahoogroups.com <mailto:SkyWires@yahoogroups.com>
Sent: Saturday, August 13, 2005 11:55 AM
Subject: [SkyWires] 300FT LOOP ON 6

..300FT LOOP IS WORKING FB ON 6..H/BREW OPEN WIRE LINE,AND LOOP AT 25FT..LOTS OF GAIN,HEARING LOTS OF STUFF THE LOCAL BIG-GUNS ON 6 ARENT HEARING..TRY IT..!...SK..

YAHOO! GROUPS LINKS

* Visit your group " SkyWires <http://groups.yahoo.com/group/SkyWires> " on the web.

* To unsubscribe from this group, send an email to: SkyWires-unsubscribe@yahoogroups.com <mailto:SkyWires-unsubscribe@yahoogroups.com?subject=Unsubscribe>

* Your use of Yahoo! Groups is subject to the Yahoo! Terms of Service <http://docs.yahoo.com/info/terms/> .

1298. 1750 meter loop

Yahoo group: SkyWires
Date: 2005-08-14 16:15:57 UTC
From: leekwon1
Topic: 1298 Message: 1298

looking for any info on building small loop antennas for 1750 meters, 171khz. Lee

1299. Re: [SkyWires] 1750 meter loop

Yahoo group: SkyWires
Date: 2005-08-14 17:47:14 UTC
From: tim smith
Topic: 1298 Message: 1299

lee...there are a couple of low freq. yahoo
groups..lowfer,longwave,etc..go to the yahoo groups
are search for the info...tim...sk..

--- leekwon1 <leekwon1@...> wrote:

> looking for any info on building small loop antennas
> for 1750 meters,
> 171khz. Lee
>
>
>

_____
Start your day with Yahoo! - make it your home page
http://www.yahoo.com/r/hs

1300. Re: [SkyWires] 1750 meter loop

Yahoo group: SkyWires
Date: 2005-08-14 17:56:58 UTC
From: Charles KC0EH
Topic: 1298 Message: 1300

Lee,

If you will go to www.lwca.org and look up Bill Ashlock in the part 15 LowFER's he has tons of information available on loop antennas for 1750 meters. His ID is WM and he is on 185.30 kHz.
Several stations run them now , however Bill is the master of the design.
...Charlie...KC0EH...COV...185.297kHz.

1301. Wanted buy a cb radio

Yahoo group: SkyWires
Date: 2005-08-15 00:09:16 UTC
From: hamradio62
Topic: 1301 Message: 1301

Hi,

I would like to buy a cb radio. Please let me know the price and what comes with the radio (at the very least). Please send a reply to hamradio62@..., Nic

1302. question about loop

Yahoo group: SkyWires
Date: 2005-08-15 01:29:24 UTC
From: Bryan
Topic: 1302 Message: 1302

HI all,

I'm curious, what is the difference between feeding a loop at the corner VS feeding in the middle of a side.

any idea what to expect for impedance on the feed.

thanks Bryan

1303. Re: [SkyWires] question about loop

Yahoo group: SkyWires
Date: 2005-08-15 03:08:15 UTC
From: tim smith
Topic: 1302 Message: 1303

bryan...it depends on how the loop is mounted. if it
is horizontal to the ground,it makes no difference.if
the loop is "standing on it's end",fed at the bottom
it will give it horizontal properties.fed at the
side,it will have vertical properties.a loop fed at
the corner,will have sort of a polarization that is
angular to the horizon. some guys do this,and tell me
they get vertical antenna take-off properties,with
less man made noise,which is vertically
polarized...tim...sk..

--- Bryan <kc8hps_2003@...> wrote:

> HI all,
>
> I'm curious, what is the difference between feeding
> a loop at the
> corner VS feeding in the middle of a side.
>
> any idea what to expect for impedance on the feed.
>
> thanks Bryan
>
>
>
>

Do You Yahoo!?
Tired of spam? Yahoo! Mail has the best spam protection around
http://mail.yahoo.com

1304. Re: [SkyWires] Wanted buy a cb radio

Yahoo group: SkyWires
Date: 2005-08-15 03:11:08 UTC
From: tim smith
Topic: 1301 Message: 1304

...nic,where are you located?...tim...sk..

--- hamradio62 <no_reply@yahoogroups.com> wrote:

> Hi,
>
> I would like to buy a cb radio. Please let me know
> the price and what
> comes with the radio (at the very least). Please
> send a reply to
> hamradio62@..., Nic
>
>
>

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http://mail.yahoo.com

1305. RE: [SkyWires] question about loop

Yahoo group: SkyWires
Date: 2005-08-15 04:33:44 UTC
From: Mark Schoonover
Topic: 1302 Message: 1305

tim smith <mailto:ve6pg@...> wrote:
> bryan...it depends on how the loop is mounted. if it
> is horizontal to the ground,it makes no difference.if
> the loop is "standing on it's end",fed at the bottom
> it will give it horizontal properties.fed at the
> side,it will have vertical properties.a loop fed at
> the corner,will have sort of a polarization that is
> angular to the horizon. some guys do this,and tell me
> they get vertical antenna take-off properties,with
> less man made noise,which is vertically
> polarized...tim...sk..
>
> --- Bryan <kc8hps_2003@...> wrote:
>
>> HI all,
>>
>> I'm curious, what is the difference between feeding a
>> loop at the corner VS feeding in the middle of a side.
>>
>> any idea what to expect for impedance on the feed.
>>
>> thanks Bryan
>>

This is all true, until your rf hits the ionosphere, then no one knows the polarization after reflection....

73

Mark
KA6WKE

1306. RE: [SkyWires] question about loop

Yahoo group: SkyWires
Date: 2005-08-15 12:48:18 UTC
From: tim smith
Topic: 1302 Message: 1306

...good point mark..i guess it really amounts to what
a guy wants,horizontal to reduce noise,or as
mine,horizontal to the ground,and basically a
cloud-burner nvis..a friend of mine has his vertically
polarized,strickly to reduce the splatter from a local
ham,who has horizontal dipoles..works well for
him..sk..

--- Mark Schoonover <ka6wke@...> wrote:

> tim smith <mailto:ve6pg@...> wrote:
> > bryan...it depends on how the loop is mounted. if
> it
> > is horizontal to the ground,it makes no
> difference.if
> > the loop is "standing on it's end",fed at the
> bottom
> > it will give it horizontal properties.fed at the
> > side,it will have vertical properties.a loop fed
> at
> > the corner,will have sort of a polarization that
> is
> > angular to the horizon. some guys do this,and tell
> me
> > they get vertical antenna take-off properties,with
> > less man made noise,which is vertically
> > polarized...tim...sk..
> >
> > --- Bryan <kc8hps_2003@...> wrote:
> >
>> HI all,
>>
>> I'm curious, what is the difference between
> feeding a
>> loop at the corner VS feeding in the middle of a
> side.
>>
>> any idea what to expect for impedance on the
> feed.
>>
>> thanks Bryan
>>
>
> This is all true, until your rf hits the ionosphere,
> then no one knows the

> polarization after reflection....
>
> 73
>
> Mark
> KA6WKE
>

_____
Do You Yahoo!?
Tired of spam? Yahoo! Mail has the best spam protection around
http://mail.yahoo.com

1307. rf amp meter thermocouple

Yahoo group: SkyWires
Date: 2005-08-18 13:12:06 UTC
From: leekwon1
Topic: 1307 Message: 1307

Hi yall looking for any information on building or making rf amp meter therocouples, there are 4 or 5 boxes of meters here and i would like to use them for cheap watt meters. Lee

1308. skywire of sorts

Yahoo group: SkyWires
Date: 2005-08-21 19:26:28 UTC
From: hgxrp
Topic: 1308 Message: 1308

Due to a small and irregular lot, I've been confined to using in-roof antennas. My primary antenna has been a 33 foot folded dipole w/stub (see message 2471 of the RX320 group) connected via a tv 300/75 ohm balun to coax.

The dipole is broadband enough to give me coverage over most of the HF spectrum, but it is most senitive at its resonant frequency (14 mhz) and is basically directional.

Since I like to listen to LW and do some BC band DX, I also use a long wire (directly connected) thrown out of a second story window and run around the perimeter of the property on a partial fence. It is subject to noise and is in need of replacement.

My thought has been to erect a skywire (in-roof)about 30 feet on a side (120 feet around). I'm of the opinion that I would need more wire to cover all of the HF freqs as well as BC and below.

I came up with a plan to use multi-conductor wire (telephone or similar) and a switching network which would add 1 wire (additional 120 feet) at a time, to the loop. The wires in the roof would all be in phase. The wires connecting the loop (roof) to the shack (2nd story) where the switching network would be located, are bi-phasic. I could shield the two phases from each other.

The end result, I would hope, would be an antenna which could be 'tuned' by adding/subtracting length and would be omni-directional, thus overcoming the minuses of my dipole.

I'm asking the resident experts to tear my idea apart. Would it work? What total length is enough? Would it be necessary to use remote switching in the roof? Would a balun connecting the switching network to the receiver (via coax) help?

Thanks for your input.

Harold

1310. RE: [SkyWires] Follow my advice

Yahoo group: SkyWires
Date: 2005-09-16 01:56:50 UTC
From: n8pu
Topic: 1310 Message: 1310

Poster has been banned and original post deleted.
Dave N8PU

1311. SkyWire Loop Antenna [Was: Wire loop.] Question

Yahoo group: SkyWires
Date: 2005-09-21 09:11:11 UTC
From: R H F
Topic: 1311 Message: 1311

Terry,

SkyWire Loop Antenna [Was: Wire loop.] Question

If both ends are coming together to form a Loop :
Then it is Balanced and can be feed directly via
Ladder Line or Coax Cable. With Coax Cable as a
Feed-Line; you could also use a 1:1 Matching
Transformer (Balun) if the Loop is going to be
used for both Tx & Rx.

NOTE - 240 Feet of wire puts you at about 4.2 MHz
with a SkyWire Loop Antenna.

FWIW - If this Loop Antenna is 'only' for Receiving
then a 4:1 Matching Transformer (Balun) could be use
with Coax Cable as a Feed-in-Line.

SKYWIRE LOOP ANTENNA :
This type of Large and Low Loop Antenna is generally
called a SkyWire Loop Antenna. There is a specific
group for builders and users of SkyWire Loop Antennas
on YAHOO ! => http://groups.yahoo.com/group/SkyWires/

This group is for people interested in building and
using a Sky-Wire Loop Antenna
SKYWIRE => http://groups.yahoo.com/group/SkyWires/

This group is for the Radio Experimenter who wants
to Learn and Exchange their Knowledge and 'secrets'
about the SkyWire Loop Antenna.
SKYWIRE => http://groups.yahoo.com/group/SkyWires/

Here are a few SkyWire Loop Antenna Links :

* SkyWire Loop Antenna {PDF Reprint}
http://srgproperties.inetusanow.net/files_custom/9467_2192.pdf

* KC8OPV Skywire Loop Antenna
http://www.qsl.net/kc8opv/antennas/skywireloop/

* The Stone Mountain Loop
http://www.subdevo.com:82/n4jvp/loop/loop.htm

* Dr. Ace's [WH2T] Full Wave Loop Antenna Info
http://www.bloomington.in.us/~wh2t/loop.html

* L.B. Cebik [W4RNL] on Horizontal Wire Loop Antennas
http://www.cebik.com/wire/hl.html
http://www.cebik.com/fdim/atl1.html
http://www.cebik.com/wire/horloop.html
http://www.cebik.com/wire/cb.html
http://www.cebik.com/wire/nvis.html
http://www.cebik.com/wire/nvisht.html

iane ~ RHF

.
.
. .

= = = In Shortwave-SWL-Antenna@yahoogroups.com,
= = = "scopestation" <scopestation@a...> wrote:

Hi.

I am new to the group but have been a Ham band swl
for 51 years - I would like subscriber's views on
the following topic please --.

I am about to erect a 240 ft wire square loop eg
60 feet per leg, the loop will only be around
10 feet high and will be used as a secondary antenna
- what is the best way to feed it should it be fed
as an unbalanced or balanced antenna !!
my atu will handle both balanced and unbalanced antennas
!!.

any thanks.

Terry !! West Yorkshire !!.
.

1312. Re: [SkyWires] Digest Number 404

Yahoo group: SkyWires
Date: 2005-09-21 12:26:37 UTC
From: n6hpx/du1 Cavite Philippines
Topic: 1312 Message: 1312
Attachments: 2 described; binary payloads are missing from this source WARC

[Attachment content not displayed]

1313. Re: [SkyWires] Digest Number 404

Yahoo group: SkyWires
Date: 2005-09-21 14:14:25 UTC
From: Andy
Topic: 1312 Message: 1313

Looks to me like a cone pointed up, on top of a second cone pointed down. With a lot of insulated guy wires from the middle going outward, to hold it open.

Vaguely similar to the old AM broadcasting towers that were narrow on top and bottom but bulged out in the middle, only much more extreme. I think it makes them more broadband.

Andy

1314. Re: [SkyWires] Digest Number 405

Yahoo group: SkyWires
Date: 2005-09-22 11:32:55 UTC
From: n6hpx/du1 Cavite Philippines
Topic: 1314 Message: 1314

They were reather interesting design to me as its
the first time I had witnessed this type, I have seen
the other types. In my opinion at the time I thought
of em as directional dipoles thinking they could be
turned by just turning a switch. I noticed on one
antenna there were coaxial cables that were about 2 or
3 inches in diameter.

Larry Fields, n6hpx/mm

--- SkyWires@yahoogroups.com wrote:

> ------------------------ Yahoo! Groups Sponsor
> ----------------------~-->
> Get fast access to your favorite Yahoo! Groups. Make
> Yahoo! your home page
>
http://us.click.yahoo.com/dpRU5A/wUILAA/yQLSAA/ELTolB/TM
>
---~->
>
>
> There are 2 messages in this issue.
>
> Topics in this digest:
>
> 1. Re: Digest Number 404
> From: n6hpx/du1 Cavite Philippines
> <n6hpx_du3@...>
> 2. Re: Digest Number 404
> From: "Andy"
> <ingraham.ma.ultranet@...>
>
>
>

____
>

____
>
> Message: 1
> Date: Wed, 21 Sep 2005 05:26:37 -0700 (PDT)
> From: n6hpx/du1 Cavite Philippines
> <n6hpx_du3@...>
> Subject: Re: Digest Number 404
>
> I recently found an antenna farm on Guam and have

> been told these are Umbrella antennas,I am enclosing
> a
> pic here and was wondering your opinion.
> This was only 3 days ago and its at a place
> called
> Barrigada.
>
> Larry Fields, n6hpx/mm
>
> --- SkyWires@yahoogroups.com wrote:
>
> > ------------------------ Yahoo! Groups Sponsor
> > ----------------------~-->
> > Get fast access to your favorite Yahoo! Groups.
> Make
> > Yahoo! your home page
> >
>
http://us.click.yahoo.com/dpRU5A/wUILAA/yQLSAA/ELTolB/TM
> >
>
---~->
> >
> >
> > There is 1 message in this issue.
> >
> > Topics in this digest:
> >
> > 1. SkyWire Loop Antenna [Was: Wire loop.]
> > Question
> > From: "R H F" <rhf-mail@...>
> >
> >
> >
>

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> >
>

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> >
> > Message: 1
> > Date: Wed, 21 Sep 2005 09:11:11 -0000
> > From: "R H F" <rhf-mail@...>
> > Subject: SkyWire Loop Antenna [Was: Wire loop.]
> > Question
> >
> > Terry,
> >
> > SkyWire Loop Antenna [Was: Wire loop.] Question
> >

> > If both ends are coming together to form a Loop :
> > Then it is Balanced and can be feed directly via
> > Ladder Line or Coax Cable. With Coax Cable as a
> > Feed-Line; you could also use a 1:1 Matching
> > Transformer (Balun) if the Loop is going to be
> > used for both Tx & Rx.
> >
> > NOTE - 240 Feet of wire puts you at about 4.2 MHz
> > with a SkyWire Loop Antenna.
> >
> > FWIW - If this Loop Antenna is 'only' for
> Receiving
> > then a 4:1 Matching Transformer (Balun) could be
> use
> >
> > with Coax Cable as a Feed-in-Line.
> >
> > SKYWIRE LOOP ANTENNA :
> > This type of Large and Low Loop Antenna is
> generally
> >
> > called a SkyWire Loop Antenna. There is a
> specific
> > group for builders and users of SkyWire Loop
> > Antennas
> > on YAHOO ! =>
> > http://groups.yahoo.com/group/SkyWires/
> >
> > This group is for people interested in building
> and
> > using a Sky-Wire Loop Antenna
> > SKYWIRE => http://groups.yahoo.com/group/SkyWires/
> >
> > This group is for the Radio Experimenter who wants
>
> > to Learn and Exchange their Knowledge and
> 'secrets'
> > about the SkyWire Loop Antenna.
> > SKYWIRE => http://groups.yahoo.com/group/SkyWires/
>
> >
> > Here are a few SkyWire Loop Antenna Links :
> >
> > * SkyWire Loop Antenna {PDF Reprint}
> >
>
http://srgproperties.inetusanow.net/files_custom/9467_2192.pdf
> >
> >
> > * KC8OPV Skywire Loop Antenna

> > http://www.qsl.net/kc8opv/antennas/skywireloop/
> >
> > * The Stone Mountain Loop
> > http://www.subdevo.com:82/n4jvp/loop/loop.htm
> >
> > * Dr. Ace's [WH2T] Full Wave Loop Antenna Info
> > http://www.bloomington.in.us/~wh2t/loop.html
> >
> > * L.B. Cebik [W4RNL] on Horizontal Wire Loop
> > Antennas
> > http://www.cebik.com/wire/hl.html
> > http://www.cebik.com/fdim/atl1.html
> > http://www.cebik.com/wire/horloop.html
> > http://www.cebik.com/wire/cb.html
> > http://www.cebik.com/wire/nvis.html
> > http://www.cebik.com/wire/nvisht.html
> >
> >
> > iane ~ RHF
> >
> > .
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> > . .
> >
> > = = = In Shortwave-SWL-Antenna@yahoogroups.com,
> > = = = "scopestation" <scopestation@a...> wrote:
> >
> >
> > Hi.
> >
> > I am new to the group but have been a Ham band swl
>
> > for 51 years - I would like subscriber's views on
> > the following topic please --.
> >
> > I am about to erect a 240 ft wire square loop eg
> > 60 feet per leg, the loop will only be around
> > 10 feet high and will be used as a secondary
> antenna
> >
> > - what is the best way to feed it should it be fed
>
> > as an unbalanced or balanced antenna !!
> > my atu will handle both balanced and unbalanced
> > antennas
> > !!.
> >
> > any thanks.
> >
> > Terry !! West Yorkshire !!.

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> > Yahoo! Groups Links
> >
> >
> > SkyWires-unsubscribe@yahoogroups.com
> >
> >
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>
> N6HPX/DU1 Philippine islands
> CELL:6197937978 leave a message I will answer in 6
> months
>
==========
> member:
> ARRL,Pinoyhams,PARL,WUN,PARA,SCADS,ASWLC,6mclubs
> US Merchant Mariner 28 1/2 years
>
==========
> STATIONS
>
VISITED;AWR<GUAM>KTWR<GUAM>FEBC<SAIPAN>BARRIGADA<GUAM>NAVMAG<HAWAII>
> RFA<SAIPAN>NAGASAKI TRANSMITTER SITE
>
>

>
> _____
> Yahoo! Mail - PC Magazine Editors' Choice 2005
> http://mail.yahoo.com
>
> [This message contained attachments]
>
>
>
>

>

>
> Message: 2
> Date: Wed, 21 Sep 2005 10:14:25 -0400
> From: "Andy" <ingraham.ma.ultranet@...>
> Subject: Re: Digest Number 404
>
> Looks to me like a cone pointed up, on top of a
> second cone pointed down.
> With a lot of insulated guy wires from the middle
> going outward, to hold it
> open.
>
> Vaguely similar to the old AM broadcasting towers
> that were narrow on top
> and bottom but bulged out in the middle, only much
> more extreme. I think it
> makes them more broadband.
>
> Andy
>
>
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>

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> Yahoo! Groups Links
>
>
> SkyWires-unsubscribe@yahoogroups.com
>

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>

N6HPX/DU1 Philippine islands
CELL:6197937978 leave a message I will answer in 6 months
==========
member: ARRL,Pinoyhams,PARL,WUN,PARA,SCADS,ASWLC,6mclubs
US Merchant Mariner 28 1/2 years
==========
STATIONS VISITED;AWR<GUAM>KTWR<GUAM>FEBC<SAIPAN>BARRIGADA<GUAM>NAVMAG<HAWAII>
RFA<SAIPAN>NAGASAKI TRANSMITTER SITE

_____
Do You Yahoo!?
Tired of spam? Yahoo! Mail has the best spam protection around
http://mail.yahoo.com

1315. You Are Invited

Yahoo group: SkyWires
Date: 2005-09-26 16:33:21 UTC
From: Robert Nicholas
Topic: 1315 Message: 1315

Do You Have A Citizen Band Radio?
You Are Invited To Join The White Squirrel CB Radio Club
http://groups.yahoo.com/group/White_Squirrel62450/

1316. Re: [SkyWires] super loop

Yahoo group: SkyWires
Date: 2005-09-27 11:29:11 UTC
From: charles allison
Topic: 1316 Message: 1316

There is a design for an antenna called the super loop. I believe Dr Ace's website talks about it a bit. It's an 80 meter horizontal delta with a 1/4 wavelength at 40meters twinline going through the middle. Has anyone made or tried this antenna, especially as an nvis mode?

best regards,

Charles
wb5izd

1317. hello

Yahoo group: SkyWires
Date: 2005-09-29 15:39:04 UTC
From: Robert Nicholas
Topic: 1317 Message: 1317

White Squirrel CB Radio Club
249 Members, Archives: Membership required
Welcome! This is a place for CB'er's to post messages to other
CB'er's;
locally or internationally and for The buying and selling of all types
of C.B. radio equipment.
http://groups.yahoo.com/group/White_Squirrel62450/

1318. NVIS Loop Skywire

Yahoo group: SkyWires
Date: 2005-09-30 12:44:05 UTC
From: Kyle
Topic: 1318 Message: 1318

Hello, please allow me to introduce myself. My name is Kyle. I am an electrical engineer with no formal training in RF, and I am a tech class operator. My wife and I are studying to upgrade to General (including learning the code). Right now we do all our hamming on 2m and are very disappointed with VHF propagation.

The bulk of what we want to do is between 0-100 miles, which puts us solidly in the HF skip zone. This makes NVIS (cloud warming) very attractive.

I plan to put up a Loop Skywire for our 80m NVIS needs, but it looks like I might also be able to have some occasional fun DXing on 20m. Wonderful!

I have read many articles on the Loop Skywire, but authors always seem to assume one has a flat piece of land. Well I am in the tip-toes of the foothills of the US Appalachian Mountains. My QTH is basically at the highest point in my county, which seems like it will help on all forms of communication. But my land is NOT flat. The house is on the peak of my property. Looking out of my back window it goes down hill, about 30' to a 1/4 acre pond, and then back up to house level at the back of my property.

I know experimenting is at the heart of ham radio. But I'd like to avoid unnecessary woes if at all possible. What might I expect from my skywire if I stay closer to the house and put the antenna over the down slope? Should the antenna slope with the land, or should it stay level and be higher from the ground on the back side?

I had thought about running it around the pond at the lower altitude, but I think that might mess up my 20m DX, and I don't want to be looking down on my antenna from the house. That just seems dumb to me (but what do I know?).

I had also thought about making the skywire 160m long and going all the way around the property, but I have read about a phenomenon of 2 wavelengths on 80m turning the lobes away from 90 degrees and degrading NVIS.

I am open to any and all suggestions. Hoping to turn the clouds orange in North GA soon!

-Kyle
W4KDA

1319. Re: [SkyWires] NVIS Loop Skywire

Yahoo group: SkyWires
Date: 2005-09-30 16:30:44 UTC
From: Gordon McCleery
Topic: 1318 Message: 1319

Kyle, my 5 year experiences with a 1000' loop up from 20' - 35' on sloping land in N. Florida, near the Ga. border (Monticello) are that I get great signal reports on 40 and 80, while I can work any station I can hear on the higher frequencies.
17 and 20 meters being my favorites, just because they are.
My antenna seems to give me high take off angles on 80 and 40 while lowering that take off angle on 14 mhz and up.
I am able to use this 1000' loop on six meters with a tuner and it also well there.
Upon occasion the loop appears to have less atmospheric
noise than a resonant 80 meter dipole at 85 feet off of
my tower. But also seems to get better reports than the
dipole.
If I run power, I have two amps I most often run an Icom 2kl at 400-500 watts out, more often than not run with the exciter an Icom 765 at 100 watts.
I run about 12 feet of good quality RG-213 to a 4:1 balun, under the eve of my home and then about 25 feet of commercial 450 Ohm ladder line to the loop.

Bottom line - try one you will like it, if your rig has an internal tuner, I am sure it will tune most if not all bands itself negating the need for an external tuner unless you plan to run an amp.

Good fortune with it let us all know how it works out for you.....73..Mac

----
Yahoo! Mail - PC Magazine Editors' Choice 2005
http://mail.yahoo.com

1320. Re: [SkyWires] NVIS Loop Skywire

Yahoo group: SkyWires
Date: 2005-09-30 23:16:34 UTC
From: Dave
Topic: 1318 Message: 1320

I knew one ham in CT who had a 1400' loop on the side of a hill similar to what you describe. The wire ran through pulleys and was fed with open wire line. He would move the loop through the pulleys to change the directivity. Another friend in CT had his normal size loop supported by the trees circling his house.

Bigger is not always better. I found that by reducing the size of my loop from 1000' to 500' gave me a lobe instead of a small null toward the south east (eastern US seaboard) for a net that I call into ever week.

The best way is to model it using one of the available software programs. One you can try is eznec. Their website has a free demo program. www.eznec.com

Dave
VE1VQ

1321. RE: [SkyWires] NVIS Loop Skywire

Yahoo group: SkyWires
Date: 2005-09-30 23:22:40 UTC
From: D. Scott MacKenzie
Topic: 1318 Message: 1321

There is also a freeware program called MMANA which is an excellent modeling program, which has the additional benefit that it is free.

MMANA is found at http://mmhamsoft.ham-radio.ch/

Scott KB?FHP
-----Original Message-----
From: SkyWires@yahoogroups.com [mailto:SkyWires@yahoogroups.com]On Behalf Of Dave
Sent: Friday, September 30, 2005 7:17 PM
To: SkyWires@yahoogroups.com
Subject: Re: [SkyWires] NVIS Loop Skywire

I knew one ham in CT who had a 1400' loop on the side of a hill similar to what
you describe. The wire ran through pulleys and was fed with open wire line. He
would move the loop through the pulleys to change the directivity. Another
friend in CT had his normal size loop supported by the trees circling his house.

Bigger is not always better. I found that by reducing the size of my loop from
1000' to 500' gave me a lobe instead of a small null toward the south east
(eastern US seaboard) for a net that I call into ever week.

The best way is to model it using one of the available software programs. One
you can try is eznec. Their website has a free demo program.
www.eznec.com

Dave
VE1VQ

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--

1322. Re: NVIS Loop Skywire

Yahoo group: SkyWires
Date: 2005-10-05 05:07:43 UTC
From: nc9k
Topic: 1318 Message: 1322

Hello Kyle,

I am an RF electronics engineer. I have been experimenting with 2 12 ga. loop skywires, each at 35 ft. height. Each is fed with its own 450 ohm ladderline and Johnson KW matchbox, switched with a B&W Protax switch. Both are fed up to 1500W PEP on the bands where I use them. One loop is 40 meters long and the other is 160 meters long. The ladderline feed to the 40M loop is 75 feet long, while the feed to the 160M loop is 45 feet long.

The 40M loop runs great 80M to 10M, and consistently gives 2 S meter units higher signal strength readings on 80M up to 500 miles out, and past that point the 160M loop gives much stronger readings. At 40M through 10M which one provides stronger signal levels depends on ionospheric conditions. The 160M loop is consistently a European DX monster on 17M. With the sunspot cycle being the way it is, on 20M I find I am using both back and forth via the Protax switch. The 160M loop gives very good coverage on 160M. I have operated the 40M loop on 160M via my homemade link coupler, but I do not recommend this mode at any power above 100W because of the extreme RF voltage on the link coupler output. I would not try feeding the 40M loop 1500W PEP on 80M with anything but a Johnson KW matchbox, other "tuners" would vaporize with the internal voltages involved with that combo.

As far as loop tilt angles are concerned, you might notice a slight skewing in your vertical angle of radiation. Being H field magnetic antennas, the pond should make no difference to your loop operation.

73's and good luck,

Leland NC9K

--- In SkyWires@yahoogroups.com, Kyle <kyle@k...> wrote:
> Hello, please allow me to introduce myself. My name is Kyle. I
am an
> electrical engineer with no formal training in RF, and I am a tech
class
> operator. My wife and I are studying to upgrade to General
(including
> learning the code). Right now we do all our hamming on 2m and are
very
> disappointed with VHF propagation.
>
> The bulk of what we want to do is between 0-100 miles, which puts
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> solidly in the HF skip zone. This makes NVIS (cloud warming) very
> attractive.
>
> I plan to put up a Loop Skywire for our 80m NVIS needs, but it
looks
> like I might also be able to have some occasional fun DXing on
20m.
> Wonderful!
>
> I have read many articles on the Loop Skywire, but authors always
seem
> to assume one has a flat piece of land. Well I am in the tip-toes
of
> the foothills of the US Appalachian Mountains. My QTH is
basically at
> the highest point in my county, which seems like it will help on
all
> forms of communication. But my land is NOT flat. The house is on
the
> peak of my property. Looking out of my back window it goes down
hill,
> about 30' to a 1/4 acre pond, and then back up to house level at
the
> back of my property.
>
> I know experimenting is at the heart of ham radio. But I'd like
to
> avoid unnecessary woes if at all possible. What might I expect
from my
> skywire if I stay closer to the house and put the antenna over the
down
> slope? Should the antenna slope with the land, or should it stay
level
> and be higher from the ground on the back side?
>
> I had thought about running it around the pond at the lower
altitude,
> but I think that might mess up my 20m DX, and I don't want to be
looking
> down on my antenna from the house. That just seems dumb to me
(but what
> do I know?).
>
> I had also thought about making the skywire 160m long and going
all the
> way around the property, but I have read about a phenomenon of 2
> wavelengths on 80m turning the lobes away from 90 degrees and
degrading
> NVIS.
>

> I am open to any and all suggestions. Hoping to turn the clouds
orange
> in North GA soon!
>
> -Kyle
> W4KDA

1323. Re: super loop

Yahoo group: SkyWires
Date: 2005-10-28 03:50:13 UTC
From: soona4sail
Topic: 1316 Message: 1323

--- In SkyWires@yahoogroups.com, "charles allison" <charles@a...>
wrote:
>Hi Charles. Radio works markets an antenna such as you describe.The
claim for it is that is an 80 - 10 meter antenna. Other hams I have
talked, and who have used it, are generally un impressed by its
performance. I understand it does work well, though on 80 meters>
Regards VE7MTW
> There is a design for an antenna called the super loop. I believe
Dr Ace's
> website talks about it a bit. It's an 80 meter horizontal delta
with a 1/4
> wavelength at 40meters twinline going through the middle. Has
anyone made
> or tried this antenna, especially as an nvis mode?
>
> best regards,
>
> Charles
> wb5izd
>

1324. Re: [SkyWires] Re: super loop

Yahoo group: SkyWires
Date: 2005-10-28 16:20:29 UTC
From: Dr.Ace Ratliff
Topic: 1316 Message: 1324
Attachments: 1 described; binary payloads are missing from this source WARC

----- Original Message -----
From: soona4sail
To: SkyWires@yahoogroups.com
Sent: Thursday, October 27, 2005 10:50 PM
Subject: [SkyWires] Re: super loop

--- In SkyWires@yahoogroups.com, "charles allison" <charles@a...>
wrote:
>Hi Charles. Radio works markets an antenna such as you describe.The
claim for it is that is an 80 - 10 meter antenna. Other hams I have
talked, and who have used it, are generally un impressed by its
performance. I understand it does work well, though on 80 meters>
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> wavelength at 40meters twinline going through the middle. Has
anyone made
> or tried this antenna, especially as an nvis mode?
>
> best regards,
>
> Charles
> wb5izd
>

From Ace, WH2T

Hi Charles,
I have been corresponding with Don, K8THU . He recently built the super loop antenna. Don gave me his permission to publish his comments. I intend to add them to the web page soon. I am waiting for any new info from Don.
Here is what Don, K8THU had to say about the Super Loop antenna.

Oct 17, 2005
Hi Ace,

Here is the update. My last antenna was a 80 meter full wave loop with about 260 feet in the shape of (roughly) a square. I could always load on 75, sometimes on 40 and rarely on 15. I tried it with a 4:1 balun and without. Same results.

Yesterday I made the superloop to your specs and hoisted it. Unfortunately the bottom 4 feet of the loop ended up on my roof. So I pulled up the bottom with the balun and the ladder line and raised that to become a completely horizontal triangle. It is up about 45 or 50 feet. My Kenwood 570 immediately loaded up on 75, 40, 20, 17, 15, and 12 but not 10. I will send you pics when I get a chance. Now I will wait to see how it performs.

I could with some effort get it up higher so it would clear the roof and be both vertical and horizontal if your research indicates that would be significantly better. I think the reason I couldn't load with the 80 meter loop is because of the limited range of my internal tuner.
But your specs work!

73,
Don, K8THU

Oct 18, 2005
Ace,
I just worked F5PFP near Lyons, France on 20 meters with the superloop.

Don,K8THU

Oct, 23 2005
Hi Ace,

Yesterday I had a fellow ham come over with his antenna analyzer. He found my resonant frequency was about 7.4 Mhz for 40 and also above 4.0 on 75. 20 was ok but not great (yet I worked France). 15 was bad. 10 was worse.
Next weekend I intend to tweak the length.
Don, K8THU

I will update the Super Loop antenna page as I get more info.
Ace - WH2T

1325. Re: [SkyWires] Re: super loop

Yahoo group: SkyWires
Date: 2005-10-28 16:40:04 UTC
From: Dr.Ace Ratliff
Topic: 1316 Message: 1325
Attachments: 1 described; binary payloads are missing from this source WARC

Hi Charles,
I have been corresponding with Don, K8THU . He recently built the super loop antenna. Don gave me his permission to publish his comments. I intend to add them to the web page soon. I am waiting for any new info from Don.
Here is what Don, K8THU had to say about the Super Loop antenna.

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Yesterday I made the superloop to your specs and hoisted it. Unfortunately the bottom 4 feet of the loop ended up on my roof. So I pulled up the bottom with the balun and the ladder line and raised that to become a completely horizontal triangle. It is up about 45 or 50 feet. My Kenwood 570 immediately loaded up on 75, 40, 20, 17, 15, and 12 but not 10. I will send you pics when I get a chance. Now I will wait to see how it performs.

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But your specs work!

73,
Don, K8THU

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Next weekend I intend to tweak the length.
Don, K8THU

I will update the Super Loop antenna page as I get more info.
Ace - WH2T

----- Original Message -----
From: soona4sail
To: SkyWires@yahoogroups.com
Sent: Thursday, October 27, 2005 10:50 PM
Subject: [SkyWires] Re: super loop

--- In SkyWires@yahoogroups.com, "charles allison" <charles@a...>
wrote:
>Hi Charles. Radio works markets an antenna such as you describe.The
claim for it is that is an 80 - 10 meter antenna. Other hams I have
talked, and who have used it, are generally un impressed by its
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> best regards,
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> Charles
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1326. New to the group

Yahoo group: SkyWires
Date: 2005-10-30 17:19:55 UTC
From: Al
Topic: 1326 Message: 1326

Just wanted to say hi to all on the group and tell you all that I've been a Delta Loop user for years. I have a full wave delta loop up for 80 meters and plan to put up a 160 full wave next spring.
My main radio is an Icom IC-706MKIIG with an IC-740 as a backup rig. Also use an IC-2720 dual bander for my vhf/uhf needs in the shack. I've had great luck with the full wave delta loop, along with the 706MKIIG with the AT-180 tuner. The AT-180 auto tuner tunes the delta loop from the low part of the 80 meter band right up to the top fo the 6 meter band. So needless to say this antenna fits my needs and I have a lot of natural antenna support structures, aka big red cedar trees to choise from. Between the cedar and douglas fir trees I have no need for any man made antenna structures, hi, hi. But then I live on Vancouver Island and I don't mind the rain as I don't have to shovel it in the winter.
Even though I live in a sort of a dip or small valley on the side of a mountain ridge and my closest neighbouring fellow ham lives about 1/4 of a mile from me. Would you believe that my loop is actually lower than his basement and it out preforms everyone for about a 100 mile radious of me.
I have to tell you about my property, the XYL and I are both amateurs and when we went looking for a parcel of land to build on, good radio reception was the most important criteria. Of course no covanets prohibiting antennas and no neighbours with pig or chicken farms with in 10 miles, hi hi.
We lucked out when we found the 2 acres we have, we drove onto the property and made contact with a station in Moscow, Japan and Scotland, so that did it for us. We went back to the realitor and made an rediculously low offer and the owner took it surprisingly. And here we are 14 years later still making contacts from the underground loop.

73.. for now ve7agw,
Al Winney,
Port Alberni, BC

1327. Re: [SkyWires] New to the group

Yahoo group: SkyWires
Date: 2005-10-30 17:53:30 UTC
From: Terry Fletcher
Topic: 1326 Message: 1327

Hi Al,
Nice qth and sounds like a nice antenna set up...Is the wire in your
loop in the vertical or horizontal plane relative to the earth?
73 Terry WA0ITP
****

Al wrote:

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>been a Delta Loop user for years. I have a full wave delta loop up
>for 80 meters and plan to put up a 160 full wave next spring.
>My main radio is an Icom IC-706MKIIG with an IC-740 as a backup rig.
>Also use an IC-2720 dual bander for my vhf/uhf needs in the shack.
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>706MKIIG with the AT-180 tuner. The AT-180 auto tuner tunes the
>delta loop from the low part of the 80 meter band right up to the
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>made an rediculously low offer and the owner took it surprisingly.
>And here we are 14 years later still making contacts from the
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>73.. for now ve7agw,
>Al Winney,
>Port Alberni, BC
>
>
>

>
>
>--
>YAHOO! GROUPS LINKS
>
> * Visit your group "SkyWires <http://groups.yahoo.com/group/SkyWires>" on
> the web.
>
> * To unsubscribe from this group, send an email to:
> SkyWires-unsubscribe@yahoogroups.com
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>
> * Your use of Yahoo! Groups is subject to the Yahoo! Terms of Service
> <http://docs.yahoo.com/info/terms/>.
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>
>--
>
>No virus found in this incoming message.
>Checked by AVG Free Edition.
>Version: 7.1.362 / Virus Database: 267.12.6/151 - Release Date: 10/28/2005
>
>

--
72 73
Terry, WA0ITP
wa0itp@...
http://www.qsl.net/wa0itp
http://www.4sqrp.com/

1328. Re: super loop

Yahoo group: SkyWires
Date: 2005-10-30 18:02:31 UTC
From: Al
Topic: 1316 Message: 1328

--- In SkyWires@yahoogroups.com, "Dr.Ace Ratliff" <wh2t@b...> wrote:
>
> Hi Charles,
> I have been corresponding with Don, K8THU . He recently built the super loop antenna. Don gave me his permission to publish his comments. I intend to add them to the web page soon. I am waiting for any new info from Don.
> Here is what Don, K8THU had to say about the Super Loop antenna.
>
> ---------------------------------------
> Oct 17, 2005
> Hi Ace,
>
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> But your specs work!
>
> 73,
> Don, K8THU
> -------------------------
> Oct 18, 2005
> Ace,
> I just worked F5PFP near Lyons, France on 20 meters with the superloop.
>
> Don,K8THU
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> -------------------------
> Oct, 23 2005

> Hi Ace,
>
> Yesterday I had a fellow ham come over with his antenna analyzer. He found my resonant frequency was about 7.4 Mhz for 40 and also above 4.0 on 75. 20 was ok but not great (yet I worked France). 15 was bad. 10 was worse.
> Next weekend I intend to tweak the length.
> Don, K8THU
>>
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> wrote:
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> talked, and who have used it, are generally un impressed by its
> performance. I understand it does work well, though on 80 meters>
> Regards VE7MTW
> > There is a design for an antenna called the super loop. I believe
> Dr Ace's
> > website talks about it a bit. It's an 80 meter horizontal delta
> with a 1/4
> > wavelength at 40meters twinline going through the middle. Has
> anyone made
> > or tried this antenna, especially as an nvis mode?
> >
> > best regards,
> >
> > Charles
> > wb5izd
> >

Hi

Don't know if this is realivant to your "Supper Loop" or not, but my fullwave delta loop for 80 meters is 286 feet erected in a diamond. Also it's erected with the top point being about 70 feet high and the bottome point is about 40 feet, it's feed at one of the corners on the sides with 300 ohm. Then down to a remote 4:1 balun then coax about 20 feet to the AT-180 tuner.
With this configuration I checked the antenna with a anylizer and it resonates at 3730 with a 1.1:1 . Also works great all the way up to the top end of 6 meters with the tuner. Without the tuner it works great at 3730 of course and about center on 40 meters and similar on 20, 17, 15 and all of 10 meters. Before I added the balun the antenna had a very narrow band width. the balun is home made, with a binocular torrid and #14 solid copper wire. I've been using this configuration now for about 3 years and it preforms great. It seems

to be giving me the best of both vertical and horizontal benefits and keeps my noise level almost nonexistant. But then living in a rural area helps as well.

73..de ve7agw

1329. Re: [SkyWires] New to the group

Yahoo group: SkyWires
Date: 2005-10-31 13:23:24 UTC
From: Kyle
Topic: 1326 Message: 1329

Welcome to the group, Al. I am new myself. In addition to what Terry asked, I'd also like to know two things:
1) how high off the ground at your qth is your antenna?
2) if your loop is horizontal, and the ground under your loop isn't level, does your loop slope with (parallel to) the ground or did you make it more or less level?

73s,
Kyle
W4KDA

Terry Fletcher wrote:
> Hi Al,
> Nice qth and sounds like a nice antenna set up...Is the wire in your
> loop in the vertical or horizontal plane relative to the earth?
> 73 Terry WA0ITP
> **********

1330. New to the group

Yahoo group: SkyWires
Date: 2005-10-31 15:42:40 UTC
From: ve7agw
Topic: 1326 Message: 1330

Hi Terry and the group,
My Delta Loop is actually about a 40 degree angel so I get the best
of both worlds, vertical and horizontal. When I first erected it I had it
pretty well plat horizontal and I didn't like the noise and the angle of
radiation I got. So I reconfigured it at a couple of different angles and
finally settled on approximately 40-41 degrees. It seems to perform at it's
best at this angle. I've made contacts in Europe, Australia, Japan, even
worked Africa in the afternoon on 75 meters about 4 days ago. I couldn't
believe my ears when I made contact, mind you it had a lot to do with the
band conditions. I also have a Mosely TA-33jr tri-bander at the 70 foot
level and it pretty well works all the upper band globally with no problems
at all.
I wanted to erect the 160 meter Delta Loop this year but it just
wasn't in the schedule so it didn't happen. There are a number of operators
on the BC Net on 3727 who use four square loops and full wave delta loops as
well with terrific results. The loop is a great antenna if you have the room
and the trees to erect it on. I wouldn't use any other type of antenna now.
In fact our club is planning on erecting a horizontal four square full wave
80 meter loop for our Emergency Operations Center for town's Provincial
Emergency Program (PEP).

73 for now, VE7AGW
Al

Hi Al,
Nice qth and sounds like a nice antenna set up...Is the wire in your
loop in the vertical or horizontal plane relative to the earth?
73 Terry WA0ITP
****

Al wrote:

>Just wanted to say hi to all on the group and tell you all that I've
>been a Delta Loop user for years. I have a full wave delta loop up
>for 80 meters and plan to put up a 160 full wave next spring.
>My main radio is an Icom IC-706MKIIG with an IC-740 as a backup rig.
>Also use an IC-2720 dual bander for my vhf/uhf needs in the shack.
>I've had great luck with the full wave delta loop, along with the
>706MKIIG with the AT-180 tuner. The AT-180 auto tuner tunes the
>delta loop from the low part of the 80 meter band right up to the
>top fo the 6 meter band. So needless to say this antenna fits my
>needs and I have a lot of natural antenna support structures, aka
>big red cedar trees to choise from. Between the cedar and douglas
>fir trees I have no need for any man made antenna structures, hi,
>hi. But then I live on Vancouver Island and I don't mind the rain as
>I don't have to shovel it in the winter.

>Even though I live in a sort of a dip or small valley on the side of
>a mountain ridge and my closest neighbouring fellow ham lives about
>1/4 of a mile from me. Would you believe that my loop is actually
>lower than his basement and it out preforms everyone for about a 100
>mile radious of me.
>I have to tell you about my property, the XYL and I are both
>amateurs and when we went looking for a parcel of land to build on,
>good radio reception was the most important criteria. Of course no
>covanets prohibiting antennas and no neighbours with pig or chicken
>farms with in 10 miles, hi hi.
>We lucked out when we found the 2 acres we have, we drove onto the
>property and made contact with a station in Moscow, Japan and
>Scotland, so that did it for us. We went back to the realitor and
>made an rediculously low offer and the owner took it surprisingly.
>And here we are 14 years later still making contacts from the
>underground loop.
>
>73.. for now ve7agw,
>Al Winney,
>Port Alberni, BC
>

1331. New to the group

Yahoo group: SkyWires
Date: 2005-11-01 16:49:26 UTC
From: ve7agw
Topic: 1326 Message: 1331

Hi Kyle and the group,

To answer your question Kyle, the loop is at about a 40-41 degree slop in a diamond configuration. The highest point is about 70 feet above ground with the lowest point at approx. 40 ft above ground with spread distance in the middle points at approx. 60 feet. The ground slops up at the highest end but the antenna is actually at the 70 ft level above the ground even though the ground slops upward at this point.
The ground rises about 8 feet at the high end compared to the level point which is about the middle of the antenna.
I found that angling the antenna between 35-45 degrees cuts down the noise level considerable and it also gives you a far better angel of radiation from the antenna.
Completely horizontal loops or dipoles tend to have a high angle of radiation, where verticals have a very low angle. The loop dents to give you a high angle unless you angle it about 35-48 degrees. After playing with my loop for the last three years I've also found that changing the feed point has some positive effects as well. The feed point can change the impedance of the antenna drastically and give you a false vswr reading, specially if your using an auto tuner.

Hope this helps you, if you have any more questions ask and I'll do my best to answer them.

73...de ve7agw,
Al

Subject: Re: Welcome to the group, Al.

I am new myself. In addition to what Terry
asked, I'd also like to know two things:
1) how high off the ground at your qth is your antenna?
2) if your loop is horizontal, and the ground under your loop isn't level, does your loop slope with (parallel to) the ground or did you make it more or less level?

73s,
Kyle
W4KDA

Terry Fletcher wrote:
> Hi Al,
> Nice qth and sounds like a nice antenna set up...Is the wire in your
> loop in the vertical or horizontal plane relative to the earth?
> 73 Terry WA0ITP
> **********

1332. Re: [SkyWires] Re: super loop

Yahoo group: SkyWires
Date: 2005-11-01 17:25:09 UTC
From: Dr.Ace Ratliff
Topic: 1316 Message: 1332
Attachments: 1 described; binary payloads are missing from this source WARC

I got another update on the "Super Loop" from Don - K8THU .
Here it is !

Hi Ace,
Ok on Saturday we removed the 1/4 wave stub and found it was about 30 inches too short so we changed it and pruned until it was resonant at 7.25. Then we reassembled the whole antenna and found with the extra stub length it was now resonant overall at 7.21 so I left it there for now and began SWR testing. Results follow:
3.995 1.1
3.751 2 to 1
7.164 1.1 to 1
7.290 1.2 to 1
14.151 1.3 to 1
14.348 1.7 to 1
21.250 2 to 1
21.441 2.5 to 1
24.932 3.5 to 1
24.987 can't load
28.331 3 to 1
29.650 can't load

Don, K8THU

Relayed by Ace - WH2T

----- Original Message -----
From: Al
To: SkyWires@yahoogroups.com
Sent: Sunday, October 30, 2005 1:02 PM
Subject: [SkyWires] Re: super loop

--- In SkyWires@yahoogroups.com, "Dr.Ace Ratliff" <wh2t@b...> wrote:
>
> Hi Charles,
> I have been corresponding with Don, K8THU . He recently built the super loop antenna. Don gave me his permission to publish his comments. I intend to add them to the web page soon. I am waiting for any new info from Don.
> Here is what Don, K8THU had to say about the Super Loop antenna.
>
> ---
> Oct 17, 2005
> Hi Ace,
>
> Here is the update. My last antenna was a 80 meter full wave loop

with about 260 feet in the shape of (roughly) a square. I could always load on 75, sometimes on 40 and rarely on 15. I tried it with a 4:1 balun and without. Same results.
>
> Yesterday I made the superloop to your specs and hoisted it. Unfortunately the bottom 4 feet of the loop ended up on my roof. So I pulled up the bottom with the balun and the ladder line and raised that to become a completely horizontal triangle. It is up about 45 or 50 feet. My Kenwood 570 immediately loaded up on 75, 40, 20, 17, 15, and 12 but not 10. I will send you pics when I get a chance. Now I will wait to see how it performs.
>
> I could with some effort get it up higher so it would clear the roof and be both vertical and horizontal if your research indicates that would be significantly better. I think the reason I couldn't load with the 80 meter loop is because of the limited range of my internal tuner.
> But your specs work!
>
> 73,
> Don, K8THU
> --------------------------
> Oct 18, 2005
> Ace,
> I just worked F5PFP near Lyons, France on 20 meters with the superloop.
>
> Don,K8THU
>
> ---------------------------
> Oct, 23 2005
> Hi Ace,
>
> Yesterday I had a fellow ham come over with his antenna analyzer. He found my resonant frequency was about 7.4 Mhz for 40 and also above 4.0 on 75. 20 was ok but not great (yet I worked France). 15 was bad. 10 was worse.
> Next weekend I intend to tweak the length.
> Don, K8THU
>>
> --- In SkyWires@yahoogroups.com, "charles allison" <charles@a...>
> wrote:
> >Hi Charles. Radio works markets an antenna such as you describe.The
> claim for it is that is an 80 - 10 meter antenna. Other hams I have
> talked, and who have used it, are generally un impressed by its
> performance. I understand it does work well, though on 80 meters>
> Regards VE7MTW

> > There is a design for an antenna called the super loop. I
believe
> Dr Ace's
> > website talks about it a bit. It's an 80 meter horizontal
delta
> with a 1/4
> > wavelength at 40meters twinline going through the middle. Has
> anyone made
> > or tried this antenna, especially as an nvis mode?
> >
> > best regards,
> >
> > Charles
> > wb5izd
> >

Hi

Don't know if this is realivant to your "Super Loop" or not, but my fullwave delta loop for 80 meters is 286 feet erected in a diamond. Also it's erected with the top point being about 70 feet high and the bottome point is about 40 feet, it's feed at one of the corners on the sides with 300 ohm. Then down to a remote 4:1 balun then coax about 20 feet to the AT-180 tuner.
With this configuration I checked the antenna with a anylizer and it resonates at 3730 with a 1.1:1 . Also works great all the way up to the top end of 6 meters with the tuner. Without the tuner it works great at 3730 of course and about center on 40 meters and similar on 20, 17, 15 and all of 10 meters. Before I added the balun the antenna had a very narrow band width. the balun is home made, with a binocular torrid and #14 solid copper wire. I've been using this configuration now for about 3 years and it preforms great. It seems to be giving me the best of both vertical and horizontal benefits and keeps my noise level almost nonexistant. But then living in a rural area helps as well.

73..de ve7agw

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1333. Re: [SkyWires] Re: super loop

Yahoo group: SkyWires
Date: 2005-11-01 17:33:18 UTC
From: Terry Fletcher
Topic: 1316 Message: 1333

Hi Ace,

What's the size of the Super Loop ? It sounds like a winner if one has
the space.

tnx Terry, WA0ITP
****

Dr.Ace Ratliff wrote:

>I got another update on the "Super Loop" from Don - K8THU .
>Here it is !
>
>Hi Ace,
>Ok on Saturday we removed the 1/4 wave stub and found it was about 30 inches too short so we changed it and pruned until it was resonant at 7.25. Then we reassembled the whole antenna and found with the extra stub length it was now resonant overall at 7.21 so I left it there for now and began SWR testing. Results follow:
>3.995 1.1
>3.751 2 to 1
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>14.348 1.7 to 1
>21.250 2 to 1
>21.441 2.5 to 1
>24.932 3.5 to 1
>24.987 can't load
>28.331 3 to 1
>29.650 can't load
>
>
>Don, K8THU
>------------------------
>Relayed by Ace - WH2T
>
> ----- Original Message -----
> From: Al
> To: SkyWires@yahoogroups.com
> Sent: Sunday, October 30, 2005 1:02 PM
> Subject: [SkyWires] Re: super loop
>
>
> --- In SkyWires@yahoogroups.com, "Dr.Ace Ratliff" <wh2t@b...> wrote:
> >
> > Hi Charles,

> > I have been corresponding with Don, K8THU . He recently built the
> super loop antenna. Don gave me his permission to publish his
> comments. I intend to add them to the web page soon. I am waiting
> for any new info from Don.
> > Here is what Don, K8THU had to say about the Super Loop antenna.
> >
> > ---------------------------------------
> > Oct 17, 2005
> > Hi Ace,
> >
> > Here is the update. My last antenna was a 80 meter full wave loop
> with about 260 feet in the shape of (roughly) a square. I could
> always load on 75, sometimes on 40 and rarely on 15. I tried it
> with a 4:1 balun and without. Same results.
> >
> > Yesterday I made the superloop to your specs and hoisted it.
> Unfortunately the bottom 4 feet of the loop ended up on my roof. So
> I pulled up the bottom with the balun and the ladder line and raised
> that to become a completely horizontal triangle. It is up about 45
> or 50 feet. My Kenwood 570 immediately loaded up on 75, 40, 20, 17,
> 15, and 12 but not 10. I will send you pics when I get a chance. Now
> I will wait to see how it performs.
> >
> > I could with some effort get it up higher so it would clear the
> roof and be both vertical and horizontal if your research indicates
> that would be significantly better. I think the reason I couldn't
> load with the 80 meter loop is because of the limited range of my
> internal tuner.
> > But your specs work!
> >
> > 73,
> > Don, K8THU
> > --------------------------
> > Oct 18, 2005
> > Ace,
> > I just worked F5PFP near Lyons, France on 20 meters with the
> superloop.
> >
> > Don,K8THU
> >
> > --------------------------
> > Oct, 23 2005
> > Hi Ace,
> >
> > Yesterday I had a fellow ham come over with his antenna analyzer.
> He found my resonant frequency was about 7.4 Mhz for 40 and also
> above 4.0 on 75. 20 was ok but not great (yet I worked France). 15
> was bad. 10 was worse.
> > Next weekend I intend to tweak the length.
> > Don, K8THU

> >>
> > --- In SkyWires@yahoogroups.com, "charles allison"
> <charles@a...>
> > wrote:
> > >Hi Charles. Radio works markets an antenna such as you
> describe.The
> > claim for it is that is an 80 - 10 meter antenna. Other hams I
> have
> > talked, and who have used it, are generally un impressed by its
> > performance. I understand it does work well, though on 80 meters>
> > Regards VE7MTW
> > > There is a design for an antenna called the super loop. I
> believe
> > Dr Ace's
> > > website talks about it a bit. It's an 80 meter horizontal
> delta
> > with a 1/4
> > > wavelength at 40meters twinline going through the middle. Has
> > anyone made
> > > or tried this antenna, especially as an nvis mode?
> > >
> > > best regards,
> > >
> > > Charles
> > > wb5izd
> > >
>
>
> Hi
>
> Don't know if this is realivant to your "Super Loop" or not, but my
> fullwave delta loop for 80 meters is 286 feet erected in a diamond.
> Also it's erected with the top point being about 70 feet high and
> the bottome point is about 40 feet, it's feed at one of the corners
> on the sides with 300 ohm. Then down to a remote 4:1 balun then coax
> about 20 feet to the AT-180 tuner.
> With this configuration I checked the antenna with a anylizer and it
> resonates at 3730 with a 1.1:1 . Also works great all the way up to
> the top end of 6 meters with the tuner. Without the tuner it works
> great at 3730 of course and about center on 40 meters and similar on
> 20, 17, 15 and all of 10 meters. Before I added the balun the
> antenna had a very narrow band width. the balun is home made, with a
> binocular torrid and #14 solid copper wire. I've been using this
> configuration now for about 3 years and it preforms great. It seems
> to be giving me the best of both vertical and horizontal benefits
> and keeps my noise level almost nonexistant. But then living in a
> rural area helps as well.
>
> 73..de ve7agw
>

>
>
>
>
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>
>---
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>
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>---
>
>
>
>
>---
>
>No virus found in this incoming message.
>Checked by AVG Free Edition.
>Version: 7.1.362 / Virus Database: 267.12.6/152 - Release Date: 10/31/2005
>
>

--
72 73
Terry, WA0ITP
wa0itp@...
http://www.qsl.net/wa0itp
http://www.4sqrp.com/

1334. Re: [SkyWires] Re: super loop

Yahoo group: SkyWires
Date: 2005-11-01 17:38:55 UTC
From: Dr.Ace Ratliff
Topic: 1316 Message: 1334
Attachments: 1 described; binary payloads are missing from this source WARC

Hi Terry ,
You need 100 feet of lot.
See
http://www.bloomington.in.us/~wh2t/Super%20Loop%20Antenna.htm

I will try to update the page soon.
73, Ace - WH2T

----- Original Message -----
From: Terry Fletcher
To: SkyWires@yahoogroups.com
Sent: Tuesday, November 01, 2005 12:33 PM
Subject: Re: [SkyWires] Re: super loop

Hi Ace,

What's the size of the Super Loop ? It sounds like a winner if one has
the space.

tnx Terry, WA0ITP
****

Dr.Ace Ratliff wrote:

>I got another update on the "Super Loop" from Don - K8THU .
>Here it is !
>
>Hi Ace,
>Ok on Saturday we removed the 1/4 wave stub and found it was about 30 inches too short so we changed it and pruned until it was resonant at 7.25. Then we reassembled the whole antenna and found with the extra stub length it was now resonant overall at 7.21 so I left it there for now and began SWR testing. Results follow:
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>21.250 2 to 1
>21.441 2.5 to 1
>24.932 3.5 to 1
>24.987 can't load
>28.331 3 to 1
>29.650 can't load
>
>

>Don, K8THU
>------------------------
>Relayed by Ace - WH2T
>
> ----- Original Message -----
> From: Al
> To: SkyWires@yahoogroups.com
> Sent: Sunday, October 30, 2005 1:02 PM
> Subject: [SkyWires] Re: super loop
>
>
> --- In SkyWires@yahoogroups.com, "Dr.Ace Ratliff" <wh2t@b...> wrote:
> >
> > Hi Charles,
> > I have been corresponding with Don, K8THU . He recently built the
> super loop antenna. Don gave me his permission to publish his
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> > Oct 17, 2005
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> > Yesterday I made the superloop to your specs and hoisted it.
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> or 50 feet. My Kenwood 570 immediately loaded up on 75, 40, 20, 17,
> 15, and 12 but not 10. I will send you pics when I get a chance. Now
> I will wait to see how it performs.
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> > I could with some effort get it up higher so it would clear the
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> that would be significantly better. I think the reason I couldn't
> load with the 80 meter loop is because of the limited range of my
> internal tuner.
> > But your specs work!
> >
> > 73,
> > Don, K8THU
> > -------------------------
> > Oct 18, 2005
> > Ace,
> > I just worked F5PFP near Lyons, France on 20 meters with the

> superloop.
> >
> > Don,K8THU
> >
> > ---------------------------
> > Oct, 23 2005
> > Hi Ace,
> >
> > Yesterday I had a fellow ham come over with his antenna analyzer.
> He found my resonant frequency was about 7.4 Mhz for 40 and also
> above 4.0 on 75. 20 was ok but not great (yet I worked France). 15
> was bad. 10 was worse.
> > Next weekend I intend to tweak the length.
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> >>
> > --- In SkyWires@yahoogroups.com, "charles allison"
> <charles@a...>
> > wrote:
> > >Hi Charles. Radio works markets an antenna such as you
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> > claim for it is that is an 80 - 10 meter antenna. Other hams I
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> > > There is a design for an antenna called the super loop. I
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> > > wavelength at 40meters twinline going through the middle. Has
> > anyone made
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> > > best regards,
> > >
> > > Charles
> > > wb5izd
> > >
>
>
> Hi
>
> Don't know if this is realivant to your "Super Loop" or not, but my
> fullwave delta loop for 80 meters is 286 feet erected in a diamond.
> Also it's erected with the top point being about 70 feet high and
> the bottome point is about 40 feet, it's feed at one of the corners
> on the sides with 300 ohm. Then down to a remote 4:1 balun then coax
> about 20 feet to the AT-180 tuner.

> With this configuration I checked the antenna with a anylizer and it
> resonates at 3730 with a 1.1:1 . Also works great all the way up to
> the top end of 6 meters with the tuner. Without the tuner it works
> great at 3730 of course and about center on 40 meters and similar on
> 20, 17, 15 and all of 10 meters. Before I added the balun the
> antenna had a very narrow band width. the balun is home made, with a
> binocular torrid and #14 solid copper wire. I've been using this
> configuration now for about 3 years and it preforms great. It seems
> to be giving me the best of both vertical and horizontal benefits
> and keeps my noise level almost nonexistant. But then living in a
> rural area helps as well.
>
> 73..de ve7agw
>
>
>
>
>
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>
>---
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> a.. Visit your group "SkyWires" on the web.
>
> b.. To unsubscribe from this group, send an email to:
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> c.. Your use of Yahoo! Groups is subject to the Yahoo! Terms of Service.
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>
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>
>
>
>
>--
>
>No virus found in this incoming message.
>Checked by AVG Free Edition.
>Version: 7.1.362 / Virus Database: 267.12.6/152 - Release Date: 10/31/2005
>
>

--
72 73
Terry, WA0ITP
wa0itp@...
http://www.qsl.net/wa0itp

http://www.4sqrp.com/

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1335. 1100 foot loop? New member

Yahoo group: SkyWires
Date: 2005-11-09 23:40:52 UTC
From: hrd998cc
Topic: 1335 Message: 1335

Hello all, I just found this group while researching loop antennas. I live on top of 10 steeply sloping acres with a few oak trees to hang wires from. By pacing the route from the house to the multiple trees, I figure I have room to hang about 1100 feet of loop. The loop would somewhat resemble home plate with my shack located at the V end. The goal is to have an antenna that will resonate, or at least tune up on the HF bands, 160 through 10 meters. I could cut it for one band, say 160 meters, but radiating on others is desirable as well.

Does anyone have any recommendations on where to start? I would like to avoid just blindly hanging up a random length of wire and bugging it out with an analyzer, but that is an option.

By the way, I must contend with CC&R's and antenna restrictions which pretty much limits my installations to wire antennas.

Thanks.

Russ
W6OHM

1336. Re: [SkyWires] 1100 foot loop? New member

Yahoo group: SkyWires
Date: 2005-11-10 00:46:35 UTC
From: JimMcSkate@aol.com
Topic: 1335 Message: 1336

I think you've found the right group, Russ.

I also think that the ratio of trouble vs performance of an 1100 foot loop would make me shy away, even if I had the space. You see, I live in the 'burbs. I have a 60 x 110 foot plot. I have a 40m loop (140' around, also shaped something like home plate.) And I use 20 gauge insulated wire (longer loops usually need something heavier to deal with the tensile requirement.)

And my little pedestrian 40m loop gets out like, well, all get-out! Mine runs without a tuner on 40 and 160, then tunes easily with an outboard tuner for 20, 15, and 10. I have fossilized 1970's gear, so don't have the WARC bands... but I don't doubt that it would tune up there as well.

My recommendation - if you're not running more than a few hundred watts - is to use twinlead or window line... avoid coax if you can. Mine is run with regular TV twinlead, which - for the price - is a pretty darn good transmission line value. The stock formula for length is 1005 divided by frequency in MHz to get the length around. Select a configuration that encloses the greatest volume (circle is best, but in practice all sorts of other shapes work fine.) There's all sorts of construction tips in the group archives... floating insulators, using slingshots to get the pull lines high in trees. My all time favorite: the guy in Canada who got tired of looking for sinkers he shot over tree limbs in the woods - so he dipped them in gravy and let his dog find them for him.

My loop is about 18 feet high, and recently I worked Italy on 40m CW using about 5 watts output.

Best of luck to you...
73,
Jim McAward
WA2LGN
Blue Point, NY

In a message dated 11/9/2005 6:55:29 PM Eastern Standard Time,
hrd998cc@... writes:

> Hello all, I just found this group while researching loop antennas.
> I live on top of 10 steeply sloping acres with a few oak trees to hang
> wires from. By pacing the route from the house to the multiple trees,
> I figure I have room to hang about 1100 feet of loop.

1337. Re: [SkyWires] 1100 foot loop? New member

Yahoo group: SkyWires
Date: 2005-11-10 02:26:36 UTC
From: K.Currie
Topic: 1335 Message: 1337

My loop is 980' works well on all bands with 100 watts. I have had no trouble with it here in northern Canada. Made with #12 insulated stranded wire, feed with 450ohm ladder line. I love the thing and all most never use my tribander any more, or my G5RV.
Just my 2 cents worth VE5HKC
Keith
----- Original Message -----
From: JimMcSkate@...
To: SkyWires@yahoogroups.com
Sent: Wednesday, November 09, 2005 6:46 PM
Subject: Re: [SkyWires] 1100 foot loop? New member

I think you've found the right group, Russ.

I also think that the ratio of trouble vs performance of an 1100 foot loop would make me shy away, even if I had the space. You see, I live in the 'burbs. I have a 60 x 110 foot plot. I have a 40m loop (140' around, also shaped something like home plate.) And I use 20 gauge insulated wire (longer loops usually need something heavier to deal with the tensile requirement.)

And my little pedestrian 40m loop gets out like, well, all get-out! Mine runs without a tuner on 40 and 160, then tunes easily with an outboard tuner for 20, 15, and 10. I have fossilized 1970's gear, so don't have the WARC bands... but I don't doubt that it would tune up there as well.

My recommendation - if you're not running more than a few hundred watts - is to use twinlead or window line... avoid coax if you can. Mine is run with regular TV twinlead, which - for the price - is a pretty darn good transmission line value. The stock formula for length is 1005 divided by frequency in MHz to get the length around. Select a configuration that encloses the greatest volume (circle is best, but in practice all sorts of other shapes work fine.) There's all sorts of construction tips in the group archives... floating insulators, using slingshots to get the pull lines high in trees. My all time favorite: the guy in Canada who got tired of looking for sinkers he shot over tree limbs in the woods - so he dipped them in gravy and let his dog find them for him.

My loop is about 18 feet high, and recently I worked Italy on 40m CW using about 5 watts output.

Best of luck to you...
73,
Jim McAward
WA2LGN
Blue Point, NY

In a message dated 11/9/2005 6:55:29 PM Eastern Standard Time, hrd998cc@... writes:

Hello all, I just found this group while researching loop antennas.
I live on top of 10 steeply sloping acres with a few oak trees to hang

wires from. By pacing the route from the house to the multiple trees,
I figure I have room to hang about 1100 feet of loop.

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1338. 1100 foot loop? New member

Yahoo group: SkyWires
Date: 2005-11-10 14:20:54 UTC
From: ve7agw
Topic: 1335 Message: 1338

Welcome to the group Russ,

I'm also a new member and if you want info on loops this is the place to look. I've been using a full wave delta loop in a diamond shape for about three, going on four years now. It's about 280' long and will load up flat on 80, 40, & 20 meters. I also have a 160 meter full wave loop ready to go up in the spring. Both antennas are fed with 300 ohm cheap TV wire down to just outside the window to the shack to a remote 4:1 home brew balun (5kw). Been using this configuration now for about three years and it out performs my Mosley TR-33 on 20 meters other than sign:noise ratio in pill ups I don't even use the TR-33 very often at all.
My plan is to erect the 160 meter in the spring and I expect it will perform about the same as the 80 meter. If you want to keep your antenna stealth then use "SuppaFlex" 12 to 14 gauge and hang it with black polypropylene 3/16" rope. And unless you know the antenna is there it will be very stealthy.
Fortunately for me, I live in the rural area of Vancouver Island and I can put up any antenna I want to pay for. Being a two amateur family makes the investment into equipment a budget item instead of a hit and seek one, hi, hi.

73...de ve7agw, Al
Port Alberni, BC
I am Canadian and I drink Canadian Beer, ehhhh!!!

Hello all, I just found this group while researching loop antennas. I live on top of 10 steeply sloping acres with a few oak trees to hang wires from. By pacing the route from the house to the multiple trees, I figure I have room to hang about 1100 feet of loop. The loop would somewhat resemble home plate with my shack located at the V end. The goal is to have an antenna that will resonate, or at least tune up on the HF bands, 160 through 10 meters. I could cut it for one band, say 160 meters, but radiating on others is desirable as well.

Does anyone have any recommendations on where to start? I would like to avoid just blindly hanging up a random length of wire and bugging it out with an analyzer, but that is an option.

By the way, I must contend with CC&R's and antenna restrictions which pretty much limits my installations to wire antennas.

Thanks.

Russ
W6OHM

1339. Re: 1100 foot loop? New member

Yahoo group: SkyWires
Date: 2005-11-11 19:58:15 UTC
From: k6mit
Topic: 1335 Message: 1339

do you have a tuner with a 4 to 1 balun to tune the loop ? if so,
it should tune on all bands just fine....
>
> Hello all, I just found this group while researching loop
antennas.
> I live on top of 10 steeply sloping acres with a few oak trees to
hang
> wires from. By pacing the route from the house to the multiple
trees,
> I figure I have room to hang about 1100 feet of loop. The loop
would
> somewhat resemble home plate with my shack located at the V end.
The
> goal is to have an antenna that will resonate, or at least tune up
on
> the HF bands, 160 through 10 meters. I could cut it for one band,
> say 160 meters, but radiating on others is desirable as well.
>
> Does anyone have any recommendations on where to start? I would
like
> to avoid just blindly hanging up a random length of wire and
bugging
> it out with an analyzer, but that is an option.
>
> By the way, I must contend with CC&R's and antenna restrictions
which
> pretty much limits my installations to wire antennas.
>
> Thanks.
>
> Russ
> W6OHM
>

1340. 160 meter loop

Yahoo group: SkyWires
Date: 2005-11-13 00:56:29 UTC
From: Skip Prinsen W1NNI
Topic: 1340 Message: 1340

I currently live in San Diego county and have a full wave loop up at about 25 - 30 feet. My wife and I are in the process of moving to the family farm in North Central Wyoming early next year. We will have 3 arces and more if it is needed for antennas. I would like to put up a multiple wave length loop at 50 feet next summer.

The present loop loads up on most of the bands with the bulit in tuner in the IC-756 Pro II. Does anyone have any suggestions as far as the length. I too have an analyizer and that is how I tuned the present one.

Thanks for any inputs.

73 de "Skip" W1NNI

1341. Re: [SkyWires] 160 meter loop

Yahoo group: SkyWires
Date: 2005-11-13 01:45:11 UTC
From: BOB
Topic: 1340 Message: 1341

if what your using on the loop works....why change it ?

1342. Re: [SkyWires] 160 meter loop

Yahoo group: SkyWires
Date: 2005-11-13 01:52:03 UTC
From: Dr.Ace Ratliff
Topic: 1340 Message: 1342
Attachments: 1 described; binary payloads are missing from this source WARC

Skip,
I agree with Bob.
Why mess with success. I also use a full wave loop.
Mine is cut for 75 meters and it's 272 feet of wire.
Ace - WH2T

----- Original Message -----
From: Skip Prinsen W1NNI
To: SkyWires@yahoogroups.com
Sent: Saturday, November 12, 2005 7:56 PM
Subject: [SkyWires] 160 meter loop

I currently live in San Diego county and have a full wave loop up at about 25 - 30 feet. My wife and I are in the process of moving to the family farm in North Central Wyoming early next year. We will have 3 arces and more if it is needed for antennas. I would like to put up a multiple wave length loop at 50 feet next summer.

The present loop loads up on most of the bands with the bulit in tuner in the IC-756 Pro II. Does anyone have any suggestions as far as the length. I too have an analyizer and that is how I tuned the present one.

Thanks for any inputs.

73 de "Skip" W1NNI

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1343. Re: [SkyWires] 160 meter loop

Yahoo group: SkyWires
Date: 2005-11-13 01:55:49 UTC
From: BOB
Topic: 1340 Message: 1343

remember too.....the bigger you make a loop antenna....the more major the lobes will be and you will have
poor coverage in areas far out on both transmit and recieve in many areas around the compass.....

1344. Re: [SkyWires] 160 meter loop

Yahoo group: SkyWires
Date: 2005-11-13 02:59:00 UTC
From: Dr.Ace Ratliff
Topic: 1340 Message: 1344
Attachments: 1 described; binary payloads are missing from this source WARC

Hi,
Here's my 2 cents.

After living on small city lots all of my adult life (other than during my military service) in 1994 I moved here to this rural mini farm and decided to experiment with some larger antennas since I now have the space. I am a rag chewer and very seldom attempt to work DX on the 160 or 75/80 meter bands.

The first antenna I made was a 1 wavelength 160 meter horizontal loop, then a 2 wavelength 160 meter loop, and then a 3 wavelength 160 meter loop antennas. I never intend to again put up any loop antenna larger than 530 feet of wire for 160 meters. I have experimented on other frequencies with up to a 10 wavelength loop antenna. As far as I could tell, the 1 wavelength 160 meter loop worked as well as if not better than the 3 wavelength 160 meter loop antenna. And I liked the way the 1 wavelength 160 meter loop performed better than the 2 wavelength 160 meter loop.

Later I built a 1 wavelength 80 meter delta shaped horizontal loop coax fed antenna that uses a 75 ohm coax Q section in the feedline. It works better than any of the 1, 2, or 3 wavelength 160 meter loop antennas on the 80 meter band. But as I said before I am a rag chewer and very seldom attempt to work DX on the 160 or 75/80 meter bands.

I now use a 1 wavelength 80 meter delta shaped horizontal loop antenna and a 160 meter band 1/4 wave inverted L "vertical" wire antenna. Two loops are more than I want to maintain. If I could only have one HF/MF antenna it would be a 1 wavelength 160 meter horizontal loop !
Ace - www.WH2T.com

----- Original Message -----
From: BOB
To: SkyWires@yahoogroups.com
Sent: Saturday, November 12, 2005 8:55 PM
Subject: Re: [SkyWires] 160 meter loop

remember too.....the bigger you make a loop antenna....the more major the lobes will be and you will have
poor coverage in areas far out on both transmit and recieve in many areas around the compass.....

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1345. BIGGER is not always BETTER...

Yahoo group: SkyWires
Date: 2005-11-14 03:49:36 UTC
From: Mike Schwendeman
Topic: 1345 Message: 1345

I agree with the two chaps below; I had VERY large loops erected,
and after finally listening to the advice from those who had "been
there," I went to a 540 foot square loop, up 45 to 50 feet. I feed this
with about 50 feet of 450 Ohm ladder line to an Icom AH-4 auto antenna
tuner. (I had 12 feet of RG-8 between the radio/antenna switch inside
the house and the auto tuner.)
My largest loop was in the area of 1900 feet of #14 wire. Overall,
the larger loop antennas were simply not that great! After trimming my
largest "grand experiment" to 540 feet, I now have a GOOD antenna.
(BIGGER is not always BETTER!) Operationally, the "shorter" loop is
much better in all cases, I believe. (Both for local and for DX.)
I also erected a 253 foot vertically polarized delta loop, fed with
50 feet of 450 Ohm ladder line at a lower corner. (The delta loop was
supported at the 105 foot level of my tower; The two bottom corners
were at about the 40 foot level, so the antenna had a very good chance
to "prove" itself.)
The feed lines for the 540 foot horizontal loop and the delta loop
were remotely "selected" by a heavy duty relay in my garage. The
selected antenna was then attached to the AH-4 auto tuner, so I could
almost "dynamically" choose and compare. I found that 90+ percent of
the time, the horizontal loop won both for local as well for DX on all
bands from 80 to 17 meters. I took the delta loop down, and carefully
coiled it and the fed line for storage. (Maybe some day...)
I will also add that I used a common home brew 75/40 meter dipole
at the 35 foot level as my REFERENCE ANTENNA to compare with the larger
antennas that I had. I found this to be an eye opener as I tried out
the wires that I had struggled to get into the air! (See the comments
below; These seem to agree with my outcome.)
73! -Mike- K0JTA

>
> Date: Sat, 12 Nov 2005 17:55:49 -0800
> From: "BOB" <k6mit@...>
>Subject: Re: 160 meter loop
>remember too.....the bigger you make a loop antenna....the more major the lobes will be
and you will have poor coverage in areas far out on both transmit and recieve in many areas
around the compass.....
>_____
>_____
>
> Date: Sat, 12 Nov 2005 21:59:00 -0500
> From: "Dr.Ace Ratliff" <wh2t@...>
>Subject: Re: 160 meter loop
>Hi, Here's my 2 cents.
> The first antenna I made was a 1 wavelength 160 meter horizontal loop, then a 2

wavelength 160 meter loop, and then a 3 wavelength 160 meter loop antennas. I never intend to again put up any loop antenna larger than 530 feet of wire for 160 meters. I have experimented on other frequencies with up to a 10 wavelength loop antenna. As far as I could tell, the 1 wavelength 160 meter loop worked as well as if not better than the 3 wavelength 160 meter loop antenna. And I liked the way the 1 wavelength 160 meter loop performed better than the 2 wavelength 160 meter loop.
> If I could only have one HF/MF antenna it would be a 1 wavelength 160 meter horizontal loop !
> Ace - www.WH2T.com
>
>
>

1346. Re: [SkyWires] BIGGER is not always BETTER...

Yahoo group: SkyWires
Date: 2005-11-14 13:08:04 UTC
From: Dave
Topic: 1345 Message: 1346

Mike Schwendeman wrote:
> I agree with the two chaps below; I had VERY large loops erected,
> and after finally listening to the advice from those who had "been
> there," I went to a 540 foot square loop, up 45 to 50 feet. I feed this

I also had the idea that bigger was better with a 1000 foot loop up 30 to 50 feet and fed with balanced line. When I ran it through EZNEC I found a couple of nulls in directions where I wanted signal! Modeling a 540 foot version actually removed the nulls and gave slight gains in those areas. Reducing the loop to 500 from 540 feet gave no real difference according to the software so the old one came down, several new lines were installed over convenient trees, and the smaller loop went up.

Eighty mtrs in the summer is not the greatest band to try for comparisons but the stations I work on regular basis seem to have stronger signals and stay longer after sunrise.

An added benefit is having less wire and fewer supports to suffer from high wind effect.

Dave
VE1VQ

1347. 4:1 Balun vs. Balanced Line Tuner

Yahoo group: SkyWires
Date: 2005-11-20 23:05:01 UTC
From: Marc Chappelle
Topic: 1347 Message: 1347

Hello,

With present band conditions being as poor as they are, I'd like to squeeze as much performance as possible out of my 40 meter delta loop. My loop is fed with 450 ohm ladder line running directly through the wall of the shack and into my MFJ autotuner. I'm able to tune most bands with the rig's internal ATU, so I really only use the external tuner for it's 4:1 current balun.

My question:
How much of a performance boost can I expect if I substitute the 4:1 balun with a real Balanced Line Tuner. I've read the various QST articles about the merits of BLTs over baluns, but what I'd really like to hear are some real-world experiences from people who've made the switch and whether or not there's any real discernable improvement.

Thanks
KA3ARF - Marc

1348. Re: [SkyWires] 4:1 Balun vs. Balanced Line Tuner

Yahoo group: SkyWires
Date: 2005-11-21 00:25:05 UTC
From: Scott Erwin
Topic: 1347 Message: 1348

If your feed line is properly balanced when using your 4:1 Balun and there is little loss through your MFJ antenna tuner then you would not see any difference when switching to a balanced antenna tuner. If however, your Balun is not operating properly or the antenna tuner has considerable loss through it then a properly tuned balanced tuner would make a huge difference. Check out this article as it goes into great detail on how to test and setup your antenna tuner and check the Balun for proper operation.
http://www.eham.net/articles/9751

--- Marc Chappelle <marc.chappelle@...> wrote:

> Hello,
>
> With present band conditions being as poor as they
> are, I'd like to
> squeeze as much performance as possible out of my 40
> meter delta loop.
> My loop is fed with 450 ohm ladder line running
> directly through the
> wall of the shack and into my MFJ autotuner. I'm
> able to tune most
> bands with the rig's internal ATU, so I really only
> use the external
> tuner for it's 4:1 current balun.
>
> My question:
> How much of a performance boost can I expect if I
> substitute the 4:1
> balun with a real Balanced Line Tuner. I've read the
> various QST
> articles about the merits of BLTs over baluns, but
> what I'd really like
> to hear are some real-world experiences from people
> who've made the
> switch and whether or not there's any real
> discernable improvement.
>
> Thanks
> KA3ARF - Marc
>
>
>

>
>
>

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http://farechase.yahoo.com

1349. free antenna design software

Yahoo group: SkyWires
Date: 2005-11-23 20:06:15 UTC
From: electronicparts2002
Topic: 1349 Message: 1349

you can download windows software for designing any type antenna for free from www.tech-systems-labs.com

1350. 20, 15 & 10M Loop Antenna Project

Yahoo group: SkyWires
Date: 2005-11-25 23:56:11 UTC
From: SNKDavis@aol.com
Topic: 1350 Message: 1350
Attachments: 1 described; binary payloads are missing from this source WARC

Hi All,

I'm new to the group and thought that I would share my recent experience with a very successful HF loop antenna project. I have a Mosley TA33 Jr. for 20, 15 and 10, but due to neighborhood considerations it is only up about 17'. On 20M it works better than a dipole, but not nearly as well as it used to work on our 40' tower at our former QTH. At 17', the beam is not adequate on 20M for contesting and busting the DX pileups.

At the urging of some local hams, and knowing that I could put the antenna much higher in the woods, I decided to experiment with a full wave loop antenna. The antenna is vertical, hanging by a single line (thanks to Easy Hang) and supported by PVC:

The antenna is working great! When I switch from the beam to the loop, the spectrum display on the Pro II immediately pops up. Even with the beam directly on the station, the loop is superior. With the loops (and dipoles for 40 and 80), we were able to work 79 of the 80 sections in both Sweepstakes contests running 100 watts (missed ND for CW and NT for phone).

The 20M element is also resonant at the bottom end of 10M (SWR is flat at 28 and below 2/1 up to 28.6), so you get two bands with one wire. The loop is very broadbanded and a tuner is not required. Another plus is that the antenna is cheap to make. I used 3/4" PVC for the supports. The total cost for the PVC and cement was about $14.00.

If you want to try your hand at a loop, here are the details on how I constructed mine. These measurements are for 20M. Repeat using a 15M frequency for the 15M band. I have a simple Excel spreadsheet that will calculate all the measurements for any frequency, and I'll be glad to send it along if anyone would like:

1. Find the size of the loop by dividing 1005 by the frequency in MHz:

1005 / 14.175 = 70.9 feet. Go ahead and cut your wire.

2. Divide the length by 4 to determine the length of each side:

70.9 / 4 = 17.725

3. Since the PVC supports go to opposite corners, the supports must be longer than the sides. To determine the length, multiply by 1.4.

17.725 X 1.4 = 24.82 (length of PVC - corner to corner)

4. You'll need the following PVC parts:

5 - 10' X 1/2" PVC
1 - 4 way connector for the center
4 sleeves

5. Cut 1 of the PVC pieces into 4, 2.5 foot lengths

6. Assemble the PVC support

7. Lay your wire out on the structure, temporarily taping it to find where it should pass through the PVC

8. Drill holes for the wire through the PVC. After you run the wire through, wrap a bit of electrical tape on both sides of the wire next to the PVC to keep the wire from sliding and to give the PVC additional support. When hanging, the wire actually supports the horizontal PVC piece and keeps it from drooping.

9. Connect your coax. You can either solder the shield to one side of the wire and the center to the other or use an SO 239 dipole connector. I opted for the SO 239 connector.

10. A loop antenna is about 100 ohms. Sure enough, when I connected 50 ohm cable, the SWR was about 2 across the whole band. (100 / 50 = 2). For a better match, use a piece of 75 ohm cable (RG 59) as a transformer. Calculate the length as follows: 492 / frequency in MHz / 2 X velocity factor.

Assuming the velocity factor is .66, the calculation for 20M would be 492 / 14.175 / 2 X .66 = 11.45 feet. I had no idea what the velocity factor was for the RG 59 cable I had. A search on the web revealed most cables were between .66 and .8. One of the pieces I had was about 12 feet long, so I just went ahead and put connectors on it. The SWR results:

14.005 - 1.4
14.100 - 1.3
14.200 - 1.2
14.300 - 1.2
14.345 - 1.1

The antenna already has a good SWR across the whole band! If I was going for perfection, it looks like the antenna should be slightly bigger. The antenna could also probably be tuned by lengthening or shortening the RG 59 section.

Conclusion:

This is the first antenna project in a LONG time that has worked "as advertised" without lots of pruning, etc. I am really pleased with the results on 20, 15 and 10, and I'm considering adding additional loops on the same PVC structure for 17, 12 and 6. If I do, each will be fed with individual feed lines.

I hope that if nothing else, my weekend project fueled your imagination for some antenna projects at your QTH!

Comments, questions and suggestions are all welcome.

73, Scott
N3FJP
www.n3fjp.com (http://www.n3fjp.com/)

1351. Re: [SkyWires] 20, 15 & 10M Loop Antenna Project

Yahoo group: SkyWires
Date: 2005-11-26 01:38:36 UTC
From: chasm@texas.net
Topic: 1350 Message: 1351

On Fri, 25 Nov 2005 18:56:11 EST, SNKDavis@... wrote:

>
>At the urging of some local hams, and knowing that I could put the antenna
>much higher in the woods, I decided to experiment with a full wave loop
>antenna. The antenna is vertical, hanging by a single line (thanks to Easy Hang)
>and supported by PVC:

HOW ABOUT SOme pictures of your install, etc??
some of us are sight learners, and cannot learn anything from writing or
hearing.
73s
K5DAM
--
K5DAM Houston EL29fu
http://tinyurl.com/df55x (BPL Presentation)

1352. Re: [SkyWires] 20, 15 & 10M Loop Antenna Project

Yahoo group: SkyWires
Date: 2005-11-26 11:27:51 UTC
From: SNKDavis@aol.com
Topic: 1350 Message: 1352
Attachments: 1 described; binary payloads are missing from this source WARC

Hi Charles,

Thanks for your interest. The best view is really the diagram that I included in my first e-mail, and I'm providing it again here:

The picture came through fine here, but I know from experience on other lists that some have trouble viewing pictures from the reflector. If you can't see the above image, I'll be glad to send you an e-mail directly. Just let me know.

I spray painted the 3/4" PVC brown. It is tough to see hanging from the tree and VERY neighborhood friendly, but that limits the photo opportunities. There really is very little to the physical construction of the antenna. It is just a matter of cutting the wire to the proper length, drilling a few holes in PVC and soldering the SO 239 connector or coax end to the wire. I'll be happy to clarify any of the steps if you need more information.

By the way, in reviewing my e-mail I noticed that in the steps I had included 1/2" PVC in the parts list. I did try 1/2", but it tended to bow like a kite. I swapped the PVC out with 3/4". It still has quite a bit of flex on the ground, but it is hanging real well.

73, Scott
N3FJP
www.n3fjp.com (http://www.n3fjp.com)

In a message dated 11/25/2005 8:38:52 PM Eastern Standard Time, chasm@... writes:

On Fri, 25 Nov 2005 18:56:11 EST, SNKDavis@... wrote:

>
>At the urging of some local hams, and knowing that I could put the antenna

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K5DAM

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for the 15M band. I have a simple Excel spreadsheet that will calculate all the measurements for any frequency, and I'll be glad to send it along if anyone would like:

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I hope that if nothing else, my weekend project fueled your imagination for some antenna projects at your QTH!

Comments, questions and suggestions are all welcome.

73, Scott
N3FJP
www.n3fjp.com (http://www.n3fjp.com/)

1353. Full Wave Loop

Yahoo group: SkyWires
Date: 2005-11-26 15:33:16 UTC
From: Thomas Giella KN4LF
Topic: 1353 Message: 1353
Attachments: 2 described; binary payloads are missing from this source WARC

If I may add, the correct formula for a single full wave loop is 1032 not 1005, 1032 comes from W4RNL the antenna expert. 1005 is used for cubical quad beams only.

I realize that I'm probably preaching to the choir but my personal experience experimenting with full wave loop antennas demonstrates that they are excellent on transmit and receive whether mounted vertically or horizontally. I'm using a full wave loop for 80 meters in the horizontal plane mounted at 35 feet and I work lot's of DX with it using just 125 watts. It's 288 feet long and 72 feet per side and I feed it on a side with 110 feet of 450 ohm window line and work through 10 meters with it.

The antenna has lot's of gain on the higher bands yest is fairly omnidirectional. Thse modeling figures are from W4RNL:

1 wl loop (70'/side), corner-fed: #12 copper 35' up over medium earth:
Freq. TO angle Max Gain Feed Z Pattern notes
MHz degrees dBi R+/-jX
3.58 90 5.16@45 67 +j 4 oval thru corners
7.1 48 5.69 84 -j150 oval across corners
10.1 41 9.32 370 -j575 narrow oval thru corners
14.1 27 10.51 305 -j105 clover leaves thru corners
18.1 20 13.75 350 +j240 EDZ-like thru corners
21.1 17 13.63 245 -j105 clover
24.95 14 14.09 320 +j110 thru crnrs w/side lobes
28.1 12 12.92 225 -j145 12 lobes

1 wl loop (70'/side, side-fed:) #12 copper 35' up over medium earth:
Freq. TO angle Max Gain Feed Z Pattern notes
MHz degrees dBi R+/-jX
3.58 90 5.09@45 65 +j 4 oval thru sides
7.1 44 6.73 275 +j130 oval thru sides
10.1 35 6.86 285 -j535 lobes at corners
14.1 27 9.69 265 -j165 4 lobes at corners
18.1 21 11.65 400 +j180 6 lobes, strong=far side
21.1 18 10.61 400 -j120 many lobes, strng=far side
24.95 15 11.08 370 +j 45 many lobes, strng=far side
28.1 11 11.83 250 -j180 many lobes, strng=far side
Here are a few links to W4RNL's articles on full wave loops:

http://www.cebik.com/wire/hl.html
http://www.cebik.com/fdim/atl1.html
http://www.cebik.com/wire/horloop.html

Though the TOA of the main lobe on a horizontal full wave loop is 90 degrees no matter the mounting height, there is a second lobe at 45 degrees about 2 db down that allows one to work DX. Last week I worked EI9HW on 80 meters phone using just 125 watts and I actually

broke the pileup on the first call to snag him.

My next project is to convert the 80 meter full wave loop to a 160 meter version.

73 & Happy Holidays,
Thomas F. Giella, KN4LF
Lakeland, FL, USA
Grid Square EL97AW
27 57 26.5 N 81 56 46.6 W
kn4lf@...

PODXS 070 PSK Club #349

Proof Of God Through Science: http://www.cosmicfingerprints.com/audio/newevidence.htm
KN4LF Amateur & SWL Radio History: http://www.kn4lf.com/index.htm
KN4LF MF Radio Propagation Theory Notes: http://www.kn4lf.com/kn4lf8.htm

----- Original Message -----
From: SNKDavis@...
To: SkyWires@yahoogroups.com
Sent: Saturday, November 26, 2005 6:27 AM
Subject: Re: [SkyWires] 20, 15 & 10M Loop Antenna Project

Hi Charles,

Thanks for your interest. The best view is really the diagram that I included in my first e-mail, and I'm providing it again here:

The picture came through fine here, but I know from experience on other lists that some have trouble viewing pictures from the reflector. If you can't see the above image, I'll be glad to send you an e-mail directly. Just let me know.

I spray painted the 3/4" PVC brown. It is tough to see hanging from the tree and VERY neighborhood friendly, but that limits the photo opportunities. There really is very little to the physical construction of the antenna. It is just a matter of cutting the wire to the proper length, drilling a few holes in PVC and soldering the SO 239 connector or coax end to the wire. I'll be happy to clarify any of the steps if you need more information.

By the way, in reviewing my e-mail I noticed that in the steps I had included 1/2" PVC in the parts list. I did try 1/2", but it tended to bow like a kite. I swapped the PVC out with 3/4". It still has quite a bit of flex on the ground, but it is hanging real well.

73, Scott
N3FJP
www.n3fjp.com

In a message dated 11/25/2005 8:38:52 PM Eastern Standard Time, chasm@... writes:
On Fri, 25 Nov 2005 18:56:11 EST, SNKDavis@... wrote:

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>At the urging of some local hams, and knowing that I could put the antenna
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>and supported by PVC:

HOW ABOUT SOme pictures of your install, etc??
some of us are sight learners, and cannot learn anything from writing or
hearing.
73s
K5DAM
If you want to try your hand at a loop, here are the details on how I constructed mine. These measurements are for 20M. Repeat using a 15M frequency for the 15M band. I have a simple Excel spreadsheet that will calculate all the measurements for any frequency, and I'll be glad to send it along if anyone would like:

1. Find the size of the loop by dividing 1005 by the frequency in MHz:

1005 / 14.175 = 70.9 feet. Go ahead and cut your wire.

2. Divide the length by 4 to determine the length of each side:

70.9 / 4 = 17.725

3. Since the PVC supports go to opposite corners, the supports must be longer than the sides. To determine the length, multiply by 1.4.

17.725 X 1.4 = 24.82 (length of PVC - corner to corner)

4. You'll need the following PVC parts:

5 - 10' X 3/4" PVC
1 - 4 way connector for the center
4 sleeves

5. Cut 1 of the PVC pieces into 4, 2.5 foot lengths

6. Assemble the PVC support

7. Lay your wire out on the structure, temporarily taping it to find where it should pass through the PVC

8. Drill holes for the wire through the PVC. After you run the wire through, wrap a bit of electrical tape on both sides of the wire next to the PVC to keep the wire from sliding and to give the PVC additional support. When hanging, the wire actually supports the horizontal PVC piece and keeps it from drooping.

9. Connect your coax. You can either solder the shield to one side of the wire and the center to the other or use an SO 239 dipole connector. I opted for the SO 239 connector.

10. A loop antenna is about 100 ohms. Sure enough, when I connected 50 ohm cable, the SWR was about 2 across the whole band. (100 / 50 = 2). For a better match, use a piece of 75 ohm cable (RG 59) as a transformer. Calculate the length as follows: 492 / frequency in MHz / 2 X velocity factor.

Assuming the velocity factor is .66, the calculation for 20M would be 492 / 14.175 / 2 X .66 = 11.45 feet. I had no idea what the velocity factor was for the RG 59 cable I had. A search on the web revealed most cables were between .66 and .8. One of the pieces I had was about 12 feet long, so I just went ahead and put connectors on it. The SWR results:

14.005 - 1.4
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14.200 - 1.2
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14.345 - 1.1

The antenna already has a good SWR across the whole band! If I was going for perfection, it looks like the antenna should be slightly bigger. The antenna could also probably be tuned by lengthening or shortening the RG 59 section.

Conclusion:

This is the first antenna project in a LONG time that has worked "as advertised" without lots of pruning, etc. I am really pleased with the results on 20, 15 and 10, and I'm considering adding additional loops on the same PVC structure for 17, 12 and 6. If I do, each will be fed with individual feed lines.

I hope that if nothing else, my weekend project fueled your imagination for some antenna projects at your QTH!

Comments, questions and suggestions are all welcome.

73, Scott
N3FJP
www.n3fjp.com

No virus found in this incoming message.
Checked by AVG Free Edition.
Version: 7.1.362 / Virus Database: 267.13.8/183 - Release Date: 11/25/2005

1354. RE: [SkyWires] 20, 15 & 10M Loop Antenna Project

Yahoo group: SkyWires
Date: 2005-12-02 03:37:02 UTC
From: J. Harrell
Topic: 1350 Message: 1354
Attachments: 1 described; binary payloads are missing from this source WARC

Scott,

Looks like a really nice antenna. Im am a Amature radio operator and I am going to try to upgrade my license to Extra later on. Joined the group to learn more about antennas. Is there any way you could shoot some pictures of the antenna this way to me so I can look at how you made the antenna and how all the coax hooks up? This may give me ideas later on when I get to try my hand at homebrewing one.

Email pics to me at: harrell@inteliport.com

Thanks,

Joey

KI4HNN

-----Original Message-----
From: SkyWires@yahoogroups.com [mailto:SkyWires@yahoogroups.com] On Behalf Of SNKDavis@...
Sent: Saturday, November 26, 2005 6:28 AM
To: SkyWires@yahoogroups.com
Subject: Re: [SkyWires] 20, 15 & 10M Loop Antenna Project

Hi Charles,

Thanks for your interest. The best view is really the diagram that I included in my first e-mail, and I'm providing it again here:

The picture came through fine here, but I know from experience on other lists that some have trouble viewing pictures from the reflector. If you can't see the above image, I'll be glad to send you an e-mail directly. Just let me know.

I spray painted the 3/4" PVC brown. It is tough to see hanging from the tree and VERY neighborhood friendly, but that limits the photo opportunities. There really is very little to the physical construction of the antenna. It is just a matter of cutting the wire to the proper length, drilling a few holes in PVC and soldering the SO 239 connector or coax end to the wire. I'll be happy to clarify any of the steps if you need more information.

By the way, in reviewing my e-mail I noticed that in the steps I had included 1/2" PVC in the parts list. I did try 1/2", but it tended to bow like a kite. I swapped the PVC out with 3/4". It still has quite a bit of flex on the ground, but it is hanging real well.

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N3FJP

www.n3fjp.com

In a message dated 11/25/2005 8:38:52 PM Eastern Standard Time,
chasm@... writes:

On Fri, 25 Nov 2005 18:56:11 EST, SNKDavis@... wrote:

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>At the urging of some local hams, and knowing that I could put the antenna

>much higher in the woods, I decided to experiment with a full wave loop
>antenna. The antenna is vertical, hanging by a single line (thanks to Easy
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>and supported by PVC:

HOW ABOUT SOme pictures of your install, etc??
some of us are sight learners, and cannot learn anything from writing or
hearing.
73s
K5DAM

If you want to try your hand at a loop, here are the details on how I
constructed mine. These measurements are for 20M. Repeat using a 15M
frequency for the 15M band. I have a simple Excel spreadsheet that will
calculate all the measurements for any frequency, and I'll be glad to send
it along if anyone would like:

1. Find the size of the loop by dividing 1005 by the frequency in MHz:

1005 / 14.175 = 70.9 feet. Go ahead and cut your wire.

2. Divide the length by 4 to determine the length of each side:

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9. Connect your coax. You can either solder the shield to one side of the wire and the center to the other or use an SO 239 dipole connector. I opted for the SO 239 connector.

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I hope that if nothing else, my weekend project fueled your imagination for some antenna projects at your QTH!

Comments, questions and suggestions are all welcome.

73, Scott

N3FJP

www.n3fjp.com <http://www.n3fjp.com/>

1355. Re: [SkyWires] 20, 15 & 10M Loop Antenna Project

Yahoo group: SkyWires
Date: 2005-12-02 07:32:27 UTC
From: n1zw
Topic: 1350 Message: 1355
Attachments: 1 described; binary payloads are missing from this source WARC

Hi Scott, I would loke to look at more infor on this antenna also. I have no restrictions but, if i could make something of this type and have it on a rotor would be very nice build. Thanks de n1zw Robin
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From: J. Harrell
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Sent: Thursday, December 01, 2005 10:37 PM
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Email pics to me at: harrell@...

Thanks,

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Sent: Saturday, November 26, 2005 6:28 AM
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YAHOO! GROUPS LINKS

a.. Visit your group "SkyWires" on the web.

b.. To unsubscribe from this group, send an email to:
SkyWires-unsubscribe@yahoogroups.com

c.. Your use of Yahoo! Groups is subject to the Yahoo! Terms of Service.

1356. Re: [SkyWires] 20, 15 & 10M Loop Antenna Project - (jpeg attached)

Yahoo group: SkyWires
Date: 2005-12-03 13:26:13 UTC
From: SNKDavis@aol.com
Topic: 1356 Message: 1356
Attachments: 2 described; binary payloads are missing from this source WARC

Hi Robin,

Thanks for your e-mail. I've received a lot of interest in this antenna! I'm glad, because it really is a great performer.

I'm going to try sending the picture as an attachment via the reflector so that it is available to others as well. I'll also send the Excel spreadsheet as a separate e-mail through the reflector. If they don't come through, please e-mail me directly at _snkdavis@..._ (mailto:snkdavis@...) and I'll be glad to send them again.

I've received several questions directly on attaching the coax to the loop. You can either use an insulator and solder the center of the coax to one side and the shield to the other, or you can use an SO239 connector. I like using the SO239 connectors. They only add a few bucks to the project and make a much neater and stronger connection. It also makes it a snap to swap out coax when needed.

Here is what I use for the loops (and also dipoles that aren't center supported):

802 CQ dipole, sloper, SO239, heavy duty, antenna supported. $8.50 Each

And for dipoles and Vees that are center supported, use:

801 CQ dipole center, SO239, center hang, heavy duty, UV resistant. $8.95 Each

The only difference between the two is the screw eye in the center of item 801. I order mine from The Wireman:

http://thewireman.com/antacc.html (http://thewireman.com/antacc.html)

Please post any questions that you have through the reflector and I'll be happy to help in any way that I can.

73, Scott
N3FJP

In a message dated 12/2/2005 9:48:31 PM Eastern Standard Time, n1zw@... writes:

Hi Scott, I would loke to look at more infor on this antenna also. I have no restrictions but, if i could make something of this type and have it on a rotor would be very nice build. Thanks de n1zw Robin

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To: _SkyWires@yahoogroups.com_ (mailto:SkyWires@yahoogroups.com)
Sent: Thursday, December 01, 2005 10:37 PM
Subject: RE: [SkyWires] 20, 15 & 10M Loop Antenna Project

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9. Connect your coax. You can either solder the shield to one side of the
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YAHOO! GROUPS LINKS

* Visit your group "_SkyWires_ (http://groups.yahoo.com/group/SkyWires)
" on the web.
* To unsubscribe from this group, send an email to:
SkyWires-unsubscribe@yahoogroups.com
(mailto:SkyWires-unsubscribe@yahoogroups.com?subject=Unsubscribe)
* Your use of Yahoo! Groups is subject to the _Yahoo! Terms of Service_
(http://docs.yahoo.com/info/terms/) .

1357. Re: [SkyWires] 20, 15 & 10M Loop Antenna Project (Excel Spreadsheet)

Yahoo group: SkyWires
Date: 2005-12-03 13:35:16 UTC
From: SNKDavis@aol.com
Topic: 1357 Message: 1357
Attachments: 2 described; binary payloads are missing from this source WARC

Here is the Excel spreadsheet that will calculate loop dimensions based on frequency.

73, Scott
N3FJP

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----- Original Message -----
From: _J. Harrell_ (mailto:harrell@...)
To: _SkyWires@yahoogroups.com_ (mailto:SkyWires@yahoogroups.com)
Sent: Thursday, December 01, 2005 10:37 PM
Subject: RE: [SkyWires] 20, 15 & 10M Loop Antenna Project

Scott,
Looks like a really nice antenna. Im am a Amature radio operator and I am going to try to upgrade my license to Extra later on. Joined the group to learn more about antennas. Is there any way you could shoot some pictures of the antenna this way to me so I can look at how you made the antenna and how all the coax hooks up? This may give me ideas later on when I get to try my hand at homebrewing one.
Email pics to me at: harrell@...
Thanks,
Joey
KI4HNN
-----Original Message-----
From: SkyWires@yahoogroups.com [mailto:SkyWires@yahoogroups.com] On Behalf Of SNKDavis@...
Sent: Saturday, November 26, 2005 6:28 AM
To: SkyWires@yahoogroups.com
Subject: Re: [SkyWires] 20, 15 & 10M Loop Antenna Project

Hi Charles,

Thanks for your interest. The best view is really the diagram that I included in my first e-mail, and I'm providing it again here:

The picture came through fine here, but I know from experience on other lists that some have trouble viewing pictures from the reflector. If you can't see the above image, I'll be glad to send you an e-mail directly. Just let me know.

I spray painted the 3/4" PVC brown. It is tough to see hanging from the tree and VERY neighborhood friendly, but that limits the photo opportunities. There really is very little to the physical construction of the antenna. It is just a matter of cutting the wire to the proper length, drilling a few holes in PVC and soldering the SO 239 connector or coax end to the wire. I'll be happy to clarify any of the steps if you need more information.

By the way, in reviewing my e-mail I noticed that in the steps I had included 1/2" PVC in the parts list. I did try 1/2", but it tended to bow like a kite. I swapped the PVC out with 3/4". It still has quite a bit of flex on the ground, but it is hanging real well.

73, Scott

N3FJP

www.n3fjp.com (http://www.n3fjp.com/)

In a message dated 11/25/2005 8:38:52 PM Eastern Standard Time, chasm@... writes:

On Fri, 25 Nov 2005 18:56:11 EST, SNKDavis@... wrote:

>
>At the urging of some local hams, and knowing that I could put the antenna
>much higher in the woods, I decided to experiment with a full wave loop
>antenna. The antenna is vertical, hanging by a single line (thanks to Easy
Hang)
>and supported by PVC:

HOW ABOUT SOme pictures of your install, etc??
some of us are sight learners, and cannot learn anything from writing or hearing.
73s
K5DAM

If you want to try your hand at a loop, here are the details on how I constructed mine. These measurements are for 20M. Repeat using a 15M frequency for the 15M band. I have a simple Excel spreadsheet that will calculate all the measurements for any frequency, and I'll be glad to send it along if anyone would like:
1. Find the size of the loop by dividing 1005 by the frequency in MHz:
1005 / 14.175 = 70.9 feet. Go ahead and cut your wire.
2. Divide the length by 4 to determine the length of each side:
70.9 / 4 = 17.725
3. Since the PVC supports go to opposite corners, the supports must be longer than the sides. To determine the length, multiply by 1.4.
17.725 X 1.4 = 24.82 (length of PVC - corner to corner)
4. You'll need the following PVC parts:
5 - 10' X 3/4" PVC
1 - 4 way connector for the center
4 sleeves
5. Cut 1 of the PVC pieces into 4, 2.5 foot lengths

6. Assemble the PVC support
7. Lay your wire out on the structure, temporarily taping it to find where it should pass through the PVC
8. Drill holes for the wire through the PVC. After you run the wire through, wrap a bit of electrical tape on both sides of the wire next to the PVC to keep the wire from sliding and to give the PVC additional support. When hanging, the wire actually supports the horizontal PVC piece and keeps it from drooping.
9. Connect your coax. You can either solder the shield to one side of the wire and the center to the other or use an SO 239 dipole connector. I opted for the SO 239 connector.
10. A loop antenna is about 100 ohms. Sure enough, when I connected 50 ohm cable, the SWR was about 2 across the whole band. (100 / 50 = 2). For a better match, use a piece of 75 ohm cable (RG 59) as a transformer. Calculate the length as follows: 492 / frequency in MHz / 2 X velocity factor. Assuming the velocity factor is .66, the calculation for 20M would be 492 / 14.175 / 2 X .66 = 11.45 feet. I had no idea what the velocity factor was for the RG 59 cable I had. A search on the web revealed most cables were between .66 and .8. One of the pieces I had was about 12 feet long, so I just went ahead and put connectors on it. The SWR results:
14.005 - 1.4
14.100 - 1.3
14.200 - 1.2
14.300 - 1.2
14.345 - 1.1
The antenna already has a good SWR across the whole band! If I was going for perfection, it looks like the antenna should be slightly bigger. The antenna could also probably be tuned by lengthening or shortening the RG 59 section.
Conclusion:
This is the first antenna project in a LONG time that has worked "as advertised" without lots of pruning, etc. I am really pleased with the results on 20, 15 and 10, and I'm considering adding additional loops on the same PVC structure for 17, 12 and 6. If I do, each will be fed with individual feed lines.
I hope that if nothing else, my weekend project fueled your imagination for some antenna projects at your QTH!
Comments, questions and suggestions are all welcome.
73, Scott
N3FJP
www.n3fjp.com (http://www.n3fjp.com/)

YAHOO! GROUPS LINKS

* Visit your group "_SkyWires_ (http://groups.yahoo.com/group/SkyWires)
" on the web.
* To unsubscribe from this group, send an email to:
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(mailto:SkyWires-unsubscribe@yahoogroups.com?subject=Unsubscribe)
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(http://docs.yahoo.com/info/terms/) .

_____

1358. my loop

Yahoo group: SkyWires
Date: 2005-12-04 23:00:06 UTC
From: m1azf
Topic: 1358 Message: 1358

firstly hi to all im new....
i have put a loop up in my garden and have fed it with 50ohm coax looking on many sites it was suggested curling the coax up about 8 loops to make a balun will i get better results just feeding straight with coax without the loop also i have found it works very well on 17metres not sure of the size but its triangle in shape i think its about 35ft by 35feet by 20 feet this is about all i can get in the garden not sure how to find out what band its most resonant on but i get about 1.7to 1 swr on most bands but 1.1 if i use the mfj tuner its only at 20 feet at present but hoping to raise it to about 38feet sloping to the house roof top it seems to work well into the states compared to my dipole will i find much difference when i raise it im also havent earth roded my station as yet will the earth stake make much difference to the performance also can i im prove what i have already got i know its small but is the best i can do with the resources i have to hand

im not to bright when it comes to theory as you can guess from my post but any help to make antenna perform better will be appreciated

many thanks shaun m1azf

1359. Re: [SkyWires] my loop

Yahoo group: SkyWires
Date: 2005-12-05 01:55:58 UTC
From: Jim Dunstan
Topic: 1358 Message: 1359

At 11:00 PM 12/4/2005 +0000, you wrote:
>firstly hi to all im new....
>i have put a loop up in my garden and have fed it with 50ohm coax
>looking on many sites it was suggested curling the coax up about 8
>loops to make a balun will i get better results just feeding
>straight with coax without the loop

The loop you are describing is not a part of the antenna but serves as an RF choke to limit current flow on the outside of the coax feed line. It will only be effective at 11 MHZ, the resonant frequency of your loop. Feeding the loop with coax will only allow you to use it on the resonant frequency. If you want to feed the loop on different frequencies you will be better off feeding it with some kind of balanced feed line.

>also i have found it works very
>well on 17metres not sure of the size but its triangle in shape i
>think its about 35ft by 35feet by 20 feet this is about all i can
>get in the garden not sure how to find out what band its most
>resonant on

The loop as you describe it is 90 ft in length. The formula for determining the loop circumference is 1004/F (in MHZ).
Working backward 90 ft should resonate at 11.1 MHZ

>but i get about 1.7to 1 swr on most bands but 1.1 if i
>use the mfj tuner its only at 20 feet at present but hoping to raise
>it to about 38feet sloping to the house roof top it seems to work
>well into the states compared to my dipole will i find much
>difference when i raise it

Feeding this loop with coax and tuning it with your antenna tuner will make a very inefficient antenna. If you substitute a balanced feed line and couple it to your antenna tuner with a balun ... your tuner may already have a balun in it ... you will get a tremendous increase in effectiveness with this antenna.

>im also havent earth roded my station as
>yet will the earth stake make much difference to the performance

There is nothing wrong with grounding your station. However as far as antenna performance is concerned there should be zero improvement as a loop is a balanced antenna and does not work against ground. However, since you are feeding it with coax off resonance your antenna may well be working against ground like a vertical ... eg your coax may be your antenna !!! then grounding the station will have effect.

>also can i im prove what i have already got i know its small but is
>the best i can do with the resources i have to hand
>
>
>im not to bright when it comes to theory as you can guess from my
>post but any help to make antenna perform better will be appreciated
>
>
>many thanks shaun m1azf

In summary:

In order to use your loop (as a loop) more effectively you basically have 2 alternatives. 1. Use the formula 1004/F (in MHZ) to make the length of the wire resonant to one amateur band that is close to what you have. For example if you add a few feet you will be resonant at 10 MHZ. You can then feed it with your coax feed line. However you will be limited to 10 MHZ.

If you want to cover other bands you have another alternative. 2. remove the coax feed line and substitute a balanced feed line ... eg TV feed line or 450 feed line. When it comes into your shack couple it to your antenna tuner through the 4:1 balun in your MFJ tuner. Your 90 ft loop coupled this way should be effective on 10MHZ, and higher. It might even work on 40M.

Jim Dunstan, VE3CI
Thunder Bay, ON

1360. Re: [SkyWires] my loop

Yahoo group: SkyWires
Date: 2005-12-05 07:53:08 UTC
From: Mel Vance
Topic: 1358 Message: 1360

> The loop you are describing is not a part of the antenna but serves as
> an RF choke to limit current flow on the outside of the coax feed
> line. It will only be effective at 11 MHZ, the resonant frequency of
> your loop. Feeding the loop with coax will only allow you to use it
> on the resonant frequency. If you want to feed the loop on different
> frequencies you will be better off feeding it with some kind of
> balanced feed line.
>
Wrong, wrong, wrong, wrong......

The coax choke will do it's job on an extremely broad range of freqs, not just on the resonant freq of the loop.

It will work fine even using a tuner to match the antenna on non-resonant freqs.....

And the loop will work at the resonant freq and above using a tuner just fine..will work better if the loop is multiples of a wave-length on the freq it is being tuned on, but will still work as is.....
>
> Feeding this loop with coax and tuning it with your antenna tuner will
> make a very inefficient antenna. If you substitute a balanced feed
> line and couple it to your antenna tuner with a balun ... your tuner
> may already have a balun in it ... you will get a tremendous increase
> in effectiveness with this antenna.
>
The only noticeable increase between coax and balanced feedline is where there is an extremely large difference in the R component between the antenna and feedline. I have not been able to tell any difference between coax and balanced line until the R component difference reaches 5:1 in runs of 200 feet or less when matching is being achieved with a tuner. I have had cases where the balanced line actually performed worse than coax.
>
> There is nothing wrong with grounding your station. However as far as
> antenna performance is concerned there should be zero improvement as a
> loop is a balanced antenna and does not work against ground. However,
> since you are feeding it with coax off resonance your antenna may well
> be working against ground like a vertical ... eg your coax may be your
> antenna !!! then grounding the station will have effect.
>
Same thing can happen with balanced line.....it can enhance the performance of the antenna by having the feedline radiate by filling nulls in the pattern....
>
> If you want to cover other bands you have another alternative. 2.
> remove the coax feed line and substitute a balanced feed line ... eg
> TV feed line or 450 feed line. When it comes into your shack couple
> it to your antenna tuner through the 4:1 balun in your MFJ tuner.

> Your 90 ft loop coupled this way should be effective on 10MHZ, and
> higher. It might even work on 40M.
>
Coax can be used with no noticeable problems compared to balanced feedline.
There is no pressing need to switch to balanced feedline....it really comes do to what you want to use.

I have yet to figure out the phobia displayed by some about using coax. Coax will work just fine. It will eliminate problems when you you need to run near metal objects. There is no real problem with coax at all.....

Mel
N7OKL

1361. Re: [SkyWires] my loop

Yahoo group: SkyWires
Date: 2005-12-05 16:59:49 UTC
From: Jim Dunstan
Topic: 1358 Message: 1361

At 11:53 PM 12/4/2005 -0800, you wrote:
> > The loop you are describing is not a part of the antenna but serves as
> > an RF choke to limit current flow on the outside of the coax feed
> > line. It will only be effective at 11 MHZ, the resonant frequency of
> > your loop. Feeding the loop with coax will only allow you to use it
> > on the resonant frequency. If you want to feed the loop on different
> > frequencies you will be better off feeding it with some kind of
> > balanced feed line.
> >
>Wrong, wrong, wrong, wrong......
>
>The coax choke will do it's job on an extremely broad range of freqs, not
>just on the
>resonant freq of the loop.
>
>It will work fine even using a tuner to match the antenna on non-resonant
>freqs.....
>
>And the loop will work at the resonant freq and above using a tuner just
>fine..will
>work better if the loop is multiples of a wave-length on the freq it is
>being tuned on,
>but will still work as is.....

Surely you're not proposing to use coax feed on all bands? If you feed a loop antenna resonant at 11 MHZ with coax and then use it on say 21 MHZ and tune it to with an antenna tuner then the whole thing becomes the antenna; the loop, the coax feed line, and all your connections to ground. The few turns at the feed point, the supposed RF choke, simply becomes a bit of inductance in the overall antenna. With this situation these turns at the feed point are irrelevant. now that is true, true, true (only 3 trues)

Jim Dunstan, VE3CI
Thunder Bay, ON

1362. Re: my loop

Yahoo group: SkyWires
Date: 2005-12-05 20:29:18 UTC
From: m1azf
Topic: 1358 Message: 1362

--- In SkyWires@yahoogroups.com, Jim Dunstan <jdunstan@t...> wrote:
>
> At 11:53 PM 12/4/2005 -0800, you wrote:
> > > The loop you are describing is not a part of the antenna but serves as
> > > an RF choke to limit current flow on the outside of the coax feed
> > > line. It will only be effective at 11 MHZ, the resonant frequency of
> > > your loop. Feeding the loop with coax will only allow you to use it
> > > on the resonant frequency. If you want to feed the loop on different
> > > frequencies you will be better off feeding it with some kind of
> > > balanced feed line.
> > >
> > >Wrong, wrong, wrong, wrong......
> >
> >The coax choke will do it's job on an extremely broad range of freqs, not
> >just on the
> >resonant freq of the loop.
> >
> >It will work fine even using a tuner to match the antenna on non-resonant
> >freqs.....
> >
> >And the loop will work at the resonant freq and above using a tuner just
> >fine..will
> >work better if the loop is multiples of a wave-length on the freq it is
> >being tuned on,
> >but will still work as is.....
>
> Surely you're not proposing to use coax feed on all bands? If you feed a
> loop antenna resonant at 11 MHZ with coax and then use it on say 21 MHZ and
> tune it to with an antenna tuner then the whole thing becomes the
> antenna; the loop, the coax feed line, and all your connections to
> ground. The few turns at the feed point, the supposed RF choke, simply
> becomes a bit of inductance in the overall antenna. With this

situation
> these turns at the feed point are irrelevant. now that is true,
true, true
> (only 3 trues)
>
>
> Jim Dunstan, VE3CI
> Thunder Bay, ON
>
well at the present time i am able to work 40metres 20metres 17met
res 80 is oviously a no no okay so feed it with 450 0hm the only
thing im worried about if i feed with 450 ohm am i more likely to
cause tvi does it matter the length of this also if its slightly
sloping will it be slightly directive as opposed to the signal going
straight up. 17 metres seem the best band at present the figures i
gave are only an estamate could be a little bigger or a little
smaller i havent looked at ten or eleven as you think it might be
resonant on ill do a test now see how the swr is on these bands
ideally id like to make it work better for 20 upwards with posibilty
of 40 all this is a real learning curve for me thanks to all,.i was
told this antenna wouldn.t be any good for dx but the noise level
allows me to hear more anywaysas i was getting s7 noise levels with
the dipole and im now getting s2/3 on good days s5 on bad days i
couldnt believe the difference i just need tighter filters for my
icom 706 and i think its going to be like night and day the
differece that is if this is the antenna not working properly i cant
wait to feed it with 450 ohm as it already out performs my home made
dipole made from an recked g5rv..have just checked swr on 10megs its
1.21 bypassing the tuner this is on 10.400 megsso it got to be about
the size that was descussed earlier if i can get it out to a square
shape rather than triangle means adding another support this should
give me34x34x20x20 roughly 108 feet of wire with my calculations but
this is probably my max unless i can get it over the apex of the
house somehow ill have to think about that one...

ps thanks for the help so far

1363. RE: [SkyWires] my loop

Yahoo group: SkyWires
Date: 2005-12-05 22:03:02 UTC
From: Paul MW0CDO
Topic: 1358 Message: 1363

I would second Mel's comments here.

I've been using a 40m loop in rectangular configuration supported by 4 20ft fishing poles for close on 2 years now.
My personal experience shows no problem with using coaxial cable to feed a loop.

The loop is constructed with 1mm diameter insulated wire.
Fundamental resonance is around 6.7MHz.
The dimensions are approx 15m (50ft) sides and 6m (20ft) ends.
There is a drawing and photo of the feed point at
http://radioham.spymac.net

I've fed this loop with 75, 300 and 450 ohm balanced feeder and tested with 2 different Pi network tuners, one homebrew and the other an MFJ 949e.
I could not get a good match on 80 or 160m using balanced feed.
As an experiment, I decided to hook some RG58 to the loop and test.
To my surprise I found the loop would now match on 80 and 160m with 5m (17ft) of RG58 feeding it.
Sure it's touchy to tune and an auto ATU probably wouldn't match it on 160 or even 80m but I can get it to play using either manual tuner.
Having established that it was possible to tune on 80 & 160m, I added an RF choke right at the feedpoint in an attempt to stop some of the RF in the shack. My shack is upstairs on the 1st floor and the loop passes by about 10ft from my operating position
The choke is an 8 inch long x 3/8 inch diameter ferrite rod stolen out of a 1960's portable radio.
I wound 15 turns of the RG58 feeder on the rod, this stopped a whole lot of problems.

So far I've worked 2000 miles on 160m with 100 watts feeding the ATU.
On 80m it works well into western europe for me, as well is inter UK contacts.
On 40m and above it works very well, not as good as a ground mounted Butternut HF6v on 10m DX though.

Don't be afraid to experiment.
Ignore what the text books tell you sometimes!
My feed arrangements are definitely not approved by most antenna books, yet it works very well.

Paul MW0CDO.

From: SkyWires@yahoogroups.com [mailto:SkyWires@yahoogroups.com] On Behalf Of Mel Vance

Sent: 05 December 2005 07:53
To: SkyWires@yahoogroups.com
Subject: Re: [SkyWires] my loop

> The loop you are describing is not a part of the antenna but serves as
> an RF choke to limit current flow on the outside of the coax feed
> line. It will only be effective at 11 MHZ, the resonant frequency of
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freqs.....

And the loop will work at the resonant freq and above using a tuner just
fine..will
work better if the loop is multiples of a wave-length on the freq it is
being tuned on,
but will still work as is.....
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> Feeding this loop with coax and tuning it with your antenna tuner will
> make a very inefficient antenna. If you substitute a balanced feed
> line and couple it to your antenna tuner with a balun ... your tuner
> may already have a balun in it ... you will get a tremendous increase
> in effectiveness with this antenna.
>
The only noticeable increase between coax and balanced feedline is where
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an extremely large difference in the R component between the antenna and
feedline. I have not been able to tell any difference between coax and
balanced line
until the R component difference reaches 5:1 in runs of 200 feet or less
when
matching is being achieved with a tuner. I have had cases where the balanced
line
actually performed worse than coax.
>
> There is nothing wrong with grounding your station. However as far as
> antenna performance is concerned there should be zero improvement as a
> loop is a balanced antenna and does not work against ground. However,
> since you are feeding it with coax off resonance your antenna may well
> be working against ground like a vertical ... eg your coax may be your
> antenna !!! then grounding the station will have effect.
>

Same thing can happen with balanced line.....it can enhance the performance
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antenna by having the feedline radiate by filling nulls in the pattern....
>
> If you want to cover other bands you have another alternative. 2.
> remove the coax feed line and substitute a balanced feed line ... eg
> TV feed line or 450 feed line. When it comes into your shack couple
> it to your antenna tuner through the 4:1 balun in your MFJ tuner.
> Your 90 ft loop coupled this way should be effective on 10MHZ, and
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>
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I have yet to figure out the phobia displayed by some about using coax. Coax
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work just fine. It will eliminate problems when you you need to run near
metal
objects. There is no real problem with coax at all.....

Mel
N7OKL

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outlet

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1364. RE: [SkyWires] Digest Number 429

Yahoo group: SkyWires
Date: 2005-12-06 15:04:48 UTC
From: ve7agw
Topic: 1364 Message: 1364

I agree with Mel, I've run coax with 8 turns around a plastic coffee can to feed my 80 meter Delta Loop. And I could tune it from 80 to 6 meters with a 1.1 to 1 match using an Icom AT-180 tuner.
I later switched to a home-brew 4:1 balun and made the loop into a four side with coax running only about 20 feet to a remote balun then approx. 75 feet of good 300 ohm TV ladder line. And this made my loop very broad banded. I can now tune all the way from 160 to 54 mhz with the highest VSWR at 1.5:1 and most at 1.1:1.
I use the remote balun so as to keep the rf out of the shack but keep the losses from the feed line down as well. The coax balun worked great as well but I didn't want the feed line loses so I went to ladder line for the majority of the distance.
Like Mel says the balun will work very broad banded. I tried the Delta loop with just with just feeding it with coax with no wound coax loop at the feed point and it worked ok, but I had a hard time tuning it without getting rf feedback. By using the coax balun it kept the rf from feeding back down the ground side of the coax.
I've also found that having as good a grounding system also make a big difference with a loop too.

73...de ve7agw
Al

Wrong, wrong, wrong, wrong......

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resonant freq of the loop.

It will work fine even using a tuner to match the antenna on non-resonant freqs.....

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what you want to use.

I have yet to figure out the phobia displayed by some about using coax. Coax will
work just fine. It will eliminate problems when you you need to run near metal

objects. There is no real problem with coax at all.....

Mel
N7OKL

1365. Re: [SkyWires] Digest Number 429

Yahoo group: SkyWires
Date: 2005-12-06 15:15:58 UTC
From: BOB
Topic: 1364 Message: 1365

i have found if i put a amadon clampon rf choke i get the same results as making the physical coil of coax

1366. Re: BALUN on Coax

Yahoo group: SkyWires
Date: 2005-12-06 15:37:32 UTC
From: Thomas Giella KN4LF
Topic: 1366 Message: 1366
Attachments: 1 described; binary payloads are missing from this source WARC

I think we all worry to much about RF radiation on a piece of coaxial cable feedline due to common mode currents. Often times radiation from the coax will fill in nulls that exist on the antenna, a good thing. But if you must a 1:1 balun made out of coax it will work pretty good. You just have to use the correct number of turns for the lowest band that you plan to operate on. Of course though there is the negative issue of picking up QRN on the coax cable feedline on receive without a balun too.

In my personal experience the chance for RF radiation of signal and pickup of QRN is greater with coaxial cable feedline than ladder or window feedline. Currents are more apt to be balanced or closely balanced on 300/450/600 ohm ladder or window line with less problems. And if you use a homebrew or store bought balanced link tuner then appreciable current imbalance is not going to happen.

Personally I think it's a bad idea to use a coaxial cable feedline on a loop antenna used for muliband use on even harmonics. The capacitive and inductive reactance (SWR) as well as voltage will be so high that huge signal losses will occur and the high voltage will eventually burn a hole through the coax. RF loss in ladder or window line is much less with a high VSWR than coaxial cable.

I have a full wave loop up for 160 meters fed with 110 feet of window line and I use it all the way up to 10 meters, using 5-100 watts of power with great success.

Just my .02.

73 & Merry Christmas,
Thomas F. Giella, KN4LF
Lakeland, FL, USA
Grid Square EL97AW
27 57 26.5 N 81 56 46.6 W
kn4lf@...

PODXS 070 PSK Club #349

Proof Of God Through Science: http://www.cosmicfingerprints.com/audio/newevidence.htm
KN4LF Amateur & SWL Radio History: http://www.kn4lf.com/index.htm
KN4LF MF Radio Propagation Theory Notes: http://www.kn4lf.com/kn4lf8.htm

----- Original Message -----
From: BOB
To: SkyWires@yahoogroups.com
Sent: Tuesday, December 06, 2005 10:15 AM
Subject: Re: [SkyWires] Digest Number 429

i have found if i put a amadon clampon rf choke i get the same results as making the physical coil of coax

1367. RE: [SkyWires] my loop

Yahoo group: SkyWires
Date: 2005-12-06 21:38:59 UTC
From: Paul MW0CDO
Topic: 1358 Message: 1367

Apologies.

I inadvertently posted the wrong address for my web page.
Link should be http://radioham.spymac.com

Paul MW0CDO.

From: SkyWires@yahoogroups.com [mailto:SkyWires@yahoogroups.com] On Behalf Of Paul MW0CDO
Sent: 05 December 2005 22:03
To: SkyWires@yahoogroups.com
Subject: RE: [SkyWires] my loop

I would second Mel's comments here.

I've been using a 40m loop in rectangular configuration supported by 4 20ft fishing poles for close on 2 years now.
My personal experience shows no problem with using coaxial cable to feed a loop.

The loop is constructed with 1mm diameter insulated wire.
Fundamental resonance is around 6.7MHz.
The dimensions are approx 15m (50ft) sides and 6m (20ft) ends.
There is a drawing and photo of the feed point at
http://radioham.spymac.net

I've fed this loop with 75, 300 and 450 ohm balanced feeder and tested with 2 different Pi network tuners, one homebrew and the other an MFJ 949e.
I could not get a good match on 80 or 160m using balanced feed.
As an experiment, I decided to hook some RG58 to the loop and test.
To my surprise I found the loop would now match on 80 and 160m with 5m (17ft) of RG58 feeding it.
Sure it's touchy to tune and an auto ATU probably wouldn't match it on 160 or even 80m but I can get it to play using either manual tuner.
Having established that it was possible to tune on 80 & 160m, I added an RF choke right at the feedpoint in an attempt to stop some of the RF in the shack. My shack is upstairs on the 1st floor and the loop passes by about 10ft from my operating position
The choke is an 8 inch long x 3/8 inch diameter ferrite rod stolen out of a 1960's portable radio.
I wound 15 turns of the RG58 feeder on the rod, this stopped a whole lot of problems.

So far I've worked 2000 miles on 160m with 100 watts feeding the ATU.
On 80m it works well into western europe for me, as well is inter UK

contacts.
On 40m and above it works very well, not as good as a ground mounted
Butternut HF6v on 10m DX though.

Don't be afraid to experiment.
Ignore what the text books tell you sometimes!
My feed arrangements are definitely not approved by most antenna books, yet
it works very well.

Paul MW0CDO.

From: SkyWires@yahoogroups.com [mailto:SkyWires@yahoogroups.com] On Behalf
Of Mel Vance
Sent: 05 December 2005 07:53
To: SkyWires@yahoogroups.com
Subject: Re: [SkyWires] my loop

> The loop you are describing is not a part of the antenna but serves as
> an RF choke to limit current flow on the outside of the coax feed
> line. It will only be effective at 11 MHZ, the resonant frequency of
> your loop. Feeding the loop with coax will only allow you to use it
> on the resonant frequency. If you want to feed the loop on different
> frequencies you will be better off feeding it with some kind of
> balanced feed line.
>
Wrong, wrong, wrong, wrong......

The coax choke will do it's job on an extremely broad range of freqs, not
just on the
resonant freq of the loop.

It will work fine even using a tuner to match the antenna on non-resonant
freqs.....

And the loop will work at the resonant freq and above using a tuner just
fine..will
work better if the loop is multiples of a wave-length on the freq it is
being tuned on,
but will still work as is.....
>
> Feeding this loop with coax and tuning it with your antenna tuner will
> make a very inefficient antenna. If you substitute a balanced feed
> line and couple it to your antenna tuner with a balun ... your tuner
> may already have a balun in it ... you will get a tremendous increase
> in effectiveness with this antenna.
>
The only noticeable increase between coax and balanced feedline is where
there is
an extremely large difference in the R component between the antenna and
feedline. I have not been able to tell any difference between coax and

balanced line
until the R component difference reaches 5:1 in runs of 200 feet or less
when
matching is being achieved with a tuner. I have had cases where the balanced
line
actually performed worse than coax.
>
> There is nothing wrong with grounding your station. However as far as
> antenna performance is concerned there should be zero improvement as a
> loop is a balanced antenna and does not work against ground. However,
> since you are feeding it with coax off resonance your antenna may well
> be working against ground like a vertical ... eg your coax may be your
> antenna !!! then grounding the station will have effect.
>
Same thing can happen with balanced line.....it can enhance the performance
of the
antenna by having the feedline radiate by filling nulls in the pattern....
>
> If you want to cover other bands you have another alternative. 2.
> remove the coax feed line and substitute a balanced feed line ... eg
> TV feed line or 450 feed line. When it comes into your shack couple
> it to your antenna tuner through the 4:1 balun in your MFJ tuner.
> Your 90 ft loop coupled this way should be effective on 10MHZ, and
> higher. It might even work on 40M.
>
Coax can be used with no noticeable problems compared to balanced feedline.
There is no pressing need to switch to balanced feedline....it really comes
do to
what you want to use.

I have yet to figure out the phobia displayed by some about using coax. Coax
will
work just fine. It will eliminate problems when you you need to run near
metal
objects. There is no real problem with coax at all.....

Mel
N7OKL

YAHOO! GROUPS LINKS

* Visit your group "SkyWires <http://groups.yahoo.com/group/SkyWires>
" on the web.

* To unsubscribe from this group, send an email to:
SkyWires-unsubscribe@yahoogroups.com
<mailto:SkyWires-unsubscribe@yahoogroups.com?subject=Unsubscribe>

* Your use of Yahoo! Groups is subject to the Yahoo! Terms of Service
<http://docs.yahoo.com/info/terms/> .

_____

1368. RE: [SkyWires] Digest Number 429

Yahoo group: SkyWires
Date: 2005-12-07 15:22:30 UTC
From: Jim Dunstan
Topic: 1364 Message: 1368

At 07:04 AM 12/6/2005 -0800, you wrote:
>I agree with Mel, I've run coax with 8 turns around a plastic coffee can to
>feed my 80 meter Delta Loop. And I could tune it from 80 to 6 meters with a
>1.1 to 1 match using an Icom AT-180 tuner.
>I later switched to a home-brew 4:1 balun and made the loop into a four side
>with coax running only about 20 feet to a remote balun then approx. 75 feet
>of good 300 ohm TV ladder line. And this made my loop very broad banded. I
>can now tune all the way from 160 to 54 mhz with the highest VSWR at 1.5:1
>and most at 1.1:1.
>I use the remote balun so as to keep the rf out of the shack but keep the
>losses from the feed line down as well. The coax balun worked great as well
>but I didn't want the feed line loses so I went to ladder line for the
>majority of the distance.
>Like Mel says the balun will work very broad banded. I tried the Delta loop
>with just with just feeding it with coax with no wound coax loop at the feed
>point and it worked ok, but I had a hard time tuning it without getting rf
>feedback. By using the coax balun it kept the rf from feeding back down the
>ground side of the coax.
>I've also found that having as good a grounding system also make a big
>difference with a loop too.
>
>73...de ve7agw
>Al

If an antenna is fed properly there is no deed for an RF ground. If your set up requires or an RF ground it is simply a stop gap arrangement to offset poor design. I hear many people say ... heh I used 300 ft of wire strung over this tree and that roof and I worked 2000 miles .... any piece of wire will get out! If that's the discussion that is not antenna design discussion.

Jim

Jim Dunstan, VE3CI
Thunder Bay, ON

1369. my loop

Yahoo group: SkyWires
Date: 2005-12-07 15:54:09 UTC
From: ve7agw
Topic: 1358 Message: 1369

Paul and the group,

There are so many variables when it comes to constructing an antenna that experimenting is the only practical means of making an antenna work or improve it's abilities.
What works for one location may not work at all for the next. Just by reading the last few days of the groups posting will show this. And then of course we throw in personal opinions and prospective and we have a good discussion going. Like Paul said, throw the text books out some times and try something new or unheard of, you never know what will happen till you try it. This is how my loop got built and it works like a charm, it even out performs my TA-33 on 20 meters most of the time. Some say that a loop is no good for DX, yet I've worked JA and HB's with my loop. At lot has to do with conditions and your location.
Personally I think a lot of antenna designs were found by accident. And the bottom line is "if it works don't fix it". what works for you may not work for your neighbor.

73...de ve7agw and Merry Christmas everyone. Here's a little poem I found that fits for us amateurs at Christmas.

Twas the night before Xmas
And all through the house
Everything was stirring
Even the mouse

Tranceivers were tuning
and aerials were up
the scotch was disguised
in a large plastic cup

Fingers on buttons
were starting to itch
this waiting on New Year
was becoming a bitch

But soon it came nearer
the party was nigh
dipoles and loops
were all hoisted high

Grins on all faces
this HF was great
No Morse to learn now
It had gone to its fate

The clocks being watched
ticked over so slow
one minute to midnight
one minute to go

And then right on time
came a signal so clear
they thought the transmitter
was terribly near

But they'd never forget
Oh that terrible sound
they were cursing and screaming
and running around

For out of the speaker
So crisp and so clear
Came the sound they abhorred
And had learned how to fear

And it said....

dahdah/dahdah/dit/ditdahdit/ditdahdit/dahdedahdah/
dahdididah/dahdah/didah/ditditdit

I would second Mel's comments here.

I've been using a 40m loop in rectangular configuration supported by 4 20ft fishing poles for close on 2 years now.
My personal experience shows no problem with using coaxial cable to feed a loop.

The loop is constructed with 1mm diameter insulated wire.
Fundamental resonance is around 6.7MHz.
The dimensions are approx 15m (50ft) sides and 6m (20ft) ends.
There is a drawing and photo of the feed point at
http://radioham.spymac.net

I've fed this loop with 75, 300 and 450 ohm balanced feeder and tested with 2 different Pi network tuners, one homebrew and the other an MFJ 949e.
I could not get a good match on 80 or 160m using balanced feed.
As an experiment, I decided to hook some RG58 to the loop and test.
To my surprise I found the loop would now match on 80 and 160m with 5m (17ft) of RG58 feeding it.
Sure it's touchy to tune and an auto ATU probably wouldn't match it on 160 or even 80m but I can get it to play using either manual tuner.
Having established that it was possible to tune on 80 & 160m, I added an RF choke right at the feedpoint in an attempt to stop some of the RF in the shack. My shack is upstairs on the 1st floor and the loop passes by about 10ft from my operating position
The choke is an 8 inch long x 3/8 inch diameter ferrite rod stolen out of a 1960's portable radio.
I wound 15 turns of the RG58 feeder on the rod, this stopped a whole lot of

problems.

So far I've worked 2000 miles on 160m with 100 watts feeding the ATU.
On 80m it works well into western europe for me, as well is inter UK contacts.
On 40m and above it works very well, not as good as a ground mounted Butternut HF6v on 10m DX though.

Don't be afraid to experiment.
Ignore what the text books tell you sometimes!
My feed arrangements are definitely not approved by most antenna books, yet it works very well.

Paul MW0CDO.

1370. RFI Problems

Yahoo group: SkyWires
Date: 2005-12-07 15:41:06 UTC
From: Thomas Giella KN4LF
Topic: 1370 Message: 1370
Attachments: 1 described; binary payloads are missing from this source WARC

Jim VE3CI Said:
If an antenna is fed properly there is no deed for an RF ground. If your set up requires or an RF ground it is simply a stop gap arrangement to offset poor design. I hear many people say ... heh I used 300 ft of wire strung over this tree and that roof and I worked 2000 miles .... any piece of wire will get out! If that's the discussion that is not antenna design discussion.

Thomas KN4LF Says:
That's correct but there is an exception. If your radio shack is in the RF field of the antenna because it's to close then you can get RFI. My house is surrounded by my 160 meter full wave loop which is mounted at only 35 feet and supported at the four corners of my 1/2 acre of property.

So RFI becomes a problem for me on the digital modes only on 20-10 meters. However I tune 1/4 wave radials on these bands with the MFJ-931 and the RFI disappears.

73 & Merry Christmas,
Thomas F. Giella, KN4LF
Lakeland, FL, USA
Grid Square EL97AW
27 57 26.5 N 81 56 46.6 W
kn4lf@...

PODXS 070 PSK Club #349

Proof Of God Through Science: http://www.cosmicfingerprints.com/audio/newevidence.htm
KN4LF Amateur & SWL Radio History: http://www.kn4lf.com/index.htm
KN4LF MF Radio Propagation Theory Notes: http://www.kn4lf.com/kn4lf8.htm

1371. Re: [SkyWires] RFI Problems

Yahoo group: SkyWires
Date: 2005-12-07 21:35:17 UTC
From: Jim Dunstan
Topic: 1370 Message: 1371

At 10:41 AM 12/7/2005 -0500, you wrote:
>Jim VE3CI Said:
>If an antenna is fed properly there is no deed for an RF ground. If your
>set up requires or an RF ground it is simply a stop gap arrangement to
>offset poor design. I hear many people say ... heh I used 300 ft of wire
>strung over this tree and that roof and I worked 2000 miles .... any piece
>of wire will get out! If that's the discussion that is not antenna design
>discussion.
>
>Thomas KN4LF Says:
>That's correct but there is an exception. If your radio shack is in the RF
>field of the antenna because it's to close then you can get RFI. My house
>is surrounded by my 160 meter full wave loop which is mounted at only 35
>feet and supported at the four corners of my 1/2 acre of property.
>
>So RFI becomes a problem for me on the digital modes only on 20-10 meters.
>However I tune 1/4 wave radials on these bands with the MFJ-931 and the
>RFI disappears.
>
>73 & Merry Christmas,
>Thomas F. Giella, KN4LF
>Lakeland, FL, USA
>Grid Square EL97AW
>27 57 26.5 N 81 56 46.6 W
><mailto:kn4lf@...>kn4lf@...

HI Thomas,

Well I would consider your situation an example not an exception. If you build a loop around your shack you may well need to have tuned radials to tame the RF at the rig .... if you want to keep that antenna design then that is a strategy you will have to use to offset the design.

73 and Season's greetings to you as well

Jim Dunstan, VE3CI
Thunder Bay, ON

1372. RE: [SkyWires] Digest Number 431

Yahoo group: SkyWires
Date: 2005-12-08 15:37:56 UTC
From: ve7agw
Topic: 1372 Message: 1372

Anyone who operates a radio station without a ground is an accident waiting to happen. That's basic safety in station setup.

Ve7agw, Al
Port Alberni, BC

If an antenna is fed properly there is no deed for an RF ground. If your set up requires or an RF ground it is simply a stop gap arrangement to offset poor design. I hear many people say ... heh I used 300 ft of wire strung over this tree and that roof and I worked 2000 miles .... any piece of wire will get out! If that's the discussion that is not antenna design discussion.

Jim

Jim Dunstan, VE3CI
Thunder Bay, ON

1373. Re: [SkyWires] Digest Number 429

Yahoo group: SkyWires
Date: 2005-12-08 17:31:14 UTC
From: Dr.Ace Ratliff
Topic: 1364 Message: 1373
Attachments: 1 described; binary payloads are missing from this source WARC

How to make a current choke balun.
----- Original Message -----
From: BOB
To: SkyWires@yahoogroups.com
Sent: Tuesday, December 06, 2005 10:15 AM
Subject: Re: [SkyWires] Digest Number 429

i have found if i put a amadon clampon rf choke i get the same results as making the physical coil of coax

---

1374. Re: [SkyWires] Choke Balun

Yahoo group: SkyWires
Date: 2005-12-08 18:03:02 UTC
From: Thomas Giella KN4LF
Topic: 1374 Message: 1374
Attachments: 2 described; binary payloads are missing from this source WARC

If you place one choke balun at the antenna feedpoint and a second one just outside the radio shack cable entrance it will really knock down QRN on receive due to common mode currents. It's also best to make your choke balun out of coax with a solid center not foam like RG-8X has, because the foam allows the center conductor to migrate out of alignment with time.

73 & Merry Christmas,
Thomas F. Giella, KN4LF
Lakeland, FL, USA
Grid Square EL97AW
27 57 26.5 N 81 56 46.6 W
kn4lf@...

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KN4LF Amateur & SWL Radio History: http://www.kn4lf.com/index.htm
KN4LF MF Radio Propagation Theory Notes: http://www.kn4lf.com/kn4lf8.htm

----- Original Message -----
From: Dr.Ace Ratliff
To: SkyWires@yahoogroups.com
Sent: Thursday, December 08, 2005 12:31 PM
Subject: Re: [SkyWires] Digest Number 429

How to make a current choke balun.

1375. Re: [SkyWires] Choke Balun

Yahoo group: SkyWires
Date: 2005-12-08 19:54:27 UTC
From: Harold Burton
Topic: 1374 Message: 1375

----- Original Message -----
From: Thomas Giella KN4LF
To: SkyWires@yahoogroups.com
Sent: Thursday, December 08, 2005 12:03 PM
Subject: Re: [SkyWires] Choke Balun

If you place one choke balun at the antenna feedpoint and a second one just outside the radio shack cable entrance it will really knock down QRN on receive due to common mode currents. It's also best to make your choke balun out of coax with a solid center not foam like RG-8X has, because the foam allows the center conductor to migrate out of alignment with time.

73 & Merry Christmas,
Thomas F. Giella, KN4LF

I recently bought some RG-8X made specifically for Marine Mobiles for exactly that reason.It has a solid polyetheline center insulator and can supposedly be walked on without harm as well as having less tendency toward center conductor migration in bends. I don't intend to subject it to much of either type of trauma but thought it might be tougher than the standard RG-8X. Price wasn't much different.

Harold
KD5SAK

1376. RE: [SkyWires] Digest Number 431

Yahoo group: SkyWires
Date: 2005-12-09 01:05:28 UTC
From: Jim Dunstan
Topic: 1372 Message: 1376

At 07:37 AM 12/8/2005 -0800, you wrote:
>Anyone who operates a radio station without a ground is an accident waiting
>to happen. That's basic safety in station setup.

You are confused about grounding. In most locations there are 3 kinds of ground. Your electrical supplier will have a ground system according to the electrical code in your location. This ground will be tied into to electrical supply and the panel at your location and they will install the required ground rod etc.. Then, as a radio operator with various antennas which are always in danger of lightning or static build up you will take precautions to reduce these dangers, eg lighting arrestors, and antenna grounding switches etc ....

Then there is the third type of ground .... RF ground ... which is related to your antenna characteristics and how it interfaces with your transmitter. This has nothing to do with the first 2 safety type grounds. A well designed antenna/feed system does not need an RF ground.

>Ve7agw, Alt
>Port Alberni, BC
>
>If an antenna is fed properly there is no deed for an RF ground. If your
>set up requires or an RF ground it is simply a stop gap arrangement to
>offset poor design. I hear many people say ... heh I used 300 ft of wire
>strung over this tree and that roof and I worked 2000 miles .... any piece
>of wire will get out! If that's the discussion that is not antenna design
>discussion.
>
>Jim
>
>
>Jim Dunstan, VE3CI
>Thunder Bay, ON
>s/
>

1377. Re: [SkyWires] Choke Balun

Yahoo group: SkyWires
Date: 2005-12-08 21:32:54 UTC
From: Dr.Ace Ratliff
Topic: 1374 Message: 1377
Attachments: 1 described; binary payloads are missing from this source WARC

How True.
----- Original Message -----
From: Thomas Giella KN4LF
To: SkyWires@yahoogroups.com
Sent: Thursday, December 08, 2005 1:03 PM
Subject: Re: [SkyWires] Choke Balun

If you place one choke balun at the antenna feedpoint and a second one just outside the radio shack cable entrance it will really knock down QRN on receive due to common mode currents. It's also best to make your choke balun out of coax with a solid center not foam like RG-8X has, because the foam allows the center conductor to migrate out of alignment with time.

73 & Merry Christmas,
Thomas F. Giella, KN4LF
Lakeland, FL, USA
Grid Square EL97AW
27 57 26.5 N 81 56 46.6 W
kn4lf@...

PODXS 070 PSK Club #349

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KN4LF Amateur & SWL Radio History: http://www.kn4lf.com/index.htm
KN4LF MF Radio Propagation Theory Notes: http://www.kn4lf.com/kn4lf8.htm

----- Original Message -----
From: Dr.Ace Ratliff
To: SkyWires@yahoogroups.com
Sent: Thursday, December 08, 2005 12:31 PM
Subject: Re: [SkyWires] Digest Number 429

How to make a current choke balun.

No virus found in this outgoing message.
Checked by AVG Free Edition.
Version: 7.1.371 / Virus Database: 267.13.12/194 - Release Date: 12/7/2005

1378. Cushcraft A3S

Yahoo group: SkyWires
Date: 2005-12-10 06:23:20 UTC
From: K.Currie
Topic: 1378 Message: 1378

A friend asked me to have a look at the traps on his Tryband antenna, he was told they are shot. Has any one ever worked on them , and what should I look for, and can they be rebuilt?
Thanks for any help, I owe this guy a few favors.
VE5HKC

1379. Re: [SkyWires] Cushcraft A3S

Yahoo group: SkyWires
Date: 2005-12-10 06:20:55 UTC
From: Mel Vance
Topic: 1378 Message: 1379

> A friend asked me to have a look at the traps on his Tryband antenna,
> he was told they are shot. Has any one ever worked on them , and what
> should I look for, and can they be rebuilt? Thanks for any help, I owe
> this guy a few favors.

I have an AT5 I was given and was wondering the same thing....traps look a little iffy to me....need to throw a dip meter on them and check them out....

Mel
N7OKL

1380. Re: [SkyWires] Cushcraft A3S

Yahoo group: SkyWires
Date: 2005-12-10 07:50:05 UTC
From: DavesRadio"RR"
Topic: 1378 Message: 1380

do a visual inspection of them. they are just coils.... make sure the drip holes are on the bottom...
K5DRC Since 1969
BULL SHOALES LAKE
http://www.bullshoals.org/lake.htm
AR/MO STATE LINE

Some day someone will give a WAR and nobody will go
----- Original Message -----
From: K.Currie
To: SkyWires@yahoogroups.com
Sent: Saturday, December 10, 2005 12:23 AM
Subject: [SkyWires] Cushcraft A3S

A friend asked me to have a look at the traps on his Tryband antenna, he was told they are shot. Has any one ever worked on them , and what should I look for, and can they be rebuilt?
Thanks for any help, I owe this guy a few favors.
VE5HKC

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b.. To unsubscribe from this group, send an email to:
SkyWires-unsubscribe@yahoogroups.com

c.. Your use of Yahoo! Groups is subject to the Yahoo! Terms of Service.

1381. Re: [SkyWires] Cushcraft A3S

Yahoo group: SkyWires
Date: 2005-12-10 15:28:43 UTC
From: ROBERT W BETTS
Topic: 1378 Message: 1381

I don't remember if those are the ones with the sleeve capacitors or not. Anyhow, best to disassemble and clean out the telescoping sleeves and clean and tighten the coil screws which are surely corroded a bit ... they always are. The last one I did was reassembled with non-conductive silicone grease to retard the corrosion process.
I used an MFJ analyzer to retune (10' of mast tied to a wooden step ladder). When it was back up on the tower, the SWR dipped nicely where it should.
Hope this helps,
Bob, N1KPR

"K.Currie" <kecurrie@...> wrote:
A friend asked me to have a look at the traps on his Tryband antenna, he was told they are shot. Has any one ever worked on them , and what should I look for, and can they be rebuilt?
Thanks for any help, I owe this guy a few favors.
VE5HKC

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To unsubscribe from this group, send an email to:
SkyWires-unsubscribe@yahoogroups.com

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1382. Re: [SkyWires] Cushcraft A3S

Yahoo group: SkyWires
Date: 2005-12-10 17:10:25 UTC
From: Dr.Ace Ratliff
Topic: 1378 Message: 1382

TIP: Don't use the silicone that smells like sulphur, it's highly acidic and corrosive.
Ace - WH2T

----- Original Message -----
From: ROBERT W BETTS
To: SkyWires@yahoogroups.com
Sent: Saturday, December 10, 2005 10:28 AM
Subject: Re: [SkyWires] Cushcraft A3S

I don't remember if those are the ones with the sleeve capacitors or not. Anyhow, best to disassemble and clean out the telescoping sleeves and clean and tighten the coil screws which are surely corroded a bit ... they always are. The last one I did was reassembled with non-conductive silicone grease to retard the corrosion process.
I used an MFJ analyzer to retune (10' of mast tied to a wooden step ladder). When it was back up on the tower, the SWR dipped nicely where it should.
Hope this helps,
Bob, N1KPR

"K.Currie" <kecurrie@sasktel.net> wrote:
A friend asked me to have a look at the traps on his Tryband antenna, he was told they are shot. Has any one ever worked on them , and what should I look for, and can they be rebuilt?
Thanks for any help, I owe this guy a few favors.
VE5HKC

1383. Re: Cushcraft A3S

Yahoo group: SkyWires
Date: 2005-12-10 17:11:41 UTC
From: k5jxl
Topic: 1378 Message: 1383

Try this link there is good information on Cushcraft A3S repair
73 Ken

http://www.hal-pc.org/~kg5u/a3refurb.txt

--- In SkyWires@yahoogroups.com, "K.Currie" <kecurrie@s...> wrote:
>

1384. Re: Cushcraft A3S

Yahoo group: SkyWires
Date: 2005-12-10 17:30:55 UTC
From: k5jxl
Topic: 1378 Message: 1384

You can find Cushcraft A3S manual here:
pdf file: 73 Ken

www.cushcraft.com/support/pdf/a3s.pdf

--- In SkyWires@yahoogroups.com, "K.Currie" <kecurrie@s...> wrote:

1385. Antenna Traps

Yahoo group: SkyWires
Date: 2005-12-10 22:09:53 UTC
From: K.Currie
Topic: 1385 Message: 1385

Thanks guys for all the coments, it should help a lot. I will need all the help I can get, I think the guy told me it would not match on 10 or 15 M and he checked every thing but the traps. So thanks again to all who replied to my post.
VE5HKC

1386. re loop

Yahoo group: SkyWires
Date: 2005-12-14 12:27:47 UTC
From: m1azf
Topic: 1386 Message: 1386

on suggestion have done away with coax and feeding with not 450 but 300 0hm line which was lying around also going through the 4/1 balun in the tuner observations noticed are these tuning is easier although much sharper to control also i think power actually radiating in the antenna has increassed as signal report recieved are mostly 5/9 to most locations worked with the odd 5/8 the other thing that has been noted is a slight increase in back ground noise but this could be the result of recieved signals being slightly stroger also.
have ordered some 4500hm line cant wait to try it also swr on most bands 1.5/1 so some inprovement overall on all band i will be purchacing some form of gying i should be able to errect it about 40feet that should inprove things much further im hoping 17 metres still seem best band with the dimensions i have even though its resonanat on 10megs have worked africa with 5/9 0n fourty from my location which i was very pleased with im going to try get it into a sqare loop as opposed a delta loop as is at present but this is a job for the new year....
heres hoping you all have many contacts over the christmas period hope to catch up with new resuklts and oppinions in the newyear.

thanks to all for your input since i jioned the forum a merry christmas one ans all.

1387. Re: [SkyWires] re loop

Yahoo group: SkyWires
Date: 2005-12-14 15:51:30 UTC
From: Thomas Giella KN4LF
Topic: 1386 Message: 1387
Attachments: 1 described; binary payloads are missing from this source WARC

Mike,

Yes go with the 450 ohm window line versus the 300 ohm. The further apart the two parallel wires are with less insulating material in between, the less loss you have in the feedline under high VSWR conditions. Also the feedline reacts less impedance change wise to moisture and dirt build up.

73 & Merry Christmas,
Thomas F. Giella, KN4LF
Lakeland, FL, USA
Grid Square EL97AW
27 57 26.5 N 81 56 46.6 W
kn4lf@...

PODXS 070 PSK Club #349

Proof Of God Through Science: http://www.cosmicfingerprints.com/audio/newevidence.htm
KN4LF Amateur & SWL Radio History: http://www.kn4lf.com/index.htm
KN4LF MF Radio Propagation Theory Notes: http://www.kn4lf.com/kn4lf8.htm
----- Original Message -----
From: m1azf
To: SkyWires@yahoogroups.com
Sent: Wednesday, December 14, 2005 7:27 AM
Subject: [SkyWires] re loop

on suggestion have done away with coax and feeding with not 450 but
300 0hm line which was lying around also going through the 4/1 balun
in the tuner observations noticed are these tuning is easier
although much sharper to control also i think power actually
radiating in the antenna has increassed as signal report recieved
are mostly 5/9 to most locations worked with the odd 5/8 the other
thing that has been noted is a slight increase in back ground noise
but this could be the result of recieved signals being slightly
stroger also.
have ordered some 4500hm line cant wait to try it also swr on most
bands 1.5/1 so some inprovement overall on all band i will be
purchacing some form of gying i should be able to errect it about
40feet that should inprove things much further im hoping 17 metres
still seem best band with the dimensions i have even though its
resonanat on 10megs have worked africa with 5/9 0n fourty from my
location which i was very pleased with im going to try get it into a
sqare loop as opposed a delta loop as is at present but this is a
job for the new year....
heres hoping you all have many contacts over the christmas period
hope to catch up with new resuklts and oppinions in the newyear.

thanks to all for your input since i jioned the forum a merry
christmas one ans all.

Yahoo! Groups Links

--
No virus found in this incoming message.
Checked by AVG Free Edition.
Version: 7.1.371 / Virus Database: 267.13.13/199 - Release Date: 12/13/2005

1388. Re: [SkyWires] re loop

Yahoo group: SkyWires
Date: 2005-12-15 04:59:31 UTC
From: Richards
Topic: 1386 Message: 1388

Gee Whiz... Hmmmm... 4500 Ohm feed line...

Now, I am a rookie at all this, but I suspect this
would pretty much kill the entire project...

(Yeah... I know it is a typo... but I just cannot
resist poking some fun atcha.)

Happy trails. and... maybe Santa will bring you
a nice new rig.

//// JH Richards ///

==========

> have ordered some 4500hm line cant wait to try it

1389. Re: [SkyWires] re loop

Yahoo group: SkyWires
Date: 2005-12-15 05:13:38 UTC
From: Walter A Fipps Jr.
Topic: 1386 Message: 1389

Guess what? With a counter wound balun and neg Q 4500 is correct!

73
de
Walter

Richards wrote:

> Gee Whiz... Hmmmm... 4500 Ohm feed line...
>
> Now, I am a rookie at all this, but I suspect this
> would pretty much kill the entire project...
>
> (Yeah... I know it is a typo... but I just cannot
> resist poking some fun atcha.)
>
> Happy trails. and... maybe Santa will bring you
> a nice new rig.
>
> //// JH Richards ///
>
> ==
>
> > have ordered some 4500hm line cant wait to try it
>
>
> SPONSORED LINKS
> Loop antenna
> <http://groups.yahoo.com/gads?t=ms&k=Loop+antenna&w1=Loop+antenna&w2=Ham+radio+sales&w3=Ham+radio+outlet&c=3&s=61&.sig=vm5VA0ziPZozGT4v4EF5uA>
> Ham radio sales
> <http://groups.yahoo.com/gads?t=ms&k=Ham+radio+sales&w1=Loop+antenna&w2=Ham+radio+sales&w3=Ham+radio+outlet&c=3&s=61&.sig=_q02DhFgP_9cgeKLt0zFOQ>
> Ham radio outlet
> <http://groups.yahoo.com/gads?t=ms&k=Ham+radio+outlet&w1=Loop+antenna&w2=Ham+radio+sales&w3=Ham+radio+outlet&c=3&s=61&.sig=wMW1pOUpJT4nrgQItAKD4g>
>
>
>
> ---
> YAHOO! GROUPS LINKS
>
> * Visit your group "SkyWires
> <http://groups.yahoo.com/group/SkyWires>" on the web.
>
> * To unsubscribe from this group, send an email to:

> SkyWires-unsubscribe@yahoogroups.com
> <mailto:SkyWires-unsubscribe@yahoogroups.com?subject=Unsubscribe>
>
> * Your use of Yahoo! Groups is subject to the Yahoo! Terms of
> Service <http://docs.yahoo.com/info/terms/>.
>
>
> ---
>

1390. Re: [SkyWires] re loop

Yahoo group: SkyWires
Date: 2005-12-15 05:29:35 UTC
From: Walter A Fipps Jr.
Topic: 1386 Message: 1390

Ignore my last post, you just had your hazing into radio, WELCOME!

73
de
KD4OVR
Walter

Richards wrote:

> Gee Whiz... Hmmmm... 4500 Ohm feed line...
>
> Now, I am a rookie at all this, but I suspect this
> would pretty much kill the entire project...
>
> (Yeah... I know it is a typo... but I just cannot
> resist poking some fun atcha.)
>
> Happy trails. and... maybe Santa will bring you
> a nice new rig.
>
> //// JH Richards ///
>
> ==
>
> > have ordered some 4500hm line cant wait to try it
>
>
> SPONSORED LINKS
> Loop antenna
> <http://groups.yahoo.com/gads?t=ms&k=Loop+antenna&w1=Loop+antenna&w2=Ham+radio+sales&w3=Ham+radio+outlet&c=3&s=61&.sig=vm5VA0ziPZozGT4v4EF5uA>
> Ham radio sales
> <http://groups.yahoo.com/gads?t=ms&k=Ham+radio+sales&w1=Loop+antenna&w2=Ham+radio+sales&w3=Ham+radio+outlet&c=3&s=61&.sig=_q02DhFgP_9cgeKLt0zFOQ>
> Ham radio outlet
> <http://groups.yahoo.com/gads?t=ms&k=Ham+radio+outlet&w1=Loop+antenna&w2=Ham+radio+sales&w3=Ham+radio+outlet&c=3&s=61&.sig=wMW1pOUpJT4nrgQItAKD4g>
>
>
>
> ---
> YAHOO! GROUPS LINKS
>
> * Visit your group "SkyWires
> <http://groups.yahoo.com/group/SkyWires>" on the web.
>

> * To unsubscribe from this group, send an email to:
> SkyWires-unsubscribe@yahoogroups.com
> <mailto:SkyWires-unsubscribe@yahoogroups.com?subject=Unsubscribe>
>
> * Your use of Yahoo! Groups is subject to the Yahoo! Terms of
> Service <http://docs.yahoo.com/info/terms/>.
>
>
> --
>

1391. Re: [SkyWires] re loop

Yahoo group: SkyWires
Date: 2005-12-15 05:22:48 UTC
From: Dr.Ace Ratliff
Topic: 1386 Message: 1391

For every action there is an opposite and equal reaction.
Ace - WH2T

----- Original Message -----
From: Walter A Fipps Jr.
To: SkyWires@yahoogroups.com
Sent: Thursday, December 15, 2005 12:13 AM
Subject: Re: [SkyWires] re loop

Guess what? With a counter wound balun and neg Q 4500 is correct!

73
de
Walter

Richards wrote:
Gee Whiz... Hmmmm... 4500 Ohm feed line...

Now, I am a rookie at all this, but I suspect this
would pretty much kill the entire project...

(Yeah... I know it is a typo... but I just cannot
resist poking some fun atcha.)

Happy trails. and... maybe Santa will bring you
a nice new rig.

//// JH Richards ///

==========

> have ordered some 4500hm line cant wait to try it

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---
YAHOO! GROUPS LINKS

a.. Visit your group "SkyWires" on the web.

b.. To unsubscribe from this group, send an email to:
SkyWires-unsubscribe@yahoogroups.com

c.. Your use of Yahoo! Groups is subject to the Yahoo! Terms of Service.

1392. Re: [SkyWires] re loop

Yahoo group: SkyWires
Date: 2005-12-15 05:38:28 UTC
From: Richards
Topic: 1386 Message: 1392

Really....? Go figure...!

Thanks for the reply. //// Richards ////
==========

Walter A Fipps Jr. wrote:
> Guess what? With a counter wound balun and neg Q 4500 is correct!
>
> 73
> de
> Walter
>
> Richards wrote:
>
>> Gee Whiz... Hmmmm... 4500 Ohm feed line...
>>

1393. Re: [SkyWires] re loop

Yahoo group: SkyWires
Date: 2005-12-15 05:43:37 UTC
From: Richards
Topic: 1386 Message: 1393

I disagree--- in fun of course... but I figure there is
at least ONE EXCEPTION :

For every case of unexpected "found money" (i.e., bonus,
gift, prize win... etc.)...

... the recipient or finder encounters a larger,
UNequal cost calamity or expense to eat it up...
and more!

That is why I do not want to win the Lotto... it would
certainly be followed by some sort of financial disaster
of truly epic proportions!

Just my cynical take... Happy trails to ya all.

========== /// Richards /// ==========

Dr.Ace Ratliff wrote:
> For every action there is an opposite and equal reaction.
> Ace - WH2T
>

1394. Coax Fed 450ohm Ladder Line?

Yahoo group: SkyWires
Date: 2005-12-15 15:18:25 UTC
From: JD WG5B
Topic: 1394 Message: 1394

Hello everyone and Merry Christmas and Happy New Year! This is my 1st of hopefully many post's!
I am in the process of putting up a full wave 160 meter loop, it will average about 30' above the ground, and since I am using existing trees on my property to support it, technically it will probably be a delta loop, as my trees did not do as instructed and grow in a perfect square! (Yes I am very disappointed with them! But they are mine what can I do?) :-)

My questions is, as I am feeding this with 450 ohm ladder line, and have no way to get the ladder line through the wall to my rig without modifications to the house, (not going to happen!) I was told by an old timer to feed it with 20' 4" of coax and the Coax will act as the Balun and allow me to bring it in to my tuner? Any thought's or suggestions please? Thank's 73 JD

SkyWires@yahoogroups.com wrote:
There are 7 messages in this issue.

--

--

WG5B Amateur Electronics and Antennas
ARS- WG5B
Joe (JD) Jordan
PO Box 1
13 N. 6th Street
Dougherty, OK. 73032-0001
Cell 580-993-0606
Fax 580-993-3271
http://www.wg5b.us for WG5B JP-270? Dual Band J-Pole's, WG5B J-Pole Mounts?, Double Bazooka Antennas, Coax and Connectors.

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1395. Re: [SkyWires] Coax Fed 450ohm Ladder Line?

Yahoo group: SkyWires
Date: 2005-12-15 15:36:25 UTC
From: BOB
Topic: 1394 Message: 1395

i dont see how a piece of coax can act as a balun...sounds stupid to me....a balun is a matching device....
coax is coax nothing more....id use a four to one balun...but not one of the cheap ones from hro or aes...they
are junk.....

on your antenna...i hope you have put pulleys at each support point with a weight on the support line so when
the wind gusts the antenna can move and not break when the trees move...

1396. Re: [SkyWires] Coax Fed 450ohm Ladder Line?

Yahoo group: SkyWires
Date: 2005-12-15 16:14:25 UTC
From: Richards
Topic: 1394 Message: 1396

Nits!! You should be able to feed the ladder line into
your home without too much trouble. Under a window is the
easiest - or inside a door frame. Or sneak it under the siding
between the foundation and the sill joist or the sill plate
(I can get coax in between mine if I work at it...) or see
the window block pass through on this URL:

Ladder line needs just a small slit of space to get into the home...
you gotta be able to figure a way for that to work. Homes are
not that well sealed off in all ways... Fee it up into the attic
via a vent or snake between the siding into the attic (there IS
a way on every home...) and bring it down through a closet
to your rig.

Just my take. Your mileage may vary...

/// Richards ///
==========

>
> My questions is, as I am feeding this with 450 ohm ladder line, and have
> no way to get the ladder line through the wall to my rig without
> modifications to the house, (not going to happen!)

1397. Re: [SkyWires] Coax Fed 450ohm Ladder Line?

Yahoo group: SkyWires
Date: 2005-12-15 16:18:15 UTC
From: Richards
Topic: 1394 Message: 1397

O0ps-- forgot the URL to Bob's site... look for the graphic on
how to bring stuff in through a window without losing heat.

http://www.geocities.com/amdxlog/mfj956.html

Happy trails. /// JHR ///
==========

1398. Re: [SkyWires] Coax Fed 450ohm Ladder Line?

Yahoo group: SkyWires
Date: 2005-12-15 16:32:55 UTC
From: Richards
Topic: 1394 Message: 1398

Or maybe the correct one would be even better...

(haste made waste,... again...)

http://www.geocities.com/amdxlog/window.html

////////////// Ashamed //////////////
==========

Richards wrote:
> O0ps-- forgot the URL to Bob's site... look for the graphic on
> how to bring stuff in through a window without losing heat.
>

1399. Re: [SkyWires] Coax Fed 450ohm Ladder Line?

Yahoo group: SkyWires
Date: 2005-12-15 17:10:44 UTC
From: William Mahaffey
Topic: 1394 Message: 1399

For my 80 meter loop I simply go from 450 ohm line to coax to a
RadioWorks Line Isolator
to coax into the shack to a tuner. I do mostly the same for a 40
meter GP vertical. I use the line
isolator to keep the rf out of the shack. It was the solution to my
particular rf problem.

The loop is low (a cloud burner supposedly) but I am able to work the
east coast barefoot from San Diego on 80 fairly easily so I am happy
with the performance.

Just fyi.

bill w6eet

On Dec 15, 2005, at 7:18 AM, JD WG5B wrote:

> Hello everyone and Merry Christmas and Happy New Year! This is my
> 1st of
> hopefully many post's!
> I am in the process of putting up a full wave 160 meter loop, it will
> average about 30' above the ground, and since I am using existing
> trees
> on my property to support it, technically it will probably be a delta
> loop, as my trees did not do as instructed and grow in a perfect
> square!
> (Yes I am very disappointed with them! But they are mine what can I
> do?)
> :-)
>
> My questions is, as I am feeding this with 450 ohm ladder line, and
> have
> no way to get the ladder line through the wall to my rig without
> modifications to the house, (not going to happen!) I was told by an
> old
> timer to feed it with 20' 4" of coax and the Coax will act as the
> Balun
> and allow me to bring it in to my tuner? Any thought's or suggestions
> please? Thank's 73 JD
>
> SkyWires@yahoogroups.com wrote:
> There are 7 messages in this issue.
>
> --
>
> --

> ---
> -------------------
> WG5B Amateur Electronics and Antennas
> ARS- WG5B
> Joe (JD) Jordan
> PO Box 1
> 13 N. 6th Street
> Dougherty, OK. 73032-0001
> Cell 580-993-0606
> Fax 580-993-3271
> http://www.wg5b.us for WG5B JP-270® Dual Band J-Pole's, WG5B J-Pole
> Mounts®, Double Bazooka Antennas, Coax and Connectors.
> ---
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>
>

1400. Re: [SkyWires] Coax Fed 450ohm Ladder Line?

Yahoo group: SkyWires
Date: 2005-12-15 15:53:41 UTC
From: Thomas Giella KN4LF
Topic: 1394 Message: 1400
Attachments: 1 described; binary payloads are missing from this source WARC

Are you going to use the full wave loop only on 160 meters? If so the coax balun will probably work pretty good if you have an antenna analyzer to design the balun in an electrically correct manner. If you are going to go for multiple band operation I would bring the window line in to a homebrewed balanced L network or link coupled balanced tuner. Even a tee network tuner with a 4:1 balun on the high side will work better than a coaxial balun for multiband use.

I have always brought my antennas and station ground into the shack via a piece of Plexiglas in the window. Works good with no holes in the wall.

73 & Merry Christmas,
Thomas F. Giella, KN4LF
Lakeland, FL, USA
Grid Square EL97AW
27 57 26.5 N 81 56 46.6 W
kn4lf@...

PODXS 070 PSK Club #349

Proof Of God Through Science: http://www.cosmicfingerprints.com/audio/newevidence.htm
KN4LF Amateur & SWL Radio History: http://www.kn4lf.com/index.htm
KN4LF MF Radio Propagation Theory Notes: http://www.kn4lf.com/kn4lf8.htm
----- Original Message -----
From: JD WG5B
To: SkyWires@yahoogroups.com
Sent: Thursday, December 15, 2005 10:18 AM
Subject: [SkyWires] Coax Fed 450ohm Ladder Line?

Hello everyone and Merry Christmas and Happy New Year! This is my 1st of hopefully many post's!
I am in the process of putting up a full wave 160 meter loop, it will average about 30' above the ground, and since I am using existing trees on my property to support it, technically it will probably be a delta loop, as my trees did not do as instructed and grow in a perfect square! (Yes I am very disappointed with them! But they are mine what can I do?) :-)

My questions is, as I am feeding this with 450 ohm ladder line, and have no way to get the ladder line through the wall to my rig without modifications to the house, (not going to happen!) I was told by an old timer to feed it with 20' 4" of coax and the Coax will act as the Balun and allow me to bring it in to my tuner? Any thought's or suggestions please? Thank's 73 JD

SkyWires@yahoogroups.com wrote:
There are 7 messages in this issue.

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--

WG5B Amateur Electronics and Antennas
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Joe (JD) Jordan
PO Box 1
13 N. 6th Street
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Cell 580-993-0606
Fax 580-993-3271
http://www.wg5b.us for WG5B JP-270® Dual Band J-Pole's, WG5B J-Pole
Mounts®, Double Bazooka Antennas, Coax and Connectors.

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recipient, please contact wg5b@... by reply e-mail and
destroy all copies of the original message.

Yahoo! Groups Links

--
No virus found in this incoming message.
Checked by AVG Free Edition.
Version: 7.1.371 / Virus Database: 267.13.13/200 - Release Date: 12/14/2005

1401. Re: [SkyWires] Coax Fed 450ohm Ladder Line?

Yahoo group: SkyWires
Date: 2005-12-15 16:05:19 UTC
From: Thomas Giella KN4LF
Topic: 1394 Message: 1401
Attachments: 1 described; binary payloads are missing from this source WARC

Using coaxial cable as a balun has been used successfully for decades. Look in any ARRL antenna handbook for examples.

73 & Merry Christmas,
Thomas F. Giella, KN4LF
Lakeland, FL, USA
Grid Square EL97AW
27 57 26.5 N 81 56 46.6 W
kn4lf@...

PODXS 070 PSK Club #349

Proof Of God Through Science: http://www.cosmicfingerprints.com/audio/newevidence.htm
KN4LF Amateur & SWL Radio History: http://www.kn4lf.com/index.htm
KN4LF MF Radio Propagation Theory Notes: http://www.kn4lf.com/kn4lf8.htm

----- Original Message -----
From: BOB
To: SkyWires@yahoogroups.com
Sent: Thursday, December 15, 2005 10:36 AM
Subject: Re: [SkyWires] Coax Fed 450ohm Ladder Line?

i dont see how a piece of coax can act as a balun...sounds stupid to me....a balun is a matching device....
coax is coax nothing more....id use a four to one balun...but not one of the cheap ones from hro or aes...they
are junk.....

on your antenna...i hope you have put pulleys at each support point with a weight on the support line so when
the wind gusts the antenna can move and not break when the trees move...

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---
YAHOO! GROUPS LINKS

a.. Visit your group "SkyWires" on the web.

b.. To unsubscribe from this group, send an email to:
SkyWires-unsubscribe@yahoogroups.com

c.. Your use of Yahoo! Groups is subject to the Yahoo! Terms of Service.

No virus found in this incoming message.
Checked by AVG Free Edition.
Version: 7.1.371 / Virus Database: 267.13.13/200 - Release Date: 12/14/2005

1402. Re: [SkyWires] Coax Fed 450ohm Ladder Line?

Yahoo group: SkyWires
Date: 2005-12-15 17:42:12 UTC
From: Thomas Giella KN4LF
Topic: 1394 Message: 1402
Attachments: 1 described; binary payloads are missing from this source WARC

You have a usable horizontally polarized signal at 3 db down with a TOA of approximately 52 deg. You also have a usable vertically polarized signal at 6 db down with a TOA of approximately 50 deg. That's why the 90 deg. TOA alleged NVIS cloud warmer only full wave loop works contacts out to 2000-3000 miles!

73 & Merry Christmas,
Thomas F. Giella, KN4LF
Lakeland, FL, USA
Grid Square EL97AW
27 57 26.5 N 81 56 46.6 W
kn4lf@...

PODXS 070 PSK Club #349

Proof Of God Through Science: http://www.cosmicfingerprints.com/audio/newevidence.htm
KN4LF Amateur & SWL Radio History: http://www.kn4lf.com/index.htm
KN4LF MF Radio Propagation Theory Notes: http://www.kn4lf.com/kn4lf8.htm
----- Original Message -----
From: William Mahaffey
To: SkyWires@yahoogroups.com
Sent: Thursday, December 15, 2005 12:10 PM
Subject: Re: [SkyWires] Coax Fed 450ohm Ladder Line?

For my 80 meter loop I simply go from 450 ohm line to coax to a RadioWorks Line Isolator to coax into the shack to a tuner. I do mostly the same for a 40 meter GP vertical. I use the line
isolator to keep the rf out of the shack. It was the solution to my particular rf problem.

The loop is low (a cloud burner supposedly) but I am able to work the
east coast barefoot from San Diego on 80 fairly easily so I am happy with the performance.

Just fyi.

bill w6eet

On Dec 15, 2005, at 7:18 AM, JD WG5B wrote:

Hello everyone and Merry Christmas and Happy New Year! This is my 1st of
hopefully many post's!
I am in the process of putting up a full wave 160 meter loop, it will
average about 30' above the ground, and since I am using existing trees
on my property to support it, technically it will probably be a delta
loop, as my trees did not do as instructed and grow in a perfect square!
(Yes I am very disappointed with them! But they are mine what can I do?)
:-)

My questions is, as I am feeding this with 450 ohm ladder line, and have no way to get the ladder line through the wall to my rig without modifications to the house, (not going to happen!) I was told by an old timer to feed it with 20' 4" of coax and the Coax will act as the Balun and allow me to bring it in to my tuner? Any thought's or suggestions please? Thank's 73 JD

SkyWires@yahoogroups.com wrote:
There are 7 messages in this issue.

--

--

WG5B Amateur Electronics and Antennas
ARS- WG5B
Joe (JD) Jordan
PO Box 1
13 N. 6th Street
Dougherty, OK. 73032-0001
Cell 580-993-0606
Fax 580-993-3271
http://www.wg5b.us for WG5B JP-270® Dual Band J-Pole's, WG5B J-Pole Mounts®, Double Bazooka Antennas, Coax and Connectors.

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1403. Re: [SkyWires] Coax Fed 450ohm Ladder Line?

Yahoo group: SkyWires
Date: 2005-12-15 19:02:49 UTC
From: BOB
Topic: 1394 Message: 1403

since when is a piece of coax added on to ladderline a balun...which he was told to do.....

1404. Re: [SkyWires] Coax Fed 450ohm Ladder Line?

Yahoo group: SkyWires
Date: 2005-12-15 19:23:45 UTC
From: Dr.Ace Ratliff
Topic: 1394 Message: 1404

JD,
I would feed it with 450 ohm ladder line from the antenna to just outside the shack then use a 4:1 balun and go from it into the window with a few feet of RG-8 coax to the rig or antenna tuner.

I show how to homebrew a 4:1 balun at

http://www.bloomington.in.us/~wh2t/balun.html

Also,
Here's an alternate method I have used in the past to run coax thru a double sash window. It works great if you are only using one coax or up to a few coaxes.
Start with the window(s) closed. For each RG-8 type coax drill a vertical 7/16 inch hole thru the seam where the upper and lower sashes meet (to the distant left or right of the center window lock). Don't go all the way to the left or right side of the window. The drill bit should be in front of the glass when you start drilling.

Half of the hole will be drilled thru the bottom of the top sash. And the other half of the hole will be drilled thru the top of the bottom sash.

Now with the window open, from outside the house, push the end of the coax up thru the vertical hole (the PL-259 will fit thru also as long as the window is open). After you get enough of the coax in the house to meet your need, close the window. It will form a seal around the coax, and since the coax runs up thru the hole no water can drip in.

If the hole(s) is temporarily not in use, you can put a cork stopper in it (corks are available at hardware stores). If you decide to repair the hole(s) because you are moving, selling, renting the house etc. Wood putty should be an easy fix. Plus the empty vertical holes are much more difficult to notice than horizontal holes.

Just my 2 cents. Ace - WH2T

----- Original Message -----
From: JD WG5B
To: SkyWires@yahoogroups.com
Sent: Thursday, December 15, 2005 10:18 AM
Subject: [SkyWires] Coax Fed 450ohm Ladder Line?

Hello everyone and Merry Christmas and Happy New Year! This is my 1st of
hopefully many post's!
I am in the process of putting up a full wave 160 meter loop, it will
average about 30' above the ground, and since I am using existing trees
on my property to support it, technically it will probably be a delta
loop, as my trees did not do as instructed and grow in a perfect square!
(Yes I am very disappointed with them! But they are mine what can I do?)
:-)

My questions is, as I am feeding this with 450 ohm ladder line, and have no way to get the ladder line through the wall to my rig without modifications to the house, (not going to happen!) I was told by an old timer to feed it with 20' 4" of coax and the Coax will act as the Balun and allow me to bring it in to my tuner? Any thought's or suggestions please? Thank's 73 JD

SkyWires@yahoogroups.com wrote:
There are 7 messages in this issue.

WG5B

1405. Re: [SkyWires] Coax Fed 450ohm Ladder Line?

Yahoo group: SkyWires
Date: 2005-12-15 19:58:11 UTC
From: ROBERT W BETTS
Topic: 1394 Message: 1405

Hi Guys:
FIY:
Here's an example of a "coaxial balun" -- the problem is that they are frequency specific.
Bob, N1KPR
http://n-lemma.com/calcs/dipole/balun.htm

BOB <k6mit@...> wrote:
i dont see how a piece of coax can act as a balun...sounds stupid to me....a balun is a matching device....
coax is coax nothing more....id use a four to one balun...but not one of the cheap ones from hro or aes...they
are junk.....

on your antenna...i hope you have put pulleys at each support point with a weight on the support line so when
the wind gusts the antenna can move and not break when the trees move...

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1406. RE: loop -> 450 vs. 300 ohm

Yahoo group: SkyWires
Date: 2005-12-15 23:47:50 UTC
From: Ron McConnell
Topic: 1406 Message: 1406

Thomas Giella KN4LF" <flcyclone@...> says
"Yes go with the 450 ohm window line versus the 300 ohm."
and gives good reasons for that.
In addition, TV grade 300 ohm line is relatively
flimsy with fine gauge wire compared
to good 450 ohm ladder line.

Playing around on the Smith chart and with
t-line programs suggest that a t-line impedance
between 200 and 300 ohms is better range
for the wide range of antenna impedances
(a few ohms to a few thousand ohms)
encountered with center-fed or end-fed doublets
for multiband use. 450 ohms is near the upper
limit for getting a good range as seen
at the transmitter end.

See Gary N3GO O'Neill's article
from Communications Quarterly, Fall 1996,
"From a J to a Zepp
The truth and its consequences"

<http://snow.prohosting.com/~w0rcy/Jpole/jpole.html>
and
<http://webpages.charter.net/aa5tb/efha.html>

Does anyone make good 300 ohm ladder line?
[Gotta do a search.]

Cheers, 73,

Ron McC.
w2iol@...

Ronald C. McConnell, PhD

WGS-84: N 40° 46' 57.9" +/-0.1"
W 74° 41' 21.3" +/-0.1"
FN20ps.77GU96 +/-
V +5058 H +1504

<http://home.earthlink.net/~rcmcc>

The trick in choosing a career is to figure
out what you really enjoy doing
and find someone to pay you to do it.
- R. C. McC.

1407. Re: Coax Fed 450ohm Ladder Line?

Yahoo group: SkyWires
Date: 2005-12-15 23:58:39 UTC
From: wg5b
Topic: 1394 Message: 1407

Technically you are correct it is not a "balun" after reading some suggested websites it is actually more of a "Transformer" and by all examples and statements it apparently works extreemly well!!

JD WG5B

--- In SkyWires@yahoogroups.com, "BOB" <k6mit@a...> wrote:
>
> since when is a piece of coax added on to ladderline a balun...which he was told to do.....
>

1408. RE; Coax fed 450ohm Ladderline

Yahoo group: SkyWires
Date: 2005-12-16 00:01:26 UTC
From: wg5b
Topic: 1408 Message: 1408

My XYL gave in! I had her read several of the replies and explained to her exactly what I had in mind, which was to use a 3 1/2" hole saw to cut a hole through the wall directly under my opoerating position (out of sight inside) and insert a peice of 3" schedule 40 pvc pipe through the hole, then drill or cut holes to fit the wire/coax in 2, 3" pipe caps (one inside one outside) run them through push on pipe caps (they fit tight enough to seal without screws or anything else) seal around coax or ladderline holes with caulking... as I said she said ok and it is done! She said ok I did not give her a chance to change her mind! I installed it all this afternoon... Feeding ladderline directly with my Tentec Model 238 tuner, Works Great!. 73 JD

1409. Re: [Bulk] [SkyWires] RE: loop -> 450 vs. 300 ohm

Yahoo group: SkyWires
Date: 2005-12-16 00:24:02 UTC
From: Jeannette Heulin
Topic: 1406 Message: 1409

http://thewireman.com/antennap.html#balanced

Jeannette aa6jh

>Does anyone make good 300 ohm ladder line?
>[Gotta do a search.]
>
>Cheers, 73,
>
>Ron McC.
>w2iol@...
>
>Ronald C. McConnell, PhD
>
>WGS-84: N 40º 46' 57.9" +/-0.1"
> W 74º 41' 21.3" +/-0.1"
> FN20ps.77GU96 +/-
> V +5058 H +1504
>
><<http://home.earthlink.net/~rcmcc>http://home.earthlink.net/~rcmcc>
>
>
>The trick in choosing a career is to figure
>out what you really enjoy doing
>and find someone to pay you to do it.
>- R. C. McC.
>
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>----------
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1410. Re: [SkyWires] Coax Fed 450ohm Ladder Line?

Yahoo group: SkyWires
Date: 2005-12-15 20:41:34 UTC
From: Dr.Ace Ratliff
Topic: 1394 Message: 1410

Bob,
I have used that type of coaxial balun on a mono band dipole many years ago.
I had forgotten about it.
73, Ace - WH2T

----- Original Message -----
From: ROBERT W BETTS
To: SkyWires@yahoogroups.com
Sent: Thursday, December 15, 2005 2:58 PM
Subject: Re: [SkyWires] Coax Fed 450ohm Ladder Line?

Hi Guys:
FIY:
Here's an example of a "coaxial balun" -- the problem is that they are frequency specific.
Bob, N1KPR
http://n-lemma.com/calcs/dipole/balun.htm

BOB <k6mit@...> wrote:
i dont see how a piece of coax can act as a balun...sounds stupid to me....a balun is a matching device....
coax is coax nothing more....id use a four to one balun...but not one of the cheap ones from hro or aes...they
are junk.....

on your antenna...i hope you have put pulleys at each support point with a weight on the support line so when
the wind gusts the antenna can move and not break when the trees move...

1411. Re: [SkyWires] Coax Fed 450ohm Ladder Line?

Yahoo group: SkyWires
Date: 2005-12-16 05:15:58 UTC
From: K6MIT
Topic: 1394 Message: 1411

a coil of coax is not a balun.....its a choke....which is common to use on antennas to choke rf so it wont come
down the coax any further.....a balun is a device wound on a core consisting of two windings of different wires.

the new clamp on chokes from amadon and other sources will do a better job of surpressing rf then a coil
of coax will, as the coax winding is for a given frequency...whereas the clamp on chokes cover the whole
hf spectrum....

1412. Re: [SkyWires] Coax Fed 450ohm Ladder Line?

Yahoo group: SkyWires
Date: 2005-12-16 05:51:29 UTC
From: Mel Vance
Topic: 1394 Message: 1412

> the new clamp on chokes from amadon and other sources will do a better
> job of surpressing rf then a coil of coax will, as the coax winding is
> for a given frequency...whereas the clamp on chokes cover the whole hf
> spectrum....

The coax choke is not for a single freq....it works equally well on freqs well above the 'design freq'....

Example....the coax choke on my 80mtr crossed dipoles works great to keep the RF off the braid on 80...as well as 40, 20, 15, and 10.....all bands I used to have RFI problems trying to tune....

Hardly a single band design.......

Mel
N7OKL

1413. Re: [SkyWires] Coax Fed 450ohm Ladder Line?

Yahoo group: SkyWires
Date: 2005-12-16 05:53:00 UTC
From: K6MIT
Topic: 1394 Message: 1413

whatever.....i quit

1414. 160 m Loop

Yahoo group: SkyWires
Date: 2005-12-16 06:04:22 UTC
From: oh6bi
Topic: 1414 Message: 1414

Hi All!

I am New in this group and it is good to tell something about me:
Name is Rami, first licence 1980 and qth is Vaasa 60,000 people town on the coast of the western Finland. I have two callsigns oh6bi (my first one) and 9j2bi when I am at my second home in Zambia. Zambian call I got 2002.

Here in Finland my home is in flat,top floor, balcony 13meter from the ground. In the balcony is my pizzabox,IC AH3 feeding 10m wire up to horisontal 41m long wire between two houses, totally antenna is 51m.
Horisontal part is abt 18 meters from ground in free space, just some flower bushes down there. This wire is quite good for all bands but I wish to have some gain for low bands. Now planning to put 160m loop instead of that wire. Distance between flats is abt 60m and they are similar, the maximum loop size in the open space could be abt 50x50m = 200m , enough space for 160m loop. Feeding will be done by ladder line from pizzabox.
My question is: What is the best feedpoint with 160 loop as thinking multiband operation, mainly 40m to 160m ?
(for higher bands I have wertical on the roof)

Best regards, 73s and gl dx de rami, oh6bi

1415. Re: [SkyWires] Coax Fed 450ohm Ladder Line?

Yahoo group: SkyWires
Date: 2005-12-16 15:15:09 UTC
From: ROBERT W BETTS
Topic: 1394 Message: 1415

I think you are referring to a "coax choke" which doesn't do what you suggest, but actually offers high reactance to common mode currents and "chokes" currents on the outer portion of the coax, moving in BOTH directions. No, choke coils are not for a "specific frequency." They are effective for any frequency above their lowest design frequency. They are chokes. They exhibit inductive reactance and follow the same laws of physics.

Your description of a balun is not accurate. I think you are thinking of the commercial term for those things found in PVC tubes and variously sold in the back of magazines. But there are many other forms of baluns. Any transformer that matches balanced to unbalanced transmission lines is a balun. A transformer does not need to have "coils of wire" to be a transformer -- nor a core. If impedance conversions are are achieved within a device, then it is a transformer. Tuners (Transmatches/couplers) are transformers. Coaxial cable which has been cut to the correct size and wired as a shorting stub is a transformer.

If you use clamp on ferrite beads to eliminate common mode currents on your coax, instead of a choke coil, check them under full power conditions, because under the right conditions, they can also choke-off differential currents present in the coax shield. That's not a good thing -- make sure they are not getting warm during use.
Bob

K6MIT <k6mit@...> wrote:
a coil of coax is not a balun.....its a choke....which is common to use on antennas to choke rf so it wont come
down the coax any further.....a balun is a device wound on a core consisting of two windings of different wires.

the new clamp on chokes from amadon and other sources will do a better job of surpressing rf then a coil
of coax will, as the coax winding is for a given frequency...whereas the clamp on chokes cover the whole
hf spectrum....

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1416. 160 m Loop

Yahoo group: SkyWires
Date: 2005-12-16 15:23:36 UTC
From: ve7agw
Topic: 1414 Message: 1416

Hi to Finland and the group.

I feed my loop about the center of one of the flats on the four square, although I know of others who feed them at a corner and it works just as good. Feeding at a corner is fine as lone as the angel of the two wires is not lower than 45 degrees, other wise you will bet a feed back point that will throw you're an auto tuner into bypass. I found this one out the hard way took me over a week trouble shooting to find out that my tuner didn't like the feed point.

73...de ve7agw
Al, Port Alberni, BC
Canada

Hi All!

I am New in this group and it is good to tell something about me:
Name is Rami, first licence 1980 and qth is Vaasa 60,000 people town on the coast of the western Finland. I have two callsigns oh6bi (my first one) and 9j2bi when I am at my second home in Zambia. Zambian call I got 2002.

Here in Finland my home is in flat,top floor, balcony 13meter from the ground. In the balcony is my pizzabox,IC AH3 feeding 10m wire up to horisontal 41m long wire between two houses, totally antenna is 51m.
Horisontal part is abt 18 meters from ground in free space, just some flower bushes down there. This wire is quite good for all bands but I wish to have some gain for low bands. Now planning to put 160m loop instead of that wire. Distance between flats is abt 60m and they are similar, the maximum loop size in the open space could be abt 50x50m = 200m , enough space for 160m loop. Feeding will be done by ladder line from pizzabox.
My question is: What is the best feedpoint with 160 loop as thinking multiband operation, mainly 40m to 160m ?
(for higher bands I have wertical on the roof)

Best regards, 73s and gl dx de rami, oh6bi

1417. Re: 160 m Loop

Yahoo group: SkyWires
Date: 2005-12-17 14:56:13 UTC
From: Greg W:-)
Topic: 1414 Message: 1417

Hi Rami.

Great to hear about fellow FIN's in the group.
I am Greg W from East Helsinki (ex Australia) and I am into loops as
well ,, although they are small RX loops.
http://www.geocities.com/onegammyleg/
Its nice also to catch up with people localy that dont speak FINglish :-D
Feel free to email me anytime <onegammyleg@...>

Regards

gregW:-)

==========

--- In SkyWires@yahoogroups.com, "oh6bi" <9j2bi@s...> wrote:
> Hi All!
>
> I am New in this group and it is good to tell something about me:
> Name is Rami,
> Here in Finland my home is in flat,top floor, balcony 13meter from
> the ground.
>
> Best regards, 73s and gl dx de rami, oh6bi

1418. Re: [SkyWires] Coax Fed 450ohm Ladder Line?

Yahoo group: SkyWires
Date: 2005-12-17 15:02:08 UTC
From: erik@n0ew.org
Topic: 1394 Message: 1418

>
> My questions is, as I am feeding this with 450 ohm ladder line, and have
> no way to get the ladder line through the wall to my rig without
> modifications to the house, (not going to happen!) I was told by an old
> timer to feed it with 20' 4" of coax and the Coax will act as the Balun
> and allow me to bring it in to my tuner? Any thought's or suggestions
> please? Thank's 73 JD

Basically, just run two lengths of coax side-by-side through the wall, with the shielding soldered together at each end. Inside hook up the station ground to the shielding (thus grounding both shieldings). The shielding's are only connected to each other (and the station ground inside your shack).

Treat the two center conductors as you would regular ladder line, except since they are shielded you can run them through wall, along metal, etc., without worry.

Outside just solder (or wire nut, etc.) the coax to the 450-Ohm ladder line.

The proper length of coax is whatever accomodates your needs. As with nearly any installation, if you are unable to tune your antenna, you can add or subtract about 1/8 to 1/4 wavelength of transmission line, or try a tuner of a different design or component size. But this is beginning to stray off subject.

If I recall correctly, the impedance of the coax ladderline will be twice the nominal impedance of the coax (e.g. 50-Ohm coax become 100-Ohm ladder line).

The ARRL Antenna Book describes this and has a table with a few examples.

-Erik n0ew

1419. Re: [SkyWires] Coax Fed 450ohm Ladder Line?

Yahoo group: SkyWires
Date: 2005-12-18 15:26:34 UTC
From: Jim Dunstan
Topic: 1394 Message: 1419

At 09:18 AM 15/12/2005 -0600, you wrote:
>Hello everyone and Merry Christmas and Happy New Year! This is my 1st of
>hopefully many post's!
>I am in the process of putting up a full wave 160 meter loop, it will
>average about 30' above the ground, and since I am using existing trees
>on my property to support it, technically it will probably be a delta
>loop, as my trees did not do as instructed and grow in a perfect square!
>(Yes I am very disappointed with them! But they are mine what can I do?)
>:-)
>
>My questions is, as I am feeding this with 450 ohm ladder line, and have
>no way to get the ladder line through the wall to my rig without
>modifications to the house, (not going to happen!) I was told by an old
>timer to feed it with 20' 4" of coax and the Coax will act as the Balun
>and allow me to bring it in to my tuner? Any thought's or suggestions
>please? Thank's 73 JD

Hi JD,

I understand the problem .... 450 ohm ladder line is difficult to bring into the house. I don't know about the 20' 4" coax trick ... I would think that keeping the feed line balanced right from the antenna to the tuner would be the best bet. A trick I have used many times was to use 75 ohm balanced line (diameter approx the same as RG58). I used a piece of sufficient length to get through the wall etc ... with 300 ohm line on the inside of the house and the 450 ohm line outside the house. So what you have is 300 ohm line from the tuner to the wall, 75 ohm line through the wall, and 450 ohm line from the wall to the antenna. Keep the higher loss balanced line short as possible.

The problem is that 75 ohm balanced line is now all but impossible to find. Beldon Cable used to make low and high power versions. It was great stuff for feeding dipoles and full size loops. Not too long ago I had this same situation and could not find 75 ohm balanced line (only need a few feet) .... and used 2 wire #16 power cord ... the kind you find in cheap extension cords (some times referred to as zip cord). It works fine. In fact I have used the same zip cord to feed a dipole directly for field day type operation. A resonant dipole is approximately 75 ohms. This antenna fed via zip cord to a 1:1 balun to the rig operates with less than 1.5:1 SWR. As a result I suspect that zip chord represents a feed line impedance of about 100 ohms.

Merry Christmas

JD (Jim Dunstan) hi

1420. Re: [SkyWires] RE; Coax fed 450ohm Ladderline

Yahoo group: SkyWires
Date: 2005-12-19 22:53:35 UTC
From: Richards
Topic: 1408 Message: 1420

Tell the XYL I think that sounds like a capital solution - and if I
get the image correct in my head, it could be used for different
and additional lines in the future. At first, I wondered why you used
such a large diameter pipe, but I can see that you could install
additional coax lines cool wax lines through it in the future -- and
especially because you did not glue down the end caps.

I might just copy that design...
Best Regards. //// Richards ////
==========

wg5b wrote:
> My XYL gave in! I had her read several of the replies and explained to
> her exactly what I had in mind, which was to use a 3 1/2" hole saw to
> cut a hole through the wall directly under my opoerating position (out
> of sight inside) and insert a peice of 3" schedule 40 pvc pipe through
> the hole, then drill or cut holes to fit the wire/coax in 2, 3" pipe
> caps (one inside one outside) run them through push on pipe caps (they
> fit tight enough to seal without screws or anything else) seal around
> coax or ladderline holes with caulking... as I said she said ok and it
> is done! She said ok I did not give her a chance to change her mind! I
> installed it all this afternoon... Feeding ladderline directly with my
> Tentec Model 238 tuner, Works Great!. 73 JD
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1421. 160m loop at higher bands ?

Yahoo group: SkyWires
Date: 2005-12-20 06:06:54 UTC
From: oh6bi
Topic: 1421 Message: 1421

Hi All !

Plannings for 160 loop are running here but
I have to stay on the plannings level until we get some
higher temperatures here; it is not very cold but
enaugh to prevent me to start wire works on the roof.
This morning my digimeter was showing minus 15 Celsius (5 F).

I had conversation with my friend (oh-ham) and he was telling
that 160m loop is not so good as 80m loop for 40m band.
He has done experiments some years ago and got better gsos at 40
when using 80m loop. How is it ??
I have seen many articles how 80m loop is running at higher bands
and I have tested 80m loops at my summer cottage with good results
but never built any loop for 160.
Anyone know good info how the height effects with loops and different
bands ? (maybe it is same as the other antennas ..)

This qth I am staying is giving good possibilities for 160m wire
experiments and I have to do it now, never know how is the next
home ...

The loop will be 18m (abt 60 ft) up from ground level, corner fed and
free space, distance to nearest building under antenna is abt 20m.
It came my mind also to put two loops there: 80m inside 160m ?
What you say about this idea ? can it work ? I have seen some wire
constructions for 20,15 and 10m, I think it was in the Moxon´s
antenna book. Comments ?

73s es GL DX de rami, oh6bi

1422. Re: 40 Meter QSO's on 160 Meter Loop

Yahoo group: SkyWires
Date: 2005-12-20 15:29:25 UTC
From: Thomas Giella KN4LF
Topic: 1422 Message: 1422
Attachments: 1 described; binary payloads are missing from this source WARC

On a 160 meter full wave loop the TOA on 40 meters will be approximately 35 deg. versus 44 deg. on an 80 meter full wave loop. So in theory you would be able to work more DX on 40 meters with the 160 meter loop versus the 80 meter loop.

If the critical frequency is above 40 meters then close in QSO's are going to occur too but not as many or as strong as say on an NVIS antenna with a 90 deg. TOA.

73 & Merry Christmas,
Thomas F. Giella, KN4LF
Lakeland, FL, USA
Grid Square EL97AW
27 57 26.5 N 81 56 46.6 W
kn4lf@arrl.net

PODXS 070 PSK Club #349

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KN4LF MF Radio Propagation Theory Notes: http://www.kn4lf.com/kn4lf8.htm

Date: Tue, 20 Dec 2005 06:06:54 -0000
From: "oh6bi" <9j2bi@...>
Subject: 160m loop at higher bands ?

Hi All !

Plannings for 160 loop are running here but
I have to stay on the plannings level until we get some
higher temperatures here; it is not very cold but
enaugh to prevent me to start wire works on the roof.
This morning my digimeter was showing minus 15 Celsius (5 F).

I had conversation with my friend (oh-ham) and he was telling
that 160m loop is not so good as 80m loop for 40m band.
He has done experiments some years ago and got better gsos at 40
when using 80m loop. How is it ??
I have seen many articles how 80m loop is running at higher bands
and I have tested 80m loops at my summer cottage with good results
but never built any loop for 160.
Anyone know good info how the height effects with loops and different
bands ? (maybe it is same as the other antennas ..)

This qth I am staying is giving good possibilities for 160m wire
experiments and I have to do it now, never know how is the next
home ...

The loop will be 18m (abt 60 ft) up from ground level, corner fed and free space, distance to nearest building under antenna is abt 20m. It came my mind also to put two loops there: 80m inside 160m ? What you say about this idea ? can it work ? I have seen some wire constructions for 20,15 and 10m, I think it was in the Moxon´s antenna book. Comments ?

73s es GL DX de rami, oh6bi

1423. Re: [SkyWires] 160m loop at higher bands ?

Yahoo group: SkyWires
Date: 2005-12-20 22:01:23 UTC
From: Dr.Ace Ratliff
Topic: 1421 Message: 1423

Rami,
A 160 mtr loop will not work as well on 80 mtr band as an 80 mtr loop.
Ace - WH2T

----- Original Message -----
From: oh6bi
To: SkyWires@yahoogroups.com
Sent: Tuesday, December 20, 2005 1:06 AM
Subject: [SkyWires] 160m loop at higher bands ?

Hi All !

Plannings for 160 loop are running here but
I have to stay on the plannings level until we get some
higher temperatures here; it is not very cold but
enaugh to prevent me to start wire works on the roof.
This morning my digimeter was showing minus 15 Celsius (5 F).

I had conversation with my friend (oh-ham) and he was telling
that 160m loop is not so good as 80m loop for 40m band.
He has done experiments some years ago and got better gsos at 40
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I have seen many articles how 80m loop is running at higher bands
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but never built any loop for 160.
Anyone know good info how the height effects with loops and different
bands ? (maybe it is same as the other antennas ..)

This qth I am staying is giving good possibilities for 160m wire
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The loop will be 18m (abt 60 ft) up from ground level, corner fed and
free space, distance to nearest building under antenna is abt 20m.
It came my mind also to put two loops there: 80m inside 160m ?
What you say about this idea ? can it work ? I have seen some wire
constructions for 20,15 and 10m, I think it was in the Moxon´s
antenna book. Comments ?

73s es GL DX de rami, oh6bi

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1424. Re: 160m loop at higher bands ?

Yahoo group: SkyWires
Date: 2005-12-21 17:15:11 UTC
From: spark_gap2000
Topic: 1421 Message: 1424

Does that mean that a 80 mtr loop will not work as well on 40
mtrs as a 40 mtr loop?
Sid,,VE3JUA.

--- In SkyWires@yahoogroups.com, "Dr.Ace Ratliff" <wh2t@b...> wrote:
>
> Rami,
> A 160 mtr loop will not work as well on 80 mtr band as an 80 mtr loop.
> Ace - WH2T
>
> ----- Original Message -----
> From: oh6bi
> To: SkyWires@yahoogroups.com
> Sent: Tuesday, December 20, 2005 1:06 AM
> Subject: [SkyWires] 160m loop at higher bands ?
>
>
> Hi All !
>
> Plannings for 160 loop are running here but
> I have to stay on the plannings level until we get some
> higher temperatures here; it is not very cold but
> enaugh to prevent me to start wire works on the roof.
> This morning my digimeter was showing minus 15 Celsius (5 F).
>
> I had conversation with my friend (oh-ham) and he was telling
> that 160m loop is not so good as 80m loop for 40m band.
> He has done experiments some years ago and got better gsos at 40
> when using 80m loop. How is it ??
> I have seen many articles how 80m loop is running at higher bands
> and I have tested 80m loops at my summer cottage with good results
> but never built any loop for 160.
> Anyone know good info how the height effects with loops and different
> bands ? (maybe it is same as the other antennas ..)
>
> This qth I am staying is giving good possibilities for 160m wire
> experiments and I have to do it now, never know how is the next
> home ...
>
> The loop will be 18m (abt 60 ft) up from ground level, corner fed and
> free space, distance to nearest building under antenna is abt 20m.
> It came my mind also to put two loops there: 80m inside 160m ?
> What you say about this idea ? can it work ? I have seen some wire
> constructions for 20,15 and 10m, I think it was in the Moxon´s
> antenna book. Comments ?

>
> 73s es GL DX de rami, oh6bi
>
>
>
>
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Service.
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>

1425. Re: 160 Meter Loop On Higher Bands

Yahoo group: SkyWires
Date: 2005-12-21 16:49:34 UTC
From: Thomas Giella KN4LF
Topic: 1425 Message: 1425
Attachments: 1 described; binary payloads are missing from this source WARC

W2HT Said: A 160 mtr loop will not work as well on 80 mtr band as an 80 mtr loop.

KN4LF Says: With due respect I say Dr. Ace that's a bit of a broad statement, it all boils down to what you are trying to accomplish on 80 meters.

If you want to rag chew locally and regionally out to say approximately 500 miles, then the 90 deg. TOA of an 80 meter full wave loop is best. With the added bonus that EZENEC 4.0 modeling shows that the loop also has a secondary TOA of approximately 52 deg. 3 db down from the main 90 deg. TOA lobe, that will allow contacts out to approximately 2000 miles. My real world experience has allowed me to work the west coast of the U.S. from Florida with that TOA of 52 deg.

If you want to work DX with a loop on 80 meters then your choice would be the 160 meter full wave loop because the TOA on 80 meters is approximately 43 deg. and will allow for DX contacts out to approximately 10,000 miles. My real world experience has allowed me to work ZS6CCY on 80 meters with the 160 meter full wave loop from Florida, a path of approximately 8200 miles.

Where you can run into problems operating 80 meters on a full wave 160 meter loop is the fact that 80 meters is a even second harmonic on the 160 full wave loop, so you have high voltage at your antenna tuner and you can get arcing inside the tuner if you use the typical store bought tee network tuner with a 4:1 balun on the hot side, like an MFJ-989C, 949E, etc.

But if you homebrew a link coupled balanced tuner or balanced L network balanced tuner with large enough voltage and current capacity components then arcing is not an issue. This will allow you to work the world on 80 meters with a 160 meter full wave loop.

BTW I have done allot of antenna modeling using ELNEC/EZNEC during the past 8 years and have found that if you model the antenna correctly and can correctly interpret and understand what the model data is telling you, then you can pretty duplicate the modeling results on the air. However let me preface that statement by saying that I'm no antenna modeling expert like W4RNL.

73 & Merry Christmas,
Thomas F. Giella, KN4LF
Lakeland, FL, USA
Grid Square EL97AW
27 57 26.5 N 81 56 46.6 W
kn4lf@...

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1426. Re: [SkyWires] Re: 160 Meter Loop On Higher Bands

Yahoo group: SkyWires
Date: 2005-12-22 01:49:07 UTC
From: Richards
Topic: 1425 Message: 1426

Gee, fellas... I am new at this... (although the term
"novice" seems to have been eliminated from the lexicon...)
and I hope I get on to it and get one the air sometime...
like... before I get too old to do it...

I appreciate you letting me eavesdrop on the conversation
as I might get some of it.

Happy trails to all. /// JH Richards ///
==========

Thomas Giella KN4LF wrote:
> W2HT Said: A 160 mtr loop will not work as well on 80 mtr band as an 80 mtr loop.
>
> KN4LF Says: With due respect I say Dr. Ace that's a bit of a broad statement,

1427. Re: [SkyWires] Re: 160 Meter Loop On Higher Bands

Yahoo group: SkyWires
Date: 2005-12-22 12:38:03 UTC
From: Dr.Ace Ratliff
Topic: 1425 Message: 1427

Hang in there JH, you will get it.
Ace - WH2T

----- Original Message -----
From: Richards
To: SkyWires@yahoogroups.com
Sent: Wednesday, December 21, 2005 8:49 PM
Subject: Re: [SkyWires] Re: 160 Meter Loop On Higher Bands

Gee, fellas... I am new at this... (although the term
"novice" seems to have been eliminated from the lexicon...)
and I hope I get on to it and get one the air sometime...
like... before I get too old to do it...

I appreciate you letting me eavesdrop on the conversation
as I might get some of it.

Happy trails to all. /// JH Richards ///
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Thomas Giella KN4LF wrote:
> W2HT Said: A 160 mtr loop will not work as well on 80 mtr band as an 80 mtr loop.
>
> KN4LF Says: With due respect I say Dr. Ace that's a bit of a broad statement,

---
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1428. Re: [SkyWires] Re: 160m loop at higher bands ?

Yahoo group: SkyWires
Date: 2005-12-22 12:36:52 UTC
From: Dr.Ace Ratliff
Topic: 1421 Message: 1428

Sid,
I have never had a 40 meter loop. So I can't say from experience.
Ace - WH2T

----- Original Message -----
From: spark_gap2000
To: SkyWires@yahoogroups.com
Sent: Wednesday, December 21, 2005 12:15 PM
Subject: [SkyWires] Re: 160m loop at higher bands ?

Does that mean that a 80 mtr loop will not work as well on 40
mtrs as a 40 mtr loop?
Sid,,VE3JUA.

--- In SkyWires@yahoogroups.com, "Dr.Ace Ratliff" <wh2t@b...> wrote:
>
> Rami,
> A 160 mtr loop will not work as well on 80 mtr band as an 80 mtr loop.
> Ace - WH2T
>

1429. Re: [SkyWires] Re: 160 Meter Loop On Higher Bands

Yahoo group: SkyWires
Date: 2005-12-22 13:15:27 UTC
From: Dr.Ace Ratliff
Topic: 1425 Message: 1429

Hello Thomas,
I know I made a broad statement and I figured someone would comment on it. I was in a hurry. I agree with everything you wrote. However, I think if a persons main objective is to work DX, that person could choose an antenna better suited for DX work than a horizontal loop.
I am not a big DXer, if I hear an interesting DX station I can usually succeed in working that station pile up or not. I have used a 160 mtr horizontal loop and an 80 mtr horizontal loop on 80 mtrs and other bands. From Indiana I have worked all 50 states many times over including Alaska and Hawaii a bunch of times on 80 mtrs using horizontal loop antennas. My main band of operation is the 80 mtr band. For myself I will stick with an 80 mtr horizontal loop on 80 mtrs.
BTW, I operate all bands from 2 thru 160 mtrs.
Happy Holidays and Merry Christmas to all.

Ace - www.WH2T.com

eMail Ace@...m

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O.M.I.S.S. # 3629
AM International # 1362
KB9RVS A.C.E.S. Club, G.E.R.A.T.O.L. # 2216 Directors # 366
----- Original Message -----
From: Thomas Giella KN4LF
To: SkyWires@yahoogroups.com
Sent: Wednesday, December 21, 2005 11:49 AM
Subject: [SkyWires] Re: 160 Meter Loop On Higher Bands

W2HT Said: A 160 mtr loop will not work as well on 80 mtr band as an 80 mtr loop.

KN4LF Says: With due respect I say Dr. Ace that's a bit of a broad statement, it all boils down to what you are trying to accomplish on 80 meters.

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But if you homebrew a link coupled balanced tuner or balanced L network balanced tuner with large enough voltage and current capacity components then arcing is not an issue. This will allow you to work the world on 80 meters with a 160 meter full wave loop.

BTW I have done allot of antenna modeling using ELNEC/EZNEC during the past 8 years and have found that if you model the antenna correctly and can correctly interpret and understand what the model data is telling you, then you can pretty duplicate the modeling results on the air. However let me preface that statement by saying that I'm no antenna modeling expert like W4RNL.

73 & Merry Christmas,
Thomas F. Giella, KN4LF
Lakeland, FL, USA
Grid Square EL97AW
27 57 26.5 N 81 56 46.6 W
kn4lf@...

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1430. Re: 160 Meter Loops

Yahoo group: SkyWires
Date: 2005-12-22 15:25:54 UTC
From: Thomas Giella KN4LF
Topic: 1430 Message: 1430
Attachments: 1 described; binary payloads are missing from this source WARC

Dr. Ace yes I know that you are very knowledgeable about antenna's and have allot of practical experience via experimentation. So no flame was intended and that's why I began my email with, "With due respect.....".

I was simply pointing out several options for a loop antenna for close in ragchewing and DXing based on my practical experience via experimentation.

BTW I'm a very spiritual person as you are.

73 & Merry Christmas,
Thomas F. Giella, KN4LF
Lakeland, FL, USA
Grid Square EL97AW
27 57 26.5 N 81 56 46.6 W
kn4lf@...

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KN4LF MF Radio Propagation Theory Notes: http://www.kn4lf.com/kn4lf8.htm
Date: Thu, 22 Dec 2005 08:15:27 -0500
From: "Dr.Ace Ratliff" <wh2t@...>
Subject: Re: Re: 160 Meter Loop On Higher Bands

Hello Thomas,
I know I made a broad statement and I figured someone would comment on it. I was in a hurry. I agree with everything you wrote. However, I think if a persons main objective is to work DX, that person could choose an antenna better suited for DX work than a horizontal loop.
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BTW, I operate all bands from 2 thru 160 mtrs.
Happy Holidays and Merry Christmas to all.

Ace - www.WH2T.com

eMail Ace@...

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AM International # 1362

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1432. Re: [SkyWires] Re: 160 Meter Loops

Yahoo group: SkyWires
Date: 2005-12-23 03:45:01 UTC
From: Dr.Ace Ratliff
Topic: 1430 Message: 1432

Hello again Thomas,
I never thought your message was an attempt to flame me. As I wrote "I agree with everything you wrote". Thanks for pointing out facts I didn't have the time to bring up in my original broad statement: it was short and expressed my opinion.
May God bless you and yours.
Very 73,
Ace - www.WH2T.com

eMail Ace@...

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O.M.I.S.S. # 3629
AM International # 1362
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Creation Evidence Museum http://www.creationevidence.org/

Creation Science Evangelism http://www.drdino.com/

----- Original Message -----
From: Thomas Giella KN4LF
To: SkyWires@yahoogroups.com
Sent: Thursday, December 22, 2005 10:25 AM
Subject: [SkyWires] Re: 160 Meter Loops

Dr. Ace yes I know that you are very knowledgeable about antenna's and have allot of practical experience via experimentation. So no flame was intended and that's why I began my email with, "With due respect.....".

I was simply pointing out several options for a loop antenna for close in ragchewing and DXing based on my practical experience via experimentation.

BTW I'm a very spiritual person as you are.

73 & Merry Christmas,
Thomas F. Giella, KN4LF
Lakeland, FL, USA
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27 57 26.5 N 81 56 46.6 W
kn4lf@arrl.net

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KN4LF MF Radio Propagation Theory Notes: http://www.kn4lf.com/kn4lf8.htm
Date: Thu, 22 Dec 2005 08:15:27 -0500
From: "Dr.Ace Ratliff" <wh2t@...>

Subject: Re: Re: 160 Meter Loop On Higher Bands

Hello Thomas,
I know I made a broad statement and I figured someone would comment on it. I was in a hurry. I agree with everything you wrote. However, I think if a persons main objective is to work DX, that person could choose an antenna better suited for DX work than a horizontal loop.
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BTW, I operate all bands from 2 thru 160 mtrs.
Happy Holidays and Merry Christmas to all.

Ace - www.WH2T.com

eMail Ace@...

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Version: 7.1.371 / Virus Database: 267.14.3/209 - Release Date: 12/21/2005

1433. hf loop antenna

Yahoo group: SkyWires
Date: 2005-12-28 03:03:28 UTC
From: k6mit
Topic: 1433 Message: 1433

i want a loop antenna for 75 meters...i can only put up one 200 feet square....could i at one side of the loop go back and forth with the wire to gain another 80 feet of wire to make a total length of 280 feet ? the antenna would be 20 off off the ground.

any input would be appreciated

bob

1435. Re: [SkyWires] hf loop antenna

Yahoo group: SkyWires
Date: 2005-12-28 15:14:16 UTC
From: charles allison
Topic: 1433 Message: 1435

Bob,

I would think for 4.000 mhz, you'd only need 251 ft or for 3.800mhz, 264 ft (1005/MHz).

One thing that can be done is to use insulated wire. This has a lower velocity factor than uninsulated wire so a shorter length is required. While it won't be nearly enough to compensate, it should knock off around 10 ft of length, give or take a few feet. Our loop is about 250 ft of insulated wire and it is about 15 ft off the ground. It's a great NVIS antenna giving us rather solid coverage around the state (TX) and a bit beyond with much lower noise than our g5rv inverted Vee at 40 ft. It also does nicely on 40m. The antenna is fed at the corner with a 1:1 current balun.

Ideally, you want to maximize the area of the loop. I've seen some make a star pattern to increase the length of wire in a smaller area. You probably don't want to run the wires close together lest it form a twinline.

Alternatively, you might just cut it a bit short and match with the tuner. Feeding with ladderline would probably help any swr losses. Lower height loop antennas though seem to have lower impedances.

best regards,
charles
wb5izd

>
> --
> --
>
> Message: 1
> Date: Wed, 28 Dec 2005 03:03:28 -0000
> From: "k6mit" <k6mit@...>
> Subject: hf loop antenna
>
> i want a loop antenna for 75 meters...i can only put up one 200 feet
> square....could i at one side of the loop go back and forth with the
> wire to gain another 80 feet of wire to make a total length of 280
> feet ? the antenna would be 20 off off the ground.
>
> any input would be appreciated
>
> bob
>

1436. Re: [SkyWires] hf loop antenna

Yahoo group: SkyWires
Date: 2005-12-28 16:07:36 UTC
From: BOB
Topic: 1433 Message: 1436

thanks for the info charles....but im wondering why you feed the loop with a one to one balun.....everything
i read says to use a four to one.

1437. Skywires...not exactly...

Yahoo group: SkyWires
Date: 2005-12-28 16:21:55 UTC
From: Jeffrey Embry
Topic: 1437 Message: 1437

...but here goes.

I live in an antenna restricted community and have a dipole for 40 - 10 meters in my attic along with a variety of Par Omni-angles for VHF/UHF. The dimentions of the attic is approximately 20 x 25ft. I would love to get on 80 meter CW. I can construct a wire loop and run it outside along the perimeter of the roof...basically laying on the shingles...or run it under the roof.

I am still not sure if this will load on 80...but will give it a go. Any thoughts or suggestions on this?

73,

--
Jeff Embry, K3OQ
FM19je
ARCI #11643
FPQRP #-696
NAQCC #25
AMSAT LM-2263

No trees were harmed in the sending of this message, however a large number of electrons were terribly inconvenienced.

1438. Re: [SkyWires] Skywires...not exactly...

Yahoo group: SkyWires
Date: 2005-12-28 16:44:15 UTC
From: BOB
Topic: 1437 Message: 1438

if you have wood shingles, be careful. a guy in san jose ran his antenna around the house under the shingles
and he caught the house on fire, and it was made with insulated wire...

1439. Re: [SkyWires] Skywires...not exactly...

Yahoo group: SkyWires
Date: 2005-12-28 16:54:04 UTC
From: Jeffrey Embry
Topic: 1437 Message: 1439

Bob,

Not wood...just plain ole cheap shingles.

--
Jeff Embry, K3OQ
FM19je
ARCI #11643
FPQRP #-696
NAQCC #25
AMSAT LM-2263

No trees were harmed in the sending of this message, however a large
number of electrons were terribly inconvenienced.

On 12/28/05, BOB <k6mit@...> wrote:
> if you have wood shingles, be careful. a guy in san jose ran his
> antenna around the house under the shingles
> and he caught the house on fire, and it was made with insulated wire...
> _____
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> SkyWires-unsubscribe@yahoogroups.com
>
> Your use of Yahoo! Groups is subject to the Yahoo! Terms of Service.
> Your use of Yahoo! Groups is subject to the Yahoo! Terms of Service.
> _____
>

1440. Re: [SkyWires] Skywires...not exactly...

Yahoo group: SkyWires
Date: 2005-12-28 18:46:36 UTC
From: Jim Dunstan
Topic: 1437 Message: 1440

At 11:21 AM 28/12/2005 -0500, you wrote:
>...but here goes.
>
>I live in an antenna restricted community and have a dipole for 40 -
>10 meters in my attic along with a variety of Par Omni-angles for
>VHF/UHF. The dimentions of the attic is approximately 20 x 25ft. I
>would love to get on 80 meter CW. I can construct a wire loop and
>run it outside along the perimeter of the roof...basically laying on
>the shingles...or run it under the roof.
>
>I am still not sure if this will load on 80...but will give it a go.
>Any thoughts or suggestions on this?
>
>73,

Hi,

The dimensions 20x25 will allow a horizontal loop about 80' in diameter which will load very well on 75/80M with a tuner. The alternatives are to either run a parallel feed line such as 300 ohm TV twin lead or 450 ohm ladder line down to a tuner at the operating position or to located a remote automatic tuner in the attic such as one of the SGC units and simply run RG58 to the operating position. Such an arrangement will work all bands 80-10 M with no difficulty. You will make tons of 80M cw contacts.

Jim, VE3CI

1441. Re: hf loop antenna

Yahoo group: SkyWires
Date: 2005-12-28 20:25:44 UTC
From: Andy
Topic: 1433 Message: 1441

> i want a loop antenna for 75 meters...i can only put up one 200 feet
> square....could i at one side of the loop go back and forth with the
> wire to gain another 80 feet of wire to make a total length of 280
> feet ? the antenna would be 20 off off the ground.

Do you know about the folded dipole? At first glance it looks like a loop, but it is completely squashed flat. Because the back-and-forth wires are close together, it behaves like a dipole (with an impedance transformation) rather than like a loop.

The point is, if you run your wires back-and-forth in close proximity, it may behave a lot differently than you'd expect. The doubled-back sections may behave like a single wire or stub. Keep them separated more.

I've seen articles showing full size loops (or dipoles) built in attics or other limited spaces, running the wire zig-zag to make it fit, but keeping all the wires apart from one another so none are in close proximity. (For example, draw a very fat "H", then trace its outline.) Yes it is a compromise but it works.

The other thing you can do, is make a 2-turn loop. In this case, where the wires go in the same rather than opposite directions, they can be close to one another, and you still get the benefits of a loop.

Regards,
Andy

1442. Re: [SkyWires] Re: hf loop antenna

Yahoo group: SkyWires
Date: 2005-12-28 20:44:42 UTC
From: BOB
Topic: 1433 Message: 1442

andy...thanks for the info

bob

1443. Re: [SkyWires] Re: hf loop antenna

Yahoo group: SkyWires
Date: 2005-12-28 20:49:49 UTC
From: Jeannette Heulin
Topic: 1433 Message: 1443

>
>The other thing you can do, is make a 2-turn loop. In this case, where the
>wires go in the same rather than opposite directions, they can be close to
>one another, and you still get the benefits of a loop.
>
>Regards,
>Andy

I have looked all over the internet to see if a multi-turns loop would
work. I saw lots of them for receive but not for transmit. I have a 40m
Loop up. Can I run a second turn and use it on 80?. How far apart should it
be?.
I installed a piece of PVC tubing at each corner of my roof (flat roof).
They are 36" long. I could easily run another turn under the first one.

Jeannette
aa6jh

1444. Re: [SkyWires] Skywires...not exactly...

Yahoo group: SkyWires
Date: 2005-12-28 20:49:40 UTC
From: Dr.Ace Ratliff
Topic: 1437 Message: 1444

----- Original Message -----
From: Jim Dunstan
To: SkyWires@yahoogroups.com
Sent: Wednesday, December 28, 2005 1:46 PM
Subject: Re: [SkyWires] Skywires...not exactly...

At 11:21 AM 28/12/2005 -0500, you wrote:
>...but here goes.
>
>I live in an antenna restricted community and have a dipole for 40 -
>10 meters in my attic along with a variety of Par Omni-angles for
>VHF/UHF. The dimentions of the attic is approximately 20 x 25ft. I
>would love to get on 80 meter CW. I can construct a wire loop and
>run it outside along the perimeter of the roof...basically laying on
>the shingles...or run it under the roof.
>
>I am still not sure if this will load on 80...but will give it a go.
>Any thoughts or suggestions on this?
>
>73,

Hi,

The dimensions 20x25 will allow a horizontal loop about 80' in diameter
which will load very well on 75/80M with a tuner. The alternatives are to
either run a parallel feed line such as 300 ohm TV twin lead or 450 ohm
ladder line down to a tuner at the operating position or to located a
remote automatic tuner in the attic such as one of the SGC units and simply
run RG58 to the operating position. Such an arrangement will work all
bands 80-10 M with no difficulty. You will make tons of 80M cw contacts.

Jim, VE3CI

Hi,
The dimensions 20x25 will allow a horizontal loop about 90' in circumference.
Ace - WH2T

1445. Re: [SkyWires] Hooking up with...

Yahoo group: SkyWires
Date: 2005-12-28 21:36:28 UTC
From: David Shrum
Topic: 1445 Message: 1445

Original message deleted and author banned, but I would be willing to bet, it like so many others like this are bogus.

I hope every one had a good Christmas and hope every one has a good New Year.
Dave N8PU

brenda.warnes5433@... wrote:

1446. HF Loop Antenna

Yahoo group: SkyWires
Date: 2005-12-29 16:04:22 UTC
From: Thomas Giella KN4LF
Topic: 1446 Message: 1446
Attachments: 1 described; binary payloads are missing from this source WARC

Jim VE3CI Said:

The dimensions 20x25 will allow a horizontal loop about 80' in diameter which will load very well on 75/80M with a tuner. The alternatives are to either run a parallel feed line such as 300 ohm TV twin lead or 450 ohm ladder line down to a tuner at the operating position or to located a remote automatic tuner in the attic such as one of the SGC units and simply run RG58 to the operating position. Such an arrangement will work all bands 80-10 M with no difficulty. You will make tons of 80M cw contacts.

Thomas KN4LF Says:

Any closed loop with a length less than a full wave loop on the fundamental frequency will have allot of capacitive reactance and "may" radiate poorly, not take high power and create arcing in the antenna tuner. In my experiments with a full wave loop on 160 meters I started with the full wave of 558 feet and kept shrinking it down under a full wave until the above problems arose. I was able to shorten it from 558 feet to 418 feet.

73 & Happy New Year,
Thomas F. Giella, KN4LF
Lakeland, FL, USA
Grid Square EL97AW
27 57 26.5 N 81 56 46.6 W
kn4lf@arrl.net

PODXS 070 PSK Club #349

Proof Of God Through Science: http://www.cosmicfingerprints.com/audio/newevidence.htm
KN4LF Amateur & SWL Radio History: http://www.kn4lf.com/index.htm
KN4LF MF Radio Propagation Theory Notes: http://www.kn4lf.com/kn4lf8.htm

1447. Re: [SkyWires] hf loop antenna

Yahoo group: SkyWires
Date: 2005-12-29 16:25:18 UTC
From: charles allison
Topic: 1433 Message: 1447

Bob,

Having a loop at 15 ft or so seems to lower the input impedance to below 50 ohms, perhaps down to 15 or 20 ohms while a loop higher up will tend towards something like 100 ohms. 4:1 baluns are used to raise the impedance rather than lower them. Also, other bands tend to have yet different impedances. I used the 1:1 current balun because I had it more than any other reason. Some people use baluns and some use coax connected directly to the loop wire. If I were feeding a section of ladder line - I'd probably build one of Dr Ace's 4:1 baluns out of pvc pipe and old electrical wire but at present, I'm not using any ladder line on this loop. Come to think of it, I already built one of his baluns and it's on an 80m loop with about 30 ft of 450 ohm ladder line that we made up for field day. That loop itself uses electric fence wire (17ga bare aluminum) and after we finally fixed 2 runs of defective coax, it actually worked for field day but it was more like 25 to 35 ft up in the trees down at the county courthouse.

best regards,

Charles
wb5izd

a
>
> Message: 2
> Date: Wed, 28 Dec 2005 08:07:36 -0800
> From: "BOB" <k6mit@...>
> Subject: Re: hf loop antenna
>
> thanks for the info charles....but im wondering why you feed the loop with a one to one balun.....everything
> i read says to use a four to one.
>
> [This message contained attachments]
>
>
>

1448. Re: [SkyWires] HF Loop Antenna

Yahoo group: SkyWires
Date: 2005-12-29 19:43:03 UTC
From: Jim Dunstan
Topic: 1446 Message: 1448

At 11:04 AM 29/12/2005 -0500, you wrote:
>Jim VE3CI Said:
>
> The dimensions 20x25 will allow a horizontal loop about 80' in diameter
> which will load very well on 75/80M with a tuner. The alternatives are to
> either run a parallel feed line such as 300 ohm TV twin lead or 450 ohm
> ladder line down to a tuner at the operating position or to located a
> remote automatic tuner in the attic such as one of the SGC units and
> simply
> run RG58 to the operating position. Such an arrangement will work all
> bands 80-10 M with no difficulty. You will make tons of 80M cw contacts.
>Thomas KN4LF Says:
>
>Any closed loop with a length less than a full wave loop on the
>fundamental frequency will have allot of capacitive reactance and "may"
>radiate poorly, not take high power and create arcing in the antenna
>tuner. In my experiments with a full wave loop on 160 meters I started
>with the full wave of 558 feet and kept shrinking it down under a full
>wave until the above problems arose. I was able to shorten it from 558
>feet to 418 feet.
>
>73 & Happy New Year,
>Thomas F. Giella, KN4LF
>Lakeland, FL, USA
>Grid Square EL97AW
>27 57 26.5 N 81 56 46.6 W
><mailto:kn4lf@...>kn4lf@...

Hi Thomas,

Well the question will be how do you get your 418 ft loop into the fellow's attic (20x25 ft) ?? He would like to make some contacts on 80M cw. I know he won't have any problem making contacts with a tuned loop 80 ft in dia. I have loaded such loops .... about 80' in 1, 2, and 3 turn loops with a simple balanced tuner and 100W. No arc, no smoke. Worked all bands. the single turn 80ft loop was the best.

I am not a fan of horizontal loops .... each to his own .... but I have used 80' loop vertically hung up in the trees .... works great 40-10M .... and not too bad on 75M. However putting it horizontal in the attic will no doubt limit its effectiveness.

By the way, I have experimented with 1/2 wave length loops and find that they are directional when oriented in the vertical position and fed in the middle of one vertical side. They are a neat antenna on 20M .... about 9' square. I hang them in the trees such that they can be rotated. I feed

them with parallel line to my trusty balanced tuner. If you scale that up to 80M you would have a loop 36' square. Pretty hard to get that up in the vertical position ....

Jim, VE3CI

1449. Fwd: [SkyWires] HF Loop Antenna

Yahoo group: SkyWires
Date: 2005-12-29 19:51:21 UTC
From: Jeffrey Embry
Topic: 1449 Message: 1449
Attachments: 2 described; binary payloads are missing from this source WARC

[Attachment content not displayed]

1451. HF Loop Antenna

Yahoo group: SkyWires
Date: 2005-12-30 15:16:07 UTC
From: Thomas Giella KN4LF
Topic: 1446 Message: 1451
Attachments: 1 described; binary payloads are missing from this source WARC

KN4LF Says:
I forgot to mention that when I trimmed my 160 meter full wave loop from 558 to 418 feet the reason it worked was because the 110 feet of 450 window line acted as part of the antenna, as I still had close to a full wave electrically. But if you use a balun at a feedpoint the feedline will not radiate and you lose this advantage.

Jim yes it would obviously be impossible to get a 80 meter full wave loop in an attic without multiple turns, which would counteract the whole idea of the full wave loop which needs allot of open capture area. The small vertical transmit loop you mention works real well though.

KN4LF Said:
Any closed loop with a length less than a full wave loop on the fundamental frequency will have allot of capacitive reactance and "may" radiate poorly, not take high power and create arcing in the antenna tuner. In my experiments with a full wave loop on 160 meters I started with the full wave of 558 feet and kept shrinking it down under a full wave until the above problems arose. I was able to shorten it from 558 feet to 418 feet.

73 & Happy New Year,
Thomas F. Giella, KN4LF
Lakeland, FL, USA
Grid Square EL97AW
27 57 26.5 N 81 56 46.6 W
kn4lf@...

KN4LF Amateur & SWL Radio History: http://www.kn4lf.com

1452. test

Yahoo group: SkyWires
Date: 2006-01-08 01:29:26 UTC
From: Terry WA0ITP
Topic: 1452 Message: 1452

Checking to see if I can make the list..
72 73
Terry, WA0ITP

1453. Free amature radio book download

Yahoo group: SkyWires
Date: 2006-01-12 21:12:33 UTC
From: electronicparts2002
Topic: 1453 Message: 1453

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thank you
leon @ Technology Systems

1454. Free amature radio book download

Yahoo group: SkyWires
Date: 2006-01-12 21:25:23 UTC
From: Lake Hodges Radio
Topic: 1453 Message: 1454

If that is true, you really ought to spell amateur correctly.

At 01:12 PM 1/12/2006, electronicparts2002 wrote:
>We have added a FREE copy of the 1959 Amature Radio Handbook to our
>website. you can download it for FREE. all 890 pages in one file. pdf
>format.
>www.tech-systems-labs.com/books.htm
>thank you
>leon @ Technology Systems

1455. Re: [SkyWires] Free amature radio book download

Yahoo group: SkyWires
Date: 2006-01-12 22:27:55 UTC
From: Dr.Ace Ratliff
Topic: 1453 Message: 1455

----- Original Message -----
From: Lake Hodges Radio
To: SkyWires@yahoogroups.com ; SkyWires@yahoogroups.com
Sent: Thursday, January 12, 2006 4:25 PM
Subject: [SkyWires] Free amature radio book download

If that is true, you really ought to spell amateur correctly.

At 01:12 PM 1/12/2006, electronicparts2002 wrote:

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format.
www.tech-systems-labs.com/books.htm
thank you
leon @ Technology Systems

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supplied.

Ace - WH2T

1456. Re: [SkyWires] Free amature radio book download

Yahoo group: SkyWires
Date: 2006-01-13 00:30:08 UTC
From: Dr.Ace Ratliff
Topic: 1453 Message: 1456

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Ace - WH2T

----- Original Message -----
From: Lake Hodges Radio
To: SkyWires@yahoogroups.com ; SkyWires@yahoogroups.com
Sent: Thursday, January 12, 2006 4:25 PM
Subject: [SkyWires] Free amature radio book download

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thank you
leon @ Technology Systems

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---
YAHOO! GROUPS LINKS

a.. Visit your group "SkyWires" on the web.

b.. To unsubscribe from this group, send an email to:
SkyWires-unsubscribe@yahoogroups.com

c.. Your use of Yahoo! Groups is subject to the Yahoo! Terms of Service.

1457. RE: [SkyWires] Free amature radio book download

Yahoo group: SkyWires
Date: 2006-01-13 00:40:49 UTC
From: Bruce Wilson
Topic: 1453 Message: 1457

This link has worked for me (with very fast download times, I must add) for the past several hours. Not that I've tried continually. Maybe the site had maxed out its connections when you tried it.

I'm curious, how much time did the link waste?

--
Bruce Wilson
Department of Chemistry
Utah Valley State College
Office: Bruce.Wilson@..., 801-863-7138, SB 220a
Mobile: b.e.wilson@..., 801-360-8089
Radio: KF7K on 146.62 or 146.76 MHz

_____

From: SkyWires@yahoogroups.com [mailto:SkyWires@yahoogroups.com] On Behalf Of Dr.Ace Ratliff
Sent: Thursday, January 12, 2006 5:30 PM
To: SkyWires@yahoogroups.com
Subject: Re: [SkyWires] Free amature radio book download

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Ace - WH2T

----- Original Message -----
From: Lake <mailto:lakehodgesradio@...> Hodges Radio
To: SkyWires@yahoogroups.com ; SkyWires@yahoogroups.com
Sent: Thursday, January 12, 2006 4:25 PM
Subject: [SkyWires] Free amature radio book download

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leon @ Technology Systems

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* Visit your group "SkyWires <http://groups.yahoo.com/group/SkyWires>" on the web.

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<mailto:SkyWires-unsubscribe@yahoogroups.com?subject=Unsubscribe>

* Your use of Yahoo! Groups is subject to the Yahoo! Terms of Service <http://docs.yahoo.com/info/terms/> .

1458. SV: [SkyWires] Free amature radio book download

Yahoo group: SkyWires
Date: 2006-01-13 00:46:20 UTC
From: SM5WPW: Michael Persson
Topic: 1453 Message: 1458

The link works fine here i Sweden /Micke SM5WPW

-----Ursprungligt meddelande-----
Från: SkyWires@yahoogroups.com [mailto:SkyWires@yahoogroups.com] För
Bruce Wilson
Skickat: den 13 januari 2006 01:41
Till: SkyWires@yahoogroups.com
Ämne: RE: [SkyWires] Free amature radio book download

This link has worked for me (with very fast download times, I must add)
for the past several hours. Not that I've tried continually. Maybe the
site had maxed out its connections when you tried it.

I'm curious, how much time did the link waste?

--
Bruce Wilson
Department of Chemistry
Utah Valley State College
Office: Bruce.Wilson@..., 801-863-7138, SB 220a
Mobile: b.e.wilson@..., 801-360-8089
Radio: KF7K on 146.62 or 146.76 MHz

From: SkyWires@yahoogroups.com [mailto:SkyWires@yahoogroups.com] On
Behalf Of Dr.Ace Ratliff
Sent: Thursday, January 12, 2006 5:30 PM
To: SkyWires@yahoogroups.com
Subject: Re: [SkyWires] Free amature radio book download

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Ace - WH2T
----- Original Message -----

From: Lake Hodges Radio <mailto:lakehodgesradio@...>
To: <mailto:SkyWires@yahoogroups.com> SkyWires@yahoogroups.com ;
SkyWires@yahoogroups. <mailto:SkyWires@yahoogroups.com> com

<mailto:SkyWires@yahoogroups.com> Sent: Thursday, January 12, 2006 4:25
PM
<mailto:SkyWires@yahoogroups.com> Subject: [SkyWires] Free amature
radio book download
<mailto:SkyWires@yahoogroups.com>
<mailto:SkyWires@yahoogroups.com>
If that is true, you really ought to spell amateur correctly.

At 01:12 PM 1/12/2006, electronicparts2002 wrote:

<mailto:SkyWires@yahoogroups.com> We have added a FREE copy of the 1959
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Ham radio sales

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Ham+radio+sales&w3=Ham+radio+outlet&c=3&s=61&.sig=_q02DhFgP_9cgeKLt0zFOQ
> Ham radio outlet

<http://groups.yahoo.com/gads?t=ms&k=Ham+radio+outlet&w1=Loop+antenna&w2
=Ham+radio+sales&w3=Ham+radio+outlet&c=3&s=61&.sig=wMW1pOUpJT4nrgQItAKD4
g>

<http://groups.yahoo.com/gads?t=ms&k=Ham+radio+outlet&w1=Loop+antenna&w2
=Ham+radio+sales&w3=Ham+radio+outlet&c=3&s=61&.sig=wMW1pOUpJT4nrgQItAKD4
g>
_____

<http://groups.yahoo.com/gads?t=ms&k=Ham+radio+outlet&w1=Loop+antenna&w2
=Ham+radio+sales&w3=Ham+radio+outlet&c=3&s=61&.sig=wMW1pOUpJT4nrgQItAKD4
g> YAHOO! GROUPS LINKS

<http://groups.yahoo.com/gads?t=ms&k=Ham+radio+outlet&w1=Loop+antenna&w2
=Ham+radio+sales&w3=Ham+radio+outlet&c=3&s=61&.sig=wMW1pOUpJT4nrgQItAKD4
g>

<http://groups.yahoo.com/gads?t=ms&k=Ham+radio+outlet&w1=Loop+antenna&w2
=Ham+radio+sales&w3=Ham+radio+outlet&c=3&s=61&.sig=wMW1pOUpJT4nrgQItAKD4

g> * Visit your group "SkyWires" on the web.

<http://groups.yahoo.com/group/SkyWires> * To unsubscribe from
this group, send an email to:
SkyWires-unsubscribe@yahoogroups.com

<mailto:SkyWires-unsubscribe@yahoogroups.com?subject=Unsubscribe> *
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1459. Re: [SkyWires] Free amature radio book download

Yahoo group: SkyWires
Date: 2006-01-13 00:55:31 UTC
From: ve1vq
Topic: 1453 Message: 1459

Dr.Ace Ratliff wrote:
>
>
>
> What a waste of time !

They must have made some corrections. I can view it now (2054 hrs.
Atlantic) without any problems.

Dave
VE1VQ

1460. Re: [SkyWires] Free amature radio book download

Yahoo group: SkyWires
Date: 2006-01-13 04:54:44 UTC
From: NØATH
Topic: 1453 Message: 1460

I clicked on the forwarded word "download" and it did perfectly for me.
But then I am neither a Dr. nor an Ace - just an amicher.
Dave / NØATH

----- Original Message -----
From: Dr.Ace Ratliff
To: SkyWires@yahoogroups.com
Sent: Thursday, January 12, 2006 6:30 PM
Subject: Re: [SkyWires] Free amature radio book download

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Ace - WH2T

----- Original Message -----
From: Lake Hodges Radio
To: SkyWires@yahoogroups.com ; SkyWires@yahoogroups.com
Sent: Thursday, January 12, 2006 4:25 PM
Subject: [SkyWires] Free amature radio book download

If that is true, you really ought to spell amateur correctly.

1461. Re: [SkyWires] Free amature radio book download

Yahoo group: SkyWires
Date: 2006-01-13 05:33:54 UTC
From: Walter A Fipps Jr.
Topic: 1453 Message: 1461

My Anti Virus said the file was infected, and aborted!
Could be you were lucky?

73
de
KD4OVR
Walter

Dr.Ace Ratliff wrote:

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> What a waste of time !
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> Ace - WH2T
>
> ----- Original Message -----
> From: Lake Hodges Radio <mailto:lakehodgesradio@...>
> To: SkyWires@yahoogroups.com <mailto:SkyWires@yahoogroups.com> ;
> SkyWires@yahoogroups.com <mailto:SkyWires@yahoogroups.com>
> Sent: Thursday, January 12, 2006 4:25 PM
> Subject: [SkyWires] Free amature radio book download
>
>
> If that is true, you really ought to spell amateur correctly.
>
>
>
> At 01:12 PM 1/12/2006, electronicparts2002 wrote:
>

>> We have added a FREE copy of the 1959 Amature Radio Handbook to our
>> website. you can download it for FREE. all 890 pages in one file.
>> pdf
>> format.
>> www.tech-systems-labs.com/books.htm
>> <http://www.tech-systems-labs.com/books.htm>
>> thank you
>> leon @ Technology Systems
>
>
> ---
> YAHOO! GROUPS LINKS
>
> * Visit your group "SkyWires
> <http://groups.yahoo.com/group/SkyWires>" on the web.
>
> * To unsubscribe from this group, send an email to:
> SkyWires-unsubscribe@yahoogroups.com
> <mailto:SkyWires-unsubscribe@yahoogroups.com?subject=Unsubscribe>
>
> * Your use of Yahoo! Groups is subject to the Yahoo! Terms of
> Service <http://docs.yahoo.com/info/terms/>.
>
>
> ---
>

1462. Re: [SkyWires] Digest Number 450

Yahoo group: SkyWires
Date: 2006-01-13 15:57:49 UTC
From: Scott Waddell
Topic: 1462 Message: 1462

Worked okay for me - Very fast download
NS5P

--

_____
Play 100s of games for FREE! http://games.mail.com/

1463. Re: [SkyWires] Free amature radio book download

Yahoo group: SkyWires
Date: 2006-01-13 16:16:59 UTC
From: Dr.Ace Ratliff
Topic: 1453 Message: 1463

Must have been a blessing in disguise.
Ace - WH2T
----- Original Message -----
From: Walter A Fipps Jr.
To: SkyWires@yahoogroups.com
Sent: Friday, January 13, 2006 12:33 AM
Subject: Re: [SkyWires] Free amature radio book download

My Anti Virus said the file was infected, and aborted!
Could be you were lucky?

73
de
KD4OVR
Walter

Dr.Ace Ratliff wrote:

What a waste of time !
When I click Any link including this link
"Amateur Radio Handbook 1959 This was a bigger seller then the ARRL Handbook. Full 810 pages in pdf format size 60 meg download "
I get -
You are not authorized to view this page
You might not have permission to view this directory or page using the credentials you supplied.

Ace - WH2T

----- Original Message -----
From: Lake Hodges Radio
To: SkyWires@yahoogroups.com ; SkyWires@yahoogroups.com
Sent: Thursday, January 12, 2006 4:25 PM
Subject: [SkyWires] Free amature radio book download

If that is true, you really ought to spell amateur correctly.

At 01:12 PM 1/12/2006, electronicparts2002 wrote:

We have added a FREE copy of the 1959 Amature Radio Handbook to our
website. you can download it for FREE. all 890 pages in one file. pdf
format.
www.tech-systems-labs.com/books.htm
thank you
leon @ Technology Systems

YAHOO! GROUPS LINKS

a.. Visit your group "SkyWires" on the web.

b.. To unsubscribe from this group, send an email to:
SkyWires-unsubscribe@yahoogroups.com

c.. Your use of Yahoo! Groups is subject to the Yahoo! Terms of Service.

1464. Re: Free amature radio book download

Yahoo group: SkyWires
Date: 2006-01-13 16:18:23 UTC
From: Greg W:-)
Topic: 1453 Message: 1464

Why not stop your bitchin about spelling and thank the person for
adding content to the group.

==========

--- In SkyWires@yahoogroups.com, Lake Hodges Radio
<lakehodgesradio@c...> wrote:
>
>
> If that is true, you really ought to spell amateur correctly.

1465. Re: [SkyWires] Free radio (but NOT amateur radio) book download

Yahoo group: SkyWires
Date: 2006-01-13 18:41:41 UTC
From: Andy
Topic: 1465 Message: 1465

OK, for kicks I downloaded it.

Note: This is NOT the 1959 ARRL Radio Amateur's Handbook. Its title is "The Radio Handbook," 15th Edition, by well-known author Bill Orr. Looks like it is a lot of radio theory, but without an emphasis on amateur radio.

At 60 Megs, it is not for those with dial-up internet access.

Did not have a problem getting it to download. Perhaps the "not authorized" message one of you got is because of an internet setting on your computer, or cookies, or whatever.

Did not get any warnings about a virus either. I even gave it an extra scan to make sure, and the file seems to be OK. (Can virii hide in PDF files, anyway?) If it matters, my virus checker updated its database earlier this morning.

The book is copyrighted. Is the copyright still in effect?

Regards,
Andy

1466. Re: Free radio (but NOT amateur radio) book download

Yahoo group: SkyWires
Date: 2006-01-14 04:39:31 UTC
From: electronicparts2002
Topic: 1465 Message: 1466

HELLO
the copyright was never renewed
i cannot believe the impact that free book had on the group.
it is not virous infected.
no such thing as "aurtorized page" for it.
but i am very happy to say that in 24 hours 3266 people from 17
groups looked at it. 318 people download it. also all books and
manuals and free design software on site had a record 128,000 meg
downloaded that is .012 terabyte in 24 hours. i am happy so many
people could use those old data books etc.
leon @ technology systems

--- In SkyWires@yahoogroups.com, "Andy" <ingraham.ma.ultranet@r...>
wrote:
>
> OK, for kicks I downloaded it.
>
> Note: This is NOT the 1959 ARRL Radio Amateur's Handbook. Its
title is "The
> Radio Handbook," 15th Edition, by well-known author Bill Orr.
Looks like it
> is a lot of radio theory, but without an emphasis on amateur radio.
>
> At 60 Megs, it is not for those with dial-up internet access.
>
> Did not have a problem getting it to download. Perhaps the "not
authorized"
> message one of you got is because of an internet setting on your
computer,
> or cookies, or whatever.
>
> Did not get any warnings about a virus either. I even gave it an
extra scan
> to make sure, and the file seems to be OK. (Can virii hide in PDF
files,
> anyway?) If it matters, my virus checker updated its database
earlier this
> morning.
>
> The book is copyrighted. Is the copyright still in effect?
>
> Regards,
> Andy
>

1467. Free radio (but NOT amateur radio) book download

Yahoo group: SkyWires
Date: 2006-01-14 19:00:55 UTC
From: ve7agw
Topic: 1465 Message: 1467

Hi to the group,

I would like to thank the person who made this download possible. The book has a lot of information that my students could use and I've now made it available to them as a download as well.

I've found that there are three types of people 1/. Those who lead. 2/. Those who follow. 3/. Those who complain about the first two.

It's been made available, it's free, so enjoy it and quite complaining and looking for something to bitch about.

Ve7agw, Al

Re: HELLO
the copyright was never renewed
i cannot believe the impact that free book had on the group.
it is not virous infected.
no such thing as "aurtorized page" for it.
but i am very happy to say that in 24 hours 3266 people from 17 groups looked at it. 318 people download it. also all books and manuals and free design software on site had a record 128,000 meg downloaded that is .012 terabyte in 24 hours. i am happy so many people could use those old data books etc.
leon @ technology systems

1468. question

Yahoo group: SkyWires
Date: 2006-01-14 20:31:58 UTC
From: Jim Dunstan
Topic: 1468 Message: 1468

Hello group,

My question doesn't relate directly to a large wire loop. However my question may have general relevance to wire antennas. I want to get on 80M.

My present antenna system provides excellent performance on 40/20/15/10 Meters using a rotatable trapped dipole. My steel tower is located near to my operating position which is close to one end of my property. I have several tall trees at the other end (approx. 90 feet distance). I could string a shortened dipole between the trees and the steel tower and suspend a feed line in the middle. However I want to avoid this and would like to feed the antenna with coax feed line attached to the steel tower as is the cable feeding my present antenna. Given this situation one half of my dipole (65') would extend from the tower to the trees. The other half of the dipole is the question (I have no trees on the other side of my tower).

The other side of the dipole will be directed straight down forming a center fed inverted 'L' antenna. However, in order to do this and keep the end at least 6' above ground would require a tower approximately 70' high. My Tower is 48' high (22' short). I am not particularly interested in vertically oriented radiation of a vertical half of a half wave antenna .... and I will have to fold it in some way to compensate for the 22' shortfall. It occurred to me that I could construct this vertical half of my dipole (65') by folding it in half (32.5'). I could use open wire line 32.5' in length. One side of the open wire line would be connected to the center feed point of the dipole, the feed line would drop 32.5' at which point the feed line would be shorted and result in another 32.5' running parallel right back up to the feed point and left unconnected to anything. The antenna currents on the feed line would be equal and opposite in direction thus cancelling out radiation from this half of the dipole for the most part.

The result would be: A horizontal 1/4 wave wire (65') at 45' which would radiate as one side of a normal 1/2 wave dipole. The other half of the dipole would consist of 32.5' of balanced line that would hang in a vertical orientation (about 1' from the tower) and represent an electrical 1/4 wavelength but basically cancel out radiation. The feed point would remain close the 50 ohm impedance ... easily fed with standard coax. with reasonable SWR.

Will it work? .... eg reasonable feed point impedance, vertical component cancelled out, and dipole reasonably balanced, and shortened half using the stub arrangement. Comments?

Thanks

Jim, VE3CI

1469. 4.1 or 1.1 the real answer?

Yahoo group: SkyWires
Date: 2006-01-15 22:49:56 UTC
From: radioman1044
Topic: 1469 Message: 1469

Hello....
I have had this big loop up for about 3 years and have really liked it but as I read all the information and keep changing it.. Here is the setup. 530 feet 14g wire up about 50 feet, fed with 60 feet of 450 ohm ladder line right into the shack into the tuner. Now the tuner has a 1.1 curent balun, and it gets very warm/hot with 1kw out on 1.850 the tuner is T network mfj989D (the new one) with the 2-500pf caps. I have tryed a dx engineering 1.1 10kw balun hooked right to the tuner and have the same warm/hot results. The inductor seems to stay cool. The SWR is 1.1 down at about 1.720 but up at 1.850 is very high. I have also tryed a direct feed, right to the s239 on the back of the tuner, one side to the center and the other side to ground, No balun. This way of course there is no heat(no balun)....Is the wire just to long? Would a 4.1 balun be better that the 1.1? I hear guys running this way all the time but never hear about the hot balun. I have also installed a 100pf doorknob on the output cap and it just allowed for a little lower inductor setting.
Thanks for any input......
Larry

1470. Re: 4.1 or 1.1 the real answer?

Yahoo group: SkyWires
Date: 2006-01-16 17:24:17 UTC
From: spark_gap2000
Topic: 1469 Message: 1470

Hi

Since a loop antenna is really a balanced device with in your case a
balanced feedline the best tuner in this case would be a balanced
feedline tuner.
MFJ now has a balanced tuner and maybe you should look into that.
The old Johnson matchbox is a balanced feedline tuner but does not
cover 160 meters.
Sid

--- In SkyWires@yahoogroups.com, "radioman1044" <lgwsaw@n...> wrote:
>
> Hello....
> I have had this big loop up for about 3 years and have really liked it
> but as I read all the information and keep changing it.. Here is the
> setup. 530 feet 14g wire up about 50 feet, fed with 60 feet of 450 ohm
> ladder line right into the shack into the tuner. Now the tuner has a
> 1.1 curent balun, and it gets very warm/hot with 1kw out on 1.850 the
> tuner is T network mfj989D (the new one) with the 2-500pf caps. I have
> tryed a dx engineering 1.1 10kw balun hooked right to the tuner and
> have the same warm/hot results. The inductor seems to stay cool. The
> SWR is 1.1 down at about 1.720 but up at 1.850 is very high. I have
> also tryed a direct feed, right to the s239 on the back of the tuner,
> one side to the center and the other side to ground, No balun. This
> way of course there is no heat(no balun)....Is the wire just to long?
> Would a 4.1 balun be better that the 1.1? I hear guys running this way
> all the time but never hear about the hot balun. I have also installed
> a 100pf doorknob on the output cap and it just allowed for a little
> lower inductor setting.
> Thanks for any input......
> Larry
>

1471. Re: 4.1 or 1.1 the real answer?

Yahoo group: SkyWires
Date: 2006-01-18 05:34:26 UTC
From: nc9k
Topic: 1469 Message: 1471

Hello Larry,

Your 1:1 current balun is heating because it is trying to isolate a high impedance load from ground. For a current balun to be effective its common mode impedance should be at least 10 times than the impedance it is trying to isolate. Even though you might have a 4:1 balun between the ladderline and the current balun the "cold" side of the 4:1 balun is still at 225 ohms above ground (assuming a non-reactive 450 ohm load at the antenna feed point) and this high impedance is still presented to your current balun. If you have a lower impedance such as 100 ohms at the antenna feed point and a reactive component the ladderline will "transform" that combination into a new higher resistance and reactance component that both the 4:1 balun and the 1:1 current balun will have to deal with. Considering such baluns are usually designed to be fed from 50 ohm and to 200 ohms for the 4:1 and to 50 ohms for the 1:1 both types of baluns basically lose their predicted electrical performance and can become very lossy in the process. Richard Measures and W4RNL in his cebik.com website give very good analysis of these conditions.

The only solutions that seem viable are either link coupled tuners such as the old Johnson matchboxes (80-10M) or the ganged dual roller inductor balanced L tuners that also present a true balanced feed to the feed system.

I've been experimenting with a 40M and a 160M loop for the past few years both fed with 450 ohm ladderline and presently have a pair of Johnson KW matchboxes for 80-10M and am using for 160M a Murch UT-2000B with factory triple core balun (in a standard T configuration I put it into - strapped both input capacitor halves together). The Murch is the only commercially made "tuner" that has achieved perfect feed balance for me on 160M.

I am building a 160M link coupler with Johnson AM broadcast band 5KW link coupler components into an old Johnson KW Matchbox. I am using a loaded Q of about 5. I've tested the 160m link coupler configuation on the bench at 1500W PEP into the 500 ft. loop and it performed nicely on 160M, flat match at 1900KC, and without touching the tuning controls, lower than 1.8:1 VSWR at the band edges and absolutely no measureable component heating, and perfect output balance across the band.

One thing I have noticed with obtaining perfect balance on the feed that I can hear foreign DX consitantly on 160 and 80M because of tyhe greatly reduced manmade and lightning nois pickup on the feedline. When I call them they usually respond. You have to hear 'em to

work 'em.

Best to you with your project.

73's Leland de NC9K

--- In SkyWires@yahoogroups.com, "radioman1044" <lgwsaw@n...> wrote:
>
> Hello....
> I have had this big loop up for about 3 years and have really liked
it
> but as I read all the information and keep changing it.. Here is
the
> setup. 530 feet 14g wire up about 50 feet, fed with 60 feet of 450
ohm
> ladder line right into the shack into the tuner. Now the tuner has
a
> 1.1 curent balun, and it gets very warm/hot with 1kw out on 1.850
the
> tuner is T network mfj989D (the new one) with the 2-500pf caps. I
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> tryed a dx engineering 1.1 10kw balun hooked right to the tuner and
> have the same warm/hot results. The inductor seems to stay cool.
The
> SWR is 1.1 down at about 1.720 but up at 1.850 is very high. I have
> also tryed a direct feed, right to the s239 on the back of the
tuner,
> one side to the center and the other side to ground, No balun. This
> way of course there is no heat(no balun)....Is the wire just to
long?
> Would a 4.1 balun be better that the 1.1? I hear guys running this
way
> all the time but never hear about the hot balun. I have also
installed
> a 100pf doorknob on the output cap and it just allowed for a little
> lower inductor setting.
> Thanks for any input......
> Larry
>

1473. Re: 4.1 or 1.1 the real answer?

Yahoo group: SkyWires
Date: 2006-01-20 17:57:00 UTC
From: radioman1044
Topic: 1469 Message: 1473

Thanks for the good information Leland------My Father has old balanced tuner with 2 large inductors and one cap mounted on a board that I will have to check out.....Thanks and 73 Larry--- In SkyWires@yahoogroups.com, "nc9k" <jasminemeese@h...> wrote:
>
> Hello Larry,
>
> Your 1:1 current balun is heating because it is trying to isolate a
> high impedance load from ground. For a current balun to be effective
> its common mode impedance should be at least 10 times than the
> impedance it is trying to isolate. Even though you might have a 4:1
> balun between the ladderline and the current balun the "cold" side of
> the 4:1 balun is still at 225 ohms above ground (assuming a non-
> reactive 450 ohm load at the antenna feed point) and this high
> impedance is still presented to your current balun. If you have a
> lower impedance such as 100 ohms at the antenna feed point and a
> reactive component the ladderline will "transform" that combination
> into a new higher resistance and reactance component that both the
> 4:1 balun and the 1:1 current balun will have to deal with.
> Considering such baluns are usually designed to be fed from 50 ohm
> and to 200 ohms for the 4:1 and to 50 ohms for the 1:1 both types of
> baluns basically lose their predicted electrical performance and can
> become very lossy in the process. Richard Measures and W4RNL in his
> cebik.com website give very good analysis of these conditions.
>
> The only solutions that seem viable are either link coupled tuners
> such as the old Johnson matchboxes (80-10M) or the ganged dual roller
> inductor balanced L tuners that also present a true balanced feed to
> the feed system.
>
> I've been experimenting with a 40M and a 160M loop for the past few
> years both fed with 450 ohm ladderline and presently have a pair of
> Johnson KW matchboxes for 80-10M and am using for 160M a Murch UT-

> 2000B with factory triple core balun (in a standard T
configuration I
> put it into - strapped both input capacitor halves together). The
> Murch is the only commercially made "tuner" that has achieved
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> feed balance for me on 160M.
>
> I am building a 160M link coupler with Johnson AM broadcast band
5KW
> link coupler components into an old Johnson KW Matchbox. I am
using a
> loaded Q of about 5. I've tested the 160m link coupler
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> on the bench at 1500W PEP into the 500 ft. loop and it performed
> nicely on 160M, flat match at 1900KC, and without touching the
tuning
> controls, lower than 1.8:1 VSWR at the band edges and absolutely
no
> measureable component heating, and perfect output balance across
the
> band.
>
> One thing I have noticed with obtaining perfect balance on the
feed
> that I can hear foreign DX consitantly on 160 and 80M because of
tyhe
> greatly reduced manmade and lightning nois pickup on the feedline.
> When I call them they usually respond. You have to hear 'em to
> work 'em.
>
> Best to you with your project.
>
> 73's Leland de NC9K
>
>
> --- In SkyWires@yahoogroups.com, "radioman1044" <lgwsaw@n...>
wrote:
> >
> > Hello....
> > I have had this big loop up for about 3 years and have really
liked
> it
> > but as I read all the information and keep changing it.. Here is
> the
> > setup. 530 feet 14g wire up about 50 feet, fed with 60 feet of
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> ohm
> > ladder line right into the shack into the tuner. Now the tuner
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> a

> > 1.1 curent balun, and it gets very warm/hot with 1kw out on
1.850
> the
> > tuner is T network mfj989D (the new one) with the 2-500pf caps.
I
> have
> > tryed a dx engineering 1.1 10kw balun hooked right to the tuner
and
> > have the same warm/hot results. The inductor seems to stay cool.
> The
> > SWR is 1.1 down at about 1.720 but up at 1.850 is very high. I
have
> > also tryed a direct feed, right to the s239 on the back of the
> tuner,
> > one side to the center and the other side to ground, No balun.
This
> > way of course there is no heat(no balun)....Is the wire just to
> long?
> > Would a 4.1 balun be better that the 1.1? I hear guys running
this
> way
> > all the time but never hear about the hot balun. I have also
> installed
> > a 100pf doorknob on the output cap and it just allowed for a
little
> > lower inductor setting.
> > Thanks for any input......
> > Larry
> >
>

1474. Loop Advice

Yahoo group: SkyWires
Date: 2006-01-21 00:06:28 UTC
From: Scott Gordon
Topic: 1474 Message: 1474

I have had a 75 meter loop up and down for several years. I guess I try a different antenna every once and a while and always end up putting my loop back up since reports are always the best. I feed it with 450 ohm line and use it on all bands. I even had good results shorting the ends together and using it on 160 meters.

Now my question, I would like to get up a loop on 160 meters. But my measurements I am only going to be around 450 and maybe can get it to near 500 feet which is probably 50 to 100 feet or so short. I will be using 450 ohm line. Does anyone know of what kind of results I might see with this length of loop? Should I just stick with my 75 meter or will I see any gains going bigger?

--
Scott Gordon
KQ8RP

1475. Re: Loop Advice

Yahoo group: SkyWires
Date: 2006-01-21 04:30:25 UTC
From: nc9k
Topic: 1474 Message: 1475

Hello Scott,

I've been experimenting with a 450 ohm ladderline fed 40M loop on 80M with fine results. The ladderline is 75 ft. long. The loop itself is only a halfwave in length and presents something like 10 ohms feedpoint resistance with a high capacuitive reactance. The feedline length of about 1/4 wave on 80M transforms the 10 ohms to a much higher resistance that my Johnson KW Matchbox has no trouble with even at 1500 watts input.

With 450 ft. instead of 530 ft. on 160M your loop feed resistance will be about 30% lower than the theoretical 100 ohms and you will have a sizable capacitive reactance component at the antenna to feedline junction. The length of your feedline in wavelengths will determine the resistive and reactive components ultimately presented in your shack. You will have excellent results on 160M when you loadup into the setup. On 80M you will have almost 2 wavelengths up which put you at about a 45 degree angle of maximum radiation. You will be able to work excellent DX.

You can get up 530 ft of wire up if you fold part of the length in the form of a V. This V can come close to the shack and then connect the rest of the way into the shack via 450 ohm ladderline. This setup will get you close to 100 ohms feed impedance with low reactance at the antenna to feedline junction.

73's and good DX,

Leland NC9K

--- In SkyWires@yahoogroups.com, "Scott Gordon" <sgordon@w...> wrote:
>
> I have had a 75 meter loop up and down for several years. I guess
I
> try a different antenna every once and a while and always end up
> putting my loop back up since reports are always the best. I feed
it
> with 450 ohm line and use it on all bands. I even had good results
> shorting the ends together and using it on 160 meters.
>
> Now my question, I would like to get up a loop on 160 meters. But
my
> measurements I am only going to be around 450 and maybe can get it
to
> near 500 feet which is probably 50 to 100 feet or so short. I will
be

> using 450 ohm line. Does anyone know of what kind of results I
might
> see with this length of loop? Should I just stick with my 75 meter
or
> will I see any gains going bigger?
>
> --
> Scott Gordon
> KQ8RP
>

1476. RE: [SkyWires] Re: Loop Advice

Yahoo group: SkyWires
Date: 2006-01-21 04:44:04 UTC
From: Scott Gordon
Topic: 1474 Message: 1476

Leland,

Thanks for the information. I hope to get this up over the weekend.
I am not sure I understand when you say pull it back in a V?

----- ----
- -
- -
-
450 Line

Can't draw it here very well but are you saying where you pull the V back to connect the feedline there? I have about 75 foot of 450 ohm ladder line I will be using. My 75 meter antenna was in a Traiangle, this one will be the same but on larger.

Thanks,, Will let you know how it does.
Scott Gordon
888-428-6622
614-419-3077 Cell
AOL- scott1gordon

-----Original Message-----
From: SkyWires@yahoogroups.com [mailto:SkyWires@yahoogroups.com] On Behalf Of nc9k
Sent: Friday, January 20, 2006 11:30 PM
To: SkyWires@yahoogroups.com
Subject: [SkyWires] Re: Loop Advice

Hello Scott,

I've been experimenting with a 450 ohm ladderline fed 40M loop on 80M with fine results. The ladderline is 75 ft. long. The loop itself is only a halfwave in length and presents something like 10 ohms feedpoint resistance with a high capacuitive reactance. The feedline length of about 1/4 wave on 80M transforms the 10 ohms to a much higher resistance that my Johnson KW Matchbox has no trouble with even at 1500 watts input.

With 450 ft. instead of 530 ft. on 160M your loop feed resistance will be about 30% lower than the theoretical 100 ohms and you will have a sizable capacitive reactance component at the antenna to feedline junction. The length of your feedline in wavelengths will determine the resistive and reactive components ultimately presented in your shack. You will have excellent results on 160M when you loadup into the setup. On 80M you will have almost 2 wavelengths up which put you at about a 45 degree angle of maximum radiation. You

will be able to work excellent DX.

You can get up 530 ft of wire up if you fold part of the length in the form of a V. This V can come close to the shack and then connect the rest of the way into the shack via 450 ohm ladderline. This setup will get you close to 100 ohms feed impedance with low reactance at the antenna to feedline junction.

73's and good DX,

Leland NC9K

--- In SkyWires@yahoogroups.com, "Scott Gordon" <sgordon@w...> wrote:
>
> I have had a 75 meter loop up and down for several years. I guess
I
> try a different antenna every once and a while and always end up
> putting my loop back up since reports are always the best. I feed
it
> with 450 ohm line and use it on all bands. I even had good results
> shorting the ends together and using it on 160 meters.
>
> Now my question, I would like to get up a loop on 160 meters. But
my
> measurements I am only going to be around 450 and maybe can get it
to
> near 500 feet which is probably 50 to 100 feet or so short. I will
be
> using 450 ohm line. Does anyone know of what kind of results I
might
> see with this length of loop? Should I just stick with my 75 meter
or
> will I see any gains going bigger?
>
> --
> Scott Gordon
> KQ8RP
>

Yahoo! Groups Links

1477. Re: Loop Advice

Yahoo group: SkyWires
Date: 2006-01-21 05:53:53 UTC
From: nc9k
Topic: 1474 Message: 1477

Hello Scott,

Say you can put up a loop of 450 ft. circumference; this is a bit short for 160M. Make the loop 430 ft long and fill in the remaining 20 feet with nylon rope. Then attach 50 ft lengths of wire to the ends of the 430 ft. of wire and attach the opposite ends of the 50 ft wires to 450 ohm ladderline. (Be sure to use appropriate strain relief where needed to prevent wire breakage.) This will lengthen the antenna system to 530 ft. without too much pattern distortion. This is what I meant by pulling it back in a V.

73's Leland NC9K

-- In SkyWires@yahoogroups.com, "Scott Gordon" <sgordon@w...> wrote:
>
> Leland,
>
> Thanks for the information. I hope to get this up over the
weekend.
> I am not sure I understand when you say pull it back in a V?
>
> ----- ----
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> Can't draw it here very well but are you saying where you pull the V
> back to connect the feedline there? I have about 75 foot of 450 ohm
> ladder line I will be using. My 75 meter antenna was in a
Traiangle,
> this one will be the same but on larger.
>
> Thanks,, Will let you know how it does.
> Scott Gordon
> 888-428-6622
> 614-419-3077 Cell
> AOL- scott1gordon
>
>
>
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>

> -----Original Message-----
> From: SkyWires@yahoogroups.com [mailto:SkyWires@yahoogroups.com] On
> Behalf Of nc9k
> Sent: Friday, January 20, 2006 11:30 PM
> To: SkyWires@yahoogroups.com
> Subject: [SkyWires] Re: Loop Advice
>
>
> Hello Scott,
>
> I've been experimenting with a 450 ohm ladderline fed 40M loop on
80M
> with fine results. The ladderline is 75 ft. long. The loop itself
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> only a halfwave in length and presents something like 10 ohms
> feedpoint resistance with a high capacuitive reactance. The
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> length of about 1/4 wave on 80M transforms the 10 ohms to a much
> higher resistance that my Johnson KW Matchbox has no trouble with
> even at 1500 watts input.
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> With 450 ft. instead of 530 ft. on 160M your loop feed resistance
> will be about 30% lower than the theoretical 100 ohms and you will
> have a sizable capacitive reactance component at the antenna to
> feedline junction. The length of your feedline in wavelengths will
> determine the resistive and reactive components ultimately
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> loadup into the setup. On 80M you will have almost 2 wavelengths
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> You can get up 530 ft of wire up if you fold part of the length in
> the form of a V. This V can come close to the shack and then
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> the rest of the way into the shack via 450 ohm ladderline. This
> setup will get you close to 100 ohms feed impedance with low
> reactance at the antenna to feedline junction.
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> 73's and good DX,
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> --- In SkyWires@yahoogroups.com, "Scott Gordon" <sgordon@w...>
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> > Scott Gordon
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>
> Yahoo! Groups Links
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1478. QST article

Yahoo group: SkyWires
Date: 2006-01-22 18:25:06 UTC
From: jllamb62
Topic: 1478 Message: 1478

Why, when I go to links, do I get an Ad for Nationwide Note Buyers
instead of the article on the Loop Skywire antenna?
jll

1479. Re: [SkyWires] QST article

Yahoo group: SkyWires
Date: 2006-01-22 19:14:49 UTC
From: Jim Dunstan
Topic: 1478 Message: 1479

At 06:25 PM 22/01/2006 +0000, you wrote:
>Why, when I go to links, do I get an Ad for Nationwide Note Buyers
>instead of the article on the Loop Skywire antenna?
>jll

Hi,

Perhaps the link supports advertising for 'NNB' or NNB has put a little latent program on your machine that periodically redirects your browser to their site, or simply pops up on your machine periodically, or something supernatural is happening hi hi.

Jim

1480. RE: [SkyWires] QST article

Yahoo group: SkyWires
Date: 2006-01-22 20:10:32 UTC
From: Scott Gordon
Topic: 1478 Message: 1480

I guess someone saved that link when it was on my site. I will see if I can find it and save it as the old link.

Scott Gordon
888-428-6622
614-419-3077 Cell
AOL- scott1gordon
http://www.cashforyourloans.com/kq8rp

-----Original Message-----
From: SkyWires@yahoogroups.com [mailto:SkyWires@yahoogroups.com] On Behalf Of jllamb62
Sent: Sunday, January 22, 2006 1:25 PM
To: SkyWires@yahoogroups.com
Subject: [SkyWires] QST article

Why, when I go to links, do I get an Ad for Nationwide Note Buyers instead of the article on the Loop Skywire antenna?
jll

Yahoo! Groups Links

1481. RE: [SkyWires] QST article

Yahoo group: SkyWires
Date: 2006-01-22 21:32:19 UTC
From: Scott Gordon
Topic: 1478 Message: 1481

Here is a link that works.

http://srgproperties.inetusanow.net/files_custom/9467_2192.pdf

Scott Gordon
888-428-6622
614-419-3077 Cell
AOL- scott1gordon
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Yahoo! Groups Links

1482. RE: [SkyWires] Re: Loop Advice

Yahoo group: SkyWires
Date: 2006-01-24 15:05:57 UTC
From: Scott Gordon
Topic: 1474 Message: 1482

Nick,

Thanks for the help, I did get my loop up but will need to lengthen it. I calculate that right now I may be 90 feet short. It has a 3:1 match up around 2.3 mhz from what I can see on my old mfg swr analyzer.

I hooked this up to my tuner via 450 ohm ladder line run directly to the tuner. I was very discouraged witht the results. It was extremely noisy, much to the fact of greater then my vertical or windom. I had a 4:1 balun spare on the shelf so I hook it up and attached to the tuner coax connector and much to my belief the noise was gone and I worked several west coast stations on 40 meters with 100 watts with 59 reports. Signal was 1 to 2 S units better on receive the windom or vertical. I have made a couple contacts on 75 as well. I have not tried it out on 160m.

So I am not sure why my tuner would not work when connected directly with 450 ladder line? This is a old Dentron Clipperton-T antenna tuner. I do have a old MFJ on the shelf that I will try this with as well.

I know I can get about 30 more feet on the loop which will give me about 466 feet. The question that I have taken so long to ask you, if I cut the loop and add the rope then attach if I add in the wire 40 feet on each Vee can I do this anywhere in the loop or only at the feedpoint? I am not sure I can do this at the feedpoint area.

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-----Original Message-----
From: SkyWires@yahoogroups.com [mailto:SkyWires@yahoogroups.com] On Behalf Of nc9k
Sent: Saturday, January 21, 2006 12:54 AM
To: SkyWires@yahoogroups.com
Subject: [SkyWires] Re: Loop Advice

Hello Scott,

Say you can put up a loop of 450 ft. circumference; this is a bit short for 160M. Make the loop 430 ft long and fill in the remaining 20 feet with nylon rope. Then attach 50 ft lengths of wire to the ends of the 430 ft. of wire and attach the opposite ends of the 50 ft wires to 450 ohm ladderline. (Be sure to use appropriate strain relief where needed to prevent wire breakage.) This will lengthen the

antenna system to 530 ft. without too much pattern distortion. This
is what I meant by pulling it back in a V.

73's Leland NC9K

-- In SkyWires@yahoogroups.com, "Scott Gordon" <sgordon@w...> wrote:
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> Yahoo! Groups Links
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Yahoo! Groups Links

1483. Loop Advice

Yahoo group: SkyWires
Date: 2006-01-24 16:36:45 UTC
From: ve7agw
Topic: 1474 Message: 1483

Hi Scott and the group,

You can add more wire to the length of a loop at any point in the loop as long as you make your connection mechanically and electrically sound and protect the joint. That is unless you are using bare wire then you don't have to protect the jointing points.
The loop is just what it says a "loop" so adding to the circumference can be done at any point.

Hope this helps,
73...de ve7agw
Al

Nick,

Thanks for the help, I did get my loop up but will need to lengthen it. I calculate that right now I may be 90 feet short. It has a 3:1 match up around 2.3 mhz from what I can see on my old mfg swr analyzer.

I hooked this up to my tuner via 450 ohm ladder line run directly to the tuner. I was very discouraged witht the results. It was extremely noisy, much to the fact of greater then my vertical or windom. I had a 4:1 balun spare on the shelf so I hook it up and attached to the tuner coax connector and much to my belief the noise was gone and I worked several west coast stations on 40 meters with 100 watts with 59 reports. Signal was 1 to 2 S units better on receive the windom or vertical. I have made a couple contacts on 75 as well. I have not tried it out on 160m.

So I am not sure why my tuner would not work when connected directly with 450 ladder line? This is a old Dentron Clipperton-T antenna tuner. I do have a old MFJ on the shelf that I will try this with as well.

I know I can get about 30 more feet on the loop which will give me about 466 feet. The question that I have taken so long to ask you, if I cut the loop and add the rope then attach if I add in the wire 40 feet on each Vee can I do this anywhere in the loop or only at the feedpoint? I am not sure I can do this at the feedpoint area.

Scott Gordon
888-428-6622
614-419-3077 Cell
AOL- scott1gordon
http://www.cashforyourloans.com/kq8rp

1484. Re: Loop Advice

Yahoo group: SkyWires
Date: 2006-01-25 03:04:12 UTC
From: nc9k
Topic: 1474 Message: 1484

Scott,

Go ahead and add symetrically spaced similar-sized multiple V's if
you can to reach 530 ft. The pattern won't be perfect but at least
you will come much closer to 160M resonance.

Many commercial tuners are very unbalanced on the "balanced" line
output. The unbalanced output condition of your Dentron tuner caused
the ladderline to directly pick up electrical noise. The external
balun you connected is electrically more balanced than the one you
bypassed in the Dentron. You have to run a true balanced 450 ohm
line to reap the low noise benefits of the loop antenna.

Outside of the Johnson Matchbox series link coupled tuners (perfect
output balance) the only commercial tuner I have found with very good
balanced output (at least on 160 and 80M)is the Murch UT-2000B with
factory triple core balun. I detected almost no inductor or balun
heating with 1500W running through it for 5 minutes on 160M. I am
still making my own link coupled tuner for 160M when I get the time
to put the components into their chassis. This will give me perfect
line balance on 160M. For now the Murch will do.

73's Leland NC9K

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> From: SkyWires@yahoogroups.com [mailto:SkyWires@yahoogroups.com] On
> Behalf Of nc9k
> Sent: Saturday, January 21, 2006 12:54 AM
> To: SkyWires@yahoogroups.com
> Subject: [SkyWires] Re: Loop Advice
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1485. RE: [SkyWires] Re: Loop Advice

Yahoo group: SkyWires
Date: 2006-01-25 03:11:44 UTC
From: Scott Gordon
Topic: 1474 Message: 1485

Thanks LeLand for all the help. Will let you know how we make out..

Scott Gordon
888-428-6622
614-419-3077 Cell
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-----Original Message-----
From: SkyWires@yahoogroups.com [mailto:SkyWires@yahoogroups.com] On Behalf Of nc9k
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> > 888-428-6622
> > 614-419-3077 Cell
> > AOL- scott1gordon

> >
> >
> >
> >
> >
> >
> >
> >
> > -----Original Message-----
> > From: SkyWires@yahoogroups.com [mailto:SkyWires@yahoogroups.com]
On
> > Behalf Of nc9k
> > Sent: Friday, January 20, 2006 11:30 PM
> > To: SkyWires@yahoogroups.com
> > Subject: [SkyWires] Re: Loop Advice
> >
> >
> > Hello Scott,
> >
> > I've been experimenting with a 450 ohm ladderline fed 40M loop on
> 80M
> > with fine results. The ladderline is 75 ft. long. The loop itself
> is
> > only a halfwave in length and presents something like 10 ohms
> > feedpoint resistance with a high capacuitive reactance. The
> feedline
> > length of about 1/4 wave on 80M transforms the 10 ohms to a much
> > higher resistance that my Johnson KW Matchbox has no trouble with
> > even at 1500 watts input.
> >
> > With 450 ft. instead of 530 ft. on 160M your loop feed resistance
> > will be about 30% lower than the theoretical 100 ohms and you
will
> > have a sizable capacitive reactance component at the antenna to
> > feedline junction. The length of your feedline in wavelengths
will
> > determine the resistive and reactive components ultimately
> presented
> > in your shack. You will have excellent results on 160M when you
> > loadup into the setup. On 80M you will have almost 2 wavelengths
> up
> > which put you at about a 45 degree angle of maximum radiation.
You
> > will be able to work excellent DX.
> >
> > You can get up 530 ft of wire up if you fold part of the length in
> > the form of a V. This V can come close to the shack and then
> connect
> > the rest of the way into the shack via 450 ohm ladderline. This
> > setup will get you close to 100 ohms feed impedance with low

> > reactance at the antenna to feedline junction.
> >
> > 73's and good DX,
> >
> > Leland NC9K
> >
> >
> >
> >
> >
> > --- In SkyWires@yahoogroups.com, "Scott Gordon" <sgordon@w...>
> wrote:
> > >
> > > I have had a 75 meter loop up and down for several years. I
guess
> > I
> > > try a different antenna every once and a while and always end
up
> > > putting my loop back up since reports are always the best. I
> feed
> > it
> > > with 450 ohm line and use it on all bands. I even had good
> results
> > > shorting the ends together and using it on 160 meters.
> > >
> > > Now my question, I would like to get up a loop on 160 meters.
> But
> > my
> > > measurements I am only going to be around 450 and maybe can get
it
> > to
> > > near 500 feet which is probably 50 to 100 feet or so short. I
> will
> > be
> > > using 450 ohm line. Does anyone know of what kind of results I
> > might
> > > see with this length of loop? Should I just stick with my 75
> meter
> > or
> > > will I see any gains going bigger?
> > >
> > > --
> > > Scott Gordon
> > > KQ8RP
> > >
> >
> >
> >
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> >

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> > Yahoo! Groups Links
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> Yahoo! Groups Links
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Yahoo! Groups Links

1486. Skywire loop for 11m

Yahoo group: SkyWires
Date: 2006-01-30 21:21:06 UTC
From: Robert
Topic: 1486 Message: 1486

Would this work on 11m?

should I make it a 5/8 wl?

How high should I put it?
thx

1487. Re: [SkyWires] Skywire loop for 11m

Yahoo group: SkyWires
Date: 2006-01-30 21:59:48 UTC
From: Dr.Ace Ratliff
Topic: 1486 Message: 1487

Robert,

Make the loop about 37 ' 2 1/2 " .

On the higher frequency bands (11 mtrs) a full wave loop antenna can be oriented as a vertical diamond or vertical cube. Fed at the top or bottom corner of a diamond this antenna has horizontal polarization, so you would probably want to feed a side corner for local (Vertical Polarized) communications.

Let me clearly state this Fact.
"A vertically oriented horizontally polarized one wavelength loop antenna with the bottom of the loop 1/2 wave length above ground is a FINE antenna".

Do NOT put the bottom of the vertically oriented loop more than 1/2 wave length above ground i.e. 18 1/2 ' .

Ace - WH2T

----- Original Message -----
From: Robert
To: SkyWires@yahoogroups.com
Sent: Monday, January 30, 2006 4:21 PM
Subject: [SkyWires] Skywire loop for 11m

Would this work on 11m? YES

should I make it a 5/8 wl? NO

How high should I put it?
thx

1488. Antenna terminolgy

Yahoo group: SkyWires
Date: 2006-02-05 23:19:55 UTC
From: chmrles133r
Topic: 1488 Message: 1488

When I went to college most of these type of antenna's were called
rohmic. Are some of these modified versions of that style??
If I remember they had many great features.

1489. Alpha delta dx antenna question

Yahoo group: SkyWires
Date: 2006-02-07 02:56:12 UTC
From: n6hpx/du1 Cavite Philippines
Topic: 1489 Message: 1489

I just purchased a Alpha Delta swl-dx antenna and
was wondering if anyone else has ever used it and what
you thought of it and also I noticed it mention Ham
bands on the advertisement and has anyone ever used it
on the Ham.

Larry Fields,n6hpx/mm
Dubai UAE

==========
N6HPX/DU1 Bacoor Philippine islands
member: ARRL,Pinoyhams,PARL,WUN,PARA,SCADS,ASWLC,6mclubs
US Merchant Mariner 28 1/2 years
www.qrz.com/n6hpx
Radios on board:Sony7600gr,Yaesu FT530,VX5R
antenna:40ft wire slooper
new*sangean 909*
==========

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Tired of spam? Yahoo! Mail has the best spam protection around
http://mail.yahoo.com

1490. Re: Alpha delta dx antenna question

Yahoo group: SkyWires
Date: 2006-02-07 16:57:21 UTC
From: Greg W:-)
Topic: 1489 Message: 1490

Hi Larry

Isnt it a bit late to ask for opinions now that you have bought it.?
How are you going to feel when everyone flames you saying ITS JUNK !?

hehe.....

Now about the antenna..

It seems a nice enough sloper.
Its cut lengths and the traps were not selected for ham band use , but
if you realy wanted to try and TX on it ide sugest using low power
only and a good tuner.

gregW:-)

http://www.geocities.com/paradoxswlsystems/
==========

--- In SkyWires@yahoogroups.com, n6hpx/du1 Cavite Philippines
<n6hpx_du3@...> wrote:
>
> I just purchased a Alpha Delta swl-dx antenna and
> was wondering if anyone else has ever used it and what
> you thought of it and also I noticed it mention Ham
> bands on the advertisement and has anyone ever used it
> on the Ham.
>
> Larry Fields,n6hpx/mm
> Dubai UAE

1491. Re: [SkyWires] Re: Alpha delta dx antenna question

Yahoo group: SkyWires
Date: 2006-02-07 17:07:52 UTC
From: Dr.Ace Ratliff
Topic: 1489 Message: 1491

==========

--- In SkyWires@yahoogroups.com, n6hpx/du1 Cavite Philippines
<n6hpx_du3@...> wrote:
>
> I just purchased a Alpha Delta swl-dx antenna and
> was wondering if anyone else has ever used it and what
> you thought of it and also I noticed it mention Ham
> bands on the advertisement and has anyone ever used it
> on the Ham.
>
> Larry Fields,n6hpx/mm
> Dubai UAE

Avoid antennas with traps if possible.
Ace - www.WH2T.com

SPONSORED LINKS
http://www.bloomington.in.us/~wh2t/ant.htm

1492. Re: [SkyWires] Re: Alpha delta dx antenna question

Yahoo group: SkyWires
Date: 2006-02-08 03:35:45 UTC
From: Walter A Fipps Jr.
Topic: 1489 Message: 1492

NO NO! an swl is swl period.
Swl's are for just that,"(listiening)" with rare exception, if you
intend tx for your transmitter if nothing else, PLEASE RESEARCH FURTHER!

73
Walter
Greg W:-) wrote:

>Hi Larry
>
>Isnt it a bit late to ask for opinions now that you have bought it.?
>How are you going to feel when everyone flames you saying ITS JUNK !?
>
>hehe.....
>
>Now about the antenna..
>
>It seems a nice enough sloper.
>Its cut lengths and the traps were not selected for ham band use , but
>if you realy wanted to try and TX on it ide sugest using low power
>only and a good tuner.
>
>gregW:-)
>
>
>http://www.geocities.com/paradoxswlsystems/
>==
>
>--- In SkyWires@yahoogroups.com, n6hpx/du1 Cavite Philippines
><n6hpx_du3@...> wrote:
>
>
>> I just purchased a Alpha Delta swl-dx antenna and
>>was wondering if anyone else has ever used it and what
>>you thought of it and also I noticed it mention Ham
>>bands on the advertisement and has anyone ever used it
>>on the Ham.
>>
>> Larry Fields,n6hpx/mm
>> Dubai UAE
>>
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>Yahoo! Groups Links
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1493. Re: [SkyWires] Re: Alpha delta dx antenna question

Yahoo group: SkyWires
Date: 2006-02-08 04:52:36 UTC
From: JHR
Topic: 1489 Message: 1493

I believe the manufacturer specifically says it
is NOT meant for transmitting. It is designed as
a receive only product.

That said, good luck with it as a transmitter.

//////// Just my take... JHR ///////////////
==

Greg W:-) wrote:
> if you realy wanted to try and TX on it ide sugest using low power
> only and a good tuner.

1494. Re: Alpha delta dx antenna question

Yahoo group: SkyWires
Date: 2006-02-08 19:10:29 UTC
From: Greg W:-)
Topic: 1489 Message: 1494

Hiya

If you noticed , I did not recomend it for transmitting and even went
far enough to say it wasnt made for it.
From a technical standpoint though you COULD transmit with it.
As I said , with a good tuner and on low power it could be made to
radiate.
With a good tuner you can turn a wire fence or a house downpipe into a
radiator., (and even a toy slinky)

I didnt say it would work well.

In fact , with the wrong traps installed and wrong cut lengths it
would work about as good as the dreaded slinky.

regards

gregW:-)

==========

--- In SkyWires@yahoogroups.com, "Walter A Fipps Jr." <wafipps@...> wrote:
>
> NO NO! an swl is swl period.
> Swl's are for just that,"(listiening)" with rare exception, if you
> intend tx for your transmitter if nothing else, PLEASE RESEARCH FURTHER!
>
> 73
> Walter

1495. Re: Alpha delta dx antenna question

Yahoo group: SkyWires
Date: 2006-02-08 19:11:12 UTC
From: Greg W:-)
Topic: 1489 Message: 1495

I agree 100% with ya there mate.

gregW:-)

==========

--- In SkyWires@yahoogroups.com, JHR <jruing@...> wrote:
>
> I believe the manufacturer specifically says it
> is NOT meant for transmitting. It is designed as
> a receive only product.
>
> That said, good luck with it as a transmitter.
>
> //////// Just my take... JHR ///////////////

1496. Re: [SkyWires] Antenna terminolgy

Yahoo group: SkyWires
Date: 2006-02-09 13:29:49 UTC
From: Dr.Ace Ratliff
Topic: 1488 Message: 1496

Most of the people, if not all the people in this group don't use rhombic antennas.
See
http://www.google.com/search?hl=en&lr=&q=rhombic+W6AM+amateur+station&btnG=Search

Ace - WH2T

----- Original Message -----
From: chmrles133r
To: SkyWires@yahoogroups.com
Sent: Sunday, February 05, 2006 6:19 PM
Subject: [SkyWires] Antenna terminolgy

When I went to college most of these type of antenna's were called
rohmic. Are some of these modified versions of that style??
If I remember they had many great features.

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WH2T LINKS

a.. http://www.bloomington.in.us/~wh2t/ant.htm
b.. www.WH2T.com

1497. Re: [SkyWires] Antenna terminolgy

Yahoo group: SkyWires
Date: 2006-02-09 17:08:04 UTC
From: Andy
Topic: 1488 Message: 1497

> Most of the people, if not all the people in this group don't use rhombic antennas.

Rhombic antennas can make pretty good, high gain antennas. Problem is ... you need a lot of real estate, and they tend to be fairly directional.

Regards,
Andy

1498. Fwd: Yahoo Privacy - Web Beacons Opt Out

Yahoo group: SkyWires
Date: 2006-02-09 22:04:42 UTC
From: David Shrum
Topic: 1498 Message: 1498

I got this off of another Yahoo group.
Dave N8PU

Members are encouraged to look at Yahoo updated privacy statement at:

<http://privacy.yahoo.com/privacy>http://privacy.yahoo.com/privacy

About half-way down the page, under Special Topics in the section on cookies, you will see a link under the heading Reference Links that says WEB BEACONS. Click on Web Beacons and read.

Click on the phrase "Web Beacons." Once the page that opens, find a paragraph entitled "Outside the Yahoo Network."

In that section find a little "Click Here to Opt Out" link that will let you "opt-out" of their snooping. Be careful NOT to click on the next button shown. It is an "Opt Back In" button that, if clicked, will UNDO the opt-out.

Note that Yahoo's invasion of your privacy - and your ability to opt-out of it - is not user-specific. It is MACHINE specific. That means you will have to opt-out on every computer (and browser) you use.

1499. Re: [SkyWires] Antenna terminolgy

Yahoo group: SkyWires
Date: 2006-02-10 04:14:08 UTC
From: Walter A Fipps Jr.
Topic: 1488 Message: 1499

DUUH, Different tools for different jobs/requirments!

73
de
Walter
KD4OVR

Andy wrote:

> > Most of the people, if not all the people in this group don't use
> rhombic antennas.
>
> Rhombic antennas can make pretty good, high gain antennas. Problem is
> ... you need a lot of real estate, and they tend to be fairly directional.
>
> Regards,
> Andy
>
>
>
>
> SPONSORED LINKS
> Ham radio sales
> <http://groups.yahoo.com/gads?t=ms&k=Ham+radio+sales&w1=Ham+radio+sales&w2=Ham+radio+out
let&c=2&s=43&.sig=XdEOzchlst5zUV-2S48nIA>
> Ham radio outlet
> <http://groups.yahoo.com/gads?t=ms&k=Ham+radio+outlet&w1=Ham+radio+sales&w2=Ham+radio+ou
tlet&c=2&s=43&.sig=QTAiSIbUjpi0aksNiNbVQw>
>
>
>
> ---
> YAHOO! GROUPS LINKS
>
> * Visit your group "SkyWires
> <http://groups.yahoo.com/group/SkyWires>" on the web.
>
> * To unsubscribe from this group, send an email to:
> SkyWires-unsubscribe@yahoogroups.com
> <mailto:SkyWires-unsubscribe@yahoogroups.com?subject=Unsubscribe>
>
> * Your use of Yahoo! Groups is subject to the Yahoo! Terms of
> Service <http://docs.yahoo.com/info/terms/>.
>
>
> ---

>

1500. Connecting to 450 ohm ladderline?

Yahoo group: SkyWires
Date: 2006-02-11 04:02:00 UTC
From: JD WG5B
Topic: 1500 Message: 1500

What is the best way to connect 450 ohm ladder line to the antenna wire?
some type of commercial strain relief? I was just curious of any
suggestions, as I just soldered mine direct, but it is pulling the
ladder line apart at the connection...

ARS-WG5B

1501. Re: [SkyWires] Connecting to 450 ohm ladderline?

Yahoo group: SkyWires
Date: 2006-02-11 05:16:08 UTC
From: Steve Book
Topic: 1500 Message: 1501

I cut a T out of 1/4" plexiglass, drilled a 1/4" hole
in each of the top parts of the T and soldered C10-14
ring terminals on the ends of the loop antenna wire
and the ladder line. I used 1/4"- 20 brass screws and
nuts to make the connections through the holes in the
plexiglass and taped the ladderline to the down
portion of the T. It has been through some pretty
strong winds this winter in eastern Ohio and it's
still holding fine.

73, Steve
N8TZ

--- JD WG5B <wg5b@...> wrote:

> What is the best way to connect 450 ohm ladder line
> to the antenna wire?
> some type of commercial strain relief? I was just
> curious of any
> suggestions, as I just soldered mine direct, but it
> is pulling the
> ladder line apart at the connection...
>
> ARS-WG5B
>
>
>

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http://mail.yahoo.com

1502. Re: [SkyWires] Connecting to 450 ohm ladderline?

Yahoo group: SkyWires
Date: 2006-02-11 06:06:51 UTC
From: JHR
Topic: 1500 Message: 1502

Could you provide a photo of
that ? Please.

///////// Richards ////////
==

Steve Book wrote:
> I cut a T out of 1/4" plexiglass, drilled a 1/4" hole
> in each of the top parts of the T and soldered C10-14

1503. Re: [SkyWires] Connecting to 450 ohm ladderline?

Yahoo group: SkyWires
Date: 2006-02-11 13:42:30 UTC
From: Dr.Ace Ratliff
Topic: 1500 Message: 1503

JD,
Here's an easy method .
Where the 2 antenna ends meet at the feedpoint use a strain insulator like
http://www.fairradio.com/0ins-egg.jpg

or a similar strain insulator .

Then connect each side of the 450 ohm ladder line to each side of the strain insulator .
No more pulling apart .
Ace - www.WH2T.com

----- Original Message -----
From: JD WG5B
To: SkyWires@yahoogroups.com
Sent: Friday, February 10, 2006 11:02 PM
Subject: [SkyWires] Connecting to 450 ohm ladderline?

What is the best way to connect 450 ohm ladder line to the antenna wire?
some type of commercial strain relief? I was just curious of any
suggestions, as I just soldered mine direct, but it is pulling the
ladder line apart at the connection...

ARS-WG5B
a..

1504. Re: [SkyWires] Connecting to 450 ohm ladderline?

Yahoo group: SkyWires
Date: 2006-02-11 18:56:07 UTC
From: Jim Dunstan
Topic: 1500 Message: 1504

At 10:02 PM 2/10/2006 -0600, you wrote:
>What is the best way to connect 450 ohm ladder line to the antenna wire?
>some type of commercial strain relief? I was just curious of any
>suggestions, as I just soldered mine direct, but it is pulling the
>ladder line apart at the connection...
>
>ARS-WG5B

Hi,

The answer is simple .... use a standard strain insulator to complete the loop. then simply solder the 450 ohm line across the insulator .... voila.

Jim, VE3CI

1505. Re: [SkyWires] Connecting to 450 ohm ladderline?

Yahoo group: SkyWires
Date: 2006-02-12 01:57:31 UTC
From: ve1vq
Topic: 1500 Message: 1505
Attachments: 1 described; binary payloads are missing from this source WARC

If you want to see a drawing that might be useful, check
http://ne.mara.net/graphics/feedpoint.jpg

I use it on my loop. The #14 wire goes through the holes at the top, then loops back and is ty-wrapped, and then loops down to the twinlead connections. I used solder terminals on both the loop wire and the twinlead ends. The twinlead is also ty-wrapped to the piece of plastic to prevent flex damage.

Dave
VE1VQ/VA6NS

1506. Connecting to 450 ohm ladderline?

Yahoo group: SkyWires
Date: 2006-02-12 02:03:24 UTC
From: VE7AGW
Topic: 1500 Message: 1506

JD and the Group,

I used a 1/2 PVC pipe Tee and drilled two holes for 1/4 inch Stainless Steel bolts to go threw on each side of the top part of the Tee. Looped the antenna wire around the bolt on the inside and tied a knot then solder the end to the Ladder line that comes up threw the vertical part of the Tee after you drill a hole threw it to put a tie strap threw the hole. Then loop the ladder line up and over the plastic tie effectively making a strain relief for the ladder line.
I've used this method now for years and they out live most of the commercial strain relief units. I think this one was originally listed in the ARRL Antenna Book, not sure which addition though.

73..de ve7agw

What is the best way to connect 450 ohm ladder line to the antenna wire? some type of commercial strain relief? I was just curious of any suggestions, as I just soldered mine direct, but it is pulling the ladder line apart at the connection...

ARS-WG5B

1507. Re: [SkyWires] Connecting to 450 ohm ladderline?

Yahoo group: SkyWires
Date: 2006-02-12 05:24:49 UTC
From: JHR
Topic: 1500 Message: 1507

YES -- thank you -- the image makes it all so clear.
Sometimes I need that. Other times, not.

THANKS again. //// Richards ////
==========

ve1vq wrote:
> If you want to see a drawing that might be useful,

1508. Re: Connecting to 450 ohm ladderline?

Yahoo group: SkyWires
Date: 2006-02-13 17:34:05 UTC
From: JD WG5B
Topic: 1500 Message: 1508

Thanks Everyone; and Steve, of course all of the Ideas are good, But I like the Idea of fastening the wires and feed line to the Plexiglas to stop the flexing at the solder points, hence no breaking.. Thanks Guys n Gals... 73 JD WG5B

>Message: 2
> Date: Fri, 10 Feb 2006 21:16:08 -0800 (PST)
> From: Steve Book <n8tz_50@...>
>Subject: Re: Connecting to 450 ohm ladderline?
>
>I cut a T out of 1/4" plexiglass, drilled a 1/4" hole
>in each of the top parts of the T and soldered C10-14
>ring terminals on the ends of the loop antenna wire
>and the ladder line. I used 1/4"- 20 brass screws and
>nuts to make the connections through the holes in the
>plexiglass and taped the ladderline to the down
>portion of the T. It has been through some pretty
>strong winds this winter in eastern Ohio and it's
>still holding fine.
>
>73, Steve
>N8TZ
>

ARS-WG5B
Joe D. Jordan
Box 1
Dougherty, OK. 73032

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1509. Re: [SkyWires] Connecting to 450 ohm ladderline?

Yahoo group: SkyWires
Date: 2006-02-14 05:32:59 UTC
From: Walter A Fipps Jr.
Topic: 1500 Message: 1509

I went to Wal Mart, purchased a polyethylene cutting board , 3/4" thick,
big enough to make about 8 strain relief insulators.
You can cut it with a hacksaw, however I used a Dremel to cut out a tee
I layed out in pencil, then used it to drill each arm to accept each leg
of the loop, I cut a 1/2 " square in each to solder the legs to the LL,
which is brought up to the cutouts through to more holes on either side
of the trunk of the tee.

Hope this helps It works for me. Good luck.

73
Walter
KD4OVR

JD WG5B wrote:

>What is the best way to connect 450 ohm ladder line to the antenna wire?
>some type of commercial strain relief? I was just curious of any
>suggestions, as I just soldered mine direct, but it is pulling the
>ladder line apart at the connection...
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>ARS-WG5B
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>Yahoo! Groups Links
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1510. AUSTRALIA

Yahoo group: SkyWires
Date: 2006-02-16 12:28:24 UTC
From: Greg W:-)
Topic: 1510 Message: 1510

SW DX'ers living in OZ (nz ok too) are invited to join ¨ausSWDXgroup¨
on Yahoo Groups.

http://groups.yahoo.com/group/ausSWDXgroup/

Its a small close knit group focusing on SW listening in Australia.

regards

gregW:-)

http://www.geocities.com/onegammyleg/

1511. proposed loop

Yahoo group: SkyWires
Date: 2006-02-20 12:31:11 UTC
From: David
Topic: 1511 Message: 1511

I am upgrading my antenna farm after much of it damaged by Hurricane Wilma last year. I am considering a 171 meter loop for a starter. I have a 35 ft tower and plenty of room especially to the west of the tower is open pasture. I was considering a Delta or diamond driven at the top of the tower and sloping downward. The plan is to place the tallest posts that I can find locally in the pasture. I expect 15-20 ft will be maximum that I can set up alone. Anyone have opinions on best way to drive this? coax is available to the tower through underground conduit. Ladderline could be run from outside of shack or base of tower . BTW this will not be used with high power. mostly 20W psk31 and 100W SSB voice. Thanks for inputs. Dave, KR4YD, LaBelle, Florida. <sk>

1512. proposed loop

Yahoo group: SkyWires
Date: 2006-02-20 20:00:54 UTC
From: VE7AGW
Topic: 1511 Message: 1512

Dave,

I have a similar type of arrangement except the area is not as open as you have. I used some large Red Cedar trees on my property to erect a Delta Loop for 80 meters then changed it to a square shaped loop up about 70 feet at the highest slopping to about 30 feet at the lowest corner.
I feed it with 300 ohm ladder line down to a remote 4:1 balun just outside the shack. Thus keeping the line losses to a minimum. Ladder line will virtually give you no line loss and the balun will stop any rf from coming back into the shack on the ground side, also matches gives you a better impedance match from coax to ladder line.
I originally had feed it with straight coax but had too much line loss and too high of a miss match on the impedance. With the remote balun the AT-180 tuner will tune it with no problems and gives a very wide band width. I only use 100 watts at the best of times but I have feed it with full legal limit with no problems.

Hope this gives you some insight into the loop and have fun experiementing.

73...de ve7agw
Al

I am upgrading my antenna farm after much of it damaged by Hurricane Wilma last year. I am considering a 171 meter loop for a starter. I have a 35 ft tower and plenty of room especially to the west of the tower is open pasture. I was considering a Delta or diamond driven at the top of the tower and sloping downward. The plan is to place the tallest posts that I can find locally in the pasture. I expect 15-20 ft will be maximum that I can set up alone. Anyone have opinions on best way to drive this? coax is available to the tower through underground conduit. Ladderline could be run from outside of shack or base of tower . BTW this will not be used with high power. mostly 20W psk31 and 100W SSB voice. Thanks for inputs. Dave, KR4YD, LaBelle, Florida. <sk>

1513. Re: [SkyWires] proposed loop

Yahoo group: SkyWires
Date: 2006-02-20 20:20:37 UTC
From: JimMcSkate@aol.com
Topic: 1511 Message: 1513

Dave,
I'm a fan of using either ladder line, window line, or even cheap-o 300 ohm twin lead - in my opinion (uninformed by mathematics, only by experience ;-) the coax is the least attractive of the lot.

I've been having a great time running low power into my 40m loop (which is only about 18 feet high at the highest point and driven with twin lead)... for a few watts of output, the antenna gets all over the place. I don't run more than about 100 watts ever. If you're packin' some serious heat, you might run away from the twin lead and go with real ladder line - but then you're back into the realm of mathematics in trying to figure out what will work best.

DOn't get me wrong - I love math... I just do enough of it at work to not want to worry about it at home ;-)

Best 73s,
Jim
WA2LGN
Blue Point, NY

In a message dated 2/20/2006 7:32:46 AM Eastern Standard Time,
kr4yd@... writes:

> I am upgrading my antenna farm after much of it damaged by Hurricane
> Wilma last year. I am considering a 171 meter loop for a starter. I
> have a 35 ft tower and plenty of room especially to the west of the
> tower is open pasture. I was considering a Delta or diamond driven at
> the top of the tower and sloping downward. The plan is to place the
> tallest posts that I can find locally in the pasture. I expect 15-20
> ft will be maximum that I can set up alone. Anyone have opinions on
> best way to drive this? coax is available to the tower through
> underground conduit. Ladderline could be run from outside of shack or
> base of tower . BTW this will not be used with high power. mostly 20W
> psk31 and 100W SSB voice. Thanks for inputs. Dave, KR4YD, LaBelle,
> Florida. <sk>

1514. Re: [SkyWires] proposed loop

Yahoo group: SkyWires
Date: 2006-02-21 00:18:31 UTC
From: David Burroughs
Topic: 1511 Message: 1514

Thanks for the info. I got 3 inputs today and all were positive with some good suggestions. I will get to the loop ASAP.

> 73 Dave KR4YD
>

1515. Re: [SkyWires] proposed loop

Yahoo group: SkyWires
Date: 2006-02-21 00:19:00 UTC
From: David Burroughs
Topic: 1511 Message: 1515

Thanks for the info. I got 3 inputs today and all were positive with some good suggestions. I will get to the loop ASAP.

> 73 Dave KR4YD
>

1516. Aluminum wire

Yahoo group: SkyWires
Date: 2006-02-20 23:18:58 UTC
From: David
Topic: 1516 Message: 1516

Tractor supply sells 12ga. aluminum electric fence wire cheap. I used some on dipoles and windom quite sucessfully. I have plenty left so will try it on my skywire loop project.
Dave KR4YD

1517. Antenna Lines & Grounds

Yahoo group: SkyWires
Date: 2006-02-21 22:05:59 UTC
From: P.M.
Topic: 1517 Message: 1517

In the Yahoo "SWLDXListener" group, "schifferjb" wrote: on antennas
for my entry into SWL.
Please help clear up some remaining questions.
> 3) I will be receiving an Eavesdropper Trapped dipole-C ...
> 5) The external antenna connection is a "PAL type male input
> connector is designed for an unbalanced 50 to 75 ohm input
> connection that is encountered with coaxial feeds."
>
> Questions:
> 1) Does this setup require grounding?
- - - REPLY: [NO].

> 2) Is the antenna grounded via the radio? Is so, is it grounded if
> the radio is not connected to the AC adapter (which has a 3-prong
> cord) and running off batteries? Does it need to be?
- - - REPLY: [On portable, vehicle or other external DC (battery)
power, you will most likely be isolated from earth ground; on AC
(main) power, the third prong provides DC ground, which should not be
assumed adequate as an RF ground].

> 3) I understand grounding the Lightning-Zapper for protection
> purposes but this won't affect reception/RF noise issues will it?
- - - REPLY: [Lightning protectors do sometimes drain-off static
build-up noises. Sometimes, they have to build to a certain level
before they will arc over, ending the QRN you hear; depends on the
amount of gap, or firing point of diode(s) in the arrestor].

> 4) What is the meaning of balanced versus unbalanced?
- - - REPLY: [I am not familiar with the PAL connector, but your
description makes it sound same as a type M (or PL-259) which is for
terminating an UNbalanced line (such as coaxial cable).
Examples of balanced lines are TV twin-lead, and ladder line, where
both conductors are equal in that they are unshielded and run
side-by-side.
Typically, UNbalanced coax lines have impedences between 52 and 93
ohms, whereas balanced lines typically run at 300, 450, or 600 ohms.
You can convert one to the other, at the termination point, by use
of a BALUN. It matches a BALanced to an UNbalanced line, of the same
impedence (if 1:1 ratio) or of different impedences (if, say, 2:1 or
4:1 ratio)].

> 5) If I do need to ground the antenna, can I do this by removing
> some of the rubber jacket some where along the coax and
> connect/solder some bare copper wire to the braided shield and run
> the bare wire to a ground rod or clamp it to the water line infeed
> to the house?

- - - REPLY: [YES].

> 6) Does the receiver need to be grounded? If so, how?
- - - REPLY: [Grounding the feed-line MAY also ground the receiver, or vice-versa. For grounding the receiver, a small guage wire (such as the green wire on your AC plug's ground pin - it does not have to be bare) is run from receiver chassis to your ground rod.
Again, note: These are DC grounds only, for the purpose of minimizing noise, shock hazard and indirect lightning hits. Nothing will protect you from a direct hit. No DC ground is necessarily suitable as an RF ground].

> (P.S. - I plan to orient the antenna N-S so I can pick up E-W
> signals, right???)
- - - REPLY: [YES].

REPLY: Paul, WPE5AVL / WA6002SWL
See "Antenna Farm" at SWLcs.KC5JK.com

1518. Re: [SkyWires] Antenna Lines & Grounds

Yahoo group: SkyWires
Date: 2006-02-22 06:29:07 UTC
From: JHR
Topic: 1517 Message: 1518

I respectfully question some of the advice PM has given.

My point of departure is the discussion of balanced vs. unbalanced feed lines IN THIS CONTEXT, and with the nature of the PAL connector mentioned in the original question post.

1) You say you have an Eavesdropper antenna (I have one, myself) which uses a BALANCED feed line. Sometimes it comes with a balanced 50 ohm feed line (newer iterations of this antenna come with a lightening/static arrestor - whereas my older model does not.) You can ground that to a copper-clad iron stake in the ground (preferably using the shortest cable to ground you can devise.)

Other iterations of this antenna come with a coax cable lead in wire, which (I believe) is also "balanced" as it is a dipole -- balanced in that the internal conductor on the coax is the "hot" side and the outer cable braid conductor is the "ground" or "counterpoise" of the antenna -- which is what is grounded.

This antenna is designed to be attached (regardless of which feed line is supplied with your model) to the 50 ohm connector on the radio.

2) A PAL connector is a coaxial connector, but it is NOT THE SAME AS A PL-259 connector. They use these in Europe whereas we more commonly use an F-connector. Grundig/Eton radios often use these as the radios are marketed primarily for European sales, where in Europe it is a very popular brand name, and secondarily in the US - even though we are a very large market for them.

3) I would connect the hot side of your Eavesdropper to the tip of my 1/8 inch phone plug and the other-ground- side of the Eavesdropper to the ring/shaft of my phone plug antenna connector --- or hot to center pin, and ground to outer ring of my PAL connector if using that one. NO RF EARTH GROUND is needed, but I would disconnect it when not in use. No other ground (i.e., RF Ground) is required, as the chassis of the radio is connected to the ground (ring) on the antenna connector.

4) I agree that the electrical system ground (third prong on power cord) is a POOR RF GROUND and is not suitable for that purpose.

Just my take. Your mileage or opinion may differ, of course.

///////////////// Richards ///////////////
==========

P.M. wrote:
> In the Yahoo "SWLDXListener" group, "schifferjb" wrote: on antennas
> for my entry into SWL.
> Please help clear up some remaining questions.
>
>>3) I will be receiving an Eavesdropper Trapped dipole-C ...
>>5) The external antenna connection is a "PAL type male input
>>connector is designed for an unbalanced 50 to 75 ohm input
>>connection that is encountered with coaxial feeds."
>>
>>Questions:
>>1) Does this setup require grounding?
>
> - - - REPLY: [NO].
>
>
>>2) Is the antenna grounded via the radio? Is so, is it grounded if
>>the radio is not connected to the AC adapter (which has a 3-prong
>>cord) and running off batteries? Does it need to be?
>
> - - - REPLY: [On portable, vehicle or other external DC (battery)
> power, you will most likely be isolated from earth ground; on AC
> (main) power, the third prong provides DC ground, which should not be
> assumed adequate as an RF ground].
>
>
>>3) I understand grounding the Lightning-Zapper for protection
>>purposes but this won't affect reception/RF noise issues will it?
>
> - - - REPLY: [Lightning protectors do sometimes drain-off static
> build-up noises. Sometimes, they have to build to a certain level
> before they will arc over, ending the QRN you hear; depends on the
> amount of gap, or firing point of diode(s) in the arrestor].
>
>
>>4) What is the meaning of balanced versus unbalanced?
>
> - - - REPLY: [I am not familiar with the PAL connector, but your
> description makes it sound same as a type M (or PL-259) which is for
> terminating an UNbalanced line (such as coaxial cable).
> Examples of balanced lines are TV twin-lead, and ladder line, where
> both conductors are equal in that they are unshielded and run
> side-by-side.
> Typically, UNbalanced coax lines have impedences between 52 and 93
> ohms, whereas balanced lines typically run at 300, 450, or 600 ohms.
> You can convert one to the other, at the termination point, by use
> of a BALUN. It matches a BALanced to an UNbalanced line, of the same

> impedence (if 1:1 ratio) or of different impedences (if, say, 2:1 or
> 4:1 ratio)].
>
>
>>5) If I do need to ground the antenna, can I do this by removing
>>some of the rubber jacket some where along the coax and
>>connect/solder some bare copper wire to the braided shield and run
>>the bare wire to a ground rod or clamp it to the water line infeed
>>to the house?
>
> - - - REPLY: [YES].
>
>
>>6) Does the receiver need to be grounded? If so, how?
>
> - - - REPLY: [Grounding the feed-line MAY also ground the receiver,
> or vice-versa. For grounding the receiver, a small guage wire (such
> as the green wire on your AC plug's ground pin - it does not have to
> be bare) is run from receiver chassis to your ground rod.
> Again, note: These are DC grounds only, for the purpose of
> minimizing noise, shock hazard and indirect lightning hits. Nothing
> will protect you from a direct hit. No DC ground is necessarily
> suitable as an RF ground].
>
>
>>(P.S. - I plan to orient the antenna N-S so I can pick up E-W
>>signals, right???)
>
> - - - REPLY: [YES].
>
> REPLY: Paul, WPE5AVL / WA6002SWL
> See "Antenna Farm" at SWLcs.KC5JK.com
>
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> Yahoo! Groups Links
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1519. Re: Clarifying Ant Lines & Grounds

Yahoo group: SkyWires
Date: 2006-02-22 23:07:56 UTC
From: P.M.
Topic: 1517 Message: 1519

JHR <jruing@...> wrote:
> I respectfully question some of the advice PM has given.
> My point of departure is the discussion of balanced vs.
> unbalanced feed lines IN THIS CONTEXT, and with the
> nature of the PAL connector...
> 1) You say you have an Eavesdropper antenna (I have
> one, myself) which uses a BALANCED feed line. Sometimes
> it comes with a balanced 50 ohm feed line ...
> Other iterations of this antenna come with a coax cable
> lead in wire, which (I believe) is also "balanced" as it
> is a dipole -- balanced in that the internal conductor
> on the coax is the "hot" side and the outer cable braid
> conductor is the "ground" or "counterpoise" of the
> antenna -- which is what is grounded.
> This antenna is designed to be attached (regardless of which
> feed line is supplied with your model) to the 50 ohm
> connector on the radio.

> 2) A PAL connector is a coaxial connector, but it is NOT
> THE SAME AS A PL-259 connector. They use these in Europe
> whereas we more commonly use an F-connector...
>
> 3) I would connect the hot side of your Eavesdropper to the
> tip of my 1/8 inch phone plug and the other -ground- side of the
> Eavesdropper to the ring/shaft of my phone plug antenna
> connector --- or hot to center pin, and ground to outer ring
> of my PAL connector if using that one. NO RF EARTH GROUND is
> needed... No other ground (i.e., RF Ground) is required, as the
chassis of the radio is connected to the ground (ring) on the antenna
> connector.

REPLY:
To clarify, let me say first that I've never heard of a balanced
feedline with an impedence as low as 50-ohms, and would suspect that
it's UNbalanced. If it is shielded (that is, with a center conductor
surrounded by an outer shield - whether braid, foil or whatever kind
-, that describes a "coaxial" cable and is UNbalanced.
As for connectors - whether Type F, Type M (PL259), phone plug
(PL55, PJ068, or the smaller size versions), or PAL - all these with a
center pin and an outer ring/sleeve/skirt/whatever are UNbalanced
termination connectors.
If it's two equal and parallel conductor lines, or two equal
side-by-side connection screws/posts on a terminal board, all these
are BALanced lines and terminations, typically 150-ohms minimum.
The Eavesdropper and any other dipole or doublet antenna is by

design a BALanced antenna. As such, it does not require either a DC or an RF ground. The entire antenna is self-contained and complete, as is, and does not rely on a ground.
The antenna's feedpoint impedence is about 50-ohms, making it suitable for feeding with 50-75-ohm coaxial cable. While a 1:1 balun may be installed at the feedpoint, to match the "BAL" to the "UN," it is not necessary.
Similarly, at the receiver, while such a mismatch may again exist, a balun is not necessary.
Regardless of all other considerations, a DC ground is always a GOOD idea. An RF ground, in this case, would serve no purpose.
73, Paul

1520. Re: [SkyWires] Re: Loop Advice

Yahoo group: SkyWires
Date: 2006-02-25 07:59:31 UTC
From: Dr.Ace Ratliff
Topic: 1474 Message: 1520

Hi Leland,
After reading your comments about the Murch UT-2000B Transmatch I searched eBay until I found a nice one. It took a long time, lots of UT-2000A tuners, few 2000B.(For those who don't know the 2000A doesn't cover 160 mtrs). My Transmatch has been modified in accordance with research done by Doug DeMaw to make it more effective in harmonic rejection. Complete documentation of the changes are in an August 1981 QST pages 42-43 article.
I just got it Friday and have it hooked up and tested. It seems to be a very nice tuner.
Very 73, Ace - WH2T

----- Original Message -----
From: nc9k
To: SkyWires@yahoogroups.com
Sent: Tuesday, January 24, 2006 10:04 PM
Subject: [SkyWires] Re: Loop Advice

Scott,

Go ahead and add symetrically spaced similar-sized multiple V's if
you can to reach 530 ft. The pattern won't be perfect but at least
you will come much closer to 160M resonance.

Many commercial tuners are very unbalanced on the "balanced" line
output. The unbalanced output condition of your Dentron tuner caused
the ladderline to directly pick up electrical noise. The external
balun you connected is electrically more balanced than the one you
bypassed in the Dentron. You have to run a true balanced 450 ohm
line to reap the low noise benefits of the loop antenna.

Outside of the Johnson Matchbox series link coupled tuners (perfect
output balance) the only commercial tuner I have found with very good
balanced output (at least on 160 and 80M)is the Murch UT-2000B with
factory triple core balun. I detected almost no inductor or balun
heating with 1500W running through it for 5 minutes on 160M. I am
still making my own link coupled tuner for 160M when I get the time
to put the components into their chassis. This will give me perfect
line balance on 160M. For now the Murch will do.

73's Leland NC9K

--- In SkyWires@yahoogroups.com, "Scott Gordon" <sgordon@w...> wrote:
>
> Nick,
>
> Thanks for the help, I did get my loop up but will need to
lengthen
> it. I calculate that right now I may be 90 feet short. It has a
3:1

> match up around 2.3 mhz from what I can see on my old mfg swr
analyzer.
>
>
> I hooked this up to my tuner via 450 ohm ladder line run directly
to
> the tuner. I was very discouraged witht the results. It was
extremely
> noisy, much to the fact of greater then my vertical or windom. I
had a
> 4:1 balun spare on the shelf so I hook it up and attached to the
tuner
> coax connector and much to my belief the noise was gone and I worked
> several west coast stations on 40 meters with 100 watts with 59
reports.
> Signal was 1 to 2 S units better on receive the windom or
vertical. I
> have made a couple contacts on 75 as well. I have not tried it out
on
> 160m.
>
> So I am not sure why my tuner would not work when connected directly
> with 450 ladder line? This is a old Dentron Clipperton-T antenna
tuner.
> I do have a old MFJ on the shelf that I will try this with as well.
>
> I know I can get about 30 more feet on the loop which will give me
about
> 466 feet. The question that I have taken so long to ask you, if I
cut
> the loop and add the rope then attach if I add in the wire 40 feet
on
> each Vee can I do this anywhere in the loop or only at the
feedpoint? I
> am not sure I can do this at the feedpoint area.
>
> Scott Gordon
> 888-428-6622
> 614-419-3077 Cell
> AOL- scott1gordon
> http://www.cashforyourloans.com/kq8rp
>
>
>
>
>
>
>
> -----Original Message-----
> From: SkyWires@yahoogroups.com [mailto:SkyWires@yahoogroups.com] On

> Behalf Of nc9k
> Sent: Saturday, January 21, 2006 12:54 AM
> To: SkyWires@yahoogroups.com
> Subject: [SkyWires] Re: Loop Advice
>
>
> Hello Scott,
>
> Say you can put up a loop of 450 ft. circumference; this is a bit
> short for 160M. Make the loop 430 ft long and fill in the
remaining
> 20 feet with nylon rope. Then attach 50 ft lengths of wire to the
> ends of the 430 ft. of wire and attach the opposite ends of the 50
ft
> wires to 450 ohm ladderline. (Be sure to use appropriate strain
> relief where needed to prevent wire breakage.) This will lengthen
the
> antenna system to 530 ft. without too much pattern distortion.
This
> is what I meant by pulling it back in a V.
>
> 73's Leland NC9K
>
>
> -- In SkyWires@yahoogroups.com, "Scott Gordon" <sgordon@w...> wrote:
> >
> > Leland,
> >
> > Thanks for the information. I hope to get this up over the
> weekend.
> > I am not sure I understand when you say pull it back in a V?
> >
> > ----- ----
> > - -
> > - -
> > -
> > 450 Line
> >
> > Can't draw it here very well but are you saying where you pull
the V
> > back to connect the feedline there? I have about 75 foot of 450
ohm
> > ladder line I will be using. My 75 meter antenna was in a
> Traiangle,
> > this one will be the same but on larger.
> >
> > Thanks,, Will let you know how it does.
> > Scott Gordon
> > 888-428-6622
> > 614-419-3077 Cell

> > AOL- scott1gordon
> >
> >
> >
> >
> >
> >
> >
> >
> > -----Original Message-----
> > From: SkyWires@yahoogroups.com [mailto:SkyWires@yahoogroups.com]
On
> > Behalf Of nc9k
> > Sent: Friday, January 20, 2006 11:30 PM
> > To: SkyWires@yahoogroups.com
> > Subject: [SkyWires] Re: Loop Advice
> >
> >
> > Hello Scott,
> >
> > I've been experimenting with a 450 ohm ladderline fed 40M loop on
> 80M
> > with fine results. The ladderline is 75 ft. long. The loop itself
> is
> > only a halfwave in length and presents something like 10 ohms
> > feedpoint resistance with a high capacuitive reactance. The
> feedline
> > length of about 1/4 wave on 80M transforms the 10 ohms to a much
> > higher resistance that my Johnson KW Matchbox has no trouble with
> > even at 1500 watts input.
> >
> > With 450 ft. instead of 530 ft. on 160M your loop feed resistance
> > will be about 30% lower than the theoretical 100 ohms and you
will
> > have a sizable capacitive reactance component at the antenna to
> > feedline junction. The length of your feedline in wavelengths
will
> > determine the resistive and reactive components ultimately
> presented
> > in your shack. You will have excellent results on 160M when you
> > loadup into the setup. On 80M you will have almost 2 wavelengths
> up
> > which put you at about a 45 degree angle of maximum radiation.
You
> > will be able to work excellent DX.
> >
> > You can get up 530 ft of wire up if you fold part of the length in
> > the form of a V. This V can come close to the shack and then
> connect
> > the rest of the way into the shack via 450 ohm ladderline. This

> > setup will get you close to 100 ohms feed impedance with low
> > reactance at the antenna to feedline junction.
> >
> > 73's and good DX,
> >
> > Leland NC9K
> >
> >
> >
> >
> >
> > --- In SkyWires@yahoogroups.com, "Scott Gordon" <sgordon@w...>
> wrote:
> > >
> > > I have had a 75 meter loop up and down for several years. I
guess
> > I
> > > try a different antenna every once and a while and always end
up
> > > putting my loop back up since reports are always the best. I
> feed
> > it
> > > with 450 ohm line and use it on all bands. I even had good
> results
> > > shorting the ends together and using it on 160 meters.
> > >
> > > Now my question, I would like to get up a loop on 160 meters.
> But
> > my
> > > measurements I am only going to be around 450 and maybe can get
it
> > to
> > > near 500 feet which is probably 50 to 100 feet or so short. I
> will
> > be
> > > using 450 ohm line. Does anyone know of what kind of results I
> > might
> > > see with this length of loop? Should I just stick with my 75
> meter
> > or
> > > will I see any gains going bigger?
> > >
> > > --
> > > Scott Gordon
> > > KQ8RP
> >

1521. Re: [SkyWires] Re: Loop Advice

Yahoo group: SkyWires
Date: 2006-02-25 18:16:56 UTC
From: erik@n0ew.org
Topic: 1474 Message: 1521

> My Transmatch has been modified in accordance with
> research done by Doug DeMaw to make it more effective in harmonic
> rejection. Complete documentation of the changes are in an August 1981
> QST pages 42-43 article.

Are you using an old tube radio? What transistor base rig has such poor
built-in harmonic rejection this becomes a concern?

Erik n0ew

1522. Re: [SkyWires] Re: Loop Advice

Yahoo group: SkyWires
Date: 2006-02-25 19:16:10 UTC
From: Dr.Ace Ratliff
Topic: 1474 Message: 1522

Hi Erik,
It was not a concern for me. The transmatch was modified before I acquired it. I put the information on the post for the benefit of other people. Many people still run tube type radios. The only tube type equipment I currently use are 2 HF amplifiers.
Ace - www.WH2T.com

----- Original Message -----
From: erik@...
To: SkyWires@yahoogroups.com
Sent: Saturday, February 25, 2006 1:16 PM
Subject: Re: [SkyWires] Re: Loop Advice

> My Transmatch has been modified in accordance with
> research done by Doug DeMaw to make it more effective in harmonic
> rejection. Complete documentation of the changes are in an August 1981
> QST pages 42-43 article.

Are you using an old tube radio? What transistor base rig has such poor
built-in harmonic rejection this becomes a concern?

Erik n0ew

1523. Re: [SkyWires] Re: Loop Advice

Yahoo group: SkyWires
Date: 2006-02-25 23:29:28 UTC
From: Jim Dunstan
Topic: 1474 Message: 1523

At 12:16 PM 25/02/2006 -0600, you wrote:
> > My Transmatch has been modified in accordance with
> > research done by Doug DeMaw to make it more effective in harmonic
> > rejection. Complete documentation of the changes are in an August 1981
> > QST pages 42-43 article.
>
>
>Are you using an old tube radio? What transistor base rig has such poor
>built-in harmonic rejection this becomes a concern?
>
>Erik n0ew

I agree with Erik. The primary function of a coax in/out transmatch is to convert the impedance of the coax feed line to a resistive 50 ohms. Once this is accomplished harmonic rejection is looked after by the output filter contained within the transceiver. With modern transceivers 2nd harmonic attenuation is not a consideration, providing a proper load is.

Jim, VE3CI

1524. Re: Loop Advice

Yahoo group: SkyWires
Date: 2006-02-26 01:31:15 UTC
From: nc9k
Topic: 1474 Message: 1524

Hello Dr. Ace,

I'm glad you like the UT-2000B. I strapped both halves of the input capacitor together in mine thus putting the tuner into a conventional "T" configuration. This provides for potentially greater efficiency when feeding low impedance loads. The "Ultimate" T configuration that these tuners originally came as has lost favor for harmonic attenuation. I always use a high power low-pass filter after my old PI network output tube amplifiers and that seems to be sufficient to keep my harmonic radiation very low. But someone running a broadband solid state amp that does not have output low pass filters like the PI's in mine would have to be concerned about additional harmonic attenuation...

I will be pulling my 160M 2KW+ capacity (Johnson 5KW AM broadcast components found on ebay) link coupled tuner project together soon. I have everything needed but the actual style of knobs I want to use. I will take photos and post the results as a file in this discussion group once I finish it. I have already temporarily assembled the components on my bench and after setting the coupler for a flat match on 1900 Kc the VSWR at either band end remained under 1.8:1 without further adjusting the tuner. This test was conducted into 50 ft. of 450 ohm ladder feeding my 35 ft. high 500 ft. loop.

I also recently modified my Miller AT-2500 auto-tuner to operate on 160M and also added a 1:1 unbalanced to balanced output inside it. I am presently running this 160-10M into my 500 ft. loop. I am leaving a Johnson KW Matchbox parked on my 135 ft. loop thus allowing me to switch back and forth between the 2 loops on the higher HF bands.

In the summertime I like the extra DC isolation that only a link-coupled tuner can provide during thunderstorm season and will be running link coupled tuners 160-10M during thunderstorm season. I know nothing will stop a direct strike but a link coupled tuner sure adds extra protection from induced voltages caused by nearby strikes. I also run 1/8 inch sparkgaps and bleeder resistors outside the house on the ladderline feeds. So far so good...

73's Leland NC9K

--- In SkyWires@yahoogroups.com, "Dr.Ace Ratliff" <wh2t@...> wrote:
>
> Hi Leland,
> After reading your comments about the Murch UT-2000B Transmatch I searched eBay until I found a nice one. It took a long time, lots of

UT-2000A tuners, few 2000B.(For those who don't know the 2000A
doesn't cover 160 mtrs). My Transmatch has been modified in
accordance with research done by Doug DeMaw to make it more effective
in harmonic rejection. Complete documentation of the changes are in
an August 1981 QST pages 42-43 article.
> I just got it Friday and have it hooked up and tested. It seems
to be a very nice tuner.
> Very 73, Ace - WH2T
>
>
> ----- Original Message -----
> From: nc9k
> To: SkyWires@yahoogroups.com
> Sent: Tuesday, January 24, 2006 10:04 PM
> Subject: [SkyWires] Re: Loop Advice
>
>
> Scott,
>
> Go ahead and add symetrically spaced similar-sized multiple V's
if
> you can to reach 530 ft. The pattern won't be perfect but at
least
> you will come much closer to 160M resonance.
>
> Many commercial tuners are very unbalanced on the "balanced" line
> output. The unbalanced output condition of your Dentron tuner
caused
> the ladderline to directly pick up electrical noise. The external
> balun you connected is electrically more balanced than the one
you
> bypassed in the Dentron. You have to run a true balanced 450 ohm
> line to reap the low noise benefits of the loop antenna.
>
> Outside of the Johnson Matchbox series link coupled tuners
(perfect
> output balance) the only commercial tuner I have found with very
good
> balanced output (at least on 160 and 80M)is the Murch UT-2000B
with
> factory triple core balun. I detected almost no inductor or balun
> heating with 1500W running through it for 5 minutes on 160M. I
am
> still making my own link coupled tuner for 160M when I get the
time
> to put the components into their chassis. This will give me
perfect
> line balance on 160M. For now the Murch will do.
>
> 73's Leland NC9K

>
>
> --- In SkyWires@yahoogroups.com, "Scott Gordon" <sgordon@w...>
wrote:
> >
> > Nick,
> >
> > Thanks for the help, I did get my loop up but will need to
> lengthen
> > it. I calculate that right now I may be 90 feet short. It has
a
> 3:1
> > match up around 2.3 mhz from what I can see on my old mfg swr
> analyzer.
> >
> >
> > I hooked this up to my tuner via 450 ohm ladder line run
directly
> to
> > the tuner. I was very discouraged witht the results. It was
> extremely
> > noisy, much to the fact of greater then my vertical or windom.
I
> had a
> > 4:1 balun spare on the shelf so I hook it up and attached to
the
> tuner
> > coax connector and much to my belief the noise was gone and I
worked
> > several west coast stations on 40 meters with 100 watts with 59
> reports.
> > Signal was 1 to 2 S units better on receive the windom or
> vertical. I
> > have made a couple contacts on 75 as well. I have not tried it
out
> on
> > 160m.
> >
> > So I am not sure why my tuner would not work when connected
directly
> > with 450 ladder line? This is a old Dentron Clipperton-T
antenna
> tuner.
> > I do have a old MFJ on the shelf that I will try this with as
well.
> >
> > I know I can get about 30 more feet on the loop which will give
me
> about
> > 466 feet. The question that I have taken so long to ask you,

if I
> cut
> > the loop and add the rope then attach if I add in the wire 40
feet
> on
> > each Vee can I do this anywhere in the loop or only at the
> feedpoint? I
> > am not sure I can do this at the feedpoint area.
> >
> > Scott Gordon
> > 888-428-6622
> > 614-419-3077 Cell
> > AOL- scott1gordon
> > http://www.cashforyourloans.com/kq8rp
> >
> >
> >
> >
> >
> >
> >
> > -----Original Message-----
> > From: SkyWires@yahoogroups.com
[mailto:SkyWires@yahoogroups.com] On
> > Behalf Of nc9k
> > Sent: Saturday, January 21, 2006 12:54 AM
> > To: SkyWires@yahoogroups.com
> > Subject: [SkyWires] Re: Loop Advice
> >
> >
> > Hello Scott,
> >
> > Say you can put up a loop of 450 ft. circumference; this is a
bit
> > short for 160M. Make the loop 430 ft long and fill in the
> remaining
> > 20 feet with nylon rope. Then attach 50 ft lengths of wire to
the
> > ends of the 430 ft. of wire and attach the opposite ends of the
50
> ft
> > wires to 450 ohm ladderline. (Be sure to use appropriate strain
> > relief where needed to prevent wire breakage.) This will
lengthen
> the
> > antenna system to 530 ft. without too much pattern distortion.
> This
> > is what I meant by pulling it back in a V.
> >
> > 73's Leland NC9K

> >
> >
> > -- In SkyWires@yahoogroups.com, "Scott Gordon" <sgordon@w...>
wrote:
> > >
> > > Leland,
> > >
> > > Thanks for the information. I hope to get this up over the
> > weekend.
> > > I am not sure I understand when you say pull it back in a V?
> > >
> > > ----- ----
> > > - -
> > > - -
> > > -
> > > 450 Line
> > >
> > > Can't draw it here very well but are you saying where you
pull
> the V
> > > back to connect the feedline there? I have about 75 foot of
450
> ohm
> > > ladder line I will be using. My 75 meter antenna was in a
> > Traiangle,
> > > this one will be the same but on larger.
> > >
> > > Thanks,, Will let you know how it does.
> > > Scott Gordon
> > > 888-428-6622
> > > 614-419-3077 Cell
> > > AOL- scott1gordon
> > >
> > >
> > >
> > >
> > >
> > >
> > >
> > >
> > > -----Original Message-----
> > > From: SkyWires@yahoogroups.com
[mailto:SkyWires@yahoogroups.com]
> On
> > > Behalf Of nc9k
> > > Sent: Friday, January 20, 2006 11:30 PM
> > > To: SkyWires@yahoogroups.com
> > > Subject: [SkyWires] Re: Loop Advice
> > >
> > >

> > > Hello Scott,
> > >
> > > I've been experimenting with a 450 ohm ladderline fed 40M
loop on
> > 80M
> > > with fine results. The ladderline is 75 ft. long. The loop
itself
> > is
> > > only a halfwave in length and presents something like 10 ohms
> > > feedpoint resistance with a high capacuitive reactance. The
> > feedline
> > > length of about 1/4 wave on 80M transforms the 10 ohms to a
much
> > > higher resistance that my Johnson KW Matchbox has no trouble
with
> > > even at 1500 watts input.
> > >
> > > With 450 ft. instead of 530 ft. on 160M your loop feed
resistance
> > > will be about 30% lower than the theoretical 100 ohms and you
> will
> > > have a sizable capacitive reactance component at the antenna
to
> > > feedline junction. The length of your feedline in
wavelengths
> will
> > > determine the resistive and reactive components ultimately
> > presented
> > > in your shack. You will have excellent results on 160M when
you
> > > loadup into the setup. On 80M you will have almost 2
wavelengths
> > up
> > > which put you at about a 45 degree angle of maximum
radiation.
> You
> > > will be able to work excellent DX.
> > >
> > > You can get up 530 ft of wire up if you fold part of the
length in
> > > the form of a V. This V can come close to the shack and then
> > connect
> > > the rest of the way into the shack via 450 ohm ladderline.
This
> > > setup will get you close to 100 ohms feed impedance with low
> > > reactance at the antenna to feedline junction.
> > >
> > > 73's and good DX,
> > >
> > > Leland NC9K

> > >
> > >
> > >
> > >
> > >
> > > --- In SkyWires@yahoogroups.com, "Scott Gordon" <sgordon@w...>
> > wrote:
> > > >
> > > > I have had a 75 meter loop up and down for several years.
I
> guess
> > > I
> > > > try a different antenna every once and a while and always
end
> up
> > > > putting my loop back up since reports are always the best.
I
> > feed
> > > it
> > > > with 450 ohm line and use it on all bands. I even had good
> > results
> > > > shorting the ends together and using it on 160 meters.
> > > >
> > > > Now my question, I would like to get up a loop on 160
meters.
> > But
> > > my
> > > > measurements I am only going to be around 450 and maybe can
get
> it
> > > to
> > > > near 500 feet which is probably 50 to 100 feet or so
short. I
> > will
> > > be
> > > > using 450 ohm line. Does anyone know of what kind of
results I
> > > might
> > > > see with this length of loop? Should I just stick with my
75
> > meter
> > > or
> > > > will I see any gains going bigger?
> > > >
> > > > --
> > > > Scott Gordon
> > > > KQ8RP
> > >
>

1526. Re: [SkyWires] Re: Clarifying Ant Lines & Grounds

Yahoo group: SkyWires
Date: 2006-02-28 04:53:58 UTC
From: JHR
Topic: 1517 Message: 1526

PM -- I think we agree about what constitutes a balanced versus unbalanced feedline. I also think we agree the Eavesdropper antenna is a balanced dipole design. I can confirm, by both research and ownership, that the Eavesdropper is a balanced dipole design, with a 50 ohm balanced feedline - that is what is specified in the specifications. The feedline is a 50 ohm parallel conductor cable (looks like a small gauge zip cord/lamp cord).

I think my only disagreement lies in the concept that certain types of connector plugs are, somehow, inherently balanced or unbalanced, or are only used for a single type of antenna. I believe the connector is neutral as to whether or not the overall antenna or feedline in his balanced or unbalanced - the feedline/antenna design decides the matter, regardless of how you connect it to the radio. You can use the same kind of plug on either balanced or unbalanced lines. How do I know? I have used each type of plug for both balanced and unbalanced antennas, depending on my whim, and the radio intended to be attached to it.

Thank you for your considered, and carefully crafted informative response. Happy trails to you.

Best Regards. /////////// Richards ////////////
==========

P.M. wrote:
> JHR <jruing@...> wrote:
>
>>I respectfully question some of the advice PM has given.
>>My point of departure is the discussion of balanced vs.
>>unbalanced feed lines IN THIS CONTEXT, and with the
>>nature of the PAL connector...
>>1) You say you have an Eavesdropper antenna (I have
>>one, myself) which uses a BALANCED feed line. Sometimes
>>it comes with a balanced 50 ohm feed line ...
>>Other iterations of this antenna come with a coax cable
>>lead in wire, which (I believe) is also "balanced" as it
>>is a dipole -- balanced in that the internal conductor
>>on the coax is the "hot" side and the outer cable braid
>>conductor is the "ground" or "counterpoise" of the
>>antenna -- which is what is grounded.
>>This antenna is designed to be attached (regardless of which
>>feed line is supplied with your model) to the 50 ohm
>>connector on the radio.
>
>
>>2) A PAL connector is a coaxial connector, but it is NOT

>>THE SAME AS A PL-259 connector. They use these in Europe
>>whereas we more commonly use an F-connector...
>>
>>3) I would connect the hot side of your Eavesdropper to the
>>tip of my 1/8 inch phone plug and the other -ground- side of the
>>Eavesdropper to the ring/shaft of my phone plug antenna
>>connector --- or hot to center pin, and ground to outer ring
>>of my PAL connector if using that one. NO RF EARTH GROUND is
>>needed... No other ground (i.e., RF Ground) is required, as the
>
> chassis of the radio is connected to the ground (ring) on the antenna
>
>>connector.
>
> ----------
> REPLY:
> To clarify, let me say first that I've never heard of a balanced
> feedline with an impedence as low as 50-ohms, and would suspect that
> it's UNbalanced. If it is shielded (that is, with a center conductor
> surrounded by an outer shield - whether braid, foil or whatever kind
> -, that describes a "coaxial" cable and is UNbalanced.
> As for connectors - whether Type F, Type M (PL259), phone plug
> (PL55, PJ068, or the smaller size versions), or PAL - all these with a
> center pin and an outer ring/sleeve/skirt/whatever are UNbalanced
> termination connectors.
> If it's two equal and parallel conductor lines, or two equal
> side-by-side connection screws/posts on a terminal board, all these
> are BALanced lines and terminations, typically 150-ohms minimum.
> The Eavesdropper and any other dipole or doublet antenna is by
> design a BALanced antenna. As such, it does not require either a DC
> or an RF ground. The entire antenna is self-contained and complete,
> as is, and does not rely on a ground.
> The antenna's feedpoint impedence is about 50-ohms, making it
> suitable for feeding with 50-75-ohm coaxial cable. While a 1:1 balun
> may be installed at the feedpoint, to match the "BAL" to the "UN," it
> is not necessary.
> Similarly, at the receiver, while such a mismatch may again exist, a
> balun is not necessary.
> Regardless of all other considerations, a DC ground is always a GOOD
> idea. An RF ground, in this case, would serve no purpose.
> 73, Paul
>
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1527. Re: [SkyWires] Re: Clarifying Ant Lines & Grounds

Yahoo group: SkyWires
Date: 2006-02-28 13:44:41 UTC
From: David Burroughs
Topic: 1517 Message: 1527

JHR wrote:

> PM -- I think we agree about what constitutes a balanced versus
> unbalanced feedline. I also think we agree the Eavesdropper antenna is
> a balanced dipole design. I can confirm, by both research and
> ownership, that the Eavesdropper is a balanced dipole design, with a 50
> ohm balanced feedline - that is what is specified in the specifications.
> The feedline is a 50 ohm parallel conductor cable (looks like a small
> gauge zip cord/lamp cord).
>
> I think my only disagreement lies in the concept that certain types of
> connector plugs are, somehow, inherently balanced or unbalanced, or are
> only used for a single type of antenna. I believe the connector is
> neutral as to whether or not the overall antenna or feedline in his
> balanced or unbalanced - the feedline/antenna design decides the matter,
> regardless of how you connect it to the radio. You can use the same
> kind of plug on either balanced or unbalanced lines. How do I know? I
> have used each type of plug for both balanced and unbalanced antennas,
> depending on my whim, and the radio intended to be attached to it.
>
> Thank you for your considered, and carefully crafted informative
> response. Happy trails to you.
>
> Best Regards. /////////// Richards ////////////
> ==
>
> P.M. wrote:
> > JHR <jruing@...> wrote:
> >
> >>I respectfully question some of the advice PM has given.
> >>My point of departure is the discussion of balanced vs.
> >>unbalanced feed lines IN THIS CONTEXT, and with the
> >>nature of the PAL connector...
> >>1) You say you have an Eavesdropper antenna (I have
> >>one, myself) which uses a BALANCED feed line. Sometimes
> >>it comes with a balanced 50 ohm feed line ...
> >>Other iterations of this antenna come with a coax cable
> >>lead in wire, which (I believe) is also "balanced" as it
> >>is a dipole -- balanced in that the internal conductor
> >>on the coax is the "hot" side and the outer cable braid
> >>conductor is the "ground" or "counterpoise" of the
> >>antenna -- which is what is grounded.
> >>This antenna is designed to be attached (regardless of which
> >>feed line is supplied with your model) to the 50 ohm
> >>connector on the radio.

> >
> >
> >>2) A PAL connector is a coaxial connector, but it is NOT
> >>THE SAME AS A PL-259 connector. They use these in Europe
> >>whereas we more commonly use an F-connector...
> >>
> >>3) I would connect the hot side of your Eavesdropper to the
> >>tip of my 1/8 inch phone plug and the other -ground- side of the
> >>Eavesdropper to the ring/shaft of my phone plug antenna
> >>connector --- or hot to center pin, and ground to outer ring
> >>of my PAL connector if using that one. NO RF EARTH GROUND is
> >>needed... No other ground (i.e., RF Ground) is required, as the
> >
> > chassis of the radio is connected to the ground (ring) on the antenna
> >
> >>connector.
> >
> > ---
> > REPLY:
> > To clarify, let me say first that I've never heard of a balanced
> > feedline with an impedence as low as 50-ohms, and would suspect that
> > it's UNbalanced. If it is shielded (that is, with a center conductor
> > surrounded by an outer shield - whether braid, foil or whatever kind
> > -, that describes a "coaxial" cable and is UNbalanced.
> > As for connectors - whether Type F, Type M (PL259), phone plug
> > (PL55, PJ068, or the smaller size versions), or PAL - all these with a
> > center pin and an outer ring/sleeve/skirt/whatever are UNbalanced
> > termination connectors.
> > If it's two equal and parallel conductor lines, or two equal
> > side-by-side connection screws/posts on a terminal board, all these
> > are BALanced lines and terminations, typically 150-ohms minimum.
> > The Eavesdropper and any other dipole or doublet antenna is by
> > design a BALanced antenna. As such, it does not require either a DC
> > or an RF ground. The entire antenna is self-contained and complete,
> > as is, and does not rely on a ground.
> > The antenna's feedpoint impedence is about 50-ohms, making it
> > suitable for feeding with 50-75-ohm coaxial cable. While a 1:1 balun
> > may be installed at the feedpoint, to match the "BAL" to the "UN," it
> > is not necessary.
> > Similarly, at the receiver, while such a mismatch may again exist, a
> > balun is not necessary.
> > Regardless of all other considerations, a DC ground is always a GOOD
> > idea. An RF ground, in this case, would serve no purpose.
> > 73, Paul
> >
> >
> >
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> >
> >

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> Ham radio outlet
> <http://groups.yahoo.com/gads?t=ms&k=Ham+radio+outlet&w1=Ham+radio+sales&w2=Ham+radio+ou
tlet&c=2&s=43&.sig=QTAiSIbUjpi0aksNiNbVQw>
>
>
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> ---
> YAHOO! GROUPS LINKS
>
> * Visit your group "SkyWires
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>
> * To unsubscribe from this group, send an email to:
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>
> * Your use of Yahoo! Groups is subject to the Yahoo! Terms of
> Service <http://docs.yahoo.com/info/terms/>.
>
>
> ---
>
yes and no! using a coaxial type connector on a balanced line will add
a different capacitance/inductance at the connector but it will be so
minor and to be of no practiacal concern. Dave KR4YD

1528. Re: Antenna Connectors

Yahoo group: SkyWires
Date: 2006-03-03 20:10:04 UTC
From: Pirate Paul
Topic: 1517 Message: 1528

JHR <jruing@...> wrote:
>
> PM -- I think we agree about what constitutes a balanced versus
> unbalanced feedline... I can confirm, by both research and
> ownership, that the Eavesdropper is a balanced dipole design, with a
50 ohm balanced feedline - that is what is specified in the
specifications. The feedline is a 50 ohm parallel conductor cable
(looks like a small gauge zip cord/lamp cord).
> I think my only disagreement lies in the concept that certain types
of connector plugs... You can use the same kind of plug on either
balanced or unbalanced lines. How do I know? I have used each type
of plug for both balanced and unbalanced antennas, depending on my
whim, and the radio intended to be attached to it...
> Best Regards. /////////// Richards ////////////
> ==
>
> Pirate Paul replies:
Like Dave said, "yes and no! using a coaxial type connector on a
balanced line will add a different capacitance/inductance at the
connector, but it will be so minor (as) to be of no practical concern.
Dave KR4Y."
Ideally, a perfectly balanced system will treat each side of the
line equally. The coaxial type connector typically grounds the outer
conductor. Well into the 70s, most general coverage receivers were
factory-equipped with a three-screw antenna connector strip, the third
screw being grounded and having a jumper strap for also grounding the
second screw, or not, according to whether you wanted to feed the
receiver with a balanced (as per doublet/dipole) or unbalanced (as per
longwire, vertical etc) antenna.
From what you say, I gather the Eavesdropper maker has apparently
eliminated the need for a balun by coming up with a balanced feedline
that is the ideal impedence for the dipole antenna. Brilliant. If it
is not too lossy, they should offer that feedline seperately, in
various lengths.
Of course, matching cheap and readily available 300-ohm TV twin-lead
to cheap and readily available 75-ohm RG-6 coax by means of a $2 TV
line transformer (balun) is not impractical at all. A drawing of this
hook-up appears on my site, SWLcs.KC5JK.com, on the "Antenna Farm"
page, under "Windom Antenna." And those TV baluns will even handle up
to about 35-watts of RF too, at HF, before they explode.
73... Paul

1529. Re: [SkyWires] Re: Antenna Connectors

Yahoo group: SkyWires
Date: 2006-03-03 21:57:54 UTC
From: David Burroughs
Topic: 1517 Message: 1529

Pirate Paul wrote:

> JHR <jruing@...> wrote:
> >
> > PM -- I think we agree about what constitutes a balanced versus
> > unbalanced feedline... I can confirm, by both research and
> > ownership, that the Eavesdropper is a balanced dipole design, with a
> 50 ohm balanced feedline - that is what is specified in the
> specifications. The feedline is a 50 ohm parallel conductor cable
> (looks like a small gauge zip cord/lamp cord).
> > I think my only disagreement lies in the concept that certain types
> of connector plugs... You can use the same kind of plug on either
> balanced or unbalanced lines. How do I know? I have used each type
> of plug for both balanced and unbalanced antennas, depending on my
> whim, and the radio intended to be attached to it...
> > Best Regards. /////////// Richards ////////////
> > ==
> >
> > Pirate Paul replies:
> Like Dave said, "yes and no! using a coaxial type connector on a
> balanced line will add a different capacitance/inductance at the
> connector, but it will be so minor (as) to be of no practical concern.
> Dave KR4Y."
> Ideally, a perfectly balanced system will treat each side of the
> line equally. The coaxial type connector typically grounds the outer
> conductor. Well into the 70s, most general coverage receivers were
> factory-equipped with a three-screw antenna connector strip, the third
> screw being grounded and having a jumper strap for also grounding the
> second screw, or not, according to whether you wanted to feed the
> receiver with a balanced (as per doublet/dipole) or unbalanced (as per
> longwire, vertical etc) antenna.
> From what you say, I gather the Eavesdropper maker has apparently
> eliminated the need for a balun by coming up with a balanced feedline
> that is the ideal impedence for the dipole antenna. Brilliant. If it
> is not too lossy, they should offer that feedline seperately, in
> various lengths.
> Of course, matching cheap and readily available 300-ohm TV twin-lead
> to cheap and readily available 75-ohm RG-6 coax by means of a $2 TV
> line transformer (balun) is not impractical at all. A drawing of this
> hook-up appears on my site, SWLcs.KC5JK.com, on the "Antenna Farm"
> page, under "Windom Antenna." And those TV baluns will even handle up
> to about 35-watts of RF too, at HF, before they explode.
> 73... Paul

Well Paul , good news if you wish to call it that. The lamp cord that is commonly called zip cord is pretty near what you ask for. Most of it is near 72-75ohm impedence depending on spacing and size of conductors and if the insulation is magnetically netural the parallel conductors are nearly always correct. of course things will vary with manufacturer. Anyway if you have a good length of it terminate the far end wth a 75ohm carbon resistor and sweep it with an antenna analyzer. I thing you will find it pretty flat through the HF spectrum. Dave

1530. Re: [SkyWires] Re: Antenna Connectors

Yahoo group: SkyWires
Date: 2006-03-03 22:09:31 UTC
From: Jim Dunstan
Topic: 1517 Message: 1530

At 04:57 PM 03/03/2006 -0500, you wrote:
>Pirate Paul wrote:
>
>
>Well Paul , good news if you wish to call it that. The lamp cord that
>is commonly called zip cord is pretty near what you ask for. Most of it
>is near 72-75ohm impedence depending on spacing and size of conductors
>and if the insulation is magnetically netural the parallel conductors
>are nearly always correct. of course things will vary with
>manufacturer. Anyway if you have a good length of it terminate the far
>end wth a 75ohm carbon resistor and sweep it with an antenna analyzer.
>I thing you will find it pretty flat through the HF spectrum.
>Dave

Hi Dave,

You are correct. Zip cord is about the only low impedance balanced line commonly available these days. In the northern communities the Native Trappers Associations supply their members with commercially made 3-5Watt battery (dry cell) commercial SSB transceivers. When these transceivers first came out many years ago they were designed for low impedance (75 ohm) balanced output. The antennas the trappers carried with them were dipoles equipped with thin 75 ohm balanced feed line that was brown in color and about the size of thin telephone cable. I believe Belden Cable manufactured it ... as well as a more robust 1 KW version. Many years ago I used the 1 KW version balanced line to feed a loop (cubicle quad). It was a wonderful antenna and worked DXCC with it.

As far as I know the cable companies no longer manufacture 75 ohm balanced RF cable. Trappers in the North who still use the old radios now use ordinary zip cord from the hardware store for feed line with satisfactory performance. Now there are all kinds of zip cords and speaker cables that are suitable. It would be nice to have some kind of formal assessment of the various products from an RF point of view.

EG .... line impedance, attenuation/100 ft, and power handling capabilities. Right now it is try whatever looks good. I now operate QRP most of the time and my latest project is to use some standard #16 copper speaker wire twin lead. I'll be doing some testing to see how well it works ..... it certainly is nice to work with.

Jim

1531. Re: [SkyWires] Re: Antenna Connectors

Yahoo group: SkyWires
Date: 2006-03-04 03:03:02 UTC
From: David Burroughs
Topic: 1517 Message: 1531

Jim Dunstan wrote:

> At 04:57 PM 03/03/2006 -0500, you wrote:
> >Pirate Paul wrote:
> >
> >
> >Well Paul , good news if you wish to call it that. The lamp cord that
> >is commonly called zip cord is pretty near what you ask for. Most of it
> >is near 72-75ohm impedence depending on spacing and size of conductors
> >and if the insulation is magnetically netural the parallel conductors
> >are nearly always correct. of course things will vary with
> >manufacturer. Anyway if you have a good length of it terminate the far
> >end wth a 75ohm carbon resistor and sweep it with an antenna analyzer.
> >I thing you will find it pretty flat through the HF spectrum.
> >Dave
>
> Hi Dave,
>
> You are correct. Zip cord is about the only low impedance balanced line
> commonly available these days. In the northern communities the Native
> Trappers Associations supply their members with commercially made 3-5Watt
> battery (dry cell) commercial SSB transceivers. When these transceivers
> first came out many years ago they were designed for low impedance (75
> ohm)
> balanced output. The antennas the trappers carried with them were
> dipoles
> equipped with thin 75 ohm balanced feed line that was brown in color and
> about the size of thin telephone cable. I believe Belden Cable
> manufactured it ... as well as a more robust 1 KW version. Many years
> ago
> I used the 1 KW version balanced line to feed a loop (cubicle quad). It
> was a wonderful antenna and worked DXCC with it.
>
> As far as I know the cable companies no longer manufacture 75 ohm
> balanced
> RF cable. Trappers in the North who still use the old radios now use
> ordinary zip cord from the hardware store for feed line with satisfactory
> performance. Now there are all kinds of zip cords and speaker cables
> that
> are suitable. It would be nice to have some kind of formal assessment of
> the various products from an RF point of view.
>
> EG .... line impedance, attenuation/100 ft, and power handling
> capabilities. Right now it is try whatever looks good. I now operate
> QRP

> most of the time and my latest project is to use some standard #16 copper
> speaker wire twin lead. I'll be doing some testing to see how well it
> works ..... it certainly is nice to work with.
>
> Good info Jim, I didn't know about those old radios but was aware that
> some have used zip cord for low power feedline. The insulation won't
> handle lots of high voltage or heat but is good for QRP. I do a lot
> of PSK31 at about 25W. I think I will try some of the WalMart speaker
> wire to feed a 20M dipole or delta loop and see how it works out. It
> should be safe at at that power level but not much more and then only
> if SWR at antenna feedpoint is low. What do you think? Dave

1532. Re: [SkyWires] Re: Antenna Connectors

Yahoo group: SkyWires
Date: 2006-03-04 13:01:17 UTC
From: Jim Dunstan
Topic: 1517 Message: 1532

At 10:03 PM 03/03/2006 -0500, you wrote:

> > are suitable. It would be nice to have some kind of formal assessment of
> > the various products from an RF point of view.
> >
> > EG .... line impedance, attenuation/100 ft, and power handling
> > capabilities. Right now it is try whatever looks good. I now operate
> > QRP
> > most of the time and my latest project is to use some standard #16 copper
> > speaker wire twin lead. I'll be doing some testing to see how well it
> > works ..... it certainly is nice to work with.
> >
> > Good info Jim, I didn't know about those old radios but was aware that
> > some have used zip cord for low power feedline. The insulation won't
> > handle lots of high voltage or heat but is good for QRP. I do a lot
> > of PSK31 at about 25W. I think I will try some of the WalMart speaker
> > wire to feed a 20M dipole or delta loop and see how it works out. It
> > should be safe at at that power level but not much more and then only
> > if SWR at antenna feedpoint is low. What do you think? Dave

Let us know how it works out for you. PSK and CW are my favourite modes.

Jim

1533. Re: [SkyWires] Connecting to 450 ohm ladderline?

Yahoo group: SkyWires
Date: 2006-03-07 18:25:56 UTC
From: dale smith
Topic: 1500 Message: 1533

The very best way is to use a ladder loc from cable xperts.
73/dale/ka5who

JD WG5B <wg5b@...> wrote:
What is the best way to connect 450 ohm ladder line to the antenna wire?
some type of commercial strain relief? I was just curious of any
suggestions, as I just soldered mine direct, but it is pulling the
ladder line apart at the connection...

ARS-WG5B

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1534. Re: Connecting 450 ohm laderline

Yahoo group: SkyWires
Date: 2006-03-09 17:37:51 UTC
From: Pirate Paul
Topic: 1500 Message: 1534

dale smith <dgsmith101@...> wrote:
What is the best way to connect 450 ohm ladder line to the antenna
wire? some type of commercial strain relief? I was just curious of
any suggestions, as I just soldered mine direct, but it is pulling the
ladder line apart at the connection...
--ARS-WG5B

~~~~~~

What, did you neglect to use a center insulator?
--KC5JK
~~~~~~

1535. Re: [SkyWires] Digest Number 481

Yahoo group: SkyWires
Date: 2006-03-09 22:39:56 UTC
From: charles allison
Topic: 1535 Message: 1535

Hi,

What I've done is to cut a 1/4" thick piece of lexan to about 1x3" and then drill 3 holes - 1/4" clear. I then put in 1/4-20 bolts in the outer two with washers, lock washers and wingnuts. Voila', instant connection for wire to 450ohm ladder line complete with a hole for support. the plastic is easily drilled with a small electric or hand drill and easily cut with about any sort of a saw. A piece that size is probably scrap and might could be found at the hardware store or at the local glass company.

best regards,

Charles
wb5izd

----- Original Message -----
From: <SkyWires@yahoogroups.com>
To: <SkyWires@yahoogroups.com>
Sent: Wednesday, March 08, 2006 3:33 PM
Subject: [SkyWires] Digest Number 481

> There is 1 message in this issue.
>
> Topics in this digest:
>
> 1. Re: Connecting to 450 ohm ladderline?
> From: dale smith <dgsmith101@...>
>
>
> ____
> ____
>
> Message: 1
> Date: Tue, 7 Mar 2006 10:25:56 -0800 (PST)
> From: dale smith <dgsmith101@...>
> Subject: Re: Connecting to 450 ohm ladderline?
>
> The very best way is to use a ladder loc from cable xperts.
> 73/dale/ka5who
>
> JD WG5B <wg5b@...> wrote:
> What is the best way to connect 450 ohm ladder line to the antenna wire?
> some type of commercial strain relief? I was just curious of any
> suggestions, as I just soldered mine direct, but it is pulling the
> ladder line apart at the connection...
>

> ARS-WG5B
>
>
>
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1536. New to the List

Yahoo group: SkyWires
Date: 2006-03-11 01:51:52 UTC
From: ben_ramler2002
Topic: 1536 Message: 1536

Hello Listers,

My name is Ben Ramler, K0BLR. I just joined the list as I just bought a FT-100. I'm only a tech right now and my main interest is VHF/UHF. I have no Tower. I'm doing this in preperation for when I move into a house. I live only in an apartment right. Does anyone on the list know if there are wires for 6 meters and two meters?

thanks,

Ben Ramler, K0BLR
Granite Falls, MN

1537. New to the List

Yahoo group: SkyWires
Date: 2006-03-11 01:54:05 UTC
From: ben_ramler2002
Topic: 1536 Message: 1537

Hello Listers,

My name is Ben Ramler, K0BLR. I just joined the list as I just bought a FT-100. I'm only a tech right now and my main interest is VHF/UHF. I have no Tower. I'm doing this in preperation for when I move into a house. I live only in an apartment right. Does anyone on the list know if there are wires for 6 meters and two meters?

thanks,

Ben Ramler, K0BLR
Granite Falls, MN

1538. Re: [SkyWires] New to the List

Yahoo group: SkyWires
Date: 2006-03-11 02:11:55 UTC
From: NØATH
Topic: 1536 Message: 1538

Hello Ben - sure you can build a dipole for might near anything freq. you want to. 468/f expressed in Mhz. will get you there. Actually they will work surprisingly well. You sure have a nice call there for a new tech - Welcome to the list
NØATH / Dave

----- Original Message -----
From: ben_ramler2002
To: SkyWires@yahoogroups.com
Sent: Friday, March 10, 2006 7:51 PM
Subject: [SkyWires] New to the List

Hello Listers,

My name is Ben Ramler, K0BLR. I just joined the list as I just bought a FT-100. I'm only a tech right now and my main interest is VHF/UHF. I have no Tower. I'm doing this in preperation for when I move into a house. I live only in an apartment right. Does anyone on the list know if there are wires for 6 meters and two meters?

thanks,

Ben Ramler, K0BLR
Granite Falls, MN

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1539. RE: [SkyWires] New to the List

Yahoo group: SkyWires
Date: 2006-03-11 01:54:30 UTC
From: D. Scott MacKenzie
Topic: 1536 Message: 1539

Absolutely - there are a bunch of wire antennas you can make for 6 and 2M - quads come to mind as a good gain antenna. Nice and small too. A wire dipole works too when the band is open - and they are also small. You can make a simple vertical loop for 6M that is only 5 feet on the side, and use PVC for the spreaders - simple and it works

KB?FHP
-----Original Message-----
From: SkyWires@yahoogroups.com [mailto:SkyWires@yahoogroups.com]On Behalf Of ben_ramler2002
Sent: Friday, March 10, 2006 8:52 PM
To: SkyWires@yahoogroups.com
Subject: [SkyWires] New to the List

Hello Listers,

My name is Ben Ramler, K0BLR. I just joined the list as I just bought a FT-100. I'm only a tech right now and my main interest is VHF/UHF. I have no Tower. I'm doing this in preperation for when I move into a house. I live only in an apartment right. Does anyone on the list know if there are wires for 6 meters and two meters?

thanks,

Ben Ramler, K0BLR
Granite Falls, MN

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1540. Gilfer Shortwave

Yahoo group: SkyWires
Date: 2006-03-20 01:47:49 UTC
From: Fred
Topic: 1540 Message: 1540

Would anyone here have a line on any info (User Manual/Schematic) for a Gilfer BCL Antenna Coupler Model Q5

1541. induced voltage

Yahoo group: SkyWires
Date: 2006-03-20 05:22:44 UTC
From: kc4ey
Topic: 1541 Message: 1541

I am think about puting up a horz square antenna at 30 feet or so.
about 100 feet will be parallel to what I think is a 15 kV power line
20 feet away or so.
I have been bit on more than one occasion working on electrical
equipment parallel to 136 kV inservice lines.
At this voltage is safety induced voltage an issue?

Charley
KC4EY .

1542. Induced voltage?

Yahoo group: SkyWires
Date: 2006-03-20 18:06:31 UTC
From: Briggs Longbothum
Topic: 1542 Message: 1542

Jeez, I would think so! While I must admit to not being an EE or otherwise qualified to specify a safe distance from such a high voltage line, I would have to think the 60Hz noise you would likely pick up would make this idea prohibitive in the second place!

But in the first place and this is hypothetical: If you wanted to "steal" the juice from an overhead line by inductively coupling to it (this is clearly illegal anyhow), how much closer, short of climbing the pole, would you ever want to get?? There's a reason why the higher voltage transmission lines are higher on the poles and further away from you.

I think yours is a damn foolish idea. Didn't those shocks learn you anything?

1543. Induced voltage?

Yahoo group: SkyWires
Date: 2006-03-20 21:34:24 UTC
From: Lake Hodges Radio
Topic: 1542 Message: 1543

Does anyone know why Art Bell W6OBB has measured 300 volts
(apparently induced) across his giant loop antenna?

He is in the middle of the desert and I don't think there are power
lines nearby.

-- Kurt

At 10:06 AM 3/20/2006, Briggs Longbothum wrote:
>Jeez, I would think so! While I must admit to not being an EE or
>otherwise qualified to specify a safe distance from such a high
>voltage line, I would have to think the 60Hz noise you would likely
>pick up would make this idea prohibitive in the second place!
>
>But in the first place and this is hypothetical: If you wanted
>to "steal" the juice from an overhead line by inductively coupling to
>it (this is clearly illegal anyhow), how much closer, short of
>climbing the pole, would you ever want to get?? There's a reason why
>the higher voltage transmission lines are higher on the poles and
>further away from you.

1544. RE: [SkyWires] Induced voltage?

Yahoo group: SkyWires
Date: 2006-03-20 22:00:36 UTC
From: Reginald F. Driscoll
Topic: 1542 Message: 1544

Any ungrounded wire will develop a induced static charge. You can measure a static charge is on any ungrounded antenna.

In power and telephone line construction un-terminated suspension cables and lines are routinely grounded during construction to prevent the buildup of a lethal static induced charge.

The charge is typically higher in areas with lower humidity and high winds.

The source of the induced charge can be adjacent power lines, lightning, rain, snow, or wind.

Reg
WA6ZAP

From: SkyWires@yahoogroups.com [mailto:SkyWires@yahoogroups.com] On Behalf Of Lake Hodges Radio
Sent: Monday, March 20, 2006 1:34 PM
To: SkyWires@yahoogroups.com
Subject: [SkyWires] Induced voltage?

Does anyone know why Art Bell W6OBB has measured 300 volts (apparently induced) across his giant loop antenna?

He is in the middle of the desert and I don't think there are power lines nearby.

-- Kurt

At 10:06 AM 3/20/2006, Briggs Longbothum wrote:

Jeez, I would think so! While I must admit to not being an EE or otherwise qualified to specify a safe distance from such a high voltage line, I would have to think the 60Hz noise you would likely pick up would make this idea prohibitive in the second place!

But in the first place and this is hypothetical: If you wanted to "steal" the juice from an overhead line by inductively coupling to it (this is clearly illegal anyhow), how much closer, short of climbing the pole, would you ever want to get?? There's a reason why the higher voltage transmission lines are higher on the poles and further away from you.

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Ham+radio+outlet&c=2&s=43&.sig=QTAiSIbUjpi0aksNiNbVQw> radio outlet

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1545. Re: [SkyWires] Induced voltage?

Yahoo group: SkyWires
Date: 2006-03-21 02:44:47 UTC
From: ve1vq
Topic: 1542 Message: 1545

> The source of the induced charge can be adjacent power lines, lightning,
> rain, snow, or wind.

I've had a one hundred foot end fed wire develop enough static in a snow storm to cause an arc across a PL-259 connector approximately every 10 seconds.

I keep the loop disconnected from any equipment and terminated with a 300 ohm (just something I had on hand!) resistor when I'm not on the air.

Dave
VE1VQ

1546. Re: [SkyWires] Induced voltage?

Yahoo group: SkyWires
Date: 2006-03-21 03:56:00 UTC
From: CHARLES COTTRELL
Topic: 1542 Message: 1546

Thanks Dave

I may try the antenna and I will remember to keep it grounded when not in use. Do you have high static when in use durning a snow storm?

KC4EY
Charley

ve1vq <ve1vq@...> wrote:

> The source of the induced charge can be adjacent power lines, lightning,
> rain, snow, or wind.

I've had a one hundred foot end fed wire develop enough static in a snow storm to cause an arc across a PL-259 connector approximately every 10 seconds.

I keep the loop disconnected from any equipment and terminated with a 300 ohm (just something I had on hand!) resistor when I'm not on the air.

Dave
VE1VQ

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1547. Re: [SkyWires] Induced voltage?

Yahoo group: SkyWires
Date: 2006-03-21 08:27:00 UTC
From: Jim Dunstan
Topic: 1542 Message: 1547

At 01:34 PM 20/03/2006 -0800, you wrote:

>Does anyone know why Art Bell W6OBB has measured 300 volts (apparently
>induced) across his giant loop antenna?
>
>He is in the middle of the desert and I don't think there are power lines
>nearby.
>
>-- Kurt

Hi,

If the voltage can be discharged to ground then slowly builds up again then it is likely that it is a result of static charge. If the voltage is AC, and can produce some level of consistent current flow then it is indeed caused by induction from some source of alternating magnetic field. My guess, given your description of the antenna location, is that the voltage is simply the result of a build up of a static charge. The usual sources of static charge are moving particles in the air.

Jim

1548. Re: [SkyWires] Induced voltage?

Yahoo group: SkyWires
Date: 2006-03-21 11:02:24 UTC
From: CHARLES COTTRELL
Topic: 1542 Message: 1548

Thanks Jim,

I think I will try putting up the antenna and see which type I get. I can not put up a tower so I need something to get back on the air.

KC4EY
Charley

Jim Dunstan <jimdunstan@...> wrote:
At 01:34 PM 20/03/2006 -0800, you wrote:

Does anyone know why Art Bell W6OBB has measured 300 volts (apparently induced) across his giant loop antenna?

He is in the middle of the desert and I don't think there are power lines nearby.

-- Kurt

Hi,

If the voltage can be discharged to ground then slowly builds up again then it is likely that it is a result of static charge. If the voltage is AC, and can produce some level of consistent current flow then it is indeed caused by induction from some source of alternating magnetic field. My guess, given your description of the antenna location, is that the voltage is simply the result of a build up of a static charge. The usual sources of static charge are moving particles in the air.

Jim

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1549. Re: [SkyWires] Induced voltage?

Yahoo group: SkyWires
Date: 2006-03-21 12:26:09 UTC
From: ve1vq
Topic: 1542 Message: 1549

CHARLES COTTRELL wrote:
> Thanks Dave
>
> I may try the antenna and I will remember to keep it grounded when not
> in use. Do you have high static when in use durning a snow storm?

I think I've mislead you! I don't ground the antenna when not in use. The feed line comes through the rear wall of the shack on two parallel threaded rods (each in its own pvc pipe). I attach the resistor across the rods when I'm not using the antenna. There is no attachment to ground. My theory is, if it's floating, it's neutral and won't attract the lightning. Whether that's true or not, it has worked for me.

I've only noticed the snow static that one time. Probably then because the antenna was unterminated/ungrounded. Since then, I've either shorted the antenna (as with the resistor) or connected it to ground through an rf choke/high value resistor.

Perhaps, because of the "nothing bad has happened so it's not going to" syndrome, I've become complacent. I've operated in snow storms since and nothing has happened to the rigs, likely because there has been a DC path (somewhere!) bleeding off the static charge.

It wouldn't hurt to add an rf choke (or a high value resistor) from the hot side of the coax (before the tuner assuming balanced feed line) to ground to keep the static under control.

Dave
VE1VQ

1550. Re: [SkyWires] Induced voltage?

Yahoo group: SkyWires
Date: 2006-03-21 14:55:18 UTC
From: Dr.Ace Ratliff
Topic: 1542 Message: 1550

Hi All,
End fed wire and/or loop antennas can develop very high static voltages on them.
This static voltage can easily be high enough to knock the front end out of sensitive receivers.
To overcome this problem, I suggest you connect a resistor from the coax center to shield (if you use coax) where the antenna wire connects to the coax or across a parallel feedline.
Only use a non-inductive resistor, carbon resistors work fine.
Don't use wire wound or metal film resistors.
The resistance value is not critical. The resistor can be left in the circuit at all times and will have no measurable effect on VSWR , power loss , etc.
I suggest about a 56K ohm 1/2 watt resistor for receive only or if transmitting with up to 100 watts.
If you will be transmitting with high power "QRO", I suggest using about a 1 Meg ohm 1/2 watt resistor.
Ace - www.WH2T.com

----- Original Message -----
From: ve1vq
To: SkyWires@yahoogroups.com
Sent: Tuesday, March 21, 2006 7:26 AM
Subject: Re: [SkyWires] Induced voltage?

CHARLES COTTRELL wrote:
> Thanks Dave
>
> I may try the antenna and I will remember to keep it grounded when not
> in use. Do you have high static when in use durning a snow storm?

I think I've mislead you! I don't ground the antenna when not in use. The feed line comes through the rear wall of the shack on two parallel threaded rods (each in its own pvc pipe). I attach the resistor across the rods when I'm not using the antenna. There is no attachment to ground. My theory is, if it's floating, it's neutral and won't attract the lightning. Whether that's true or not, it has worked for me.

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Perhaps, because of the "nothing bad has happened so it's not going to" syndrome, I've become complacent. I've operated in snow storms since and nothing has happened to the rigs, likely because there has been a DC path (somewhere!) bleeding off the static charge.

It wouldn't hurt to add an rf choke (or a high value resistor) from the hot side of the coax (before the tuner assuming balanced feed line) to ground to keep the static under control.

Dave
VE1VQ

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1551. Re: [SkyWires] Induced voltage? (Wind Generated Static Charge)

Yahoo group: SkyWires
Date: 2006-03-21 16:17:13 UTC
From: Harold Burton
Topic: 1551 Message: 1551

Dr.Ratliff, do bare wire dipoles acquire similar charges? My 28 month old FT-857 suffered a recent partial deafness and loss of S meter display. Took 2 weeks and $135 (including shipping both ways) for Vertex Standard to put it back in like new condition. Its "illness" began on a windy day while I was using the single feedline crossed 40/80 meter dipoles out at my shop/shack building. Would your "static bleeder" work for dipoles too? I think I'll stick with the house antenna (vertical 5BTV) until I hear your reply on this matter. Hmmm, do verticals avoid static accumulation or should they have a "bleeder" connection also? I'm afraid I'm acquiring a rampant case of ASAP (Antenna Static Accumulation Paranoia)(G) Well, completely sane or not, my questions are serious ones. For, to those of us living anywhere on the great plains, a day without noticeable wind is a rare event.

Harold
KD5SAK

----- Original Message -----
From: Dr.Ace Ratliff
To: SkyWires@yahoogroups.com
Sent: Tuesday, March 21, 2006 8:55 AM
Subject: Re: [SkyWires] Induced voltage?

Hi All,
End fed wire and/or loop antennas can develop very high static voltages on them.
This static voltage can easily be high enough to knock the front end out of sensitive receivers.
To overcome this problem, I suggest you connect a resistor from the coax center to shield (if you use coax) where the antenna wire connects to the coax or across a parallel feedline.
Only use a non-inductive resistor, carbon resistors work fine.
Don't use wire wound or metal film resistors.
The resistance value is not critical. The resistor can be left in the circuit at all times and will have no measurable effect on VSWR , power loss , etc.
I suggest about a 56K ohm 1/2 watt resistor for receive only or if transmitting with up to 100 watts.
If you will be transmitting with high power "QRO", I suggest using about a 1 Meg ohm 1/2 watt resistor.
Ace - www.WH2T.com

1552. Re: [SkyWires] Induced voltage?

Yahoo group: SkyWires
Date: 2006-03-21 16:32:15 UTC
From: Andy
Topic: 1542 Message: 1552

> If the voltage can be discharged to ground then slowly builds up again
> then
> it is likely that it is a result of static charge.

That's the first thing that came to mind with me too. But if it is truly a continuous loop, and doesn't have something like a capacitor in the middle of it, then it shouldn't maintain a static (DC) charge.

If it is a continuous loop, then presumably this 300 volts (if real) must be an AC measurement. Perhaps its size makes it very good at reception and the induced voltage (probably measured with a rather high impedance load) is what it picks up. Magnetic induction normally causes a current in the secondary loop, and if you don't have a short or low impedance load on it, the voltage can be somewhat large (depending on self inductance, which probably is quite large in his case).

Does he live in a house with no AC power? Otherwise, there's got to be power lines nearby (to act as a transformer primary), just not of the very high voltage kind.

Regards,
Andy

1553. Re: [SkyWires] Induced voltage? (Wind Generated Static Charge)

Yahoo group: SkyWires
Date: 2006-03-21 20:30:41 UTC
From: Jim Dunstan
Topic: 1551 Message: 1553

At 10:17 AM 21/03/2006 -0600, you wrote:
>Dr.Ratliff, do bare wire dipoles acquire similar charges? My 28 month old
>FT-857 suffered a recent partial deafness and loss of S meter display.
>Took 2 weeks and $135 (including shipping both ways) for Vertex Standard
>to put it back in like new condition. Its "illness" began on a windy day
>while I was using the single feedline crossed 40/80 meter dipoles out at
>my shop/shack building. Would your "static bleeder" work for dipoles too?
>I think I'll stick with the house antenna (vertical 5BTV) until I hear
>your reply on this matter. Hmmm, do verticals avoid static accumulation or
>should they have a "bleeder" connection also? I'm afraid I'm acquiring a
>rampant case of ASAP (Antenna Static Accumulation Paranoia)(G) Well,
>completely sane or not, my questions are serious ones. For, to those of us
>living anywhere on the great plains, a day without noticeable wind is a
>rare event.
>
>Harold
>KD5SAK

Hi Harold,

All antennas may accumulate a static charge .... the amount of charge will be related to the amount of wire up there. Whether the charge remains on the antenna depends on the design of the antenna .... eg whether the design includes a Direct Current path to ground. Lets say you are using a wire dipole fed directly with coax cable .... eg one side of the dipole is connected to the shield and the other side of the dipole is connected to the centre conductor. Lets assume your radio is grounded, either directly, or indirectly via the power supply. When you connect the coax to your radio the shield side of the dipole will have a DC connection to ground and any static charge that builds up on that half of the dipole will drain directly to ground via your radio ground. However the static voltage building up on the other half of the dipole appears on the centre pin of the coax connector and it can only get to ground via the circuitry in your radio front end and can can cause damage depending on the front end design of the radio.

Solutions:

If you use a balun at the feed point of the dipole the usual design will provide a DC path for both sides of the dipole. If you don't use a balun it is possible to put a high value resistor across the feed point of the dipole allowing both sides of the dipole to feed to ground via the coax shield or put the resistor across the feed point (coax connector) at the radio. In any case, the test is whether or not all parts of the wire antenna have a DC path to ground. Dipoles and long wire antennas are the major culprits as well as large vertical antennas. Loops are a little more

forgiving in that the wire is one continuous piece .... if any part has DC ground then it all has DC ground. A good ohm meter will tell you the story hi hi.

Jim, VE3CI

1554. Re: [SkyWires] Induced voltage? (Wind Generated Static Charge)

Yahoo group: SkyWires
Date: 2006-03-21 20:36:01 UTC
From: Dr.Ace Ratliff
Topic: 1551 Message: 1554

Hi Harold,
Any large bare metal antenna can develop a high static DC voltage charge unless there is a path to discharge the static to ground. Many times that path will be thru the receiver's front end. I know of several cases of this type of receiver damage.

You ask "Would your "static bleeder" work for dipoles too? " The answer is yes.
Large chokes connected from the feedline to ground will bleed off the static charges also.
You also ask "Do verticals avoid static accumulation or should they have a "bleeder" connection also? "
The answer is "that depends" on the type of matching system used. If the DC resistance across the station end of the feedline or at the antenna feedpoint , as measured with an Ohm meter , is a few ohms or less , you don't need to worry about a DC static charge build up. If on the other hand the DC resistance across the station end of the feedline or at the antenna feedpoint , as measured with an Ohm meter , is infinite , you should consider installing some type of discharge/bleed off device .
I hope this answers your questions.
P.S. Nearby lightning strikes can also induce very high voltages into large antennas.
Very 73, Ace - www.WH2T.com
----- Original Message -----
From: Harold Burton
To: SkyWires@yahoogroups.com
Sent: Tuesday, March 21, 2006 11:17 AM
Subject: Re: [SkyWires] Induced voltage? (Wind Generated Static Charge)

Dr.Ratliff, do bare wire dipoles acquire similar charges? My 28 month old FT-857 suffered a recent partial deafness and loss of S meter display. Took 2 weeks and $135 (including shipping both ways) for Vertex Standard to put it back in like new condition. Its "illness" began on a windy day while I was using the single feedline crossed 40/80 meter dipoles out at my shop/shack building. Would your "static bleeder" work for dipoles too? I think I'll stick with the house antenna (vertical 5BTV) until I hear your reply on this matter. Hmmm, do verticals avoid static accumulation or should they have a "bleeder" connection also? I'm afraid I'm acquiring a rampant case of ASAP (Antenna Static Accumulation Paranoia)(G) Well, completely sane or not, my questions are serious ones. For, to those of us living anywhere on the great plains, a day without noticeable wind is a rare event.

Harold
KD5SAK

----- Original Message -----
From: Dr.Ace Ratliff
To: SkyWires@yahoogroups.com
Sent: Tuesday, March 21, 2006 8:55 AM
Subject: Re: [SkyWires] Induced voltage?

Hi All,
End fed wire and/or loop antennas can develop very high static voltages on them.

This static voltage can easily be high enough to knock the front end out of sensitive receivers.
To overcome this problem, I suggest you connect a resistor from the coax center to shield (if you use coax) where the antenna wire connects to the coax or across a parallel feedline.
Only use a non-inductive resistor, carbon resistors work fine.
Don't use wire wound or metal film resistors.
The resistance value is not critical. The resistor can be left in the circuit at all times and will have no measurable effect on VSWR , power loss , etc.
I suggest about a 56K ohm 1/2 watt resistor for receive only or if transmitting with up to 100 watts.
If you will be transmitting with high power "QRO", I suggest using about a 1 Meg ohm 1/2 watt resistor.
Ace - www.WH2T.com

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1555. Re: [SkyWires] Induced voltage? (Wind Generated Static Charge)

Yahoo group: SkyWires
Date: 2006-03-21 21:44:22 UTC
From: Harold Burton
Topic: 1551 Message: 1555

Thank you Dr. Ratliff, I'll do a little system checking and apply what you've told me.

Harold
KD5SAK
----- Original Message -----
From: Dr.Ace Ratliff
To: SkyWires@yahoogroups.com
Sent: Tuesday, March 21, 2006 2:36 PM
Subject: Re: [SkyWires] Induced voltage? (Wind Generated Static Charge)

Hi Harold,
Any large bare metal antenna can develop a high static DC voltage charge unless there is a path to discharge the static to ground. Many times that path will be thru the receiver's front end. I know of several cases of this type of receiver damage.

You ask "Would your "static bleeder" work for dipoles too? " The answer is yes.
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I hope this answers your questions.
P.S. Nearby lightning strikes can also induce very high voltages into large antennas.
Very 73, Ace - www.WH2T.com
----- Original Message -----
From: Harold Burton
To: SkyWires@yahoogroups.com
Sent: Tuesday, March 21, 2006 11:17 AM
Subject: Re: [SkyWires] Induced voltage? (Wind Generated Static Charge)

Dr.Ratliff, do bare wire dipoles acquire similar charges? My 28 month old FT-857 suffered a recent partial deafness and loss of S meter display. Took 2 weeks and $135 (including shipping both ways) for Vertex Standard to put it back in like new condition. Its "illness" began on a windy day while I was using the single feedline crossed 40/80 meter dipoles out at my shop/shack building. Would your "static bleeder" work for dipoles too? I think I'll stick with the house antenna (vertical 5BTV) until I hear your reply on this matter. Hmmm, do verticals avoid static accumulation or should they have a "bleeder" connection also? I'm afraid I'm acquiring a rampant case of ASAP (Antenna Static Accumulation Paranoia)(G) Well, completely sane or not, my questions are serious ones. For, to those of us living anywhere on the great plains, a day without noticeable wind is a rare event.

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From: Dr.Ace Ratliff
To: SkyWires@yahoogroups.com
Sent: Tuesday, March 21, 2006 8:55 AM
Subject: Re: [SkyWires] Induced voltage?

Hi All,
End fed wire and/or loop antennas can develop very high static voltages on them.
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Only use a non-inductive resistor, carbon resistors work fine.
Don't use wire wound or metal film resistors.
The resistance value is not critical. The resistor can be left in the circuit at all times and will have no measurable effect on VSWR , power loss , etc.
I suggest about a 56K ohm 1/2 watt resistor for receive only or if transmitting with up to 100 watts.
If you will be transmitting with high power "QRO", I suggest using about a 1 Meg ohm 1/2 watt resistor.
Ace - www.WH2T.com

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SkyWires-unsubscribe@yahoogroups.com

c.. Your use of Yahoo! Groups is subject to the Yahoo! Terms of Service.

No virus found in this incoming message.
Checked by AVG Free Edition.
Version: 7.1.385 / Virus Database: 268.2.6/287 - Release Date: 3/21/2006

1556. Re: [SkyWires] Induced voltage?

Yahoo group: SkyWires
Date: 2006-03-22 03:08:09 UTC
From: JHR
Topic: 1542 Message: 1556

I use antenna switches (3:1) which ground the hot side
when turned to the fourth- or off - position when not in use.
I believe this shunts the hot side to ground and will bleed
off any static.

Hope I am right... /// Richards ///
==========

Dr.Ace Ratliff wrote:
\
I suggest you connect a resistor from the coax center to shield (if you
use coax) where the antenna wire connects to the coax or across a
parallel feedline.

1557. Re: [SkyWires] Induced voltage?

Yahoo group: SkyWires
Date: 2006-03-22 05:00:20 UTC
From: CHARLES COTTRELL
Topic: 1542 Message: 1557

thanks

JHR <jruing@...> wrote: I use antenna switches (3:1) which ground the hot side
when turned to the fourth- or off - position when not in use.
I believe this shunts the hot side to ground and will bleed
off any static.

Hope I am right... /// Richards ///
==========

Dr.Ace Ratliff wrote:
\
I suggest you connect a resistor from the coax center to shield (if you
use coax) where the antenna wire connects to the coax or across a
parallel feedline.

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1558. Is it possibal to nest 2 delta loops

Yahoo group: SkyWires
Date: 2006-03-24 13:05:14 UTC
From: Jay
Topic: 1558 Message: 1558

Good morning
I currently use a delta loop on 4o meters, what I would like to do I hang a second loop for 2o meters inside the 4o meter loop using the same vertical support.
Will this effect the operation of either loop?
Thank you
Jay
N3OW

1559. Re: [SkyWires] Is it possibal to nest 2 delta loops

Yahoo group: SkyWires
Date: 2006-03-24 20:24:08 UTC
From: Jim Dunstan
Topic: 1558 Message: 1559

At 01:05 PM 24/03/2006 +0000, you wrote:
>Good morning
>I currently use a delta loop on 4o meters, what I would like to do I
>hang a second loop for 2o meters inside the 4o meter loop using the
>same vertical support.
> Will this effect the operation of either loop?
>Thank you
>Jay
>N3OW

Hi Jay,

No problem ..... I operated 20-15-10 mtr loops nested in both a driven element and reflector (cubical quad). No reason why there should be any problem with nested 40-20 mtr loops.

Jim, VE3CI

1560. Re: [SkyWires] Induced voltage?

Yahoo group: SkyWires
Date: 2006-03-25 00:48:10 UTC
From: erik@n0ew.org
Topic: 1542 Message: 1560

> At 01:34 PM 20/03/2006 -0800, you wrote:
>
>
>>Does anyone know why Art Bell W6OBB has measured 300 volts (apparently
>>induced) across his giant loop antenna?
>>
>>He is in the middle of the desert and I don't think there are power lines
>>nearby.
>>
>>-- Kurt

The story continues that one can sit there with a knife switch and flick
it back and forth and always get a consistant 300-volt pop time after time
after time, with no perceptiable rise/drop time between the pops.

Is reported to happen during windless days too.

Doesn't sound like static.

-Erik n0ew
longtime coast to coast am fan

1561. Re: Induced voltage?

Yahoo group: SkyWires
Date: 2006-03-25 03:54:44 UTC
From: DAVID
Topic: 1542 Message: 1561

Doesn't Art Bell have a FM Radio Station close by?
Dave

--- In SkyWires@yahoogroups.com, erik@... wrote:
>
> > At 01:34 PM 20/03/2006 -0800, you wrote:
> >
> >
> >>Does anyone know why Art Bell W6OBB has measured 300 volts
(apparently
> >>induced) across his giant loop antenna?
> >>
> >>He is in the middle of the desert and I don't think there are
power lines
> >>nearby.
> >>
> >>-- Kurt
>
>
> The story continues that one can sit there with a knife switch and
flick
> it back and forth and always get a consistant 300-volt pop time
after time
> after time, with no perceptiable rise/drop time between the pops.
>
> Is reported to happen during windless days too.
>
> Doesn't sound like static.
>
> -Erik n0ew
> longtime coast to coast am fan
>

1562. Re: [SkyWires] Induced voltage?

Yahoo group: SkyWires
Date: 2006-03-25 05:27:10 UTC
From: Jim Dunstan
Topic: 1542 Message: 1562

At 06:48 PM 24/03/2006 -0600, you wrote:
> > At 01:34 PM 20/03/2006 -0800, you wrote:
> >
> >
> >>Does anyone know why Art Bell W6OBB has measured 300 volts (apparently
> >>induced) across his giant loop antenna?
> >>
> >>He is in the middle of the desert and I don't think there are power lines
> >>nearby.
> >>
> >>-- Kurt
> >
> >
>The story continues that one can sit there with a knife switch and flick
>it back and forth and always get a consistant 300-volt pop time after time
>after time, with no perceptiable rise/drop time between the pops.
>
>Is reported to happen during windless days too.
>
>Doesn't sound like static.
>
>-Erik n0ew
>longtime coast to coast am fan

Hi,

What you describe is "BACK EMF". If I understand the experiment that produces the 300 Volt 'pop' is as follows:

-start with a large wire loop
-place a knife switch and some voltage measuring device across the feed point (an oscilloscope will do)
-flick the switch on (short the loop) then off (open the loop)
-the result is a voltage spike that peaks up to 300 volts

This experiment indicates that there is DC electron flow in the wire loop when it is shorted. When the short is removed, (flipping the knife switch), the sudden termination of electron flow causes a voltage 'pop' ... BACK EMF. The question is, what is the cause of the electron flow? Either the wire is picking up an electric charge due to environmental conditions or it is caused the Earth's magnetic field itself. No other way to get DC electron flow in a wire.

The following internet site provides a pretty good description of the BACK EMF phenomena.

http://www.newton.dep.anl.gov/askasci/phy00/phy00351.htm

Jim

1563. Re: [SkyWires] Induced voltage?

Yahoo group: SkyWires
Date: 2006-03-25 06:38:02 UTC
From: Andy
Topic: 1542 Message: 1563

> The story continues that one can sit there with a knife switch and flick
> it back and forth and always get a consistant 300-volt pop time after time
> after time, with no perceptiable rise/drop time between the pops.

DC or AC?

If it's DC, it'd be strange indeed to have it pop up to 300V and stay there.

If it's AC, then one would expect there to be 300V AC (or whatever value)
there all the time except when it's shorted out ... in which case, if you
ask me, it seems a wee bit silly to do that experiment with the knife
switch. (Kind of like toggling a wall switch and being surprised that a
light bulb turns on and off every time you do it.)

Regards,
Andy

1564. Re: [SkyWires] Induced voltage?

Yahoo group: SkyWires
Date: 2006-03-25 08:22:34 UTC
From: Walter A Fipps Jr.
Topic: 1542 Message: 1564

All right all ready;

Please remember your basics, You have an FCC ticket , You were
intelligent enough to pass the test, even ,thought they gave you the
answers before hand!!!! SO Fing what, you should have retained at least
enough to understanding what THE F is going on in the example hereto
fore described.

If this is the future of Ham Radio, we can all say adios!

May God Bless
73
de
Walter
KD4OVR

Andy wrote:

>>The story continues that one can sit there with a knife switch and flick
>>it back and forth and always get a consistant 300-volt pop time after time
>>after time, with no perceptiable rise/drop time between the pops.
>>
>>
>
>DC or AC?
>
>If it's DC, it'd be strange indeed to have it pop up to 300V and stay there.
>
>If it's AC, then one would expect there to be 300V AC (or whatever value)
>there all the time except when it's shorted out ... in which case, if you
>ask me, it seems a wee bit silly to do that experiment with the knife
>switch. (Kind of like toggling a wall switch and being surprised that a
>light bulb turns on and off every time you do it.)
>
>Regards,
>Andy
>
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>Yahoo! Groups Links
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1565. Re: [SkyWires] Induced voltage?

Yahoo group: SkyWires
Date: 2006-03-25 15:58:34 UTC
From: David Shrum
Topic: 1542 Message: 1565

Walter,
It seems you have a good knowledge in this sort of topic so how about being an Elmer to those of us that don't understand or just don't remember all that info; It is lists like this that is meant to share information amongst the members. I for one don't really understand how a wire that creates a DC short, can work for an antenna but is does. Members of this great group share their ideas, questions etc... with the whole group, that is why groups like this one is better than Radio Shack. At least here if some one has a question... they get an answer that goes beyond 'cell phones'.
Dave N8PU

Walter A Fipps Jr. wrote:
> All right all ready;
>
> Please remember your basics, You have an FCC ticket , You were
> intelligent enough to pass the test, even ,thought they gave you the
> answers before hand!!!! SO Fing what, you should have retained at
> least enough to understanding what THE F is going on in the example
> hereto fore described.
>
> If this is the future of Ham Radio, we can all say adios!
>
> May God Bless
> 73
> de
> Walter
> KD4OVR
>
>

1566. Re: Is it possibal to nest 2 delta loops

Yahoo group: SkyWires
Date: 2006-03-25 17:38:19 UTC
From: Jay
Topic: 1558 Message: 1566

--- In SkyWires@yahoogroups.com, Jim Dunstan <jimdunstan@...> wrote:
>
> At 01:05 PM 24/03/2006 +0000, you wrote:
> >Good morning
> >I currently use a delta loop on 4o meters, what I would like to do I
> >hang a second loop for 2o meters inside the 4o meter loop using the
> >same vertical support.
> > Will this effect the operation of either loop?
> >Thank you
> >Jay
> >N3OW
>
> Hi Jay,
>
> No problem ..... I operated 20-15-10 mtr loops nested in both a driven
> element and reflector (cubical quad). No reason why there should be
any
> problem with nested 40-20 mtr loops.
>
> Jim, VE3CI
>
Thank you

1572. New to group

Yahoo group: SkyWires
Date: 2006-03-29 00:17:25 UTC
From: jllamb62
Topic: 320 Message: 1572

Hello,
My name is Jim Lamb and I live in southwestern Indiana. I will be retiring soon and I want to get back into building radios and other electronic devices.
Several years ago I was an avid shortwave listener, I still have my Drake receivers,SPR4 and R4C, old but reliable. I got out my old radio parts and started gathering new information.
I want to get into longwave, mediumwave, and vhf as well as shortwave . I also want to experiment with antennas, dipole, vertical,etc.
I live in the country on 18 acres so space will not be a problem.
I am looking forward to participating in the group.
Jim

1573. Quads?

Yahoo group: SkyWires
Date: 2006-03-29 18:26:08 UTC
From: K.Currie
Topic: 1573 Message: 1573

Does any one have any good plans for building a quad (2 meter) antenna. I am looking to build one with multi directors. Just a fun thing to try.
Thanks keith

1574. New to group

Yahoo group: SkyWires
Date: 2006-03-29 19:18:44 UTC
From: VE7AGW
Topic: 320 Message: 1574

Welcome to the group Jim, are you a ham or a swl? We have a cross collection of mainly hams and some swl's as well. The topics get pretty interesting and some time even mind boggling (aka lots of theory). But we all have fun exchanging a lot of great and not so great ideas.

73...ve7cm
Al, Port Alberni, BC

Hello,
My name is Jim Lamb and I live in southwestern Indiana. I will be retiring soon and I want to get back into building radios and other electronic devices.
Several years ago I was an avid shortwave listener, I still have my Drake receivers,SPR4 and R4C, old but reliable. I got out my old radio parts and started gathering new information.
I want to get into longwave, mediumwave, and vhf as well as shortwave . I also want to experiment with antennas, dipole, vertical,etc.
I live in the country on 18 acres so space will not be a problem.
I am looking forward to participating in the group.
Jim

1575. Re: [SkyWires] Digest Number 493

Yahoo group: SkyWires
Date: 2006-03-29 19:56:29 UTC
From: Bryan Burrma
Topic: 1575 Message: 1575

welcome Jim,, Your in the right place.. Enjoy the roundtable talks here. A lot can be learned from reading this board.

Bryan s.w Michigan www.kc8hps.com

SkyWires@yahoogroups.com wrote: There is 1 message in this issue.

Topics in this digest:

1. New to group
From: "jllamb62"

Message: 1
Date: Wed, 29 Mar 2006 00:17:25 -0000
From: "jllamb62"
Subject: New to group

Hello,
My name is Jim Lamb and I live in southwestern Indiana. I will be retiring soon and I want to get back into building radios and other electronic devices.
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I am looking forward to participating in the group.
Jim

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1576. Re: [SkyWires] Quads?

Yahoo group: SkyWires
Date: 2006-03-30 00:27:24 UTC
From: David Burroughs
Topic: 1573 Message: 1576

http://homepage.ntlworld.com/s.amesbury/M3FVB/2elementquad.htm
here is one. google search and find many more Dave KR4YD

1577. World Event Map Link

Yahoo group: SkyWires
Date: 2006-04-02 02:35:06 UTC
From: Fred
Topic: 1577 Message: 1577

A bit off topic to say the least but I am sure all will be interested
in this link:

http://visz.rsoe.hu/alertmap/woalert.php?lang=eng

This is a real-time map showing big events around the globe, ie

Major accidents: (Plains, Trains & Ferries etc)
Disease Outbreaks (Bird flu & Cholera etc)
Earthquakes
WX events and related evacuations.

I am sure you get the idea.

Updated as events are happening. Below the map are categorized event
showing additional details as known about the event. Or you may just
click on the icon and get the same info.

Icon descriptions may be found here;
http://visz.rsoe.hu/alertmap/icons.php?lang=eng

I hope you enjoy this information source

Garth N2BMP

HomePage: http://groups.msn.com/N2BMP

1578. Newbie loop question

Yahoo group: SkyWires
Date: 2006-04-02 20:52:29 UTC
From: thomas104394
Topic: 1578 Message: 1578

Hi to all,
just joined the group I'm UK based Ham 2m0azw.Dont have
large real estate for antenna erection and would like to ask views on
using non resonant loops.Could put about a 30 meter loop would this
cover other bands via a atu ?Should the antenna be fed via coax or 300
ohm feeder?Any thougths ideas welcome
regards Tom

1579. RE: [SkyWires] Newbie loop question

Yahoo group: SkyWires
Date: 2006-04-02 20:57:09 UTC
From: D. Scott MacKenzie
Topic: 1578 Message: 1579

Generally you could work 30M and up. You MIGHT be able to work 40M. Better to see if you can put up a 40M loop.

Feed with 300 or 450 ohm ladder line, and use your antenna tuner. That will give you the most flexibility, and the least losses.

Scott, KB?FHP
-----Original Message-----
From: SkyWires@yahoogroups.com [mailto:SkyWires@yahoogroups.com]On Behalf Of thomas104394
Sent: Sunday, April 02, 2006 4:52 PM
To: SkyWires@yahoogroups.com
Subject: [SkyWires] Newbie loop question

Hi to all,
just joined the group I'm UK based Ham 2m0azw.Dont have large real estate for antenna erection and would like to ask views on using non resonant loops.Could put about a 30 meter loop would this cover other bands via a atu ?Should the antenna be fed via coax or 300 ohm feeder?Any thougths ideas welcome
regards Tom

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--

1580. Re: [SkyWires] Newbie loop question

Yahoo group: SkyWires
Date: 2006-04-02 22:24:30 UTC
From: Jim Dunstan
Topic: 1578 Message: 1580

At 08:52 PM 02/04/2006 +0000, you wrote:
>Hi to all,
> just joined the group I'm UK based Ham 2m0azw.Dont have
>large real estate for antenna erection and would like to ask views on
>using non resonant loops.Could put about a 30 meter loop would this
>cover other bands via a atu ?Should the antenna be fed via coax or 300
>ohm feeder?Any thougths ideas welcome
> regards Tom

Hi Tom,

A 30m loop can be a very effective antenna for all bands 80-10M depending on how high you can get it .... It can be oriented horizontally or vertically .... or something in between. The loop can also be configured in 2 or 3 turns .... the single turn will be the most efficient. In order to tune the loop on all bands a couple of strategies can be employed:

The SGC (they make automatic antenna couplers) strategy is to put one of their automatic antenna couplers right at the feed point of the loop and to connect the coupler to the radio via coax cable. This is a very effective method of tuning such a loop.

The second strategy is to tune the loop with an antenna tuner located at the operating location ..... this requires running parallel feed line to the loop. 300 ohm twin lead will do a good job.

By the way, SGC recommends a loop 24.5M loop .... or 80 ft.

Jim

1581. more loop questions

Yahoo group: SkyWires
Date: 2006-04-03 20:13:39 UTC
From: thomas104394
Topic: 1581 Message: 1581

Many thanks for the replies about the loop antenna,concerning the mode of operation.Does the antenna require earthing at the atu or does it perform dipole fashion no grounding needed,I have my shack upper floor level and have no access for a proper ground wire run would be too long.Sure you will all put me staight on the matter

thanks Tom 2m0azw

1582. Making a PCB board at home

Yahoo group: SkyWires
Date: 2006-04-03 21:10:23 UTC
From: Greg W:-)
Topic: 1582 Message: 1582

For the experimenters out there ,,, I have just uploaded my latest instalment on my site . how to make a PCB board at home.

Its a bit off topic for in here , but not if your wanting to make an amp for the skywire loop., then it might come in real handy.:-)

gregW:-)

http://www.geocities.com/onegammyleg/

1583. Re: [SkyWires] more loop questions

Yahoo group: SkyWires
Date: 2006-04-04 02:19:03 UTC
From: Jim Dunstan
Topic: 1581 Message: 1583

At 08:13 PM 03/04/2006 +0000, you wrote:
>Many thanks for the replies about the loop antenna,concerning the mode
>of operation.Does the antenna require earthing at the atu or does it
>perform dipole fashion no grounding needed,I have my shack upper floor
>level and have no access for a proper ground wire run would be too
>long.Sure you will all put me staight on the matter
>
> thanks Tom 2m0azw

Hi Tom,

You are correct, the loop antenna operates dipole fashion in that it is a balanced antenna which does not require an RF ground in order to function properly. Being a balanced antenna the loop is best fed with a balanced feed line. However, as with the dipole, many operators feed a resonant loop with coax line with excellent results. In order to avoid or lessen antenna currents on the shield operators often use a balun or a simple RF choke (formed by coiling the coax feed line or ferrite cores) at the feed point.

If you are planning on multi-band operation then a balanced feed line such as 450 ohm ladder line is essential ..... unless you use an automatic antenna coupler right at the feed point (such as SGC weather proof units).

There has been a lot of discussion about DC grounding of loop antennas .... for safety purposes .... eg when lightning walks about .... or to simply drain to ground excessive static charges that build up due to various particles in the air etc .... These considerations are most relevant with really large bare wire antennas .... although under certain conditions even smaller antennas can build up sufficient static charges to cause damage to some radios. If you use a coax feed then then the loop is entirely grounded to your ATU/RADIO system via the coax shield. If you use a balanced feed system your antenna tuner may not provide a DC ground .... eg a link coupling system. In a case like that a high value resistor to ground can serve to drain the charge without contributing substantially to disturbing the tuning.

Jim, VE3CI

1584. Re: [SkyWires] more loop questions

Yahoo group: SkyWires
Date: 2006-04-04 14:44:39 UTC
From: Andy
Topic: 1581 Message: 1584

> There has been a lot of discussion about DC grounding of loop antennas
....
> for safety purposes .... eg when lightning walks about ....
...
> If you use a
> balanced feed system your antenna tuner may not provide a DC ground .... eg
> a link coupling system. In a case like that a high value resistor to
> ground can serve to drain the charge without contributing substantially to
> disturbing the tuning.

I believe it used to be common practice for hams to use a knife switch where the feedline enters the shack, and ground the feedline when not in use.

Perhaps it's something that's been semi-forgotten since changing to coax, since it's not so easy anymore to wire it up to that big old knife switch.

Of course the knife switch doesn't help while you're operating and the wind is blowing and the antenna is building up a few thousand volts of static charge.

Regards,
Andy

1585. Re: [SkyWires] more loop questions

Yahoo group: SkyWires
Date: 2006-04-04 15:52:10 UTC
From: erik@n0ew.org
Topic: 1581 Message: 1585

>
> Of course the knife switch doesn't help while you're operating and the
> wind
> is blowing and the antenna is building up a few thousand volts of static
> charge.
>

I'd expect the rigs of the "knife-switch era" were not as sensitive to voltage changes as the IC type rigs common today. Certainly the internal voltage ranges were much higher in tube rigs. Seems to me I've seen tube designs on the order of hundreds of volts. Whereas today's rigs are more on the order of 3 to 15 volts, depending upon which part of the internal circuits considering. Certainly different animals!

I know many of the tube rigs (all?) had a much greater tuning range than todays rigs due to the pi network they used to transition between the rigs output and the antenna.

I'm just guessing, but it seems reasonable to me to assume due to major design differences the tube rigs and todays IC rigs should be considered as separate categories most of the time. An interesting blending to consider would be those rigs that were half-breeds: part tube and part transistor.

I've also heard that "link" coupling was much more common "back then." As this eliminates a physical connection between the antenna system and the XCVR, it seems logical in these cases yet another safety barrior was in place between the antenna and the rig.

Anyone out there know for certain?

-Erik n0ew

1586. Re: [SkyWires] more loop questions

Yahoo group: SkyWires
Date: 2006-04-04 16:48:41 UTC
From: Jim Dunstan
Topic: 1581 Message: 1586

At 10:44 AM 04/04/2006 -0400, you wrote:
> > There has been a lot of discussion about DC grounding of loop antennas
>....
> > for safety purposes .... eg when lightning walks about ....
>...
> > If you use a
> > balanced feed system your antenna tuner may not provide a DC ground .... eg
> > a link coupling system. In a case like that a high value resistor to
> > ground can serve to drain the charge without contributing substantially to
> > disturbing the tuning.
>
>I believe it used to be common practice for hams to use a knife switch where
>the feedline enters the shack, and ground the feedline when not in use.
>
>Perhaps it's something that's been semi-forgotten since changing to coax,
>since it's not so easy anymore to wire it up to that big old knife switch.
>
>Of course the knife switch doesn't help while you're operating and the wind
>is blowing and the antenna is building up a few thousand volts of static
>charge.
>
>Regards,
>Andy

Hi Andy,

Years ago I had a large dipole fed with home brew balanced feed line and
that is exactly what I did when there seemed to be a storm brewing ... go
outside and pull the knife switch and put the feed line directly to ground.

Jim, VE3CI

1587. Re: [SkyWires] more loop questions

Yahoo group: SkyWires
Date: 2006-04-04 17:00:25 UTC
From: Jim Dunstan
Topic: 1581 Message: 1587

At 10:52 AM 04/04/2006 -0500, you wrote:
> >
> > Of course the knife switch doesn't help while you're operating and the
> > wind
> > is blowing and the antenna is building up a few thousand volts of static
> > charge.
> >
>
>
>I'd expect the rigs of the "knife-switch era" were not as sensitive to
>voltage changes as the IC type rigs common today. Certainly the internal
>voltage ranges were much higher in tube rigs. Seems to me I've seen tube
>designs on the order of hundreds of volts. Whereas today's rigs are more
>on the order of 3 to 15 volts, depending upon which part of the internal
>circuits considering. Certainly different animals!
>
>I know many of the tube rigs (all?) had a much greater tuning range than
>todays rigs due to the pi network they used to transition between the rigs
>output and the antenna.
>
>I'm just guessing, but it seems reasonable to me to assume due to major
>design differences the tube rigs and todays IC rigs should be considered
>as separate categories most of the time. An interesting blending to
>consider would be those rigs that were half-breeds: part tube and part
>transistor.
>
>I've also heard that "link" coupling was much more common "back then." As
>this eliminates a physical connection between the antenna system and the
>XCVR, it seems logical in these cases yet another safety barrior was in
>place between the antenna and the rig.
>
>Anyone out there know for certain?
>
>-Erik n0ewl
Hi Erik,

Yes, my old tube rig was all home brew .... a 300 Watt plate modulated transmitter and tube type receiver. Both the receiver and transmitter had link coupling. The receiver front end band pass inductor used a link coupling to the antenna input. The transmitter used link coupling between the transmitter tank coil and the input to the antenna tuner. the antenna feed line was taped on either side of the tuned inductor and the link to the transmitter was mounted at the centre ... the link was also moveable to adjust coupling. Changing bands was not a quick operation hi hi.

The centre of the antenna tuner inductor was grounded as was the centre of the split stator capacitor. The knife switch outside was simply to put the antenna to ground when there was stormy weather ... or when I wasn't home hi hi ..

Jim, VE3CI

1588. Re: [SkyWires] Digest Number 498

Yahoo group: SkyWires
Date: 2006-04-05 23:08:16 UTC
From: RonW
Topic: 1588 Message: 1588

-Here's info for a balanced to unbalanced tuner with no balun that some may be interested in, I'm going to build one some day for the loop I'll get up one day, Ron, ag4lh;
http://www.amfone.net/ECSound/K1JJ13.htm

1590. This Dog won't hunt here no more!!

Yahoo group: SkyWires
Date: 2006-04-06 23:46:53 UTC
From: Scott Gordon
Topic: 1590 Message: 1590

BANNED

From: "C. K." <cucupupumumaza_13@...>
Date: Thu Apr 6, 2006 6:38 pm
Subject: Seduction Books: Why They\'re Worth The Price

1591. D 104

Yahoo group: SkyWires
Date: 2006-04-14 20:33:05 UTC
From: K.Currie
Topic: 1591 Message: 1591

Does Anyone have a schematic for the internal wireing of a Astatic D-104 microphone?
Thanks Keith

1592. Re: D 104

Yahoo group: SkyWires
Date: 2006-04-14 21:13:03 UTC
From: patob6602
Topic: 1591 Message: 1592

--- In SkyWires@yahoogroups.com, "K.Currie" <kecurrie@...> wrote:
>
> Does Anyone have a schematic for the internal wireing of a Astatic D-104 microphone?
> Thanks Keith
>

Keith, see the following link on the ARRL website;

http://www.arrl.org/members-only/tis/info/pdf/9908034.pdf

The article describes the mic (including the schematic diagram) and how to build a buffer amplifier to use it with modern radios.

73,
Pat O'Brien
AB7AZ

1593. Flexo

Yahoo group: SkyWires
Date: 2006-04-15 17:51:17 UTC
From: jllamb62
Topic: 1593 Message: 1593

Back in the mid 80s there was an excellent electronics magazine called Hands On Electronics. In the May/June 1986 issue was article by Ed Noll W3FQJ called Flexo SWL Aerial. I always wanted to try this antenna, now I will have the time and room to put it up. There are two problems, I have the original article but I don't have the correction for the control box that appeared in the next issue.
The second problem is I have looked all over the internet for Ed Noll or W3FQJ.
All I get are sites selling his books, no web or home address.
So, I need help. Does anyone remember the magazine and kept the article and correction?
Anyone who belongs to other groups will see this post again and again, etc.
Jim WA9038SWL

1594. antenna layout enquiry

Yahoo group: SkyWires
Date: 2006-04-16 08:06:14 UTC
From: thomas104394
Topic: 1594 Message: 1594

Hi to all,
due to size constraints on property I have a 20 meter length dipole erected in horizontal vee beam fashion dont know the angle at the feedpoint it is fed with 300 ohm twin into an mfj 949e atu)(not a proper balanced I know).The swr shows about 6:1 on all bands tuner by passed even on 40-20 meters were I thougth there would be resonance of some kind.Would like to know is this normal due to using twin feeder,do have a train of thougth it may be the feeder length it is in the 30 feet plus region 1/4 wavelength 40 1/2 wavelength 20 meters.Lastly very touchy to tune up on all bands less 17 meters/15 meters.Any help on the matter most welcome

thanks Tom (2m0azw)

1595. Re: [SkyWires] antenna layout enquiry

Yahoo group: SkyWires
Date: 2006-04-17 00:10:46 UTC
From: Jim Dunstan
Topic: 1594 Message: 1595

At 08:06 AM 16/04/2006 +0000, you wrote:
>Hi to all,
> due to size constraints on property I have a 20 meter length
>dipole erected in horizontal vee beam fashion dont know the angle at
>the feedpoint it is fed with 300 ohm twin into an mfj 949e atu)(not a
>proper balanced I know).The swr shows about 6:1 on all bands tuner by
>passed even on 40-20 meters were I thougth there would be resonance of
>some kind.Would like to know is this normal due to using twin
>feeder,do have a train of thougth it may be the feeder length it is in
>the 30 feet plus region 1/4 wavelength 40 1/2 wavelength 20
>meters.Lastly very touchy to tune up on all bands less 17 meters/15
>meters.Any help on the matter most welcome
>
> thanks Tom (2m0azw)

Hi Tom,

First, the type of antenna you describe can be very effective and you will have no problem making contacts. I assume your MFJ antenna tuner has a built in balun to which you are connecting your 300 ohm feed line. Such an antenna will be close to 1/2 wave resonance at 40M, but since you are using 300 ohm twin lead you will have a mismatch ... eg approx 75 ohm to 300 ohm. On 20 meters it will represent a full wave and the feed point will be very high ... also representing a mismatch to 300 ohm.

I assume you are attempting to build a multi-band antenna in which case antenna resonance is not an issue ... in fact the antenna and feed line length are chosen to avoid resonance ..... especially 1/2 wave either side of the feed point ..... as in the 65 ft dipole you describe .... this will represent 1/2 wave either side of the feed point on the 20 M band. If you do a search on the internet you will find some sites that have researched ideal antenna and feed line lengths. 44ft (13.5M) and 88ft (27M) are a couple of favorite mult-band lengths as I recall. You may have to choose based on your favorite bands vs the available space for the dipole and the distance (feed line length).

Jim, (VE3CI)

1596. Re: antenna layout enquiry

Yahoo group: SkyWires
Date: 2006-04-17 00:52:34 UTC
From: k5jxl
Topic: 1594 Message: 1596

Tom,
You may find Dr.Ace's webpage of interest on feeder lengths.

http://www.bloomington.in.us/~wh2t/zepp.html

"To avoid problems matching any center fed antenna with high impedance
open wire lines, keep the feedline around these lengths.

[The WORST POSSIBLE line lengths are shown in brackets]

160 meter antenna 35-60, 170-195 or 210-235 feet
[Avoid 130, 260 ft]

80 meter antenna 34-40, 90-102 or 160-172 feet
[Avoid 66, 135, 190 ft]

40 meter antenna 42-52, 73-83, 112-123 or 145-155 feet
[Avoid 32, 64, 96, 128 ft]

Some slight trimming or adding of feedline may be necessary to
accommodate the higher frequency bands."
73
Ken

--- In SkyWires@yahoogroups.com, "thomas104394" <galtt1@...> wrote:
>
> Hi to all,
> due to size constraints on property I have a 20 meter length
> dipole erected in horizontal vee beam fashion dont know the angle at
> the feedpoint it is fed with 300 ohm twin into an mfj 949e atu)(not a

1597. vee beam advice

Yahoo group: SkyWires
Date: 2006-04-18 18:47:02 UTC
From: thomas104394
Topic: 1597 Message: 1597

Thanks to all who posted advice about the horizontal vee beam,currently down so I can work on the feeder length add a few more feet wheather permitting.Just hooked up a longwire W3edp surprised how well it performs fo such a simple design.Before I go could I set a poser for all?Instead of of lengthening the feeder with more 300 ohm twin what would be the effect of using 72 ohm twin instead ?Read somewhere some twin electrical cable believe its called zip cord stateside has an impedence of around 72 ohm,sure someone more learned in the group will put me right on the the matter.Will sign off for now

thanks in advance Tom(2m0azw)

1598. Re: [SkyWires] vee beam advice

Yahoo group: SkyWires
Date: 2006-04-18 23:01:46 UTC
From: Jim Dunstan
Topic: 1597 Message: 1598

At 06:47 PM 18/04/2006 +0000, you wrote:
>Thanks to all who posted advice about the horizontal vee
>beam,currently down so I can work on the feeder length add a few more
>feet wheather permitting.Just hooked up a longwire W3edp surprised how
>well it performs fo such a simple design.Before I go could I set a
>poser for all?Instead of of lengthening the feeder with more 300 ohm
>twin what would be the effect of using 72 ohm twin instead ?Read
>somewhere some twin electrical cable believe its called zip cord
>stateside has an impedence of around 72 ohm,sure someone more learned
>in the group will put me right on the the matter.Will sign off for now
>
> thanks in advance Tom(2m0azw)

Hi Tom,

Hi Tom, I have used zip cord as feed line with great success for portable antenna arrangements .... eg split approx 17 ft to form a dipole on 20M and then keep the rest intact as the feed line. I also use short pieces in my balanced feed line at home for purposes of running through bulkheads etc. There is no agreement .... and I have not measured .... the exact impedance of such twin lead .... nor it's efficiency. I am sure there is quite a range given the different line construction and materials used in different varieties of cord.

For portable use (50W or less) I have had great success with #16 or #14 copper speaker cord ... it is light and very flexible and seems to operate with good efficiency .... but I rarely operate with more than 50 watts .... usually in the 15 watt range. For purposes of running through bulkheads etc I have used more rugged lamp cord ... again #14 gauge variety .... and are only 3 or 4 feet in length.

If your purpose is simply to add some electrical length to your feed line outside I would recommend sticking to the 300 ohm twin lead ... it is reactively low loss and quite reliable .... even at higher power (150 to 300 Watts). However, I have never found any problem in mixing balanced line of different characteristics .... eg partially 450 ohm, partially 300 ohm, partially 100 ohm, etc .... however as I mentioned, the 300 ohm twin lead is a know quantity in terms of efficiency at RF. They used to manufacture 72 ohm twin lead for RF but seem to have discontinued it. Zip cord of different manufacture is always questionable for RF.

Jim, VE3CI

1600. Re: [SkyWires] Human-buttons

Yahoo group: SkyWires
Date: 2006-04-24 09:19:35 UTC
From: David Shrum
Topic: 1600 Message: 1600

It may very well be a good campaign, but that isn't what this group is about, they are banned and original message deleted.
Dave N8PU

BC892@... wrote:
> This campaign is about Human beings,
>

1601. End fed zepp advice

Yahoo group: SkyWires
Date: 2006-04-26 02:22:55 UTC
From: thomas104394
Topic: 1601 Message: 1601

Hello to all,
looking to construct an end fed zepp antenna and would
like to ask members how is the feeder connected at the atu?Is the twin
leads connected to the balanced line posts(atu is a mfj 949e)or is it
only the antenna wire side that is connected?Leaving one side of the
balanced feeder unterminated both ends.Hope someone can help

thanks Tom 2m0azw

1602. Re: [SkyWires] End fed zepp advice

Yahoo group: SkyWires
Date: 2006-04-26 08:55:04 UTC
From: tim smith
Topic: 1601 Message: 1602

tom...you connect both wires at the tuner..the balanced wire inputs...do a search for "the 4 dollar special",and you will see some info on this..they work great...tim...sk..

thomas104394 <galtt1@...> wrote: Hello to all,
looking to construct an end fed zepp antenna and would
like to ask members how is the feeder connected at the atu?Is the twin
leads connected to the balanced line posts(atu is a mfj 949e)or is it
only the antenna wire side that is connected?Leaving one side of the
balanced feeder unterminated both ends.Hope someone can help

thanks Tom 2m0azw

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1603. Re: [SkyWires] End fed zepp advice

Yahoo group: SkyWires
Date: 2006-04-26 11:33:16 UTC
From: Jim Dunstan
Topic: 1601 Message: 1603

At 02:22 AM 26/04/2006 +0000, you wrote:
>Hello to all,
> looking to construct an end fed zepp antenna and would
>like to ask members how is the feeder connected at the atu?Is the twin
>leads connected to the balanced line posts(atu is a mfj 949e)or is it
>only the antenna wire side that is connected?Leaving one side of the
>balanced feeder unterminated both ends.Hope someone can help
>
> thanks Tom 2m0azw

Hi Tom,

The key to an end fed Zepp is to keep the feed line 1/4 wave in length and the antenna wire a 1/2 wave in length. Your open wire feed line should represent an impedance close to the characteristic impedance of the line (eg 300 or 450 ohm) at the feed point ..... and it is balanced. The best way to feed 300 ohm with your tuner is to feed it via the balun in the tuner. The other end of the 1/4 wave length feed line will be very high impedance. The 1/2 wave length antenna wire which also represents a very high impedance at the end is connected to one of the two wires of the feed line and the other one is left unconnected.

In other words, you feed the balanced feed line like you would feed any other balanced feed line, with a balun (unless you have a specially designed balanced antenna tuner). The feed line is 1/4 wave long. Last, a 1/2 wave antenna wire is connected to one side at the high impedance end of the feed line. The system is basically designed for one band.

Jim, VE3CI

1604. end fed zepp another thought

Yahoo group: SkyWires
Date: 2006-04-26 13:32:57 UTC
From: thomas104394
Topic: 1604 Message: 1604

Hi again,
re the zepp antenna thanks for the replies so far clear on
the connection method but one more point.Do I earth the atu as for a
standard longwire or leave it unearthed as for a balanced system is
the antenna unbalanced or a pseudo balanced one ? Lastly is it only a
one band antenna or may it be used on harmonics,power wise my max
output is 50 watts.All food for thought

bye for now Tom

1605. Re: [SkyWires] end fed zepp another thought

Yahoo group: SkyWires
Date: 2006-04-26 16:05:51 UTC
From: Jim Dunstan
Topic: 1604 Message: 1605

At 01:32 PM 26/04/2006 +0000, you wrote:
>Hi again,
> re the zepp antenna thanks for the replies so far clear on
>the connection method but one more point.Do I earth the atu as for a
>standard longwire or leave it unearthed as for a balanced system is
>the antenna unbalanced or a pseudo balanced one ? Lastly is it only a
>one band antenna or may it be used on harmonics,power wise my max
>output is 50 watts.All food for thought
>
> bye for now Tom

The end fed Zepp does not require an RF ground in order to provide a load to the antenna tuning unit. In order to operate properly the feed line must represent a high impedance at the end .... eg 1/4 or 3/4 wavelength. The antenna portion must be any multiple of a 1/2 wave length .. eg 1/2 or 1 wavelength. Small deviations in these lengths immediately introduces unbalance in the feedline and causes it to radiate. A Zepp designed for 40M will not work as a Zepp on 20M and vis versa.

If you want to go multi-band then you really have 2 choices ..... attach a length of antenna wire of equal length to both sides of the balanced line .... then when you go off resonance the feed line will not loose balance and will continue to act as a feed line on multi-band. In fact if you put a half wave on either side you will have what they call a 'Double Zepp' .... which is a really great antenna .... and it will no longer be end fed, but center fed.

Your second choice will be to simply tie both sides of the feed line together and treat the whole thing like a random length wire and feed it against ground.

The advantage of using an end fed Zepp with feed line and antenna wire of proper length is that you don't need an RF ground in order to feed it. This is especially handy for portable work .... or if you happen to be trailing the antenna behind your Zepplin air ship filled with flammable gas and you would rather not use it's airframe as ground hi hi.

1606. Smaller Skywire

Yahoo group: SkyWires
Date: 2006-04-26 18:24:25 UTC
From: Kyle
Topic: 1606 Message: 1606

As a bit of background, I passed my General exam back in November, and bought an ICOM-706 to use as my base station. I have been studying the code using a Gordon West CD set and a MFJ code tutor. I just can't seem to master it. Practice, practice, practice.... yet it eludes me.

Anyway, I am really excited to try a skywire, but can't do any HF work yet. So I started wondering if the skywire loop concept could be used on a smaller scale, a.k.a. a higher frequency like 2 meters. What does the group think? It shouldn't be a problem to mount it 1/4 wavelength or greater above the earth. If I have it greater than 1/4 wavelenth up, would it need an artificial ground below it?

If the members think it will (or might) work, I can do some experimentation. I just don't want to spend a bunch of time working on it if "it just doesn't work for VHF frequencies." I'm confounded enough with the code - I don't need any more frustration.

Oh, and I forgot to mention, I'd want to use it horizontally to keep it omnidirectional. Thoughts, ideas, suggestions?

73,
Kyle
W4KDA

1607. RE: [SkyWires] Smaller Skywire

Yahoo group: SkyWires
Date: 2006-04-26 22:40:01 UTC
From: D. Scott MacKenzie
Topic: 1606 Message: 1607

It will work just fine - although I would mount it vertically and feed it at the bottom to get horizontal polarization....you could also add another loop and make a quad. that way you could use it for SSB and CW on 2M. Cut it for about 144.150 or so. Remember to add the 1/4 wave 75 ohm matching stub....

I would mount it higher than 1/4 wave - that is about 2 feet off the ground for 2M. For VHF - the higher the better....

Scott
KB?FHP
-----Original Message-----
From: SkyWires@yahoogroups.com [mailto:SkyWires@yahoogroups.com]On Behalf Of Kyle
Sent: Wednesday, April 26, 2006 2:24 PM
To: SkyWires@yahoogroups.com
Subject: [SkyWires] Smaller Skywire

As a bit of background, I passed my General exam back in November, and bought an ICOM-706 to use as my base station. I have been studying the code using a Gordon West CD set and a MFJ code tutor. I just can't seem to master it. Practice, practice, practice.... yet it eludes me.

Anyway, I am really excited to try a skywire, but can't do any HF work yet. So I started wondering if the skywire loop concept could be used on a smaller scale, a.k.a. a higher frequency like 2 meters. What does the group think? It shouldn't be a problem to mount it 1/4 wavelength or greater above the earth. If I have it greater than 1/4 wavelenth up, would it need an artificial ground below it?

If the members think it will (or might) work, I can do some experimentation. I just don't want to spend a bunch of time working on it if "it just doesn't work for VHF frequencies." I'm confounded enough with the code - I don't need any more frustration.

Oh, and I forgot to mention, I'd want to use it horizontally to keep it omnidirectional. Thoughts, ideas, suggestions?

73,
Kyle
W4KDA

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1608. Re: [SkyWires] End fed zepp advice

Yahoo group: SkyWires
Date: 2006-04-27 11:47:59 UTC
From: larry
Topic: 1601 Message: 1608

Greetings....

A question....

Your discussion about the 1/4 wavelength open wire feeder, I agree with however I am puzzled about one thing...

Your comment about using 300 ohm or 450 ohm feeder because it matches the end impedance of the dipole, has me puzzled....

My understanding is that the end impedance of a halfwave dipole is in excess of half a megohm.... At the end of a dipole you have your highest voltage and lowest current of the dipole therefore the impedance would be at it's highest..... hundreds of thousands of ohms impedance...

Larry ve3fxq

----- Original Message -----
From: Jim Dunstan
To: SkyWires@yahoogroups.com
Sent: Wednesday, April 26, 2006 7:33 AM
Subject: Re: [SkyWires] End fed zepp advice

At 02:22 AM 26/04/2006 +0000, you wrote:
>Hello to all,
> looking to construct an end fed zepp antenna and would
>like to ask members how is the feeder connected at the atu?Is the twin
>leads connected to the balanced line posts(atu is a mfj 949e)or is it
>only the antenna wire side that is connected?Leaving one side of the
>balanced feeder unterminated both ends.Hope someone can help
>
> thanks Tom 2m0azw

Hi Tom,

The key to an end fed Zepp is to keep the feed line 1/4 wave in length and the antenna wire a 1/2 wave in length. Your open wire feed line should represent an impedance close to the characteristic impedance of the line (eg 300 or 450 ohm) at the feed point ..... and it is balanced. The best way to feed 300 ohm with your tuner is to feed it via the balun in the tuner. The other end of the 1/4 wave length feed line will be very high impedance. The 1/2 wave length antenna wire which also represents a very high impedance at the end is connected to one of the two wires of the feed line and the other one is left unconnected.

In other words, you feed the balanced feed line like you would feed any other balanced feed line, with a balun (unless you have a specially

designed balanced antenna tuner). The feed line is 1/4 wave long. Last, a 1/2 wave antenna wire is connected to one side at the high impedance end of the feed line. The system is basically designed for one band.

Jim, VE3CI

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1609. Re: [SkyWires] End fed zepp advice

Yahoo group: SkyWires
Date: 2006-04-27 23:49:55 UTC
From: Jim Dunstan
Topic: 1601 Message: 1609

At 07:47 AM 27/04/2006 -0400, you wrote:
>Greetings....
>
>A question....
>
>Your discussion about the 1/4 wavelength open wire feeder, I agree with
>however I am puzzled about one thing...
>
>Your comment about using 300 ohm or 450 ohm feeder because it matches the
>end impedance of the dipole, has me puzzled....
>
>My understanding is that the end impedance of a halfwave dipole is in
>excess of half a megohm.... At the end of a dipole you have your highest
>voltage and lowest current of the dipole therefore the impedance would be
>at it's highest..... hundreds of thousands of ohms impedance...
>
>Larry ve3fxq

Hi Larry,

Sorry to puzzle you hi hi .... yes, you are correct. A half wave length wire does indeed present a high impedance at the ends and low impedance in the middle. If you feed it in the centre the impedance is around 70 ohms. However it is possible to feed it at the end .... 'Zepp' fashion. Feeding it this way is usually done by feeding it off the end of a 1/4 wave length of open wire line .... the most commonly available line being either 300 or 450 ohm line. The half wave wire (usually horizontal) is attached to one side of the open wire line and the other side is left all by its lonsome eg end fed.

It seems to work .... that is the currents in the feed line seem to remain more or less balanced with minimum radiation. However, the antenna is a bit finicky. When the horizontal wire is exactly resonant the impedance (measured) at the end of the 450 ohm feed line reads between 200 and 400 ohms ... well within the range of an antenna tuner. Small changes in either the feed line length or antenna length dramatically effects the feed point impedance.

It seems like an odd way to put up an antenna .... however sometimes end feeding the wire is the most practical arrangement ..... especially this kind of end fed arrangement .... as it does not require an RF ground system.

Jim, VE3CI

1610. Copper wire prices

Yahoo group: SkyWires
Date: 2006-04-28 14:06:29 UTC
From: Andy
Topic: 1610 Message: 1610

I caught an item on another list that says copper prices have risen more than 30% this month, 6% on Wednesday alone.

This is not a random fluctuation (a.k.a. 'noise'); they are expected to not come back down. If so, expect wire prices to follow suit soon.

Regards,
Andy

1611. SKYWIRE LOOPS IN RESTRICTED LOCATIONS

Yahoo group: SkyWires
Date: 2006-04-29 18:54:31 UTC
From: KEN (G3SDW)
Topic: 1611 Message: 1611

HI EVERYBODY I AM A NEW MEMBER AND I WOULD LIKE TO TELL YOU ALL ABOUT
MY LOOP ANTENNA THAT I USE HERE IN THE UK.
I LIVE IN AN APPARTMENT BLOCK 2 STORIES HIGH AND I AM ON THE GROUND
FLOOR.THE LOOP THAT I USE IS APPROX A FULL WAVE ON 40M ABOUT 140ft LONG
AND IT IS TUCKED INTO YHE PLASTIC RAIN GUTTER WHICH IS SURROUNDING THE
BUILDING.I FEED IT WITH A 4:1 BALUN AND THEN 50ohm COAX WHICH GIVES ME
COVERAGE FROM 40M TO 10M VIA AN MFJ941E TUNER.
THE ANTENNA IS INVISABLE. EVERYBODY IS HAPPY AND NO TVI WHAT COULD BE
BETTER IN A SMALL QTH,JUST HAD 599 ON 20M CW FROM THE GULF.
HOPE THIS IS OF SOME INTEREST
73
KEN
G3SDW
(TORQUAY UK.)

1612. NEW QUAD GROUP JUST FORMED

Yahoo group: SkyWires
Date: 2006-04-30 03:24:09 UTC
From: Robert
Topic: 1612 Message: 1612

A new Amateur Radio QUAD users group has just been formed.
check it out here, and spread the word:

http://groups.yahoo.com/group/HAMQUADS/

HAMQUADS-subscribe@yahoogroups.com

Rob N8RT

1613. Re: SKYWIRE LOOPS IN RESTRICTED LOCATIONS

Yahoo group: SkyWires
Date: 2006-05-01 02:47:58 UTC
From: Jeff
Topic: 1611 Message: 1613

Ken,

Great job on the loop. I have pretty much the same set-up here in southern Texas, but my loop is around 250 feet long and, at most, 12 feet off the ground. It loads up on 80-10 like a pro. Worked North Dakota this week on 75m using it. No complaints here. Wish I could get it higher, but that's not going to happen due to the restrictions, but no big deal. This is a great antenna. Good luck with yours!

73 de Jeff, KF5KWO
Helotes, TX

1614. New Radiowave Propagation Yahoo eGroup

Yahoo group: SkyWires
Date: 2006-05-01 23:01:57 UTC
From: Thomas Giella KN4LF
Topic: 1614 Message: 1614

Radiowave Propagation Yahoo eGroup:
http://groups.yahoo.com/group/radiowavepropagation

This eGroup will be the home of my radiowave propagation outlooks, a place to discuss LF/MF/HF radiowave propagation theory and observations, as well as a repository of propagation related website links.

While the primary emphasis of this eGroup will be on LF/MF and HF radiowave propagation, discussion of any propagation mode from DC to daylight is permitted.

Questions and requests for assistance concerning radiowave propagation for new and old hams alike is allowed and encouraged.

--... ...--,
Thomas F. Giella, KN4LF
Lakeland, FL, USA
Grid Square EL97AW
kn4lf@...

PODXS 070 PSK31 Club Member #349
Feld Hell Club Member #FH141
National Veterans Ham Radio Club Member

Radiowave Propagation Yahoo eGroup:
http://groups.yahoo.com/group/radiowavepropagation
Digital Radio Modes Yahoo eGroup:
http://groups.yahoo.com/group/digitalradiomodes
Feld Hell Yahoo eGroup: http://groups.yahoo.com/group/feldhell
National Veterans Ham Radio Club http://groups.yahoo.com/group/NVHRC
KN4LF Amateur & SWL Radio History: http://www.kn4lf.com
KN4LF 160 Meter Propagation Theory Notes: http://www.kn4lf.com/kn4lf8.htm

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No virus found in this outgoing message.
Checked by AVG Free Edition.
Version: 7.1.385 / Virus Database: 268.5.1/327 - Release Date: 4/28/2006

1615. D1O4 ??

Yahoo group: SkyWires
Date: 2006-05-11 18:49:27 UTC
From: K.Currie
Topic: 1615 Message: 1615

I am useing a D1O4 mick with a TS940 Kenwood, and it is very hard to adjust the audio, and when I key up the ALC meter really jumps up. In the manual it talks about a fix for high uo put micks like the D1O4 but I dont understand wher they are telling me to fix the problim. Can any one help Thanks
VE5HKC
Keith

1616. Re: [SkyWires] D1O4 ??

Yahoo group: SkyWires
Date: 2006-05-12 14:46:20 UTC
From: Bill Wright
Topic: 1615 Message: 1616

Keith
If memory serves me, the D104 (aka Chrome Lollipop) is a 100~200k Z The fix is a rework of the high-low switch in the bottom of the mike stand. Search around on the ARRL QST for Astatic D104 fix. It has been a few years ago maybe 2000.
73 Bill

I am useing a D1O4 mick with a TS940 Kenwood, and it is very hard to adjust the audio, and when I key up the ALC meter really jumps up. In the manual it talks about a fix for high uo put micks like the D1O4 but I dont understand wher they are telling me to fix the problim. Can any one help Thanks
VE5HKC
Keith

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1617. Re: [SkyWires] D1O4 ??

Yahoo group: SkyWires
Date: 2006-05-12 17:22:48 UTC
From: K.Currie
Topic: 1615 Message: 1617

Thanks Bill I will try to finf it, or get some one to show me what my Kenwood manual is trying to tell me.
Keith
----- Original Message -----
From: Bill Wright
To: SkyWires@yahoogroups.com
Sent: Friday, May 12, 2006 8:46 AM
Subject: Re: [SkyWires] D1O4 ??

Keith
If memory serves me, the D104 (aka Chrome Lollipop) is a 100~200k Z The fix is a rework of the high-low switch in the bottom of the mike stand. Search around on the ARRL QST for Astatic D104 fix. It has been a few years ago maybe 2000.
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Keith

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Checked by AVG Free Edition.
Version: 7.1.375 / Virus Database: 268.5.4/332 - Release Date: 5/4/06

1618. Re: [SkyWires] D1O4 ??

Yahoo group: SkyWires
Date: 2006-05-12 18:21:46 UTC
From: Dr.Ace Ratliff
Topic: 1615 Message: 1618

Keith ,
If memory serves me , you need to series a resistor with the audio wire from the mic to the radio . Try a 1/2W 33K Ohm resistor .
Ace - WH2T

----- Original Message -----
From: K.Currie
To: SkyWires@yahoogroups.com
Sent: Friday, May 12, 2006 12:22 PM
Subject: Re: [SkyWires] D1O4 ??

Thanks Bill I will try to finf it, or get some one to show me what my Kenwood manual is trying to tell me.
Keith
----- Original Message -----
From: Bill Wright
To: SkyWires@yahoogroups.com
Sent: Friday, May 12, 2006 8:46 AM
Subject: Re: [SkyWires] D1O4 ??

Keith
If memory serves me, the D104 (aka Chrome Lollipop) is a 100~200k Z The fix is a rework of the high-low switch in the bottom of the mike stand. Search around on the ARRL QST for Astatic D104 fix. It has been a few years ago maybe 2000.
73 Bill

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VE5HKC
Keith

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1619. Is a skywire loop a good choice to reach Mexico from Colorado

Yahoo group: SkyWires
Date: 2006-05-15 23:19:19 UTC
From: ransom_peek
Topic: 1619 Message: 1619

I would like to communicate on a vhf band from Fort Collins Colorado to Mexico and have not had much luck with a third floor attic dipole on 20 meters. I have covenants here, but a quarter acre lot might make for a good stealth skywire.

Is a skywire a good choice for dxing to Mexico?

1620. Re: Better Feed for 1/2Wave zepp

Yahoo group: SkyWires
Date: 2006-05-19 22:03:59 UTC
From: Pirate Paul
Topic: 1601 Message: 1620

If you can't resolve the feedpoint issue for the half-wave end-fed antenna, or don't like the results (because you have RF floating around all over the shack, or whatever), here is a different way to do it, and one that will allow you to use unbalanced coax and feed it the same way you would in the center (as a dipole). Done properly, you won't even need a balun, tuner, or RF ground to make it match the rig and perform properly.

```
---X---
|
|
---X---==============
```

As shown in the above pictorial of a horizontal J-Pole, add a quarter-wavelength tuning stub (---) to one end of the half-wave (===) antenna wire. Short the end (|) of the stub opposite the one connected to the antenna. Feed the stub at (X) with any coaxial cable 50 - 75 ohms. Find the correct feedpoint location by sliding the coax tiepoints (X) left or right. Note that while the total antenna length (---=======) is now three-quarters, it is still a half-wave antenna, as the tuning stub is not part of the radiating portion of the antenna.
--Paul, WPE5AVL

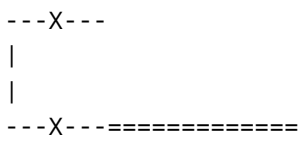
1621. Re: [SkyWires] Re: Better Feed for 1/2Wave zepp

Yahoo group: SkyWires
Date: 2006-05-20 01:20:34 UTC
From: Cedric Lockley
Topic: 1601 Message: 1621

Hi Paul

What is the separation between the two horizontal elements of the J Pole?
Is it dependent on the J Pole material and/or the frequency?

Cedric VK4ZCL



1622. New to Group

Yahoo group: SkyWires
Date: 2006-05-22 18:27:26 UTC
From: Lee
Topic: 278 Message: 1622

Hi,

My name is Lee, callsign K3GI, living in southern Delaware. I've been using loop antennas for 10 years. I'm a newbie to the group.

My current loop is used for HF and has been up for about 10 years. It is cut for 80 meters (can't remember the length). It is strung from tree-to-tree in my yard with 6 supports. Height varies from 20 to 30 feet. I feed it with 450 ohm ladder line to a 4:1 balun with coax running into the shack. The automatic tuners on my Kenwood TS-850S and Icom IC-746 easily tune it from 80 to 10 meters (can work 6 meters on the IC-746). I've worked 50 states and over 70 DX countries with it, including Australia and New Zealand. I also use it for SWL with my Drake R8.

Originally it was fed with 300 ohm twin lead into an MFJ 949E for tuning into my Kenwood TS-440S which did not have the built-in tuner.

I've had other skywire loops up, but this antenna has been a mainstay. I hope to get up a 160 meter version sometime this year. The skywire loop is a great antenna, very versatile, and can work multiple bands if configured right. About three years I was able to put up a tower and beam for the higher HF frequencies (and VHF/UHF), but will never give up my loop(s).

73 de Lee, K3GI

1623. slopers

Yahoo group: SkyWires
Date: 2006-05-23 04:46:09 UTC
From: K.Currie
Topic: 1623 Message: 1623

Does any one have any info on building sloper antennas, or know of web sites for them?
VE5HKC

1624. Re: [SkyWires] slopers

Yahoo group: SkyWires
Date: 2006-05-23 14:24:18 UTC
From: Jim Dunstan
Topic: 1623 Message: 1624

At 10:46 PM 22/05/2006 -0600, you wrote:
>Does any one have any info on building sloper antennas, or know of web
>sites for them?
> VE5HKC

Hi,

There are a number of sloper designs ....

--- A simple resonant dipole suspended with one end to the high support and
the other end tied off closer to ground ... and fed in the middle.
--- A ground fed wire antenna with the other end sloping up to the high support
--- A 1/4 wave wire fed with coax at the top of a steel tower sloping off
toward ground
--- An inverted Vee fed at the top
--- An inverted Vee fed at ground at one end

etc...

If you do searches on the internet you will find all kinds of versions
people have experimented with. Generally speaking I have found the sloper
seems to work very well .... I have tried most of them but my
favourite for effectiveness and ease of installation is a 100' inverted
vee with the apex at 30' made of 3 sections of TV mast. The two sides of
the inverted vee act as guy lines as well with a third of rope. Feed it
with 300 ohm TV twinlead to an antenna tuner and you will have an excellent
antenna 80-10 M .... once you learn the technique it can be put up in
about 20 minutes .... one person.

Jim, VE3CI

1625. balanced tuner design in QST March 1959

Yahoo group: SkyWires
Date: 2006-05-24 20:09:25 UTC
From: Dave Marling
Topic: 1588 Message: 1625

Recently I was looking through my HR Magazine CD's for tuner designs. In the July 1981, on page 31, W6SAI referenced in his article a tuner from the March 1959 QST.

Does anyone have either the QST article they could scan for me, or the article on CD that they email me. The drawings reproduced in the HR piece are very hard to make out. The article was by Lew McCoy, W1ICP. Lew also had an article in the November 1961 QST on a higher power version. I'd like a copy of that one as well.

Thanks,
Dave
VE1VQ/VA6NS

1626. Re: [SkyWires] balanced tuner design in QST March 1959

Yahoo group: SkyWires
Date: 2006-05-24 22:18:45 UTC
From: Dr.Ace Ratliff
Topic: 1588 Message: 1626

Hi Dave,
Here's some info I hope you find helpful.

McCoy was well-known for one of his projects, ''The Ultimate Transmatch,'' an antenna tuner he described in a July 1970 Page 24 QST article.

SEE
http://www.miami.muohio.edu/president/personal/w8zr/homebrew/tuner.htm

Murch made a UT-2000 series of Ultimate Transmatch's , I have a UT-2000B

Reference :
``A Transmatch for Balanced or Unbalanced Lines,'' page 25-8 in The ARRL Antenna Book, 17th Edition, edited by R.D. Straw, (ARRL,Newington,1994).

73, Ace - WH2T

----- Original Message -----
From: Dave Marling
To: SkyWires@yahoogroups.com
Sent: Wednesday, May 24, 2006 3:09 PM
Subject: [SkyWires] balanced tuner design in QST March 1959

Recently I was looking through my HR Magazine CD's for tuner designs.
In the July 1981, on page 31, W6SAI referenced in his article a tuner
from the March 1959 QST.

Does anyone have either the QST article they could scan for me, or the
article on CD that they email me. The drawings reproduced in the HR
piece are very hard to make out. The article was by Lew McCoy, W1ICP.
Lew also had an article in the November 1961 QST on a higher power
version. I'd like a copy of that one as well.

Thanks,
Dave
VE1VQ/VA6NS

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1627. Re: [SkyWires] balanced tuner design in QST March 1959

Yahoo group: SkyWires
Date: 2006-05-24 23:19:34 UTC
From: Dave Marling
Topic: 1588 Message: 1627

Evening Ace,

I've seen both of the tuners you refer to. Both use a balun to match the balanced line. The tuner articles I'm looking for are both link coupled types. Appreciate the help.

73
Dave
VE1VQ/VA6NS

1630. Re: balanced tuner design in QST March 1959

Yahoo group: SkyWires
Date: 2006-05-25 06:45:25 UTC
From: nc9k
Topic: 1588 Message: 1630

You will find the W6SAI high power link coupler construction article inside the files section of this website. 73 Leland NC9K

1631. Re: [SkyWires] Re: balanced tuner design in QST March 1959

Yahoo group: SkyWires
Date: 2006-05-25 11:38:04 UTC
From: Dave Marling
Topic: 1588 Message: 1631

Thanks Leland, for the article information. Now to dig in the junk box!

73,
Dave
VE1VQ/VA6NS

1632. Stub Width for 1/2Wave J-Pole

Yahoo group: SkyWires
Date: 2006-05-26 00:58:14 UTC
From: Pirate Paul
Topic: 1601 Message: 1632

"Cedric Lockley" <cedricl@...> wrote:
> Hi Paul
> What is the separation between the two horizontal elements of the J Pole? Is it dependent on the J Pole material and/or the frequency?
Cedric VK4ZCL
> ---X---
> |
> |
> ---X---==========

Yes. The distance between the two Xs depends on the band. I use two inch (2" US) spacing on the VHF model which I built for my boat. Fahnstock clips at the two Xs allow me to slide the coaxial feeder up or down the solid heavy wire elements, to two pre-marked spots, which allows me to operate either 146 ham radio or 156 maritime radio band. A model I built for twenty-meters employs about a one-foot (1' US) spacing. I've built three of these (14 MHz) over the years, and all tuned up easily and worked great. I generally use a small, insulated stranded wire (about #20-guage) for all the elements.
Incidentally, you can ground the bottom of the stub (at the corner to the left of the lower X shown above), if it's convenient. That way, you can attach only half the stub (upper X above) to a grounded telescopic antenna mast or tower, for example, using stand-offs, and drive the grounded mast as a vertical antenna. Works equally well. Grounded antennas are quieter, and may present less attraction for lightning too.
--Paul, KC5JK

1633. loop .jpg's added to the 'file' section

Yahoo group: SkyWires
Date: 2006-05-26 23:37:05 UTC
From: Dave Marling
Topic: 1588 Message: 1633

I've uploaded three .jpg files to the 'file' section on here. These show one loop installation. You'll find them in the folder called 'loop information'.

Dave
VE1VQ

1634. St Louis Loop

Yahoo group: SkyWires
Date: 2006-05-28 11:16:19 UTC
From: bambazonke01
Topic: 1634 Message: 1634

Has anyone tried the mini loop called the St Louis loop?
It is only a delta of 34 ft per side and has two clip-on extension
arms for 80 Meters. Supposed to work all bands.
Jim VE3DDY

1636. Re: [SkyWires] Get a Ipod at No Cost

Yahoo group: SkyWires
Date: 2006-05-31 20:54:58 UTC
From: David Shrum
Topic: 1636 Message: 1636

Banned and original message deleted.
Dave N8PU

junelle-coyne842@... wrote:

1637. Carolina Windom

Yahoo group: SkyWires
Date: 2006-06-01 12:09:55 UTC
From: vk6ian
Topic: 1637 Message: 1637

I'm thinking of building a Carolina Windom antenna. All the information about element lengths is given in whole feet. Does anyone know the actual dimentions of these antennas or are the lengths not that critical and cutting to the nearest foot is correct.
Cheers,
Ian.

1638. Skywire Antennas

Yahoo group: SkyWires
Date: 2006-06-05 11:30:12 UTC
From: G D Tune 1964
Topic: 1638 Message: 1638

Any that operates at 11 meters

1639. Re: Skywire Antennas

Yahoo group: SkyWires
Date: 2006-06-06 00:57:59 UTC
From: nn5g
Topic: 1638 Message: 1639

Hi "G D Tune 1964"... Sure! It will work at any frequency. Just follow
the formula. Welcome to the group.... Paul, NN5G

--- In SkyWires@yahoogroups.com, "G D Tune 1964" <photo1964@...> wrote:
>
> Any that operates at 11 meters
>

1641. Re: [SkyWires] New file uploaded to SkyWires

Yahoo group: SkyWires
Date: 2006-06-06 11:37:24 UTC
From: C. Beijersbergen
Topic: 1641 Message: 1641

What has this got to do with Skywires?

So now Spam even gets uploaded to the files area!

Cor Beijersbergen van Henegouwen

1642. Re: [SkyWires] New file uploaded to SkyWires

Yahoo group: SkyWires
Date: 2006-06-06 22:44:52 UTC
From: David Shrum
Topic: 1641 Message: 1642

Not any more, it is gone, this original message is gone and that
'member' is also gone.

I agree, it has/had nothing to do with SkyWires.
Dave N8PU

SkyWires@yahoogroups.com wrote:
> Hello,
>
> This email message is a notification to let you know that
> a file has been uploaded to the Files area of the SkyWires
> group.
>
>

1643. Re: [SkyWires] New file uploaded to SkyWires

Yahoo group: SkyWires
Date: 2006-06-07 07:10:26 UTC
From: C. Beijersbergen
Topic: 1641 Message: 1643

>>>>Not any more, it is gone, this original message is gone and that 'member' is also gone.

I agree, it has/had nothing to do with SkyWires.
Dave N8PU<<<<<

Thanks,

Cor Beijersbergen van Henegouwen

1645. Re: [SkyWires] wonderful place for dating with military strongs and beauties

Yahoo group: SkyWires
Date: 2006-06-08 09:33:31 UTC
From: David Shrum
Topic: 1645 Message: 1645

As before, gone deleted banned.
Dave N8PU

militarydate004 wrote:

1646. Re: wonderful place for dating with military strongs and beauties

Yahoo group: SkyWires
Date: 2006-06-08 10:23:09 UTC
From: Greg W:-)
Topic: 1645 Message: 1646

AWW Shux ,,and I was realy wanting to date a chik that can bench press
300 pounds and open beer botles with her teeth.

Guess I will have to look elsewhere now. :-(

gregW:-)

http://www.geocities.com/onegammyleg/
==========

--- In SkyWires@yahoogroups.com, David Shrum <aq392@...> wrote:
>
> As before, gone deleted banned.
> Dave N8PU
>
> militarydate004 wrote:
>

1648. Re: [SkyWires] New Graphic Site

Yahoo group: SkyWires
Date: 2006-06-13 09:39:08 UTC
From: David Shrum
Topic: 1648 Message: 1648

Deleted original message, unsure about if I should ban the sender, the call is legit but on other groups I'm a member of, other call signs are being used to spread this stuff. The only thought is it might be some infected computers being used? Thoughts?
Dave N8PU

Bryan Burrma wrote:

1649. Re: [SkyWires] New Graphic Site

Yahoo group: SkyWires
Date: 2006-06-13 12:21:31 UTC
From: Kyle
Topic: 1648 Message: 1649

Dave,

It also happened in one of my hot-rod groups. The information that list administrator shared may be useful to the group, so I thought I'd pass it along:

"This was posted on one of my other groups, thought it may be of precautionary interest to others.

There is a virus being sent around. The e-mail begins with the "NEW GRAPHIC SITE" subject or text inside e-mail. Do not download any attachments or click on the link for the "graphc site".It is a virus that is written in _javascript. Anyone sending e-mails contatining a virus will be removed from the list. Please don't open any e-mails with that.

Please run your virus scanners to insure that you do not have this virus as it will replicate itself and SPAM anyone in your address book.

FMI on the virus:
Here is a link to Symantec with information on this virus:

http://www.symantec.com/avcenter/venc/data/js.yamanner@...

There is also info on removing it."

-Kyle
W4KDA

David Shrum wrote:
> Deleted original message, unsure about if I should ban the sender, the
> call is legit but on other groups I'm a member of, other call signs are
> being used to spread this stuff. The only thought is it might be some
> infected computers being used? Thoughts?
> Dave N8PU

1650. Re: [SkyWires] New Graphic Site

Yahoo group: SkyWires
Date: 2006-06-13 12:35:43 UTC
From: Andy
Topic: 1648 Message: 1650

> Deleted original message, unsure about if I should ban the sender, the
> call is legit but on other groups I'm a member of, other call signs are
> being used to spread this stuff. The only thought is it might be some
> infected computers being used? Thoughts?

It is. A virus (worm, actually), that is.

I've started seeing warnings about this worm, from places like Symantec.

It specifically targets Yahoogroups too.

Sometimes the sender's computer is the one that's infected, but sometimes it sends itself using someone else's (forged) address, probably grabbed from the address book on the infected computer.

Andy

1651. Re: [SkyWires] New Graphic Site

Yahoo group: SkyWires
Date: 2006-06-13 18:34:51 UTC
From: Scott Erwin
Topic: 1648 Message: 1651

This is a result of infected computers. On another
Yahoo group I own I simply set the offending user to
moderate so these messages do not get sent to the
group and sent a message to the person this stuff is
coming from that there computer is compromised.

--- David Shrum <aq392@...> wrote:

> Deleted original message, unsure about if I should
> ban the sender, the
> call is legit but on other groups I'm a member of,
> other call signs are
> being used to spread this stuff. The only thought is
> it might be some
> infected computers being used? Thoughts?
> Dave N8PU
>
> Bryan Burrma wrote:
>

_____
Do You Yahoo!?
Tired of spam? Yahoo! Mail has the best spam protection around
http://mail.yahoo.com

1652. Re: [SkyWires] New Graphic Site

Yahoo group: SkyWires
Date: 2006-06-13 21:04:45 UTC
From: David Shrum
Topic: 1648 Message: 1652

Done, and thanks for the help.
Dave

Scott Erwin wrote:
> This is a result of infected computers. On another
> Yahoo group I own I simply set the offending user to
> moderate so these messages do not get sent to the
> group and sent a message to the person this stuff is
> coming from that there computer is compromised.
>
> --- David Shrum <aq392@...> wrote:
>

1653. Fwd: Great_Hot_Police_singles need partners for chatting or more!!!(with photos)

Yahoo group: SkyWires
Date: 2006-06-14 08:08:51 UTC
From: police.lovers
Topic: 1653 Message: 1653

--- In ...@yahoogroups.com, "Mr. Johnson"
<nyfranksporting@...> wrote:

This is the perfect place for singles, friends and admirers to talk about loves, relationships, cultures, religions, work, sports, lives or more.

Are you tired of being alone on a Saturday night? why there? browse local singles for free! That's just what you are looking for! Have a try, you will get what you need and love it!

http://geocities.com/police.lovers/

1654. Secrets to Business Success on the Internet

Yahoo group: SkyWires
Date: 2006-06-15 01:14:17 UTC
From: Migz Inton
Topic: 1654 Message: 1654

Create a business or build on a business venture with a vision of success in mind. Your vision is an investment! Be adaptable, open-minded, and diversify your efforts. This will lead to successful growth and long-term security. Take time to explore tools and do whatever detective work is necessary; make it a habit that continues over the years. Give yourself all of the advantages possible and you will reach your highest goals.
To learn more about the secrets to business success, visit Online Business 101.

http://online-business-101.blogspot.com/2006/06/secrets-to-business-success-on.html

_____
Do You Yahoo!?
Tired of spam? Yahoo! Mail has the best spam protection around
http://mail.yahoo.com

_____
Do You Yahoo!?
Tired of spam? Yahoo! Mail has the best spam protection around
http://mail.yahoo.com

1655. Group Suggestion

Yahoo group: SkyWires
Date: 2006-06-15 12:34:48 UTC
From: Kyle
Topic: 1655 Message: 1655

Good morning, Skywires group. I have to say I really enjoy this group. There are a generous number of participants, activity is light, there is not a bunch of off-topic chattiness, and when posts are off-topic, they are at least of interest to skywire admirers.

Recently, we have been having a growing number of "spams". I ask if we should consider changing the group to require membership approval? My boss runs a Yahoo group for the accounting package we use at work, and requires applicants to tell him the version they are running and who their VAR is before he will approve them. Spammers see this and simply never apply. Users don't have a problem answering the question. He's had the group going for about 4 years now and not a single spam. In that time, the group has grown from 3 members to 28, which is exceptional for the small userbase it serves.

I would think we could ask potential new members to include their call sign and the make/model of just a single radio they own. A spammer would most likely move on, while a real amateur operator/potential member (even lowly tech class operators such as myself) would have no problem answering the two questions. While there are exceptions to every rule, the chances of a ham being a spammer seem low to me, as hams are not the type of people who would engage in such activity.

What does the group think?

73,
Kyle
W4KDA

1656. RE: [SkyWires] Group Suggestion

Yahoo group: SkyWires
Date: 2006-06-15 12:47:19 UTC
From: J. Harrell
Topic: 1655 Message: 1656

In response to the message,

I myself have been signed up for a while now, but I don’t post all that regular. I apologize for this. One reason I haven’t is because I don’t have a suitable hf antenna at the moment. Also currently at the moment all that I own is a Icom 706MKII which I use on 2 meters mostly and 6 meters. As far as the callsigns go and equipment would be a good Idea I think. Hopefully as time progresses I will get my hf antenna up in the air and listen and post more.

Just my 2 cents worth.

Joey

KI4HNN

NC

-----Original Message-----
From: SkyWires@yahoogroups.com [mailto:SkyWires@yahoogroups.com] On Behalf Of Kyle
Sent: Thursday, June 15, 2006 8:35 AM
To: SkyWires@yahoogroups.com
Subject: [SkyWires] Group Suggestion

Good morning, Skywires group. I have to say I really enjoy this group. There are a generous number of participants, activity is light, there is not a bunch of off-topic chattiness, and when posts are off-topic, they are at least of interest to skywire admirers.

Recently, we have been having a growing number of "spams". I ask if we should consider changing the group to require membership approval? My boss runs a Yahoo group for the accounting package we use at work, and requires applicants to tell him the version they are running and who their VAR is before he will approve them. Spammers see this and simply never apply. Users don't have a problem answering the question. He's had the group going for about 4 years now and not a single spam. In that time, the group has grown from 3 members to 28, which is exceptional for the small userbase it serves.

I would think we could ask potential new members to include their call sign and the make/model of just a single radio they own. A spammer would most likely move on, while a real amateur operator/potential member (even lowly tech class operators such as myself) would have no problem answering the two questions. While there are exceptions to every rule, the chances of a ham being a spammer seem low to me, as hams are not the type of people who would engage in such activity.

What does the group think?

73,
Kyle
W4KDA

--
No virus found in this incoming message.
Checked by AVG Free Edition.
Version: 7.1.394 / Virus Database: 268.8.4/364 - Release Date: 6/14/2006

--
No virus found in this outgoing message.
Checked by AVG Free Edition.
Version: 7.1.394 / Virus Database: 268.8.4/364 - Release Date: 6/14/2006

1657. Re: Group Suggestion

Yahoo group: SkyWires
Date: 2006-06-15 15:08:54 UTC
From: Paul
Topic: 1655 Message: 1657

--- In SkyWires@yahoogroups.com, Kyle <kyle@...> wrote:
>
> Good morning, Skywires group. I have to say I really enjoy this
group.
> There are a generous number of participants, activity is light,
there
> is not a bunch of off-topic chattiness, and when posts are off-
topic,
> they are at least of interest to skywire admirers.
>
> Recently, we have been having a growing number of "spams". I ask
if we
> should consider changing the group to require membership
approval? My
> boss runs a Yahoo group for the accounting package we use at work,
and
> requires applicants to tell him the version they are running and
who
> their VAR is before he will approve them. Spammers see this and
simply
> never apply. Users don't have a problem answering the question.
He's
> had the group going for about 4 years now and not a single spam.
In
> that time, the group has grown from 3 members to 28, which is
> exceptional for the small userbase it serves.
>
> I would think we could ask potential new members to include their
call
> sign and the make/model of just a single radio they own. A
spammer
> would most likely move on, while a real amateur operator/potential
> member (even lowly tech class operators such as myself) would have
no
> problem answering the two questions. While there are exceptions
to
> every rule, the chances of a ham being a spammer seem low to me,
as hams
> are not the type of people who would engage in such activity.
>
> What does the group think?
>
> 73,
> Kyle
> W4KDA

>
+++ Very good idea >> do it iam all for it. Paul

1658. Re: [SkyWires] Re: Group Suggestion

Yahoo group: SkyWires
Date: 2006-06-15 15:39:27 UTC
From: Garth Conover
Topic: 1655 Message: 1658

Sounds like qa good idea to me. Go for it.

----- Original Message -----
From: Paul<mailto:pchabot@...>
To: SkyWires@...m<mailto:SkyWires@yahoogroups.com>
Sent: Thursday, June 15, 2006 11:08 AM
Subject: [SkyWires] Re: Group Suggestion

--- In SkyWires@yahoogroups.com<mailto:SkyWires@yahoogroups.com>, Kyle <kyle@...> wrote:
>
> Good morning, Skywires group. I have to say I really enjoy this
group.
> There are a generous number of participants, activity is light,
there
> is not a bunch of off-topic chattiness, and when posts are off-
topic,
> they are at least of interest to skywire admirers.
>
> Recently, we have been having a growing number of "spams". I ask if we

We Made Changes
Your Yahoo! Groups email is all new.

Learn More<http://us.lrd.yahoo.com/_ylc=X3oDMTJtZ25mbG5mBF9TAzk3MzU5NzE0BF9wAzEEZ3JwSWQDMT
A5NDYxMTkEZ3Jwc3BJZAMxNjAwMDYzMTA4BHNlYwNuY21vZARzbGsDaW5mbwRzdGltZQMxMTUwMzg0Mjc2;_ylg=1/
SIG=11gd5l5o4/**http://groups.yahoo.com/local/newemail.html>

Share Feedback<http://us.lrd.yahoo.com/_ylc=X3oDMTJuNzRvOWY0BF9TAzk3MzU5NzE0BF9wAzIEZ3JwSW
QDMTA5NDYxMTkEZ3Jwc3BJZAMxNjAwMDYzMTA4BHNlYwNuY21vZARzbGsDZmRiY2sEc3RpbWUDMTE1MDM4NDI3Ng--
;_ylg=1/SIG=11im36rmb/**http://surveylink.yahoo.com/wix/p1412899.aspx>

Recent Activity
a.. 5New Members<http://us.lrd.yahoo.com/_ylc=X3oDMTJnZ2hraDgzBF9TAzk3MzU5NzE0BGdycElkAzEw
OTQ2MTE5BGdycHNwSWQDMTYwMDA2MzEwOARzZWMDdnRsBHNsawN2bWJycwRzdGltZQMxMTUwMzg0Mjc2;_ylg=1/SI
G=11j0c8766/**http://groups.yahoo.com/group/SkyWires/members>
Visit Your Group <http://us.lrd.yahoo.com/_ylc=X3oDMTJmaHY4cmRyBF9TAzk3MzU5NzE0BGdycElkAzE
wOTQ2MTE5BGdycHNwSWQDMTYwMDA2MzEwOARzZWMDdnRsBHNsawN2Z2hwBHN0aW1lAzExNTAzODQyNzY-;_ylg=1/S
IG=11bptia7l/**http://groups.yahoo.com/group/SkyWires>
SPONSORED LINKS
a.. Loop antenna<http://us.lrd.yahoo.com/_ylc=X3oDMTJkYjNpcjUxBF9TAzk3MzU5NzE0BF9wAzEEZ3Jw
SWQDMTA5NDYxMTkEZ3Jwc3BJZAMxNjAwMDYzMTA4BHNlYwNzbG1vZARzdGltZQMxMTUwMzg0Mjc3;_ylg=1/SIG=15
jojipvl/**http://groups.yahoo.com/gads?t=ms&k=Loop+antenna&w1=Loop+antenna&w2=Ham+radio+sa
les&w3=Ham+radio+outlet&c=3&s=61&g=2&.sig=QON0UYVdjYRkdicQCQ4yag>
b.. Ham radio sales<http://us.lrd.yahoo.com/_ylc=X3oDMTJkNWlmMjJpBF9TAzk3MzU5NzE0BF9wAzIEZ
3JwSWQDMTA5NDYxMTkEZ3Jwc3BJZAMxNjAwMDYzMTA4BHNlYwNzbG1vZARzdGltZQMxMTUwMzg0Mjc3;_ylg=1/SIG
=15ofs5t92/**http://groups.yahoo.com/gads?t=ms&k=Ham+radio+sales&w1=Loop+antenna&w2=Ham+ra

dio+sales&w3=Ham+radio+outlet&c=3&s=61&g=2&.sig=M_72yH5kKpGJ6w57eJGjXQ>
c.. Ham radio outlet<http://us.lrd.yahoo.com/_ylc=X3oDMTJkOTM5cGwxBF9TAzk3MzU5NzE0BF9wAzME
Z3JwSWQDMTA5NDYxMTkEZ3Jwc3BJZAMxNjAwMDYzMTA4BHNlYwNzbG1vZARzdGltZQMxMTUwMzg0Mjc3;_ylg=1/SI
G=15pinapgl/**http://groups.yahoo.com/gads?t=ms&k=Ham+radio+outlet&w1=Loop+antenna&w2=Ham+
radio+sales&w3=Ham+radio+outlet&c=3&s=61&g=2&.sig=A4KG6mkA-1FQLj0UHWQfbA>
.

1659. St Louis Loop

Yahoo group: SkyWires
Date: 2006-06-15 22:38:00 UTC
From: bambazonke01
Topic: 1634 Message: 1659

Does anyone use the St Louis loop?
It is apparently a reduced size loop and has pig tails for 80 meters.
Has anyone details of design?
Jim VE3DDY

1660. Re: [SkyWires] Group Suggestion

Yahoo group: SkyWires
Date: 2006-06-16 01:42:00 UTC
From: Richards
Topic: 1655 Message: 1660

Sure -- it works for other groups. Yet, I have no problem just deleting the few items that get through. It really only causes one a problem if he answers the spam message, because that validates his address.

But a few opening lines to gain membership sounds like a fair approach.

/////////////// Richards ///////////////

==========

Kyle wrote:

> should consider changing the group to require membership approval?

1661. Loop Question

Yahoo group: SkyWires
Date: 2006-06-16 05:03:13 UTC
From: K.Currie
Topic: 322 Message: 1661

Has any one had any experience with a reflector wire under their horizontal loop?
VE5HKC
Keith

1662. Re: [SkyWires] Group Suggestion

Yahoo group: SkyWires
Date: 2006-06-16 05:05:04 UTC
From: K.Currie
Topic: 1655 Message: 1662

Sure , Sounds ok to me, if it keeps the QRM out.
----- Original Message -----
From: Kyle
To: SkyWires@yahoogroups.com
Sent: Thursday, June 15, 2006 6:34 AM
Subject: [SkyWires] Group Suggestion

Good morning, Skywires group. I have to say I really enjoy this group. There are a generous number of participants, activity is light, there is not a bunch of off-topic chattiness, and when posts are off-topic, they are at least of interest to skywire admirers.

Recently, we have been having a growing number of "spams". I ask if we should consider changing the group to require membership approval? My boss runs a Yahoo group for the accounting package we use at work, and requires applicants to tell him the version they are running and who their VAR is before he will approve them. Spammers see this and simply never apply. Users don't have a problem answering the question. He's had the group going for about 4 years now and not a single spam. In that time, the group has grown from 3 members to 28, which is exceptional for the small userbase it serves.

I would think we could ask potential new members to include their call sign and the make/model of just a single radio they own. A spammer would most likely move on, while a real amateur operator/potential member (even lowly tech class operators such as myself) would have no problem answering the two questions. While there are exceptions to every rule, the chances of a ham being a spammer seem low to me, as hams are not the type of people who would engage in such activity.

What does the group think?

73,
Kyle
W4KDA

No virus found in this incoming message.
Checked by AVG Free Edition.
Version: 7.1.375 / Virus Database: 268.9.0/366 - Release Date: 6/15/06

1663. Re: [SkyWires] Loop Question

Yahoo group: SkyWires
Date: 2006-06-16 12:14:41 UTC
From: Kyle
Topic: 322 Message: 1663

Keith,

I am a newbie, and have not yet got my loop up. But I did read something about this elsewhere on the Internet. If I recall correctly, a reflector is not needed because the typical 80m loop is < 1/4 wavelength (20m) up from the ground. At 20m up, on an 80m frequency the loop would have an optimal horizontal takeoff. However, most people have them far closer to the earth than 20m. Although this turns the takeoff angle more vertical, because of the inherent efficiency of the design, there is still plenty of signal towards the horizon for DXing. Putting a reflector wire underneath the loop would do nothing if it were physically on the ground, and putting it in the air exacerbates the issue, making the takeoff more vertical. As I understand it, the reflector wire would only theoretically help if your loop was greater than 20m off the ground. So the bottom line as I recall was that is really wasn't necessary. Perhaps someone in the group has tested this and can shed more light on the subject.

And please correct me if I am wrong!

-Kyle
W4KDA

K.Currie wrote:
> Has any one had any experience with a reflector wire under their
> horizontal loop?
> VE5HKC
> Keith

1664. Re: [SkyWires] Group Suggestion

Yahoo group: SkyWires
Date: 2006-06-16 11:59:06 UTC
From: Andy
Topic: 1655 Message: 1664

I've been told that the most effective solution to keeping spammers out of Yahoogroups (even better than requiring membership approval), is automatically putting all new members on 'moderated' status, until they post at least one valid on-topic message. Moderated status just means that if they post a message, the message is delayed until approved by the moderator. After that, the moderator switches them to normal status and subsequent messages aren't delayed.

Requiring membership approval has the advantage that spammers don't get to even join and harvest names and addresses from the messages they receive.

And it probably helps to hide the list of Members (especially if the group doesn't require membership approval). The Member list is a great resource for spammers.

Andy

1665. RE: [SkyWires] Group Suggestion

Yahoo group: SkyWires
Date: 2006-06-16 14:00:30 UTC
From: Kenneth Johnston
Topic: 1655 Message: 1665

I like any suggestion that improves the group and kills the spam.

Kenneth

KE4SJX

IC 706 MKII

Yaesu FT 50

IC 2720

Kenwood 530S

Assorted junk

-----Original Message-----
From: SkyWires@yahoogroups.com [mailto:SkyWires@yahoogroups.com] On Behalf Of Andy
Sent: Friday, June 16, 2006 6:59 AM
To: SkyWires@yahoogroups.com
Subject: Re: [SkyWires] Group Suggestion

I've been told that the most effective solution to keeping spammers out of Yahoogroups (even better than requiring membership approval), is automatically putting all new members on 'moderated' status, until they post at least one valid on-topic message. Moderated status just means that if they post a message, the message is delayed until approved by the moderator. After that, the moderator switches them to normal status and subsequent messages aren't delayed.

Requiring membership approval has the advantage that spammers don't get to even join and harvest names and addresses from the messages they receive.

And it probably helps to hide the list of Members (especially if the group doesn't require membership approval). The Member list is a great resource for spammers.

Andy

1666. Re: [SkyWires] Group Suggestion

Yahoo group: SkyWires
Date: 2006-06-16 18:51:01 UTC
From: John_SusanH@att.net
Topic: 1655 Message: 1666

I don't post much since my loop has come down, but I enjoy keeping up with the ideas posted on the group. I like the idea - here's mine.
AD7AW K2/100 jon

1667. Re: [SkyWires] Group Suggestion

Yahoo group: SkyWires
Date: 2006-06-16 23:48:26 UTC
From: David Shrum
Topic: 1655 Message: 1667

I have been looking over the area where moderators can lurk and do things, well I can NOT change that, it is my belief that the list owner has that privilege; about all I can do is to moderate someone AFTER they have joined and have given a good reason to do that, I can't do that before the fact, I can't speak for the other moderators, only myself.
Dave N8PU

1668. Re: [SkyWires] Group Suggestion

Yahoo group: SkyWires
Date: 2006-06-17 01:42:30 UTC
From: Dr.Ace Ratliff
Topic: 1655 Message: 1668

I agree.
Ace - WH2T

----- Original Message -----
From: David Shrum
To: SkyWires@yahoogroups.com
Sent: Friday, June 16, 2006 6:48 PM
Subject: Re: [SkyWires] Group Suggestion

I have been looking over the area where moderators can lurk and do things, well I can NOT change that, it is my belief that the list owner has that privilege; about all I can do is to moderate someone AFTER they have joined and have given a good reason to do that, I can't do that before the fact, I can't speak for the other moderators, only myself.
Dave N8PU

1669. Re: [SkyWires] Group Suggestion

Yahoo group: SkyWires
Date: 2006-06-17 01:08:03 UTC
From: Dave Marling
Topic: 1655 Message: 1669

I manage two lists on Yahoo. They are set up so any new application comes to me for approval. If I'm at all suspicious I send a request to the applicant from a throwaway account on Yahoo. If they reply with their callsign (or with a legitimate reason to join) I check them out on the databases, and if they pass, I approve them. If not, they're gone! Most, if spammers, won't bother to reply.

I'm also a co-manager for the qrp-canada reflector and do the same for it. There, we ban any spammer making application, although most lately seem to be sending unsolicited mail rather than trying for entry, so it gets held for our approval/rejection. Then we place them on an auto-discard list. That site uses different software and has more options about what to do with these folks.

My opinions...

Dave
VE1VQ

1670. Re: Group Suggestion

Yahoo group: SkyWires
Date: 2006-06-17 07:36:14 UTC
From: Al
Topic: 1655 Message: 1670

I don't have any problem with having approved membership as this seems to be the way most other groups are going to get rid of the spamers. It has affected this group that bad but a couple of other groups I belong to have be vertually taken over by spam. So it will get worse in time.

Al, VE7AGW
>
>
> Good morning, Skywires group. I have to say I really enjoy this group.
> There are a generous number of participants, activity is light, there
> is not a bunch of off-topic chattiness, and when posts are off-topic,
> they are at least of interest to skywire admirers.
>
> Recently, we have been having a growing number of "spams". I ask if we
> should consider changing the group to require membership approval? My
> boss runs a Yahoo group for the accounting package we use at work, and
> requires applicants to tell him the version they are running and who
> their VAR is before he will approve them. Spammers see this and simply
> never apply. Users don't have a problem answering the question. He's
> had the group going for about 4 years now and not a single spam. In
> that time, the group has grown from 3 members to 28, which is
> exceptional for the small userbase it serves.
>
> I would think we could ask potential new members to include their call
> sign and the make/model of just a single radio they own. A spammer
> would most likely move on, while a real amateur operator/potential
> member (even lowly tech class operators such as myself) would have no
> problem answering the two questions. While there are exceptions to
> every rule, the chances of a ham being a spammer seem low to me,

as hams
> are not the type of people who would engage in such activity.
>
> What does the group think?
>
> 73,
> Kyle
> W4KDA
>
>
>
>
>
> ----------

>
>
> No virus found in this incoming message.
> Checked by AVG Free Edition.
> Version: 7.1.375 / Virus Database: 268.9.0/366 - Release Date:
6/15/06
>

1671. Re: [SkyWires] Re: Group Suggestion

Yahoo group: SkyWires
Date: 2006-06-17 08:23:15 UTC
From: Richards
Topic: 1655 Message: 1671

Yeah... the worst thing is so many members take the bait
and reply to the spam asking to be removed from the list,
thereby validating their email addresses. The spammers sell
(or trade) their lists among themselves.

A guy who sublets space in my office had real problems because
he kept responding to the option to "go here to be taken off"
the list. Doing this, he had picked up more than a thousand
instances (each) of various viruses and spy ware cookies.
He has had only two or three since we got him to stop doing this,
and use a decent anti virus and anti-spy ware program. Now, if we
could only get him to quit using AOL, we would allow him to access
our network...

Just my take. /////////// Richards ///////////

==========

Al wrote:
> I don't have any problem with having approved membership as this
> seems to be the way most other groups are going to get rid of the
> spamers. I ...

1673. Re: [SkyWires] How To Master The Art Of Making Money Online

Yahoo group: SkyWires
Date: 2006-06-18 03:51:44 UTC
From: David Shrum
Topic: 1673 Message: 1673

Banned and original message deleted.
Dave N8PU

Migz Inton wrote:

1674. New to group

Yahoo group: SkyWires
Date: 2006-06-22 01:01:40 UTC
From: w7tea
Topic: 320 Message: 1674

When we moved to an antenna restricted neighborhood more than 15 years ago (as in no outside antennas) I put a 40m loop in the attic, fed with ladder line down thru a wall and to a
current balun in the shack. Worked pretty well. Then I moved the antenna outside. Another 40m loop--in sloping delta configuration, again fed with ladder line, balun and coax to shack--It equalled the attic loop. My final loop is 80 sloping delta with the apex up about 50ft in a fir tree and the baseline up about 5ft along a cedar fence. It is fed in the corner
with a 4:1 balun and coax to the shack. The antenna wire is #16 copperweld which is practically invisible, at least to retired folks' eyes--like mine. But have not had a complaint.
Hardly ever work 80m but have made many a stateside and DX contact with this antenna on all bands 40m and up. Fairly low SWR on the resonant bands and tuner takes care of the others.

Love the loop!

73, Gary W7TEA

1675. Re: [SkyWires] New to group

Yahoo group: SkyWires
Date: 2006-06-23 02:00:48 UTC
From: Richards
Topic: 320 Message: 1675

Say... could send me a digital photo of your outdoor loop
and other antennas? It would help me if I could visualize
them in place. If that is workable, you probably need to
send them to me off list or post in the photo section on the
list, as attachments are typically stripped from these
message forums. I am working on similar installations and
it would help to see how others are doing it.

Thanks a bunch in advance. /// Richards ////
==========

w7tea wrote:
Then I moved the antenna outside.
But have not had a complaint.

1676. Balluns

Yahoo group: SkyWires
Date: 2006-06-23 04:07:33 UTC
From: K.Currie
Topic: 1676 Message: 1676

What is the difference betweenbaluns wound on PVC pipe Ferrite rod, or iron rod?
VE5HKC
Keith

1677. Re: Balluns

Yahoo group: SkyWires
Date: 2006-06-23 19:42:30 UTC
From: bambazonke01
Topic: 1676 Message: 1677

--- In SkyWires@yahoogroups.com, "K.Currie" <kecurrie@...> wrote:
>
> What is the difference betweenbaluns wound on PVC pipe Ferrite rod,
or iron rod?
> VE5HKC
> Keith
>
Basically,
Baluns wond on PVC pipe require a lot more turns of wire to adequately
do the impedance change or balance. For that reason we use ferrite
type material that has a frequency response within the bands we use.
It therefore requires a lot less turns to do the job because of
the "Permeability" of the ferrite material.
If the balun is wound on an iron core it saturates at very low
frequency and is not usable at Ham frequencies.
Jim VE3DDY

1678. Re: New to group

Yahoo group: SkyWires
Date: 2006-06-23 19:44:50 UTC
From: bambazonke01
Topic: 320 Message: 1678

--- In SkyWires@yahoogroups.com, Richards <jruing@...> wrote:
>
> Say... could send me a digital photo of your outdoor loop
> and other antennas? It would help me if I could visualize
> them in place. If that is workable, you probably need to
> send them to me off list or post in the photo section on the
> list, as attachments are typically stripped from these
> message forums. I am working on similar installations and
> it would help to see how others are doing it.
>
> Thanks a bunch in advance. /// Richards ////

Go into the photos section of this group and see my DCTL loop under
VE3DDY
Jim VE3DDY

1679. Re: [SkyWires] Re: Balluns

Yahoo group: SkyWires
Date: 2006-06-22 22:34:44 UTC
From: David Burroughs
Topic: 1676 Message: 1679

bambazonke01 wrote:

> --- In SkyWires@yahoogroups.com <mailto:SkyWires%40yahoogroups.com>,
> "K.Currie" <kecurrie@...> wrote:
> >
> > What is the difference betweenbaluns wound on PVC pipe Ferrite rod,
> or iron rod?
> > VE5HKC
> > Keith
> >
> Basically,
> Baluns wond on PVC pipe require a lot more turns of wire to adequately
> do the impedance change or balance. For that reason we use ferrite
> type material that has a frequency response within the bands we use.
> It therefore requires a lot less turns to do the job because of
> the "Permeability" of the ferrite material.
> If the balun is wound on an iron core it saturates at very low
> frequency and is not usable at Ham frequencies.
> Jim VE3DDY
>
>

Comment... The term of "a lot more turns" may be overstated. I build lots of air core baluns for 1:1 matching at HF. I use 3/4 inch PVC for the core and it only takes 10 turns of triflilar wound wire to do the job. I prefer air core because it does not saturate or overheat as easily a ferrite. Just the opinon of this ham.
Dave KR4YD

1680. Re: [SkyWires] Re: New to group

Yahoo group: SkyWires
Date: 2006-06-24 03:30:26 UTC
From: Richards
Topic: 320 Message: 1680

Cool - thanks. /// Richards ///
==========

>
> Go into the photos section of this group and see my DCTL loop under

1681. Re: New to group

Yahoo group: SkyWires
Date: 2006-06-24 15:49:32 UTC
From: bambazonke01
Topic: 320 Message: 1681

--- In SkyWires@yahoogroups.com, Richards <jruing@...> wrote:
>
> Cool - thanks. /// Richards ///
> ==
>
> >
> > Go into the photos section of this group and see my DCTL loop under
>
Richards,
That loop antenna works well on 40 M using low power like 5 or 10
watts. It seems to be as good as my G5RV which is at 40 ft and the
loop is sitting inside the house as shown in the pics.
Bandwidth is narrow though and you must fabricate a tuning capacitor
or even make the loops open like the pages of a book.
Watch out, even with low power you can get nasty burns from this
antenna if you touch it while transmitting.
It blistered a large spot on my forearm and it took months to heal.
I wonder if it could be used to cure hemmeroids?
:-)
Jim VE3DDY
Jim VE3DDY

1682. Re: [SkyWires] Re: New to group

Yahoo group: SkyWires
Date: 2006-06-24 16:29:50 UTC
From: Richards
Topic: 320 Message: 1682

If so, I will take two! /// JHR ///

==========

bambazonke01 wrote:
> I wonder if it could be used to cure hemmeroids?
> :-)

1683. Another Newbie With A Question

Yahoo group: SkyWires
Date: 2006-06-26 17:21:01 UTC
From: MD Calvert
Topic: 1683 Message: 1683

After fifty years of on-again off-again listening to SW, I am trying to get back into the fun. I Googled various terms through groups and found several. I joined this one because of the idea that I might FINALLY begin to understand a little more about wire antennas.

In looking at the photo files of various SkyWire antennas, I noticed that almost all involved a wire loop of some shape and length, connected to a coax feed line by a "matching transformer." I don't know what a "matching transformer is, looks like, or does. Can someone post an explanation with pix of a transformer (or several if they differ in size, shape, etc.).

Thanks all,

MDCalvert
Oak Ridge, TN

1684. Re: [SkyWires] Another Newbie With A Question

Yahoo group: SkyWires
Date: 2006-06-26 19:05:47 UTC
From: Dr.Ace Ratliff
Topic: 1683 Message: 1684

Hi MD,
Welcome to the group . It is not necessary to connect a Balun / matching transformer between the loop antenna and the feedline . Some people use a 2:1 balun between the loop antenna and the feedline . A full wave loop antenna should have an impedance of about 100 ohms so a 2:1 balun provides a good match to 50 ohm coax .

Baluns / matching transformers come in various types .
Here's a link to one I designed
http://www.bloomington.in.us/~wh2t/balun.html

Check out
http://www.bloomington.in.us/~wh2t/loop.html
for some info on loop antennas .

73, Ace - WH2T

----- Original Message -----
From: MD Calvert
To: SkyWires@yahoogroups.com
Sent: Monday, June 26, 2006 12:21 PM
Subject: [SkyWires] Another Newbie With A Question

After fifty years of on-again off-again listening to SW, I am trying to get back into the fun. I Googled various terms through groups and found several. I joined this one because of the idea that I might FINALLY begin to understand a little more about wire antennas.

In looking at the photo files of various SkyWire antennas, I noticed that almost all involved a wire loop of some shape and length, connected to a coax feed line by a "matching transformer." I don't know what a "matching transformer is, looks like, or does. Can someone post an explanation with pix of a transformer (or several if they differ in size, shape, etc.).

Thanks all,

MDCalvert
Oak Ridge, TN

1685. Re: [SkyWires] Another Newbie With A Question

Yahoo group: SkyWires
Date: 2006-06-26 20:39:51 UTC
From: erik@n0ew.org
Topic: 1683 Message: 1685

> I joined this one because of the idea that I might
> FINALLY begin to understand a little more about wire antennas.

A good choice of groups!

> In looking at the photo files of various SkyWire antennas, I noticed
> that almost all involved a wire loop of some shape and length,
> connected to a coax feed line by a "matching transformer."

The word "Skywire" refers to a horizontal loop antenna. This is why you are seeing so much discussion about this type of antenna. This group formed to specifically discuss that type of antenna. You generally won't find us discussing dipole, verticals, beams, or just about any type of antenna except loops, unless in passing or by way of comparision to loops.

"Matching transformer" could mean several things.

Unfortunately, often in the amateur radio community terms are used to mean more
than one thing, and at times we don't agree on the proper use of such terms. In
that light, it is a hobby after all, so you can't expect to hold us to the same
standards as a professional group. On the other hand we do try to come to a common use of terms.

Most likely this term refers to a length of parallel transmission line connected
to the feed point of the antenna, the other end of which is in turn is attached
to a random length of coax. Typically there is a balun at this junction between
the two types of transmission line.

Hope this helps a little bit,
Erik n0ew

1686. loops and dipoles

Yahoo group: SkyWires
Date: 2006-06-26 23:35:48 UTC
From: n6hpx/du1 Cavite Philippines
Topic: 1683 Message: 1686

I have been contemplating on buying a 6 meter
loop,stacked, and have wondered if anyone has ever
used one in comparision with a 6 meter dipole and
wonder how it worked for you.

I have a 6 meter dipole already up at my station
and wish to try other antennas,like loops and beams.

Thanks

Larry Fields,n6hpx/du1

N6HPX/du1:Philippine islands
member: ARRL,Pinoyhams,PARL,WUN,PARA,
SCADS,ASWLC,6mclubs
US Merchant Mariner 29 years<since 1977>
www.qrz.com/n6hpx
Radios on board:Sangean909,Sony7600gr
Yaesu FT530,VX5R
antenna:40ft wire slooper,AN-60

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1687. skywire feedline question

Yahoo group: SkyWires
Date: 2006-06-30 19:19:54 UTC
From: chucknewberg
Topic: 1687 Message: 1687

Am back on the bands after 10 years and now have room for a skywire, and have a question on how to attatch the feedline and or coax. Do we run a loop of wire and hook one end up to the wire out of the coax and the other end onto the braid? ? and or one end onto one side of the centerpiece as to one leg of a dipole and the other end as it comes around on the loop to the other side? tnx for the help Chuck KL7OH

1688. Re: [SkyWires] skywire feedline question

Yahoo group: SkyWires
Date: 2006-07-01 01:33:22 UTC
From: Dr.Ace Ratliff
Topic: 1687 Message: 1688

Hi Chuck ,
Run a loop of wire and hook one end of the loop up to the center wire out of the coax and the other end of the loop onto the braid .
Ace - WH2T

----- Original Message -----
From: chucknewberg
To: SkyWires@yahoogroups.com
Sent: Friday, June 30, 2006 2:19 PM
Subject: [SkyWires] skywire feedline question

Am back on the bands after 10 years and now have room for a skywire, and have a question on how to attatch the feedline and or coax. Do we run a loop of wire and hook one end up to the wire out of the coax and the other end onto the braid? ? and or one end onto one side of the centerpiece as to one leg of a dipole and the other end as it comes around on the loop to the other side? tnx for the help Chuck KL7OH

1689. Re: [SkyWires] skywire feedline question

Yahoo group: SkyWires
Date: 2006-07-05 19:46:16 UTC
From: chuck newberg
Topic: 1687 Message: 1689

thank you! am looking at an 80m loop but may have
room for a 160m loop, appreciate your reply
Chuck KL7OH Fairbanks

--- "Dr.Ace Ratliff" <wh2t@...> wrote:

> Hi Chuck ,
> Run a loop of wire and hook one end of the loop
> up to the center wire out of the coax and
> the other end of the loop onto the braid .
> Ace - WH2T
>
>
> ----- Original Message -----
> From: chucknewberg
> To: SkyWires@yahoogroups.com
> Sent: Friday, June 30, 2006 2:19 PM
> Subject: [SkyWires] skywire feedline question
>
>
> Am back on the bands after 10 years and now have
> room for a skywire,
> and have a question on how to attatch the feedline
> and or coax. Do we
> run a loop of wire and hook one end up to the wire
> out of the coax and
> the other end onto the braid? ? and or one end
> onto one side of the
> centerpiece as to one leg of a dipole and the
> other end as it comes
> around on the loop to the other side? tnx for the
> help Chuck KL7OH
>
>
>
>

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http://mail.yahoo.com

1690. Re: [SkyWires] Loop Question

Yahoo group: SkyWires
Date: 2006-07-22 14:14:29 UTC
From: Andy
Topic: 322 Message: 1690

> ... As I understand it, the
> reflector wire would only theoretically help if your loop was greater
> than 20m off the ground. ...

The following is based on theory, as opposed to experience; but I think a reflector also helps because real earth tends to be lossy (unless you live by a salt marsh).

Also, it's not the top of the soil that reflects, it may be several feet down and somewhat ill-defined, so a reflector loop or wire can help give your antenna a better defined reflector with a known separation.

Andy

1691. Florida Lightning Strike Photographs

Yahoo group: SkyWires
Date: 2006-07-23 15:27:00 UTC
From: Thomas Giella KN4LF
Topic: 1691 Message: 1691
Attachments: 1 described; binary payloads are missing from this source WARC

On July 19, 2006 I took a direct lightning strike to my 50 foot Rohn steel push up mast. I have photo's published at the website link below.
http://www.kn4lf.com/kn4lf60.htm .

--... ...--,
Thomas F. Giella, KN4LF
Lakeland, FL, USA
Grid Square EL97AW
kn4lf@...

KN4LF Amateur & SWL Radio History: http://www.kn4lf.com
Radiowave Propagation Yahoo eGroup: http://groups.yahoo.com/group/radiowavepropagation

1692. Re: [SkyWires] Florida Lightning Strike Photographs

Yahoo group: SkyWires
Date: 2006-07-23 16:01:53 UTC
From: David Shrum
Topic: 1691 Message: 1692

WOW, thank God you weren't sitting in that room when it was hit.
Dave N8PU

Thomas Giella KN4LF wrote:
> *On July 19, 2006 I took a direct lightning strike to my 50 foot Rohn
> steel push up mast. I have photo's published at the website link below.*
> *http://www.kn4lf.com/kn4lf60.htm .*
>
> *--... ...--,
> Thomas F. Giella, KN4LF
> Lakeland, FL, USA
> Grid Square EL97AW
> kn4lf@... <mailto:kn4lf@...>*
>
> *KN4LF Amateur & SWL Radio History: http://www.kn4lf.com
> Radiowave Propagation Yahoo eGroup:
> http://groups.yahoo.com/group/radiowavepropagation *
>
>

1693. Re: Loop Question

Yahoo group: SkyWires
Date: 2006-07-23 19:26:02 UTC
From: Karel ZS6WN
Topic: 322 Message: 1693

Hi Andy and others

I've playing around with skywire loops for many years (since the invention of the german quad in the late 70's..) and the idea of having a reflector loop has been going around in my thoughts for a while.

Now I wonder: should it be the same size as the main loop, or shorter or longer?

And what would an ideal separation be?

Another idea was to have a smaller loop inside the main loop at the same height.

Wonder if the guys with the fancy antenna analyzing software can't shed some light for us on these?

73 de ZS6WN

Karel

1694. Re: [SkyWires] Re: Loop Question

Yahoo group: SkyWires
Date: 2006-07-23 20:59:15 UTC
From: icra@galaxynet.com
Topic: 322 Message: 1694

>
> Another idea was to have a smaller loop inside the main loop at the same height.
>
> Wonder if the guys with the fancy antenna analyzing software can□t shed some light for us on
> these?
>
I kinda had a similar idea to this one.....

My thought was to try a loaded loop about 1/3 smaller inside the larger loop and feed it out of
phase to the main loop.....

My hope would be to act some what like the phased feed on a beam and direct more of the signal outward....especially on the lower bands....

Not having the software to model it and City not letting me put up a loop to try it, no idea if it
would work....

Mel
N7OKL

1695. Re: [SkyWires] Re: Loop Question

Yahoo group: SkyWires
Date: 2006-07-23 22:26:03 UTC
From: Andy
Topic: 322 Message: 1695

> I've playing around with skywire loops for many years (since the invention
> of the german quad in the late 70's..) and the idea of having a reflector
> loop has been going around in my thoughts for a while.
>
> Now I wonder: should it be the same size as the main loop, or shorter or
> longer?

I've read that the reflector loop should be a little larger. Same as the reflector on a beam. Making it longer/larger makes it inductive which gives it the optimal phase shift, or something to that effect. (How much larger? 5% or so??)

> And what would an ideal separation be?

According to what I've read others say ... Some say 0.25 wavelength is ideal, while others say that is only theoretically true for a plane reflector (which it ain't), and something more like 0.1 or 0.15 wavelength gives the best gain / best results.

Regards,
Andy

1696. Size of horizontal loop?

Yahoo group: SkyWires
Date: 2006-07-29 16:55:12 UTC
From: Hans Remeeus
Topic: 322 Message: 1696

Dear all,

Next year we will move to another house with a yard of about 1 acre.
After 35 years of dipoles finally a horizontal loop is within reach!

My most used band is 80 meters for local and mid-European communication.
A few times a year I participate in an HF-contest, but I am not a kind
of DX'er.

I want to feed the horizontal loop with about 200 feet of 600 Ohm open
line and use the loop for multiband 160 - 10 meters with a balanced
antennatuner.

The height of the loop will be about 35 feet and I will use wooden
supports for the loop.

It am planning to make a full-size loop for 80 meters. However, on this
yard it is easy to make a loop of 4 x 100 feet instead of 4 x 70 feet.

What is your opinion about the size 400 feet instead of a full-wave for
80 meters?

Thanks!

--

73,
Hans Remeeus (PA1HR)
http://www.remeeus.eu
Communication is about people, the rest is technology.

1697. Re: [SkyWires] Size of horizontal loop?

Yahoo group: SkyWires
Date: 2006-07-29 18:33:48 UTC
From: David Shrum
Topic: 322 Message: 1697

There are members a lot more qualified to answer than I, so consider this only an opinion, if you have the space to add a little more than a hundred feet, it would be close to being resonate for 160 and still work on all the others.

I have one that is about 530 (ish) feet and at best maybe 20 feet up, and currently supported in and around trees, when I first put it up I could tune it in to use it on 160, right now I can't, one of these days I will get around to trying to see why I can't tune it in, but for now I can use it on 80 on up through 10 if I want; almost forgot I have about 20 or less feet of RG8 coax directly connected to the loop. Maybe if I experimented a little I might get it to work better, but for now it does what I want it to do.
Dave N8PU

Hans Remeeus wrote:
> Dear all,
>
> Next year we will move to another house with a yard of about 1 acre.
> After 35 years of dipoles finally a horizontal loop is within reach!
>
> My most used band is 80 meters for local and mid-European communication.
> A few times a year I participate in an HF-contest, but I am not a kind
> of DX'er.
>
> I want to feed the horizontal loop with about 200 feet of 600 Ohm open
> line and use the loop for multiband 160 - 10 meters with a balanced
> antennatuner.
>
> The height of the loop will be about 35 feet and I will use wooden
> supports for the loop.
>
> It am planning to make a full-size loop for 80 meters. However, on this
> yard it is easy to make a loop of 4 x 100 feet instead of 4 x 70 feet.
>
> What is your opinion about the size 400 feet instead of a full-wave for
> 80 meters?
>
> Thanks!
>
>
>

1698. Re: [SkyWires] Size of horizontal loop?

Yahoo group: SkyWires
Date: 2006-07-29 18:52:48 UTC
From: Dave Marling
Topic: 322 Message: 1698

I took the lazy way when it came to the first loop. I bought a 500' roll of #14 electrical wire at Home Depot and used the entire length, adjusting the support lines over the convenient trees.

A couple of years ago, I thought bigger might be better so I added another 500' roll to the first, moving the support lines out to other available trees.

One night, I got around to running the configuration through EZ-NEC and found the direction I wanted to favor actually had a small null. Plotting the original 500' version gave me a slight bit of gain where I wanted it.

So, down came the extra wire, and back to the original trees for support.

Mine is five (unequal) sided as that allowed for a more open loop than with the four points available.

Fed with open wire line from a homebrew ballanced tuner.

Dave
VE1VQ

1699. Re: [SkyWires] Size of horizontal loop?

Yahoo group: SkyWires
Date: 2006-07-29 20:51:13 UTC
From: Hans Remeeus
Topic: 322 Message: 1699

Thanks to all for your nteresting information!

This evening I found another interesting site about large horizontal loop antennas, including a very simple but effective tool. It can be found on http://www.smeter.net/antennas/rjeloop4.php

I will make a horizontal loop of 4 x 25 meters (= 4 x 82 feet) for 160 - 30. And for the higher bands a 14 MHz full-size vertical delta loop. Both with open feeder line.

--

73,
Hans Remeeus (PA1HR)
http://www.remeeus.eu
Communication is about people, the rest is technology.

1701. Re: Loop Question

Yahoo group: SkyWires
Date: 2006-07-30 09:28:25 UTC
From: bambazonke01
Topic: 322 Message: 1701

--- In SkyWires@yahoogroups.com, "Karel ZS6WN" <zs6wn@...> wrote:
>
> Hi Andy and others
>
>
>
> I've playing around with skywire loops for many years (since the
invention
> of the german quad in the late 70's..) and the idea of having a
reflector
> loop has been going around in my thoughts for a while.
>
>
>
> Now I wonder: should it be the same size as the main loop, or
shorter or
> longer?
>

Karel-Ou Klein Boet,
When I operated from ZE as ZE1FF in the 70's I had a 20 meter 4 element delta loop beam hung from a catenary rope suspended between two trees. The direction was fixed of course.
The spacing between elements was the same as you would have for a regular yagi and the element size was +5% for the reflector and corresponding reduced sizes for the directors.
At one point I changed the feed and fed all elements like a log periodic. I eventually had to take it down as it was making my wifes bedroom flourescent light flicker on and off.
Jim VE3DDY

1703. Putting new loop up.

Yahoo group: SkyWires
Date: 2006-08-01 00:27:13 UTC
From: Joe
Topic: 1703 Message: 1703

Ok, guys which will be best for my new loop, 14 guage
single strand copper weld, or 12 guage stranded copper
which is insulated, plan on loop of 263 ft, with a 4:1
balun to coax rg-8u feed line.

Any suggestions,
Thanks for the help before i get started.

Dan K7IUQ

_____
Do You Yahoo!?
Tired of spam? Yahoo! Mail has the best spam protection around
http://mail.yahoo.com

1704. Re: [SkyWires] Putting new loop up.

Yahoo group: SkyWires
Date: 2006-08-01 02:29:46 UTC
From: Richards
Topic: 1703 Message: 1704

I vote for insulated stranded wire.

////////////// Richards ///////////
==

Joe wrote:
14 guage
> single strand copper weld, or 12 guage stranded copper
> which is insulated,

1705. Re: Putting new loop up.

Yahoo group: SkyWires
Date: 2006-08-01 03:27:50 UTC
From: w7tea
Topic: 1703 Message: 1705

I've had a 80m slanting delta loop of 16 guage copperweld up for over 10 years without issue. It has gone thru ice storms and pretty high winds. Wire doesn't stretch. It is also fed thru a 4:1 current balun and coax. I've been very happy with this low profile antenna --especially since our CCand R's prohibit any outside antennas.

Gary W7TEA

--- In SkyWires@yahoogroups.com, Joe <joey98223@...> wrote:
>
>
> Ok, guys which will be best for my new loop, 14 guage
> single strand copper weld, or 12 guage stranded copper
> which is insulated, plan on loop of 263 ft, with a 4:1
> balun to coax rg-8u feed line.
>
> Any suggestions,
> Thanks for the help before i get started.
>
> Dan K7IUQ
>
>
> _____
> Do You Yahoo!?
> Tired of spam? Yahoo! Mail has the best spam protection around
> http://mail.yahoo.com
>

1706. Re: [SkyWires] Putting new loop up.

Yahoo group: SkyWires
Date: 2006-08-01 04:50:30 UTC
From: K.Currie
Topic: 1703 Message: 1706

I used #12 stranded on my 160 m
Keith
----- Original Message -----
From: Richards
To: SkyWires@yahoogroups.com
Sent: Monday, July 31, 2006 8:29 PM
Subject: Re: [SkyWires] Putting new loop up.

I vote for insulated stranded wire.

////////// Richards //////////
==========

Joe wrote:
14 guage
> single strand copper weld, or 12 guage stranded copper
> which is insulated,

No virus found in this incoming message.
Checked by AVG Free Edition.
Version: 7.1.375 / Virus Database: 268.10.4/402 - Release Date: 7/27/06

1707. Re: [SkyWires] Putting new loop up.

Yahoo group: SkyWires
Date: 2006-08-01 04:55:38 UTC
From: erik@n0ew.org
Topic: 1703 Message: 1707

> ... which will be best for my new loop, 14 guage
> single strand copper weld, or 12 guage stranded copper
> which is insulated, plan on loop of 263 ft, with a 4:1
> balun to coax rg-8u feed line.

I'd go with the stranded wire. This antenna will be outdoors, so I'd prefer to have the greater durability of stranded wire to survive the swaying in the wind.

You'll also get slightly wider bandwidth with the larger diameter, but the two choices are so close to one another you likely _won't_ notice any improvement.

Of course, if the single strand is free, and you don't mind occassional repairs, you may go that route.

How's that for a non-answer! Hehehe....

You're also likely to get a number of sugesstions regarding balanced transmission line of one type or another. Less loss. Important? Depends how long your run of transmission line is, and how much you care to be watchful of keeping the balanced line away from metal.

Whatever you choose to do, it'll likely work pretty well.
Erik n0ew

1708. ?

Yahoo group: SkyWires
Date: 2006-08-04 04:29:19 UTC
From: K.Currie
Topic: 1708 Message: 1708

Does any one on here know a Bill Ramsey through the SkyWires groop?

1709. Re: Putting new loop up.

Yahoo group: SkyWires
Date: 2006-08-04 20:29:07 UTC
From: xbullworker
Topic: 1703 Message: 1709

--- In SkyWires@yahoogroups.com, Joe <joey98223@...> wrote:
>
>
> Ok, guys which will be best for my new loop, 14 guage
> single strand copper weld, or 12 guage stranded copper
> which is insulated, plan on loop of 263 ft, with a 4:1
> balun to coax rg-8u feed line.
>
> Any suggestions,
> Thanks for the help before i get started.
>
> Dan K7IUQ
>
>

Dan:
I always use insulated 12ga stranded wire for my antennas including my 75mtr delta loop. Cheap if you buy at Home Depot or Lowes.

I dislike copper weld, harder to work with.I DISLIKE solid wire of any kind including solid wire open wire feedline, always use stranded wire for any antenna use.

12ga stranded will stretch a little, but I use open wire feeders and a tuner so dont worry about it. After a couple years it doesnt stretch anymore.

I have a 130 ft zepp with stranded wire, been up 6 years and thru many high winds and several ice storms, the wire is tuff.

Note our similar names AND Calls

Stan K9IUQ

1710. SOLORCON ANTRON 99

Yahoo group: SkyWires
Date: 2006-08-06 19:32:36 UTC
From: tandn_family_electronics
Topic: 1710 Message: 1710

I have an A-99 and I have not used it for a few years. Yesterday I got it out and checked it out. I noticed that it seems to be grounded. What I am saying is, When I checked the end of the plug to screw on the COAX I noticed that my meter showed that it was touching somewhere. At first I thought that it was my COAX but I figured out that is was the Antenna. I took the antenna apart and checked and could not see a visible problem. I did not fully take it apart to where it could not be repaired and put back together. Does anyone know what could be wrong? I have never built an antenna so I am not very good in this area. I di know how to work on C.B. radio's but not antenna's.
Thanks,Dean

1711. Re: [SkyWires] SOLORCON ANTRON 99

Yahoo group: SkyWires
Date: 2006-08-07 02:20:30 UTC
From: Dr.Ace Ratliff
Topic: 1710 Message: 1711

Hi Dean,
The antenna is probably designed to be a DC short to ground but not a short to ground at RF . Check the VSWR .
Ace - WH2T

----- Original Message -----
From: tandn_family_electronics
To: SkyWires@yahoogroups.com
Sent: Sunday, August 06, 2006 2:32 PM
Subject: [SkyWires] SOLORCON ANTRON 99

I have an A-99 and I have not used it for a few years. Yesterday I got it out and checked it out. I noticed that it seems to be grounded. What I am saying is, When I checked the end of the plug to screw on the COAX I noticed that my meter showed that it was touching somewhere. At first I thought that it was my COAX but I figured out that is was the Antenna. I took the antenna apart and checked and could not see a visible problem. I did not fully take it apart to where it could not be repaired and put back together. Does anyone know what could be wrong? I have never built an antenna so I am not very good in this area. I di know how to work on C.B. radio's but not antenna's.
Thanks,Dean

1712. Re: SOLORCON ANTRON 99

Yahoo group: SkyWires
Date: 2006-08-07 06:46:27 UTC
From: Greg W:-)
Topic: 1710 Message: 1712

Hi

YES that antenna is DC grounded !

http://www.walcottcb.com/solarcon-a99-base-cb-antenna-ground-radial-kit-p-1012.html

Measuring with an ohm meter from the inner of the coax to the outer
braid will show up as a short circuit.
It is not actually zero ohms , but very very low at DC.

This DC grounding is normal , part of the design and is there to
provide a level of lightning protection by providding a low resistance
path from the antenna active element to the supporting structure (pole
etc)
It is often used on external antennas like this.

gregW:-)

http://www.geocities.com/onegammyleg/
==========

--- In SkyWires@yahoogroups.com, "Dr.Ace Ratliff" <wh2t@...> wrote:
>
> Hi Dean
> The antenna is probably designed to be a DC short to ground but
not a short to ground at RF . Check the VSWR .
> Ace - WH2T
>
> ----- Original Message -----
> From: tandn_family_electronics
> To: SkyWires@yahoogroups.com
> Sent: Sunday, August 06, 2006 2:32 PM
> Subject: [SkyWires] SOLORCON ANTRON 99
>
>
> I have an A-99 and I have not used it for a few years. Yesterday I
got
> it out and checked it out. I noticed that it seems to be grounded.
> What I am saying is, When I checked the end of the plug to screw
on the
> COAX I noticed that my meter showed that it was touching
somewhere. At
> first I thought that it was my COAX but I figured out that is was the
> Antenna. I took the antenna apart and checked and could not see a
> visible problem. I did not fully take it apart to where it could not
> be repaired and put back together. Does anyone know what could be
> wrong? I have never built an antenna so I am not very good in this

> area. I di know how to work on C.B. radio's but not antenna's.
> Thanks,Dean
>

1713. Re: SOLORCON ANTRON 99

Yahoo group: SkyWires
Date: 2006-08-07 11:12:49 UTC
From: tandn_family_electronics
Topic: 1710 Message: 1713

Thank you very much. Now I can put it back together and use it.
This will save me a lot of money. I am used to the mobile antenna
more than the Base antenna. I did not find the fine print about the
DC ground until you pointed it out for me. I looked all over the
Web, before I thought about looking here.

--- In SkyWires@yahoogroups.com, "Greg W:-)" <onegammyleg@...> wrote:
>
> Hi
>
> YES that antenna is DC grounded !
>
> http://www.walcottcb.com/solarcon-a99-base-cb-antenna-ground-
radial-kit-p-1012.html
>
> Measuring with an ohm meter from the inner of the coax to the outer
> braid will show up as a short circuit.
> It is not actually zero ohms , but very very low at DC.
>
> This DC grounding is normal , part of the design and is there to
> provide a level of lightning protection by providding a low
resistance
> path from the antenna active element to the supporting structure
(pole
> etc)
> It is often used on external antennas like this.
>
> gregW:-)
>
>
> http://www.geocities.com/onegammyleg/
>
==
>
> --- In SkyWires@yahoogroups.com, "Dr.Ace Ratliff" <wh2t@> wrote:
> >
> > Hi Dean
> > The antenna is probably designed to be a DC short to ground
but
> not a short to ground at RF . Check the VSWR .
> > Ace - WH2T
> >
> > ----- Original Message -----
> > From: tandn_family_electronics
> > To: SkyWires@yahoogroups.com

> > Sent: Sunday, August 06, 2006 2:32 PM
> > Subject: [SkyWires] SOLORCON ANTRON 99
> >
> >
> > I have an A-99 and I have not used it for a few years.
Yesterday I
> got
> > it out and checked it out. I noticed that it seems to be
grounded.
> > What I am saying is, When I checked the end of the plug to
screw
> on the
> > COAX I noticed that my meter showed that it was touching
> somewhere. At
> > first I thought that it was my COAX but I figured out that is
was the
> > Antenna. I took the antenna apart and checked and could not
see a
> > visible problem. I did not fully take it apart to where it
could not
> > be repaired and put back together. Does anyone know what could
be
> > wrong? I have never built an antenna so I am not very good in
this
> > area. I di know how to work on C.B. radio's but not antenna's.
> > Thanks,Dean
> >
>

1715. Re: music

Yahoo group: SkyWires
Date: 2006-08-08 12:54:50 UTC
From: Greg W:-)
Topic: 1715 Message: 1715

Spammer !

--- In SkyWires@yahoogroups.com, "alexis-sabry934@..."
<alexis-sabry934@...> wrote:
>
> W00t. I didn't even hand over a dime for this thing. Got it in red
too ;) My first mp3 player, have to say this rocks, sure beats
the old CD player. Got it for no charge thanks to
http://www.dontbelategetithere.com/eztcvrcfwj
>

1716. Re: [SkyWires] music

Yahoo group: SkyWires
Date: 2006-08-08 21:17:43 UTC
From: David Shrum
Topic: 1715 Message: 1716

Baned and original message deleted.
Dave N8PU

alexis-sabry934

1718. Re: [SkyWires] Hot Blonde

Yahoo group: SkyWires
Date: 2006-08-09 20:30:32 UTC
From: David Shrum
Topic: 1718 Message: 1718

Banned and original message gone.
Dave N8PU

carinaangel80 wrote:
>

1719. Re: SOLORCON ANTRON 99

Yahoo group: SkyWires
Date: 2006-08-10 06:32:12 UTC
From: tandn_family_electronics
Topic: 1710 Message: 1719

I thought that I repaired this antenna. I took it apart and only changed the coax and made sure that it was put back the same way. I used some clear hose in place of the little piece of plastic that they had keeping it seperated inside. I had to use a PVC repair tube that basically just joines PVC together and it had a piece of rubber in it. I do not see what this could change. It seems like the PVC does not really do anything but help provide length. I could be wrong on that matter. Like I said before, I am just learning about Antennas and do not understand all of the math behind it. I have already ordered a new Procom PT-99 and it will be in here in a couple of days. It did not really cost much to basically look inside of this one. I do not know how to check for the D.C. ground. It seemed like it was not grounded after what I did. I do not know anything that I changed. The copper wire inside of it rattles a lot so I think it was damaged before I even started. I am hoping to find another base to replace the base on this one.
The main reason that I took it apart in the first place was because when I was putting it together the first time, the bottem was turning and it is not supposed to turn. While I had it apart I noticed that where the COAX inside of the bottem was soldered, had came unsoldered. There was no way to repair this but to take it apart. I think that someone played with it because the tuning rings were turned all of the way up and I almost did not get them loose. I guess I know now what the inside of one looks like.

Thanks for all of the help. I put a little information on another site and got called stupid. It seems like the people here really try to help.
Ga.Slim

--- In SkyWires@yahoogroups.com, "tandn_family_electronics" <tandn_family_electronics@...> wrote:
>
> Thank you very much. Now I can put it back together and use it.
> This will save me a lot of money. I am used to the mobile antenna
> more than the Base antenna. I did not find the fine print about the
> DC ground until you pointed it out for me. I looked all over the
> Web, before I thought about looking here.
>
>
> --- In SkyWires@yahoogroups.com, "Greg W:-)" <onegammyleg@> wrote:
> >
> > Hi
> >

> > YES that antenna is DC grounded !
> >
> > http://www.walcottcb.com/solarcon-a99-base-cb-antenna-ground-
> radial-kit-p-1012.html
> >
> > Measuring with an ohm meter from the inner of the coax to the
outer
> > braid will show up as a short circuit.
> > It is not actually zero ohms , but very very low at DC.
> >
> > This DC grounding is normal , part of the design and is there to
> > provide a level of lightning protection by providding a low
> resistance
> > path from the antenna active element to the supporting structure
> (pole
> > etc)
> > It is often used on external antennas like this.
> >
> > gregW:-)
> >
> >
> > http://www.geocities.com/onegammyleg/
> >
>
==========
> >
> > --- In SkyWires@yahoogroups.com, "Dr.Ace Ratliff" <wh2t@> wrote:
> > >
> > > Hi Dean
> > > The antenna is probably designed to be a DC short to
ground
> but
> > not a short to ground at RF . Check the VSWR .
> > > Ace - WH2T
> > >
> > > ----- Original Message -----
> > > From: tandn_family_electronics
> > > To: SkyWires@yahoogroups.com
> > > Sent: Sunday, August 06, 2006 2:32 PM
> > > Subject: [SkyWires] SOLORCON ANTRON 99
> > >
> > >
> > > I have an A-99 and I have not used it for a few years.
> Yesterday I
> > got
> > > it out and checked it out. I noticed that it seems to be
> grounded.
> > > What I am saying is, When I checked the end of the plug to
> screw
> > on the

> > > COAX I noticed that my meter showed that it was touching
> > somewhere. At
> > > first I thought that it was my COAX but I figured out that
is
> was the
> > > Antenna. I took the antenna apart and checked and could not
> see a
> > > visible problem. I did not fully take it apart to where it
> could not
> > > be repaired and put back together. Does anyone know what
could
> be
> > > wrong? I have never built an antenna so I am not very good
in
> this
> > > area. I di know how to work on C.B. radio's but not
antenna's.
> > > Thanks,Dean
> > >
> >
>

1720. Re: [SkyWires] Re: SOLORCON ANTRON 99

Yahoo group: SkyWires
Date: 2006-08-11 20:35:48 UTC
From: icra@galaxynet.com
Topic: 1710 Message: 1720

> not know anything that I changed. The copper wire inside of it
> rattles a lot so I think it was damaged before I even started. I am

The wire in each section is not held in place by anything other than the conection at top and
bottom, so it will rattle around when shaken.

This is normal and not a sign of damage.....

Mel
N7OKL

1721. Re: SOLORCON ANTRON 99

Yahoo group: SkyWires
Date: 2006-08-13 22:58:06 UTC
From: Garth
Topic: 1710 Message: 1721

The wire in each section is not held in place by anything other than the conection at top and
bottom, so it will rattle around when shaken.

I noticed the same phenom in the bottom and mid section of my Solarcon. Among many other things I got this Solarcon in a big trade a couple of years ago. At the last minute the other fellow said here take this I no longer need it. I was going to put it up. But first I decided to do something with the 2 sections that rattled. Long term I suspected this situation could take a toll on the connections at either end with wind shaking it. Here is what I did. I drilled some holes in areas that had nothing in them but the wire. Mid section was easy, as that is all there is but a wire from end to end. But the bottom section is a different story. Anyhow I found this Article about the 99 on the net:

http://www.marktruett.com/files/a99.pdf It loads slow but has decent fotos as to internal parts locations.

Although it did not talk about my thought to cure the rattle it did show a 99 cut apart and allowed me to drill safely.

Important Note:

Care should be taken to ensure the bit does not grab and pull in hard as it breaks thru the inner wall as to not cut the wire. Better a rattle than a chopped conductor. I clamped my sections in a drill press mounted machinists vise just enough to hold it firmly while I drilled.

After drilling the 3 ¼ holes each in both sections. (¼ inch was just right to allow the nozzle in the can to slip in. I did not use the extension tube provided.) I squirted in a dose of DOW GREAT STUFF. I stopped just as it started to come out of the end holes. I inserted the GREAT STUFF nozzle into the center hole. As far as I could tell it reached the escape holes at the same time. All 3 holes seemed to weep out the same amount of expansion excess. This is an insulating foam sealant used as an expanding weather proofing. It does that real well, Hence the appropriate name "GREAT STUFF" I have used this stuff before and it expands like crazy. The first time I used it was under a sill plate on a prehung exterior door. Well it did not have sufficient escape for the expanding characteristics. It bowed the aluminum sill. Had to get a new one. But anyhow I filled both section and placed them in the sun horizontally holes downward. It expanded rapidly for about 30 minutes or so. Then just slowly oozed for an additional hour. The wires no longer rattle. I trimmed off the hard

foam that was sticking out and touched it up with a bit of F'glass resin just to be sure it was sealed from the weather.

Disclaimer:

I am in no way suggesting that anyone do this. Experiment at your own risk. This writer will assume no responsibility for any attempts to stop Solarcon 99 rattles that may be inspired by this posting.

This antenna is truly an extra and its destruction from this crazy attempt will not upset me. So I figured it was worth a try. Once I get it up and load it up, I will report, Very, very briefly as to if any electrical effects from the foam rattle repair attempt occurred.

1722. Re: Putting new loop up.

Yahoo group: SkyWires
Date: 2006-08-13 23:30:01 UTC
From: joey98223
Topic: 1703 Message: 1722

OK, one more question with my loop up and balun installed the SWR ratio is showing that the anntenna is long, ergo at lowers frequency for band SWR is lowest.

SWR for loop @ 3505 is less than 1.5 it rises as the frequency increases to over 3.5. This swr exhibits itself on both 40 and 75/80 meters.

By checking my desired optimum freq 3900 on 75/80 meters i feel that i need to shorten the loop by approximently 9 feet, I hate to remove this much wire at once but dropping the antenna and reterminating the wire at the feed point is a lot of work.

I was wondering if I could take a section out of the loop near the center of the antenna and resolder the wire ends and still have it preform as a loop antenna?? But I am worried that this might cause an inductive loop that would change the anteena characterists<SP> too much.

Any suggestions for this problem?

Thanks in advance 73's

Dan

--- In SkyWires@yahoogroups.com, "xbullworker" <lazysenior@...> wrote:
>
> --- In SkyWires@yahoogroups.com, Joe <joey98223@> wrote:
> >
> >
> > Ok, guys which will be best for my new loop, 14 guage
> > single strand copper weld, or 12 guage stranded copper
> > which is insulated, plan on loop of 263 ft, with a 4:1
> > balun to coax rg-8u feed line.
> >
> > Any suggestions,
> > Thanks for the help before i get started.
> >
> > Dan K7IUQ
> >
> >
>
> Dan:
> I always use insulated 12ga stranded wire for my antennas including my
> 75mtr delta loop. Cheap if you buy at Home Depot or Lowes.
>
> I dislike copper weld, harder to work with.I DISLIKE solid wire of any
> kind including solid wire open wire feedline, always use stranded wire

> for any antenna use.
>
> 12ga stranded will stretch a little, but I use open wire feeders and a
> tuner so dont worry about it. After a couple years it doesnt stretch
> anymore.
>
> I have a 130 ft zepp with stranded wire, been up 6 years and thru many
> high winds and several ice storms, the wire is tuff.
>
> Note our similar names AND Calls
>
> Stan K9IUQ
>

1723. Re: [SkyWires] Re: SOLORCON ANTRON 99

Yahoo group: SkyWires
Date: 2006-08-14 16:32:02 UTC
From: Dean Terrell
Topic: 1710 Message: 1723

I am glad to talk to someone that has taken one of these apart before. I cut mine into. This is the only way to get the bottem off. I did not correct the problem and it is not DC grounded anymore. That was not a good thing because I have found out that it has got to be DC grounded. The bottem connection keeps spinning and I soldered the hell out of it. I gave up on it for now. It was a bitch to put back together. I had to use a PVC pipe connecter to put it together and it did not want to join. I used the connecter that has the rubber in it that wedges it together if you know what I mean. I did put some thicker clear hose in the place of the small thin piece on the inside that kept it from pos and neg from touching. I do not know if that stopped the DC ground or not. I do not see why it would since they had it that way to begin with. I would be willing to try to construct the entire thing (bottem half) myself if it did not cost so much. It is not made of much
but fiberglass/pvc pipe. I can buy another antena at my dealer price for around $50.00 that is the same antenna (Procom PT-99). I already bought one and it seems to work great. It would be great if I ran across someone that had a bottem piece without the top. Let me know how your project goes.

Thanks,Ga.Slim

Garth <EWRTSA@...> wrote:
The wire in each section is not held in place by anything other than
the conection at top and
bottom, so it will rattle around when shaken.

I noticed the same phenom in the bottom and mid section of my
Solarcon. Among many other things I got this Solarcon in a big trade
a couple of years ago. At the last minute the other fellow said here
take this I no longer need it. I was going to put it up. But first I
decided to do something with the 2 sections that rattled. Long term I
suspected this situation could take a toll on the connections at
either end with wind shaking it. Here is what I did. I drilled some
holes in areas that had nothing in them but the wire. Mid section was
easy, as that is all there is but a wire from end to end. But the
bottom section is a different story. Anyhow I found this Article
about the 99 on the net:

http://www.marktruett.com/files/a99.pdf It loads slow but has decent
fotos as to internal parts locations.

Although it did not talk about my thought to cure the rattle it did
show a 99 cut apart and allowed me to drill safely.

Important Note:

Care should be taken to ensure the bit does not grab and pull in hard
as it breaks thru the inner wall as to not cut the wire. Better a
rattle than a chopped conductor. I clamped my sections in a drill
press mounted machinists vise just enough to hold it firmly while I

drilled.

After drilling the 3 ? holes each in both sections. (? inch was just right to allow the nozzle in the can to slip in. I did not use the extension tube provided.) I squirted in a dose of DOW GREAT STUFF. I stopped just as it started to come out of the end holes. I inserted the GREAT STUFF nozzle into the center hole. As far as I could tell it reached the escape holes at the same time. All 3 holes seemed to weep out the same amount of expansion excess. This is an insulating foam sealant used as an expanding weather proofing. It does that real well, Hence the appropriate name "GREAT STUFF" I have used this stuff before and it expands like crazy. The first time I used it was under a sill plate on a prehung exterior door. Well it did not have sufficient escape for the expanding characteristics. It bowed the aluminum sill. Had to get a new one. But anyhow I filled both section and placed them in the sun horizontally holes downward. It expanded rapidly for about 30 minutes or so. Then just slowly oozed for an additional hour. The wires no longer rattle. I trimmed off the hard foam that was sticking out and touched it up with a bit of F'glass resin just to be sure it was sealed from the weather.

Disclaimer:

I am in no way suggesting that anyone do this. Experiment at your own risk. This writer will assume no responsibility for any attempts to stop Solarcon 99 rattles that may be inspired by this posting.

This antenna is truly an extra and its destruction from this crazy attempt will not upset me. So I figured it was worth a try. Once I get it up and load it up, I will report, Very, very briefly as to if any electrical effects from the foam rattle repair attempt occurred.

Yahoo! Messenger with Voice. Make PC-to-Phone Calls to the US (and 30+ countries) for 2?/min or less.

1724. Re: Putting new loop up.

Yahoo group: SkyWires
Date: 2006-08-15 20:03:20 UTC
From: Karel
Topic: 1703 Message: 1724

Hi Dan,

This antenna in my opinion and experience is very forgiving. I played around with it a lot over years and it remains my antenna of choice for multipurpose use.

I use a 160m long loop (so roughly 4 x 40m square). I have more than enough space for it or even bigger loop. Its been up for 2 years and I worked over 230 countries with it so far, including 25 on 160m.

The one problem I had was to get it to resonate on our limited portion of 160m (1810 - 1850KHz) but still be able to use it on 80 and 40 and the rest of the bands. If the SWR is lowest on 1825, it will obviously be the lowest around 3650 on 80 (OK for local use but not DX) and 7300 (useless for me as our 40m is 7000 - 7100).

Yes I do use an ATU but as you know that create losses which is not always acceptable.

So if I want to work DX low down on 80m around 3510 it means I must lengthen the antenna so it resonates around the bottom of 80 but it will result in it to resonate around 1755kHz.

What I did is to take little choc block terminal connectors, cut the loop somewhere at the opposite end and add a extra length of wire for 160m use or simply take it out and "screw" the shorter loop together for use on the bottom ends of 80, 40, 20, 15, 10 (and the rest of the bands through the ATU).

Hope this helps. I suggest you just go for it!

73 de ZS6WN
Karel
Polokwane, South Africa

--- In SkyWires@yahoogroups.com, "joey98223" <joey98223@...> wrote:
>
> OK, one more question with my loop up and balun installed the SWR
> ratio is showing that the anntenna is long, ergo at lowers frequency
> for band SWR is lowest.
>
> SWR for loop @ 3505 is less than 1.5 it rises as the frequency
> increases to over 3.5. This swr exhibits itself on both 40 and 75/80
> meters.
>
> By checking my desired optimum freq 3900 on 75/80 meters i feel
that i

> need to shorten the loop by approximently 9 feet, I hate to remove
> this much wire at once but dropping the antenna and reterminating
the
> wire at the feed point is a lot of work.
>
> I was wondering if I could take a section out of the loop near the
> center of the antenna and resolder the wire ends and still have it
> preform as a loop antenna?? But I am worried that this might cause
an
> inductive loop that would change the anteena characterists<SP> too
much.
>
> Any suggestions for this problem?
>
> Thanks in advance 73's
>
> Dan
>
> --- In SkyWires@yahoogroups.com, "xbullworker" <lazysenior@> wrote:
> >
> > --- In SkyWires@yahoogroups.com, Joe <joey98223@> wrote:
> > >
> > >
> > > Ok, guys which will be best for my new loop, 14 guage
> > > single strand copper weld, or 12 guage stranded copper
> > > which is insulated, plan on loop of 263 ft, with a 4:1
> > > balun to coax rg-8u feed line.
> > >
> > > Any suggestions,
> > > Thanks for the help before i get started.
> > >
> > > Dan K7IUQ
> > >
> > >
> >
> > Dan:
> > I always use insulated 12ga stranded wire for my antennas
including my
> > 75mtr delta loop. Cheap if you buy at Home Depot or Lowes.
> >
> > I dislike copper weld, harder to work with.I DISLIKE solid wire
of any
> > kind including solid wire open wire feedline, always use stranded
wire
> > for any antenna use.
> >
> > 12ga stranded will stretch a little, but I use open wire feeders
and a
> > tuner so dont worry about it. After a couple years it doesnt
stretch

> > anymore.
> >
> > I have a 130 ft zepp with stranded wire, been up 6 years and thru
many
> > high winds and several ice storms, the wire is tuff.
> >
> > Note our similar names AND Calls
> >
> > Stan K9IUQ
> >
>

1725. lenght between 21 and 43m

Yahoo group: SkyWires
Date: 2006-08-16 09:02:56 UTC
From: IK5ZTT, Paolo
Topic: 1725 Message: 1725

hi everybody,

my idea is to make a skywire, but my perimeter
lenghr is circa 30m (not multiple of 21).

My loop should be all 30m conductors (by electrical
coil 1.5mm) or only 21 m shold be electrical and the rest
9 m made by nylon ?

The setup is preferrd in orizontal plane 2/3 m up, or with inclination to gruond ??

tanks a lot from now
=====
73s de IK5ZTT, Paolo, Cascina (PI), Italy
300 links at www.qsl.net/ik5ztt
A.R.I. - I.P.H.G. - S.R.T. member
ik5ztt @ amsat.org

1726. RE: Putting new loop up. -> W%DXP's No-Tuner Tuner

Yahoo group: SkyWires
Date: 2006-08-16 19:52:12 UTC
From: Ronald C. McConnell
Topic: 1726 Message: 1726

Karel, says about his big loop,
"...The one problem I had was to get it to resonate
on our limited portion of 160m (1810 - 1850KHz)..."

Take a peek at Cecil Moore, W5DXPs "No-Tuner Tuner"
approach where he switches in lengths of low-loss
open-wire feedline in binary steps at the transmitter end
of the feedline to transform a nasty impedance into a range
where the tuner, or even the transmitter itself, can handle it.
No magic, just transmission line theory and practice...

< <http://www.qsl.net/w5dxp> http://www.qsl.net/w5dxp>

For portable operation, Cecil says,
"I carry around 1, 2, 4, 8, & 16 foot lengths of 450 ohm line
and just plug them together with banana plugs to achieve
a match without a tuner."

In particular, see

W5DXP's No-Tuner, All-HF-Band, Horizontal, Center-Fed Antenna

< <http://www.qsl.net/w5dxp/notuner.htm>
http://www.qsl.net/w5dxp/notuner.htm>

which shows the whole base station antenna
= 130' centerfed dipole + 450 ohm feed + "No Tuner" Tuner
and a fixed version of his "No-Tuner" Tuner
with data, photos, ...

Maybe for 160m, you could add a 64ft section,
if 32 feet isn't enough.
(Hmmm, do the arithmetic...)

Cheers, 73,

Ron McC.
W2IOL

w2iol@...

Ronald C. McConnell, PhD

WGS-84: N 40º 46' 57.9" +/-0.1"
W 74º 41' 21.3" +/-0.1"
FN20ps.77GU96 +/-
V +5058 H +1504

< <http://home.earthlink.net/~rcmcc> http://home.earthlink.net/~rcmcc>

There are 10 kinds of people.
Those who understand binary arithmetic
and those who do not.

1727. Re: [SkyWires] Re: SOLORCON ANTRON 99

Yahoo group: SkyWires
Date: 2006-08-17 22:16:37 UTC
From: Ken Burchfield
Topic: 1710 Message: 1727

Here is a page with pictures that someone opened up: .pdf file
freeweb.supereva.com/bookstore/docs/a99.pdf
73 Ken

Dean Terrell <tandn_family_electronics@...> wrote: I am glad to talk to someone that has taken one of these apart before. I cut mine into. This is the only way to get the bottem off. I did not correct the problem and it is not DC grounded anymore. That was not a good thing because I have found out that it has got to be DC grounded. The bottem connection keeps spinning and I soldered the hell out of it. I gave up on it for now. It was a bitch to put back together. I had to use a PVC pipe connecter to put it together and it did not want to join. I used the connecter that has the rubber in it that wedges it together if you know what I mean. I did put some thicker clear hose in the place of the small thin piece on the inside that kept it from pos and neg from touching. I do not know if that stopped the DC ground or not. I do not see why it would since they had it that way to begin with. I would be willing to try to construct the entire thing (bottem half)
myself if it did not cost so much. It is not made of much but fiberglass/pvc pipe. I can buy another antena at my dealer price for around $50.00 that is the same antenna (Procom PT-99). I already bought one and it seems to work great. It would be great if I ran across someone that had a bottem piece without the top. Let me know how your project goes.

Thanks,Ga.Slim

Stay in the know. Pulse on the new Yahoo.com. Check it out.

1728. Feeding the Loop

Yahoo group: SkyWires
Date: 2006-08-18 15:25:42 UTC
From: KR Mason
Topic: 1728 Message: 1728

Greetings group,

I'm going to put up my first outside loop this weekend. I've played with one in the house (thumbtacked to the ceiling) and really liked it. I'm excited about getting one up outside.

My plan is to feed it with homebrew parallel transmission line to a 1:1 current balun at the shack entry and then coax from the balan to a homebrew l-tuner. I understand that the l-tuner is not a balanced tuner but am hoping the balun will make it work. The coax from the balun to the tuner is less than 3 feet. Is it a reasonable expectation that this will work? I'm thinking that the short run of coax will keep losses to a acceptable level.

Any comments and or suggestions will be appreciated.

Thanks,
Kent

1729. Re: [SkyWires] Feeding the Loop

Yahoo group: SkyWires
Date: 2006-08-18 16:27:05 UTC
From: icra@galaxynet.com
Topic: 1728 Message: 1729

> I'm going to put up my first outside loop this weekend. I've played
> with one in the house (thumbtacked to the ceiling) and really liked
> it. I'm excited about getting one up outside.
>
> My plan is to feed it with homebrew parallel transmission line to a
> 1:1 current balun at the shack entry and then coax from the balan to a
> homebrew l-tuner. I understand that the l-tuner is not a balanced
> tuner but am hoping the balun will make it work. The coax from the
> balun to the tuner is less than 3 feet. Is it a reasonable
> expectation that this will work? I'm thinking that the short run of
> coax will keep losses to a acceptable level.
>
Will work just fine that way....

Mel
N7OKL

1730. open wire line insulators

Yahoo group: SkyWires
Date: 2006-08-20 17:57:28 UTC
From: Dave Marling
Topic: 1577 Message: 1730

Does anyone know how PVC stacks up against ABS when it comes to use as insulators for making open wire line? I'm thinking mainly in their reaction to sunlight.

Dave
VE1VQ

1731. Re: [SkyWires] open wire line insulators

Yahoo group: SkyWires
Date: 2006-08-20 18:14:02 UTC
From: tim smith
Topic: 1577 Message: 1731

...dave...been 6 yrs w/pvc...6 inches wide...no problems at all here in toronto....sk..

Dave Marling <ve1vq@...> wrote: Does anyone know how PVC stacks up against ABS when it comes to use as
insulators for making open wire line? I'm thinking mainly in their
reaction to sunlight.

Dave
VE1VQ

Talk is cheap. Use Yahoo! Messenger to make PC-to-Phone calls. Great rates starting at 1?/min.

1732. Re: [SkyWires] open wire line insulators

Yahoo group: SkyWires
Date: 2006-08-20 19:01:19 UTC
From: Dave Marling
Topic: 1577 Message: 1732

Thanks Tim. I also found a couple of notes on Cebik's web site about various grades/colours of PVC and sun resistance.

Dave
VE1VQ

1733. Re: Feeding the Loop

Yahoo group: SkyWires
Date: 2006-08-21 02:00:31 UTC
From: w7tea
Topic: 1728 Message: 1733

Kent, that certainly should work. What is the size of the loop? For example, a 40m loop is about 140' in length. It will exhibit a fairly low SWR on resonant frequencies and line loss
should be quite small. I have a fir tree in the yard and have strung the apex of a 80m slanting delta loop from there. It is fed in a bottom corner with a 4:1 current balun and then about 40' of coax to the shack. Works fine.

Have fun, Gary W7TEA

--- In SkyWires@yahoogroups.com, "KR Mason" <kentrmason@...> wrote:
>
> Greetings group,
>
> I'm going to put up my first outside loop this weekend. I've played
> with one in the house (thumbtacked to the ceiling) and really liked
> it. I'm excited about getting one up outside.
>
> My plan is to feed it with homebrew parallel transmission line to a
> 1:1 current balun at the shack entry and then coax from the balan to a
> homebrew l-tuner. I understand that the l-tuner is not a balanced
> tuner but am hoping the balun will make it work. The coax from the
> balun to the tuner is less than 3 feet. Is it a reasonable
> expectation that this will work? I'm thinking that the short run of
> coax will keep losses to a acceptable level.
>
> Any comments and or suggestions will be appreciated.
>
> Thanks,
> Kent
>

1735. Re: [SkyWires] Hot and cool biker boyz...

Yahoo group: SkyWires
Date: 2006-08-21 09:49:18 UTC
From: David Shrum
Topic: 1735 Message: 1735

Baned and original message removed.
Dave N8PU

bikerboyz1903 wrote:

1736. Re: [SkyWires] Feeding the Loop

Yahoo group: SkyWires
Date: 2006-08-23 21:33:43 UTC
From: Robert Mozulay
Topic: 1728 Message: 1736

Hi Mel,

I feed my horizontal loop with commercially available ladder line (110 ft. in length) and a W2DU balun at the shack end of the transmission line. From the balun I use 20 ft of coax to a Ten-Tec tuner which is an L network tuner with an unbalanced output.

The loop is 270 ft. in length. I operate it on 160m to 10m.

I recommend using a current balun (like the W2DU) and NOT a voltage balun.

Good balun article: "Baluns: What they do and how they do it" by Roy Lewallen. Use Google to find the paper. Lots of good words and measurements in this paper.

Also on the web you can find the balun chapter from the book Reflections, written by W2DU, on the W2DU web site.

Good luck and have fun.

Bob/WB2UFE

icra@... wrote:
> I'm going to put up my first outside loop this weekend. I've played
> with one in the house (thumbtacked to the ceiling) and really liked
> it. I'm excited about getting one up outside.
>
> My plan is to feed it with homebrew parallel transmission line to a
> 1:1 current balun at the shack entry and then coax from the balan to a
> homebrew l-tuner. I understand that the l-tuner is not a balanced
> tuner but am hoping the balun will make it work. The coax from the
> balun to the tuner is less than 3 feet. Is it a reasonable
> expectation that this will work? I'm thinking that the short run of
> coax will keep losses to a acceptable level.
>
Will work just fine that way....

Mel
N7OKL

1737. Re: [SkyWires] Feeding the Loop

Yahoo group: SkyWires
Date: 2006-08-24 13:33:17 UTC
From: Kyle
Topic: 1728 Message: 1737

Bob,

I only read the first page of each, but both articles seem to be
outstanding. Here are the URLs I found for the articles you referred to:
http://www.eznec.com/Amateur/Articles/Baluns.pdf
http://w2du.com/r2ch21.pdf

As Roy points out in his article, most references on the Internet tell
you how to use or build baluns, but not when you need them (and when you
don't). I'm grateful you passed these particular references on to the
group.

Many Thanks,
Kyle
W4KDA

Robert Mozulay wrote:
> I recommend using a current balun (like the W2DU) and NOT a voltage balun.
>
> Good balun article: "Baluns: What they do and how they do it" by Roy
> Lewallen. Use Google to find the paper. Lots of good words and
> measurements in this paper.
> Also on the web you can find the balun chapter from the book
> Reflections, written by W2DU, on the W2DU web site.

1738. Re: [SkyWires] Feeding the Loop

Yahoo group: SkyWires
Date: 2006-08-25 14:14:24 UTC
From: Robert Mozulay
Topic: 1728 Message: 1738

Hi Kyle,

Thanks for looking up those URLs for the group.

With respect to Baluns: It is interesting to note that some authors are proposing placing the current balun at the INPUT side of the antenna tuner to obtain optimal performance. I have not investigated this unique antenna circuit topology. This is briefly discussed in the W2DU reference below.

I highly recommend the book Reflections by W2DU. I've learned more from this book than any other I've read. It can be purchased on the ARRL web site.

If you like to experiment with ferrite cores, the cores are readily available from the Mouser Catalog. The Mouser web site is excellent. They carry a wide selection of clamp on cores and solid cores. Make sure the resonant frequency of the cores you are purchasing agree with the bands (HF vs. VHF vs. UHF) that you are operating. Also, Mouser does not require minimum order $$-- Digikey requires a $25 minumum order.

73s,

Bob/WB2UFE

Kyle <kyle@...> wrote:
Bob,

I only read the first page of each, but both articles seem to be
outstanding. Here are the URLs I found for the articles you referred to:
http://www.eznec.com/Amateur/Articles/Baluns.pdf
http://w2du.com/r2ch21.pdf

As Roy points out in his article, most references on the Internet tell
you how to use or build baluns, but not when you need them (and when you
don't). I'm grateful you passed these particular references on to the
group.

Many Thanks,
Kyle
W4KDA

Robert Mozulay wrote:
> I recommend using a current balun (like the W2DU) and NOT a voltage balun.
>
> Good balun article: "Baluns: What they do and how they do it" by Roy
> Lewallen. Use Google to find the paper. Lots of good words and
> measurements in this paper.
> Also on the web you can find the balun chapter from the book
> Reflections, written by W2DU, on the W2DU web site.

1739. Re: Feeding the Loop

Yahoo group: SkyWires
Date: 2006-08-25 16:03:04 UTC
From: Greg S
Topic: 1728 Message: 1739

I just would like to second the urging to get, read, and understand the book "Reflections II" by Mr. Walt Maxwell. It is a MUST read, (in my humle opinion.)

73- Greg, KC8HXO

Do You Yahoo!?
Tired of spam? Yahoo! Mail has the best spam protection around
http://mail.yahoo.com

1740. RE: Feeding the Loop

Yahoo group: SkyWires
Date: 2006-08-26 23:44:39 UTC
From: bruggo@verizon.net
Topic: 1728 Message: 1740

Greg S. et al-

I had taken your suggestion to find and read Maxwell's book "Reflections 11," but easier said than done. Seems it has been out of print for a few years and despite statements from the Maxwell camp that there would be revisons, updates, and a new printing, nothing has hit the presses. Worse, there seems to be a stalled effort in that directions!

I just got back from Boxboro (expecting to find it there or news of where to find it) with no luck on finding the book. Did I happen to ask all the wrong people or can anyone offer any help in finding this tome? Tnx in advance! Briggs, ab2nj

---
mail2web - Check your email from the web at
http://mail2web.com/ .

1741. Re: [SkyWires] RE: Feeding the Loop

Yahoo group: SkyWires
Date: 2006-08-28 03:08:13 UTC
From: Richards
Topic: 1728 Message: 1741

have you tried asking your local library to obtain that publication through interlibrary loan services? Although it is not the sort of thing that all libraries readily have on the shelf, these services can tie into collegiate and other specialty libraries which would have such a thing on hand. Many colleges have amateur radio clubs, and their libraries might have such books, therefor. I find a lot of books, CDs, DVDs, videos, etc. this way, which would not normally be in the stock of my local library. Usually, the service is free. This service might get you the book on a temporary basis, while you look for your own copy to purchase some place or other.

Just my take. //// Richards ////
==========

bruggo@... wrote:
> Greg S. et al-
>
> I had taken your suggestion to find and read Maxwell's book "Reflections
> 11," but easier said than done. Seems it has been out of print

1742. Re: [SkyWires] RE: Feeding the Loop

Yahoo group: SkyWires
Date: 2006-08-28 19:37:39 UTC
From: Robert Mozulay
Topic: 1728 Message: 1742

Amazon has two used hard cover copies of the first edition of Reflections. They are asking $80.

Hard to believe that this book went out of print.

Bob, WB2UFE

"bruggo@..." <bruggo@...> wrote:
Greg S. et al-

I had taken your suggestion to find and read Maxwell's book "Reflections 11," but easier said than done. Seems it has been out of print for a few years and despite statements from the Maxwell camp that there would be revisons, updates, and a new printing, nothing has hit the presses. Worse, there seems to be a stalled effort in that directions!

I just got back from Boxboro (expecting to find it there or news of where to find it) with no luck on finding the book. Did I happen to ask all the wrong people or can anyone offer any help in finding this tome? Tnx in advance! Briggs, ab2nj

---
mail2web - Check your email from the web at
http://mail2web.com/ .

1743. Best Antenna Ever...

Yahoo group: SkyWires
Date: 2006-09-05 03:29:08 UTC
From: JimMcSkate@aol.com
Topic: 1743 Message: 1743

My 40m loop blew down in Saturday's remains of TS Ernesto, which hit Long Island with gusts up to around 40 MPH. on Sunday I replaced it completely - new wire, new supports (one was saved - the rest broke in the storm). Took about two hours, with my 5 year old helping... if he hadn't been helping it would've taken about an hour.

Total cost: zero. (I happened to have a few hundred feet left on a spool of insulated stranded wire, and made three supports out of scrap lumber.)

Best antenna ever. EVER!
73 de
WA2LGN
Jim in Blue Point, NY

1744. Re: [SkyWires] Best Antenna Ever...

Yahoo group: SkyWires
Date: 2006-09-05 11:52:16 UTC
From: Dave Marling
Topic: 1743 Message: 1744

> the storm). Took about two hours, with my 5 year old helping... if he
> hadn't been helping it would've taken about an hour.

Jim, treasure the 'help' while you can. It won't be long before the
help isn't around or has other interests.

Dave
VE1VQ

1745. Re: [SkyWires] Best Antenna Ever...

Yahoo group: SkyWires
Date: 2006-09-06 12:26:32 UTC
From: JimMcSkate@aol.com
Topic: 1743 Message: 1745

In a message dated 9/6/2006 1:44:25 AM Eastern Standard Time,
ve1vq@... writes:

> It won't be long before the
> help isn't around or has other interests.
>

So true this is... thanks.

73,
Jim

1746. Reflections file uploaded

Yahoo group: SkyWires
Date: 2006-09-07 18:20:33 UTC
From: oldlongbeard
Topic: 1746 Message: 1746

I just put an abbreviated copy of articles by Mr. Maxwell in the files section. PLEASE don't let some of the math scare you away.... skip over that, and comb over it again later, when you've had a chance to digest the general ideas he presents.
I can't remember where this file came from, but I stumbled on it on my hard drive today!!

Not as good as the book, but better than nothing!!

Thanks, Walt!!!!!!

73- Greg Schippers, KC8HXO

1747. Re: [SkyWires] Reflections file uploaded

Yahoo group: SkyWires
Date: 2006-09-08 02:23:10 UTC
From: Dr.Ace Ratliff
Topic: 1746 Message: 1747

Good Stuff ,
Ace - WH2T

----- Original Message -----
From: oldlongbeard
To: SkyWires@yahoogroups.com
Sent: Thursday, September 07, 2006 1:20 PM
Subject: [SkyWires] Reflections file uploaded

I just put an abbreviated copy of articles by Mr. Maxwell in the files section. PLEASE don't let some of the math scare you away.... skip over that, and comb over it again later, when you've had a chance to digest the general ideas he presents.
I can't remember where this file came from, but I stumbled on it on my hard drive today!!

Not as good as the book, but better than nothing!!

Thanks, Walt!!!!!!

73- Greg Schippers, KC8HXO

1748. EUROPEAN AMPLITUDE MODULATION AMATEUR RADIO GROUP

Yahoo group: SkyWires
Date: 2006-09-08 13:54:28 UTC
From: gvastianos
Topic: 1748 Message: 1748

EUROPEAN AMPLITUDE MODULATION AMATEUR RADIO GROUP

NEW YAHOO GROUP: http://groups.yahoo.com/group/eamarg/

This is a group for licenced amateur radio operators (HAMs) who are interested in the AMPLITUDE MODULATION (AM) mode of communications. The group exists to promote the AM operation in the HAM bands and provide information about operating events and technical matters.

EAMARG encourages regional AM activity insuring there is AM available somewhere on the amateur bands. Based on the fact that the majority of the AM calling frequencies in USA belong outside the european HF bandplans... one of the EAMARG main goals is to help in the establishment of AM calling frequencies that will be compatible with the HF bandplans of the european countries.

EAMARG future plans including the sponsorship of operating events and contests that will promote the use Amplitude Modulation.

In order to join this group you must be a licenced radio amateur.

1749. Starduster Antenna

Yahoo group: SkyWires
Date: 2006-09-13 03:12:58 UTC
From: mikecarambat
Topic: 1749 Message: 1749

Anybody know what the exact length of the vertical element on the Starduster CB antenna is?

Mine blew down in the hurricane. I can estimate but that will require too many SWR tuning trips to the push up pole and leave me with arms like popeye the sailor.

Thanks

1750. Starduster vertical radiator

Yahoo group: SkyWires
Date: 2006-09-14 00:02:56 UTC
From: M. E.
Topic: 1750 Message: 1750

The starduster vertical radiator is 108 inches long.

K0ME

1751. Re: [SkyWires] Starduster vertical radiator

Yahoo group: SkyWires
Date: 2006-09-14 01:17:42 UTC
From: David Shrum
Topic: 1750 Message: 1751

Stupid me, I had one and got the BRIGHT idea of cutting it down to make
a 2 Meter antenna out of it before I upgraded form the Tech license.
Needless to say after I had started my cutting I realized I should have
left it alone. OH WELL, hind sight usually better then the current moment.
Dave N8PU

M. E. wrote:
> The starduster vertical radiator is 108 inches long.
>
> K0ME
>

1752. 160m loop design

Yahoo group: SkyWires
Date: 2006-09-14 20:07:56 UTC
From: Mike
Topic: 1752 Message: 1752

Hi,

I'm glad I found this group after searching eham. I have a few design questions about building a 160m loop for multiband use.

1. Which feedline to use 300 or 450 ohm ladder line?

As per Dx Engineering 300 ohm is better because the impedance swings wont be as great seen by the tuner.

2. Which balun to use, 1:1 or 4:1.

As per Dx Engineering the 1:1 balun is the choice again because the tuner will not see a very low impedance.

3. What length should the wire be?

I believe this depends on the gauge of the wire and whether or not it is insulated taking into account velocity factor.

Choosing a balun by DX Engineering gives different answers on which balun to use depending on usage.

Tnx,

Mike KA2FIR

1753. Re: [SkyWires] 160m loop design

Yahoo group: SkyWires
Date: 2006-09-15 19:03:43 UTC
From: Hans Remeeus
Topic: 1752 Message: 1753

Hello Mike,

I recommend to read the excellent site of W4RNL:
http://www.cebik.com/fdim/atl1.html
http://www.cebik.com/wire/horloop.html

Another good article is:
http://www.smeter.net/antennas/rjeloop4.php
This site contains a very nice tool.

I am planning to install a 1/wavelength 160m loop next year spring. With homemade open feeder line from the same wire as the loop. This would be around 600 Ohm.

1. Preferable is 450 Ohm or more.

2. 4:1 or 2:1.

3. The loop 1/wl. The length of the feeder is not very important, so is the velocity factor and the gauge. I would prefer an insulated wire of at least 2,5 mm2 (AWG10?).

Good luck!

73,
Hans Remeeus (PA1HR)
http://www.remeeus.eu
Communication is about people, the rest is technology.

Mike schreef:
>
>
> Hi,
>
> I'm glad I found this group after searching eham. I have a few design
> questions about building a 160m loop for multiband use.
>
> 1. Which feedline to use 300 or 450 ohm ladder line?
>
> As per Dx Engineering 300 ohm is better because the impedance swings
> wont be as great seen by the tuner.
>
> 2. Which balun to use, 1:1 or 4:1.
>
> As per Dx Engineering the 1:1 balun is the choice again because the
> tuner will not see a very low impedance.
>

> 3. What length should the wire be?
>
> I believe this depends on the gauge of the wire and whether or not it
> is insulated taking into account velocity factor.
>
> Choosing a balun by DX Engineering gives different answers on which
> balun to use depending on usage.
>
> Tnx,
>
> Mike KA2FIR
>

1754. Hello - need info

Yahoo group: SkyWires
Date: 2006-09-16 14:12:44 UTC
From: Antonio radiodx
Topic: 1754 Message: 1754

Hi FM´s

I´m new here, I would like to know a good web page about skywire and other antennas.

thanks

73´s

Antonio 3 AT 133

1755. Re: [SkyWires] Hello - need info

Yahoo group: SkyWires
Date: 2006-09-16 17:27:00 UTC
From: Dr.Ace Ratliff
Topic: 1754 Message: 1755

Welcome Antonio,

SEE
http://www.bloomington.in.us/~wh2t/ant.htm

73, Ace

----- Original Message -----
From: Antonio radiodx
To: Grupo47 - skywires
Sent: Saturday, September 16, 2006 9:12 AM
Subject: [SkyWires] Hello - need info

Hi FM´s

I´m new here, I would like to know a good web page about skywire and other antennas.

thanks

73´s

Antonio 3 AT 133

1756. Re: [SkyWires] 160m loop design

Yahoo group: SkyWires
Date: 2006-09-16 20:54:26 UTC
From: Dr.Ace Ratliff
Topic: 1752 Message: 1756

Hi Mike ,

I agree with Hans. 450 ohm ladder line is better than 300 ohm.
A 4:1 balun should perform better than a 1:1 balun.
I would make the loop from about 530 to 560 feet of wire.
You can use bare or insulated wire. I would use a heavy enough gauge of wire that it wouldn't break very easy. My 75/80 mtr loop is made from 272' feet of solid, bare, 8 AWG wire.
Here's a page where I show how to home brew a 4:1 balun - http://www.bloomington.in.us/~wh2t/balun.html
73, Ace - WH2T

----- Original Message -----
From: Mike
To: SkyWires@yahoogroups.com
Sent: Thursday, September 14, 2006 3:07 PM
Subject: [SkyWires] 160m loop design

Hi,

I'm glad I found this group after searching eham. I have a few design questions about building a 160m loop for multiband use.

1. Which feedline to use 300 or 450 ohm ladder line?

As per Dx Engineering 300 ohm is better because the impedance swings wont be as great seen by the tuner.

2. Which balun to use, 1:1 or 4:1.

As per Dx Engineering the 1:1 balun is the choice again because the tuner will not see a very low impedance.

3. What length should the wire be?

I believe this depends on the gauge of the wire and whether or not it is insulated taking into account velocity factor.

Choosing a balun by DX Engineering gives different answers on which balun to use depending on usage.

Tnx,

Mike KA2FIR

1757. Re: [SkyWires] Hello - need info

Yahoo group: SkyWires
Date: 2006-09-16 23:08:42 UTC
From: Antonio radiodx
Topic: 1754 Message: 1757

Thanks Ace for the welcome.
Antonio PY 2 CAT
----- Original Message -----
From: Dr.Ace Ratliff
To: SkyWires@yahoogroups.com
Sent: Saturday, September 16, 2006 2:27 PM
Subject: Re: [SkyWires] Hello - need info

Welcome Antonio,

SEE
http://www.bloomington.in.us/~wh2t/ant.htm

73, Ace

----- Original Message -----
From: Antonio radiodx
To: Grupo47 - skywires
Sent: Saturday, September 16, 2006 9:12 AM
Subject: [SkyWires] Hello - need info

Hi FM´s

I´m new here, I would like to know a good web page about skywire and other antennas.

thanks

73´s

Antonio 3 AT 133

No virus found in this incoming message.
Checked by AVG Free Edition.
Version: 7.1.405 / Virus Database: 268.12.4/449 - Release Date: 15/9/2006

1758. Re: [SkyWires] Hello - need info

Yahoo group: SkyWires
Date: 2006-09-17 00:13:51 UTC
From: icra@galaxynet.com
Topic: 1754 Message: 1758

> SEE
> http://www.bloomington.in.us/~wh2t/ant.htm
>
That link pops out a 'page can not be displayed' error for me...

Mel
N7OKL

1759. Re: [SkyWires] 160m loop design

Yahoo group: SkyWires
Date: 2006-09-17 00:15:54 UTC
From: icra@galaxynet.com
Topic: 1752 Message: 1759

> Here's a page where I show how to home brew a 4:1 balun -
> http://www.bloomington.in.us/~wh2t/balun.html
> 73, Ace - WH2T

Same thing on this link...'page can not be displayed'....

Mel
N7OKL

1760. Re: [SkyWires] Hello - need info

Yahoo group: SkyWires
Date: 2006-09-17 00:30:19 UTC
From: py1vhf - anderson colla
Topic: 1754 Message: 1760

Google for "wh2t".

icra@... escreveu:
>> SEE
>> http://www.bloomington.in.us/~wh2t/ant.htm
>>
>>
> That link pops out a 'page can not be displayed' error for me...
>
> Mel
> N7OKL
>
>

--
+++
- _____
- /_____\
- (|<*,*>|) PY1VHF * Anderson Colla
- [`-'] GG97co * p y 1 v h f AT amsat.org
- -"-"- Maca? RJ * Brazil
-
- Those that can, DX. Those that can't DX, do nets...

1761. Re: [SkyWires] Hello - need info

Yahoo group: SkyWires
Date: 2006-09-17 00:43:54 UTC
From: Scott Gordon
Topic: 1754 Message: 1761

You can get to WH2T link from my website, http://www.kq8rp.us

On Sat, 2006-09-16 at 21:30 -0300, py1vhf - anderson colla wrote:
> Google for "wh2t".
>
> icra@... escreveu:
> >> SEE
> >> http://www.bloomington.in.us/~wh2t/ant.htm
> >>
> >>
> > That link pops out a 'page can not be displayed' error for me...
> >
> > Mel
> > N7OKL
> >
> >
>
> --
> +++
> - _____
> - /_____\
> - (|<*,*>|) PY1VHF * Anderson Colla
> - [`-'] GG97co * p y 1 v h f AT amsat.org
> - -"-"- Macaé RJ * Brazil
> -
> - Those that can, DX. Those that can't DX, do nets...
>
>
>
>
>

1763. Re: [SkyWires] Hello - need info

Yahoo group: SkyWires
Date: 2006-09-17 01:31:32 UTC
From: Dave Marling
Topic: 1754 Message: 1763

Also check out W4RNL's web site at http://www.cebik.com/ for information
on antennas of all types, tuner design as well as feed line information.

Dave
VE1VQ

1764. Re: [SkyWires] The Truth Is...

Yahoo group: SkyWires
Date: 2006-09-17 02:03:25 UTC
From: David Shrum
Topic: 1764 Message: 1764

Joined, posted Spam and banned in less than one hour. Well at least
according to the time stamp on the message. :)
Dave N8PU

ethylweeks wrote:
> Never in my life...
>

1765. Re: Hello - need info

Yahoo group: SkyWires
Date: 2006-09-17 02:16:14 UTC
From: togreedy2
Topic: 1754 Message: 1765

--- In SkyWires@yahoogroups.com, "Antonio radiodx" <radio@...> wrote:
>
> Hi FM´s
>
> I´m new here, I would like to know a good web page about skywire and
other antennas.
>
> thanks
>
> 73´s
>
> Antonio 3 AT 133

M8 i have a very good article on skywires if you send me an email i
will post it to you.
73'
VK4F***
>

1766. Re: [SkyWires] 160m loop design

Yahoo group: SkyWires
Date: 2006-09-17 15:46:38 UTC
From: Dr.Ace Ratliff
Topic: 1752 Message: 1766

Hi Mel,

http://www.bloomington.in.us/~wh2t/balun.html

works fine here.
Ace - WH2T

----- Original Message -----
From: icra@...
To: SkyWires@yahoogroups.com
Sent: Saturday, September 16, 2006 7:15 PM
Subject: Re: [SkyWires] 160m loop design

> Here's a page where I show how to home brew a 4:1 balun -
> http://www.bloomington.in.us/~wh2t/balun.html
> 73, Ace - WH2T

Same thing on this link...'page can not be displayed'....

Mel
N7OKL

1767. Re: [SkyWires] 160m loop design

Yahoo group: SkyWires
Date: 2006-09-17 17:18:21 UTC
From: David Shrum
Topic: 1752 Message: 1767

Neither Firefox or Internet Explore can not display the page here. Other links work, just not this one for me either.
Dave N8PU

Message from Firefox -- Firefox can't establish a connection to the server at www.bloomington.in.us.
Message from Internet Explorer -The page cannot be displayed

Dr.Ace Ratliff wrote:
> Hi Mel,
>
> http://www.bloomington.in.us/~wh2t/balun.html
> <http://www.bloomington.in.us/%7Ewh2t/balun.html>
>
> works fine here.
> Ace - WH2T
>
>

1768. Re: [SkyWires] 160m loop design

Yahoo group: SkyWires
Date: 2006-09-17 18:24:46 UTC
From: Hans Remeeus
Topic: 1752 Message: 1768

Sometimes it workes, sometimes it does'nt. Can't find the reason.

73,
Hans Remeeus (PA1HR)
http://www.remeeus.eu
Communication is about people, the rest is technology.

Dr.Ace Ratliff schreef:
>
>
> Hi Mel,
>
> http://www.bloomington.in.us/~wh2t/balun.html
> <http://www.bloomington.in.us/~wh2t/balun.html>
>
> works fine here.
> Ace - WH2T
>

1769. Whidbey Kite fest ops Sept 23/24

Yahoo group: SkyWires
Date: 2006-09-17 18:38:11 UTC
From: icra@galaxynet.com
Topic: 1769 Message: 1769

Have confirmed permission to operate from the annual Whidbey Island Kite festival.

Scheduled to run Sept 23/24 from 0900-1700 (1600-0000GMT) each day.

With reasonable winds, will be on kite lifted antennas.....taking a modified multi-band vertical just in case.

I will be there, but may have a few others show up to operate, so calls may vary through both days.....intend to have Whidbey Kite fest included in the CQ broadcast.

At this time, plan to focus mostly on 20mtr SSB with some attempts at 40mtr SSB. May have some 30mtr PSK31 if I can get the laptop working with it or some one brings/loans gear for it.

Would really love to work others that are flying antennas, so if any one is interested and able, go out and fly a kite lifted antenna on those days.....others in the local kite club would get a real thrill from it....might be able to get them interested in ham radio....

Will post more details on the event plans toward the end of the week...

Mel
N7OKL

1770. Bazooka for 160?

Yahoo group: SkyWires
Date: 2006-09-17 19:42:15 UTC
From: AD5VJ Bob
Topic: 1770 Message: 1770

Well I sent this to TopBand Reflector first but no one has responded so I guess I stumped 'em.

Hello everyone:

I am in a space limited environment and already have a double bazooka tuned for 80 meters that works fine on 80 meters. I also have
a MFJ-949B Tuner and a manual antenna switch. Rig is an IC-775.

I have two antennas already going to the MFJ the double bazooka and a TitanDX Vertical. Therefore both PL-259 connectors are being
used.

I do have a random wire input to the tuner and a balanced wire input that are open at this point.

Does anyone know of a way I can use the Double Bazooka tuned for 80 meters (or something) at least for stateside work on 160.

I realize that DX would be out of the question without, A LOT OF HEIGHT, a Vertical, Loop or Beverage, but those are not options for
me at this point.

My only chance at this point is to somehow use the Bazooka for local calls.

Someone somewhere had said something about shorting it but if so where and how?

73 fer nw,
Bob AD5VJ(AAR6VM)
http://www.ad5vj.com/

Member CTDXCC
10X# 37210, FP#-1141
SMIRK#-5177, RARS #-149

1771. Re: [SkyWires] Bazooka for 160?

Yahoo group: SkyWires
Date: 2006-09-17 22:26:40 UTC
From: Dr.Ace Ratliff
Topic: 1770 Message: 1771

Hi Bob ,
You could try shorting the coax center and shield together at the station end of the coax and then try feeding the antenna as a top loaded vertical. It might then be tunable with the MFJ-949B on 160 mtrs. Make sure you have a good ground at the MFJ-949B .
Good Luck, Ace - WH2T

http://www.bloomington.in.us/~wh2t/bazooka.html

----- Original Message -----
From: AD5VJ Bob
To: SkyWires@yahoogroups. Com
Sent: Sunday, September 17, 2006 2:42 PM
Subject: [SkyWires] Bazooka for 160?

Well I sent this to TopBand Reflector first but no one has responded so I guess I stumped 'em.

Hello everyone:

I am in a space limited environment and already have a double bazooka tuned for 80 meters that works fine on 80 meters. I also have
a MFJ-949B Tuner and a manual antenna switch. Rig is an IC-775.

I have two antennas already going to the MFJ the double bazooka and a TitanDX Vertical. Therefore both PL-259 connectors are being
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My only chance at this point is to somehow use the Bazooka for local calls.

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73 fer nw,
Bob AD5VJ(AAR6VM)
http://www.ad5vj.com/

Member CTDXCC
10X# 37210, FP#-1141
SMIRK#-5177, RARS #-149

1772. RE: [SkyWires] Bazooka for 160?

Yahoo group: SkyWires
Date: 2006-09-18 00:01:32 UTC
From: AD5VJ Bob
Topic: 1770 Message: 1772

Hello Dr:

Well I tried that and it seems to tune but if I try more than about 12W output the rig abruptly turns off in such a way that I dont
want to do that anymore.

I checked and all is ok, but I didn't like the way it flickered off on me.

The SWR on the MFJ tuner showed ok 1:2 to 1 at around 5 Watts, but as I increased power it was not a good thing :0)

So back to the drawing board.

I have a MFJ-1702C two way antenna switch so where the rig would normally go into the switch, I put the bazooka.

Then I fed one side of the switch POSITION A with a standard piece of RG-8 JUMPER CABLE to the standard pl259 input to the MFJ-949B
tuner which I normally use for the bazooka. Position two on the MFJ-949B tuner.

The other side of the switch POSITION B, I plugged in an adapter I made using a shorty piece of coax with a pl259 on one end.

The open end of the adapter I made I shorted the braid to the center conductor, then I fed it to the input of the tuner that says
"wire".

So I could switch between the double bazooka for 80 and the modified bazooka for 160.

I have the tuner and the rig grounded through the same wire (so there are no ground loops) that leads to a ground stake that is 10
feet in length just on the other side of the wall of the shack outside.

So tell me what do you think?

73 fer nw,
Bob AD5VJ(AAR6VM)
http://www.ad5vj.com/

Member: CTDXCC, NTCC
FISTS: # 12637
10X# 37210, FP#-1141
SMIRK#-5177, RARS #-149

From: SkyWires@yahoogroups.com [mailto:SkyWires@yahoogroups.com] On Behalf Of Dr.Ace Ratliff
Sent: Sunday, September 17, 2006 5:27 PM

To: SkyWires@yahoogroups.com
Subject: Re: [SkyWires] Bazooka for 160?

Hi Bob ,
You could try shorting the coax center and shield together at the station end of the coax and then try feeding the antenna as a top
loaded vertical. It might then be tunable with the MFJ-949B on 160 mtrs. Make sure you have a good ground at the MFJ-949B .
Good Luck, Ace - WH2T

http://www.bloomington.in.us/~wh2t/bazooka.html

----- Original Message -----
From: AD5VJ Bob <mailto:rtnmi@...>
To: SkyWires@yahoogroups. Com
Sent: Sunday, September 17, 2006 2:42 PM
Subject: [SkyWires] Bazooka for 160?

Well I sent this to TopBand Reflector first but no one has responded so I guess I stumped 'em.

Hello everyone:

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I realize that DX would be out of the question without, A LOT OF HEIGHT, a Vertical, Loop or Beverage, but those are not options for
me at this point.

My only chance at this point is to somehow use the Bazooka for local calls.

Someone somewhere had said something about shorting it but if so where and how?

73 fer nw,
Bob AD5VJ(AAR6VM)
http://www.ad5vj. <http://www.ad5vj.com/> com/

Member CTDXCC
10X# 37210, FP#-1141
SMIRK#-5177, RARS #-149

1773. Re: [SkyWires] Bazooka for 160?

Yahoo group: SkyWires
Date: 2006-09-18 00:39:43 UTC
From: Jim Dunstan
Topic: 1770 Message: 1773

At 02:42 PM 17/09/2006 -0500, you wrote:

>Well I sent this to TopBand Reflector first but no one has responded so I
>guess I stumped 'em.
>
>Hello everyone:
>
>I am in a space limited environment and already have a double bazooka
>tuned for 80 meters that works fine on 80 meters. I also have
>a MFJ-949B Tuner and a manual antenna switch. Rig is an IC-775.
>
>I have two antennas already going to the MFJ the double bazooka and a
>TitanDX Vertical. Therefore both PL-259 connectors are being
>used.
>
>I do have a random wire input to the tuner and a balanced wire input that
>are open at this point.
>
>Does anyone know of a way I can use the Double Bazooka tuned for 80 meters
>(or something) at least for stateside work on 160.
>
>I realize that DX would be out of the question without, A LOT OF HEIGHT, a
>Vertical, Loop or Beverage, but those are not options for
>me at this point.
>
>My only chance at this point is to somehow use the Bazooka for local calls.
>
>Someone somewhere had said something about shorting it but if so where and
>how?
>
>73 fer nw,
>Bob AD5VJ(AAR6VM)

Hi Bob,

The Double Bazooka is a single band dipole with a unique matching system that shortens the overall length by about 10% and reportedly broadens the resonance to provide a reasonable SWR across the band. Some say that a bazooka does not need a balun ..... true, in the same way any dipole can be operated without a balun .... as long as you don't mind antenna current on the outside of the feed line shield.

I am not sure from your post whether you intend to simply convert the dipole from 75M to 160M for single band use or if you are interested in occasional 160M operation and want to keep the 75M operation. General practice in developing a multi band dipole is to feed it with open wire

line and make the dimensions 1/2 wave length on the lowest frequency of operation. In your case you want to operate on a lower frequency than the design length. You already recognize that resultant operation as a dipole will not .... as you say ... allow DX hi hi.

My recommendation is to forget using the antenna as a dipole. If you have a reasonable RF ground at the operating position the absolute best plan for 160 operation with your 80 mtr dipole is to short the feed line at the tuner end and treat the coax feed line as a single vertical antenna (centre conductor to the shield) .... the dipole will simply act as a capacity hat. Perhaps that is what you heard when someone mentioned shorting it. This will provide better performance than simply replacing the 80M dipole with a 160M dipole at the same height. If you have access to a water pipe (plumbing) try using it as your RF ground.

I worked a 160M breakfast net round table for years using a similar arrangement (dipole as a vertical with a water pipe ground) hi. With a descent RF ground such an arrangement will give you good distance contacts ... still no guarantee for DX hi .

73 Jim, VE3CI

>

1774. RE: [SkyWires] Bazooka for 160?

Yahoo group: SkyWires
Date: 2006-09-18 01:06:55 UTC
From: Jim Dunstan
Topic: 1770 Message: 1774

At 07:01 PM 17/09/2006 -0500, you wrote:

>Hello Dr:
>
>Well I tried that and it seems to tune but if I try more than about 12W
>output the rig abruptly turns off in such a way that I dont want to do
>that anymore.
>
>I checked and all is ok, but I didn't like the way it flickered off on me.
>
>The SWR on the MFJ tuner showed ok 1:2 to 1 at around 5 Watts, but as I
>increased power it was not a good thing :0)
>
>So back to the drawing board.
>
>I have a MFJ-1702C two way antenna switch so where the rig would normally
>go into the switch, I put the bazooka.
>
>Then I fed one side of the switch POSITION A with a standard piece of RG-8
>JUMPER CABLE to the standard pl259 input to the MFJ-949B tuner which I
>normally use for the bazooka. Position two on the MFJ-949B tuner.
>
>The other side of the switch POSITION B, I plugged in an adapter I made
>using a shorty piece of coax with a pl259 on one end.
>
>The open end of the adapter I made I shorted the braid to the center
>conductor, then I fed it to the input of the tuner that says "wire".
>
>So I could switch between the double bazooka for 80 and the modified
>bazooka for 160.
>
>I have the tuner and the rig grounded through the same wire (so there are
>no ground loops) that leads to a ground stake that is 10 feet in length
>just on the other side of the wall of the shack outside.
>
>So tell me what do you think?
>
> 73 fer nw,
>Bob AD5VJ(AAR6VM)
><http://www.ad5vj.com/>http://www.ad5vj.com/
>
>Member: CTDXCC, NTCC
>FISTS: # 12637
>10X# 37210, FP#-1141
>SMIRK#-5177, RARS #-149

Hi Bob,

It sounds to me from what you describe that you were trying to load up your 'shorty piece of coax' !!! First of all your antenna switch on your tuner will not be able to automatically switch you between your antenna as a dipole on 80M and vertical on 160M .... not possible. Unless i am very wrong, your antenna tuner will have a coax input (connected to your transceiver output) and a couple of coax output connectors .... eg position A & B .... for more than one coax fed unbalanced antennas. In addition you say you have a connector for a wire antenna. There are probably instructions on connecting 2 wires .... eg a balanced line or 1 wire as in a single wire.

You need to use the arrangement of a single wire. Now you can use your shorty adapter but in reverse .... the coax end goes to your feed line from the dipole ... you will have to use a female-to-female coax adapter to connect them. The other end of the shorty adapter cable .... shield and centre conductor are shorted together .... and it goes to the single wire connector.

Now when you want to use the antenna for 80M you will have to undo the coax connector on the antenna feed line from the shorty adapter .... leave the adapter connected to the wire connector .... and connect the coax feed line to either connector A or B (which ever one u normally use) and use it as a dipole on 80M .... reverse the process when you want to go on 160M again.

Also , the wire to the ground rod is very marginal as an RF ground ... it may work for static and DC safety ... but as an RF ground it is a '"0". At minimum connect a few lengths of #14 copper wire to the connector on the ground rod and run them along the ground ... around the house ... more the better ...

give it another try.

Jim, VE3CI

1775. RE: [SkyWires] Bazooka for 160?

Yahoo group: SkyWires
Date: 2006-09-18 01:12:19 UTC
From: AD5VJ Bob
Topic: 1770 Message: 1775

Now I am hearing a bunch of guys in QSO on 1913.00 LSB very loud.

The take the shield off method seems to work :0)

73 fer nw,
Bob AD5VJ(AAR6VM)
http://www.ad5vj.com/

Member: CTDXCC, NTCC
FISTS: # 12637
10X# 37210, FP#-1141
SMIRK#-5177, RARS #-149

> -----Original Message-----
> From: SkyWires@yahoogroups.com
> [mailto:SkyWires@yahoogroups.com] On Behalf Of Jim Dunstan
> Sent: Sunday, September 17, 2006 7:40 PM
> To: SkyWires@yahoogroups.com
> Subject: Re: [SkyWires] Bazooka for 160?
>
> At 02:42 PM 17/09/2006 -0500, you wrote:
>
> >Well I sent this to TopBand Reflector first but no one has
> responded so
> >I guess I stumped 'em.
> >
> >Hello everyone:
> >
> >I am in a space limited environment and already have a
> double bazooka
> >tuned for 80 meters that works fine on 80 meters. I also have a
> >MFJ-949B Tuner and a manual antenna switch. Rig is an IC-775.
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> >I have two antennas already going to the MFJ the double
> bazooka and a
> >TitanDX Vertical. Therefore both PL-259 connectors are being used.
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> >I do have a random wire input to the tuner and a balanced wire input
> >that are open at this point.
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> >Does anyone know of a way I can use the Double Bazooka tuned for 80
> >meters (or something) at least for stateside work on 160.
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> >I realize that DX would be out of the question without, A LOT OF
> >HEIGHT, a Vertical, Loop or Beverage, but those are not
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> >My only chance at this point is to somehow use the Bazooka
> for local calls.
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> >Someone somewhere had said something about shorting it but
> if so where
> >and how?
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> >Bob AD5VJ(AAR6VM)
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> Hi Bob,
>
> The Double Bazooka is a single band dipole with a unique
> matching system that shortens the overall length by about 10%
> and reportedly broadens the resonance to provide a reasonable
> SWR across the band. Some say that a bazooka does not need a
> balun ..... true, in the same way any dipole can be operated
> without a balun .... as long as you don't mind antenna
> current on the outside of the feed line shield.
>
> I am not sure from your post whether you intend to simply
> convert the dipole from 75M to 160M for single band use or if
> you are interested in occasional 160M operation and want to
> keep the 75M operation. General practice in developing a
> multi band dipole is to feed it with open wire line and make
> the dimensions 1/2 wave length on the lowest frequency of
> operation. In your case you want to operate on a lower
> frequency than the design length. You already recognize that
> resultant operation as a dipole will not .... as you say ...
> allow DX hi hi.
>
> My recommendation is to forget using the antenna as a dipole.
> If you have a reasonable RF ground at the operating position
> the absolute best plan for 160 operation with your 80 mtr
> dipole is to short the feed line at the tuner end and treat
> the coax feed line as a single vertical antenna (centre
> conductor to the shield) .... the dipole will simply act as a
> capacity hat. Perhaps that is what you heard when someone
> mentioned shorting it. This will provide better performance
> than simply replacing the 80M dipole with a 160M dipole at
> the same height. If you have access to a water pipe
> (plumbing) try using it as your RF ground.
>
> I worked a 160M breakfast net round table for years using a
> similar arrangement (dipole as a vertical with a water pipe
> ground) hi. With a descent RF ground such an arrangement
> will give you good distance contacts ... still no guarantee
> for DX hi .

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> 73 Jim, VE3CI
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> Yahoo! Groups Links
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1776. RE: [SkyWires] Bazooka for 160?

Yahoo group: SkyWires
Date: 2006-09-18 01:05:24 UTC
From: AD5VJ Bob
Topic: 1770 Message: 1776

I shortened this email up to save bandwidth.

Very interesting:

I have tried two suggested methods so far please read further to see what happened:

One is the shorting method described which I will comment on a little later and this method suggested by another Ham as well:

> I have seen a number of 'compromise' setups that work
> surprisingly well. One such method uses whatever antenna you
> have for the low bands. If you take the PL259 loose on the
> antenna port, leave the center conductor sticking into the
> chassis, but slide back the 'nut' so that the shield is no
> longer connected to the chassis of the rig, you have a
> make-shift vertical. There is no need to short the center to
> the shield, but that is what some folks do (it doesn't hurt
> or help).

I used this method.
Tuned the tuner.
Went to full 200 watts output
And contacted a n7 who said he could copy me but could not make out the audio because he said he had 20 over 9 static crashes.

Then I tried the Shorting method:

It seems to tune ok with this method at low power, but if I try more than about 12W output after tuning it, the rig abruptly turns
off in such a way that I dont want to do that anymore.

I checked and all is ok, but I didn't like the way it flickered off on me.

The SWR on the MFJ tuner showed ok 1:2 to 1 at around 5 Watts, but as I increased power it was not a good thing :0)

So back to the drawing board.

I have a MFJ-1702C two way antenna switch so where the rig would normally go into the switch, I put the bazooka.

Then I fed one side of the switch POSITION A with a standard piece of RG-8 JUMPER CABLE to the standard pl259 input to the MFJ-949B
tuner which I normally use for the bazooka. Position two on the MFJ-949B tuner.

The other side of the switch POSITION B, I plugged in an adapter I made using a shorty piece of coax with a pl259 on one end.

The open end of the adapter I made I shorted the braid to the center conductor, then I fed it to the input of the tuner that says
"wire".

So I could switch between the double bazooka for 80 and the modified bazooka for 160.

I have the tuner and the rig grounded through the same wire (so there are no ground loops) that leads to a ground stake that is 10
feet in length just on the other side of the wall of the shack outside.

So what do you think?

Ideas please?

73 fer nw,
Bob AD5VJ(AAR6VM)
http://www.ad5vj.com/

Member: CTDXCC, NTCC
FISTS: # 12637
10X# 37210, FP#-1141
SMIRK#-5177, RARS #-149

1777. RE: [SkyWires] Bazooka for 160?

Yahoo group: SkyWires
Date: 2006-09-18 02:40:13 UTC
From: AD5VJ Bob
Topic: 1770 Message: 1777

Well it is seeming to work. Now for the proof of the pudding :0)

I am going to 1.833.5 cw and see if I can scare anyone up.

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Bob AD5VJ(AAR6VM)
http://www.ad5vj.com/

Member: CTDXCC, NTCC
FISTS: # 12637
10X# 37210, FP#-1141
SMIRK#-5177, RARS #-149

> -----Original Message-----
> From: SkyWires@yahoogroups.com
> [mailto:SkyWires@yahoogroups.com] On Behalf Of AD5VJ Bob
> Sent: Sunday, September 17, 2006 8:12 PM
> To: SkyWires@yahoogroups.com
> Subject: RE: [SkyWires] Bazooka for 160?
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> > [mailto:SkyWires@yahoogroups.com] On Behalf Of Jim Dunstan
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> > To: SkyWires@yahoogroups.com
> > Subject: Re: [SkyWires] Bazooka for 160?
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1778. RE: [SkyWires] Bazooka for 160?

Yahoo group: SkyWires
Date: 2006-09-18 02:41:50 UTC
From: AD5VJ Bob
Topic: 1770 Message: 1778

Well it is seeming to work. After a slight adjustment noted in the reply below by the good Dr now it is working at the controls
anyway.

Now for the proof of the pudding :0)

I am going to 1.833.5 cw and see if I can scare anyone up.

Thanks Doc

73 fer nw,
Bob AD5VJ(AAR6VM)
<http://www.ad5vj.com/> http://www.ad5vj.com/

Member: CTDXCC, NTCC
FISTS: # 12637
10X# 37210, FP#-1141
SMIRK#-5177, RARS #-149

From: SkyWires@yahoogroups.com [mailto:SkyWires@yahoogroups.com] On Behalf Of Jim Dunstan
Sent: Sunday, September 17, 2006 8:07 PM
To: SkyWires@yahoogroups.com
Subject: RE: [SkyWires] Bazooka for 160?

At 07:01 PM 17/09/2006 -0500, you wrote:

Hello Dr:

Well I tried that and it seems to tune but if I try more than about 12W output the rig abruptly turns off in such a way that I dont
want to do that anymore.

I checked and all is ok, but I didn't like the way it flickered off on me.

The SWR on the MFJ tuner showed ok 1:2 to 1 at around 5 Watts, but as I increased power it was not a good thing :0)

So back to the drawing board.

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Then I fed one side of the switch POSITION A with a standard piece of RG-8 JUMPER CABLE to the standard pl259 input to the MFJ-949B
tuner which I normally use for the bazooka. Position two on the MFJ-949B tuner.

The other side of the switch POSITION B, I plugged in an adapter I made using a shorty piece of coax with a pl259 on one end.

The open end of the adapter I made I shorted the braid to the center conductor, then I fed it to the input of the tuner that says
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So I could switch between the double bazooka for 80 and the modified bazooka for 160.

I have the tuner and the rig grounded through the same wire (so there are no ground loops) that leads to a ground stake that is 10
feet in length just on the other side of the wall of the shack outside.

So tell me what do you think?

73 fer nw,
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http://www.ad5vj.com/

Member: CTDXCC, NTCC
FISTS: # 12637
10X# 37210, FP#-1141
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Hi Bob,

It sounds to me from what you describe that you were trying to load up your 'shorty piece of coax' !!! First of all your antenna
switch on your tuner will not be able to automatically switch you between your antenna as a dipole on 80M and vertical on 160M ....
not possible. Unless i am very wrong, your antenna tuner will have a coax input (connected to your transceiver output) and a
couple of coax output connectors .... eg position A & B .... for more than one coax fed unbalanced antennas. In addition you say
you have a connector for a wire antenna. There are probably instructions on connecting 2 wires .... eg a balanced line or 1 wire as
in a single wire.

You need to use the arrangement of a single wire. Now you can use your shorty adapter but in reverse .... the coax end goes to your
feed line from the dipole ... you will have to use a female-to-female coax adapter to connect them. The other end of the shorty
adapter cable .... shield and centre conductor are shorted together .... and it goes to the single wire connector.

Now when you want to use the antenna for 80M you will have to undo the coax connector on the antenna feed line from the shorty
adapter .... leave the adapter connected to the wire connector .... and connect the coax feed line to either connector A or B (which
ever one u normally use) and use it as a dipole on 80M .... reverse the process when you want to go on 160M again.

Also , the wire to the ground rod is very marginal as an RF ground ... it may work for static and DC safety ... but as an RF ground

it is a '"0". At minimum connect a few lengths of #14 copper wire to the connector on the ground rod and run them along the ground
... around the house ... more the better ...

give it another try.

Jim, VE3CI

1779. RE: [SkyWires] Bazooka for 160?

Yahoo group: SkyWires
Date: 2006-09-18 03:59:59 UTC
From: AD5VJ Bob
Topic: 1770 Message: 1779

Well now we're having fun.

1823.027 cw

Just worked two stations on Top Band.
K0VA and

Well make that three (anyway) to busy to write gotta see whets up here that's been waiting for me :0)

Thanks fellas for all your help and experience. Now we can get with it so to speak.

73 fer nw,
Bob AD5VJ(AAR6VM)
http://www.ad5vj.com/

Member: CTDXCC, NTCC
FISTS: # 12637
10X# 37210, FP#-1141
SMIRK#-5177, RARS #-149

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> [mailto:SkyWires@yahoogroups.com] On Behalf Of AD5VJ Bob
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1780. Bazooka On 160

Yahoo group: SkyWires
Date: 2006-09-18 15:13:14 UTC
From: Thomas Giella KN4LF
Topic: 1780 Message: 1780
Attachments: 1 described; binary payloads are missing from this source WARC

Bob,

I doubt that you stumped anyone on the Topband Reflector. Unfortunately the Topband Reflector is home to some of the snobbiest elitist's on any e-list in amateur radio and probably didn't want to waste their time on your query.

There are a couple of different design methods for a bazooka antenna and they are all for single band use only, no efficient harmonic operation possible. You could short the shack end of the coaxial feedline and feed the antenna as a current fed tee vertical but it will be poor for local or regional night time work because of the low take off angle and lack of ground radial counterpoise system.

For 160 meter local/regional rag chewing I would suggest an end fed 3/8's wave inverted L made out of #14 stranded house wire to the single wire binding post of your antenna tuner. Using 1900 kc as a target frequency the formula for a 3/8's wave antenna is 351 versus 468 for a half wave. So 351 divided by 1900 kc is 184.7 feet. I suggest a 3/8's wave length antenna as it get's the highest current point on the antenna outside in the air instead of inside right at your antenna tuner, so less RFI potential. Also a wire longer than a 1/2 wave has a higher radiation resistance and therefore is more efficient and helps to counteract losses in the ground from a poor ground radial counterpoise.

The inverted L configuration will give you high angle horizontal signal on the horizontal flat top for local and regional rag chewing and a low angle vertical signal for DX out to 1000-1500 miles. Make the vertical section as long as possible (30-60 ft) and you will be very surprised at how well the antenna works without a bunch of counterpoise radial wires on the ground. You can get by with no ground radials but I would suggest one 123 foot one for the antenna to push against so to speak.

I have four 160 meter antenna designs published on the WWW at www.kn4lf.com . Surf about half way down the site for the links.

--... ...--,
Thomas F. Giella, KN4LF
Lakeland, FL, USA
Grid Square EL97AW
kn4lf@...

KN4LF Amateur & SWL Radio History: http://www.kn4lf.com
Radiowave Propagation Yahoo eGroup: http://groups.yahoo.com/group/radiowavepropagation
New Scientific Evidence for the Existence of God:
http://www.cosmicfingerprints.com/audio/newevidence.htm

Bazooka for 160?
Posted by: "AD5VJ Bob" rtnmi@... rtnmi
Sun Sep 17, 2006 12:50 pm (PST)
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Someone somewhere had said something about shorting it but if so where and how?

73 fer nw,
Bob AD5VJ(AAR6VM)
http://www.ad5vj.com/

1781. New Member - Need 6m Halo/Squalo Design

Yahoo group: SkyWires
Date: 2006-09-19 10:51:57 UTC
From: jeff_br549
Topic: 1781 Message: 1781

I need a good and easy design for a 6 meter halo or squalo. If you know anything else as good or better, I welcome your help. Thanks.

Jeff KI4LLE

1782. Re: [SkyWires] Bazooka for 160?

Yahoo group: SkyWires
Date: 2006-09-19 10:49:09 UTC
From: Dr.Ace Ratliff
Topic: 1770 Message: 1782

Hi Bob,
Sorry I didn't have time to get back to you . I was going to suggest taking the coax shield loose and just using the center conductor but someone beat me to it . All I can say is stick to what works .
Very 73 and gud DX , Ace - WH2T

----- Original Message -----
From: AD5VJ Bob
To: SkyWires@yahoogroups.com
Sent: Sunday, September 17, 2006 10:59 PM
Subject: RE: [SkyWires] Bazooka for 160?

Well now we're having fun.

1823.027 cw

Just worked two stations on Top Band.
K0VA and

Well make that three (anyway) to busy to write gotta see whets up here that's been waiting for me :0)

Thanks fellas for all your help and experience. Now we can get with it so to speak.

73 fer nw,
Bob AD5VJ(AAR6VM)
http://www.ad5vj.com/

Member: CTDXCC, NTCC
FISTS: # 12637
10X# 37210, FP#-1141
SMIRK#-5177, RARS #-149

> -----Original Message-----
> From: SkyWires@yahoogroups.com
> [mailto:SkyWires@yahoogroups.com] On Behalf Of AD5VJ Bob
> Sent: Sunday, September 17, 2006 9:40 PM
> To: SkyWires@yahoogroups.com
> Subject: RE: [SkyWires] Bazooka for 160?
>
> Well it is seeming to work. Now for the proof of the pudding :0)
>
> I am going to 1.833.5 cw and see if I can scare anyone up.
>
> 73 fer nw,
> Bob AD5VJ(AAR6VM)
> http://www.ad5vj.com/

>
> Member: CTDXCC, NTCC
> FISTS: # 12637
> 10X# 37210, FP#-1141
> SMIRK#-5177, RARS #-149
>
>
> > -----Original Message-----
> > From: SkyWires@yahoogroups.com
> > [mailto:SkyWires@yahoogroups.com] On Behalf Of AD5VJ Bob
> > Sent: Sunday, September 17, 2006 8:12 PM
> > To: SkyWires@yahoogroups.com
> > Subject: RE: [SkyWires] Bazooka for 160?
> >
> > Now I am hearing a bunch of guys in QSO on 1913.00 LSB very loud.
> >
> > The take the shield off method seems to work :0)
> >
> > 73 fer nw,
> > Bob AD5VJ(AAR6VM)
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> > FISTS: # 12637
> > 10X# 37210, FP#-1141
> > SMIRK#-5177, RARS #-149
> >
> >
> > > -----Original Message-----
> > > From: SkyWires@yahoogroups.com
> > > [mailto:SkyWires@yahoogroups.com] On Behalf Of Jim Dunstan
> > > Sent: Sunday, September 17, 2006 7:40 PM
> > > To: SkyWires@yahoogroups.com
> > > Subject: Re: [SkyWires] Bazooka for 160?
> > >
> > > At 02:42 PM 17/09/2006 -0500, you wrote:
> > >
> > > >Well I sent this to TopBand Reflector first but no one has
> > > responded so
> > > >I guess I stumped 'em.
> > > >
> > > >Hello everyone:
> > > >
> > > >I am in a space limited environment and already have a
> > > double bazooka
> > > >tuned for 80 meters that works fine on 80 meters. I also have a
> > > >MFJ-949B Tuner and a manual antenna switch. Rig is an IC-775.
> > > >
> > > >I have two antennas already going to the MFJ the double
> > > bazooka and a

> > > >TitanDX Vertical. Therefore both PL-259 connectors are
> being used.
> > > >
> > > >I do have a random wire input to the tuner and a balanced
> > wire input
> > > >that are open at this point.
> > > >
> > > >Does anyone know of a way I can use the Double Bazooka
> > tuned for 80
> > > >meters (or something) at least for stateside work on 160.
> > > >
> > > >I realize that DX would be out of the question without, A LOT OF
> > > >HEIGHT, a Vertical, Loop or Beverage, but those are not
> > > options for me
> > > >at this point.
> > > >
> > > >My only chance at this point is to somehow use the Bazooka
> > > for local calls.
> > > >
> > > >Someone somewhere had said something about shorting it but
> > > if so where
> > > >and how?
> > > >
> > > >73 fer nw,
> > > >Bob AD5VJ(AAR6VM)
> > >
> > > Hi Bob,
> > >
> > > The Double Bazooka is a single band dipole with a unique matching
> > > system that shortens the overall length by about 10% and
> reportedly
> > > broadens the resonance to provide a reasonable SWR across
> > the band.
> > > Some say that a bazooka does not need a balun ..... true,
> > in the same
> > > way any dipole can be operated without a balun .... as
> long as you
> > > don't mind antenna current on the outside of the feed line shield.
> > >
> > > I am not sure from your post whether you intend to simply
> > convert the
> > > dipole from 75M to 160M for single band use or if you are
> > interested
> > > in occasional 160M operation and want to keep the 75M operation.
> > > General practice in developing a multi band dipole is to
> > feed it with
> > > open wire line and make the dimensions 1/2 wave length on
> > the lowest
> > > frequency of operation. In your case you want to operate
> > on a lower

> > > frequency than the design length. You already recognize that
> > > resultant operation as a dipole will not .... as you say ...
> > > allow DX hi hi.
> > >
> > > My recommendation is to forget using the antenna as a dipole.
> > > If you have a reasonable RF ground at the operating position the
> > > absolute best plan for 160 operation with your 80 mtr
> dipole is to
> > > short the feed line at the tuner end and treat the coax
> > feed line as a
> > > single vertical antenna (centre conductor to the shield) .... the
> > > dipole will simply act as a capacity hat. Perhaps that
> is what you
> > > heard when someone mentioned shorting it. This will
> provide better
> > > performance than simply replacing the 80M dipole with a
> > 160M dipole at
> > > the same height. If you have access to a water pipe
> > > (plumbing) try using it as your RF ground.
> > >
> > > I worked a 160M breakfast net round table for years using
> a similar
> > > arrangement (dipole as a vertical with a water pipe
> > > ground) hi. With a descent RF ground such an arrangement
> will give
> > > you good distance contacts ... still no guarantee for DX hi .
> > >
> > > 73 Jim, VE3CI
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1783. RE: [SkyWires] Bazooka for 160?

Yahoo group: SkyWires
Date: 2006-09-19 11:21:10 UTC
From: AD5VJ Bob
Topic: 1770 Message: 1783

I cant believe it I just worked New Zealand this morning.

Thanks everyone for your help.

73 fer nw,
Bob AD5VJ(AAR6VM)
http://www.ad5vj.com/

Member: CTDXCC, NTCC
FISTS: # 12637
10X# 37210, FP#-1141
SMIRK#-5177, RARS #-149

From: SkyWires@yahoogroups.com [mailto:SkyWires@yahoogroups.com] On Behalf Of Dr.Ace Ratliff
Sent: Tuesday, September 19, 2006 5:49 AM
To: SkyWires@yahoogroups.com
Subject: Re: [SkyWires] Bazooka for 160?

Hi Bob,
Sorry I didn't have time to get back to you . I was going to suggest taking the coax shield loose and just using the center
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1784. 450 or 600 ohm feedline?

Yahoo group: SkyWires
Date: 2006-09-19 15:44:15 UTC
From: Christopher Zeman
Topic: 1784 Message: 1784

I am going to build and install a full wave 40 meter loop with homebrew ladder line. Would I be better off with 450 or 600 ohm ladder line? I've read a great deal of information online on the topic, but what do you guys prefer and why?

Chris
N9XCR

1785. Re: [SkyWires] 450 or 600 ohm feedline?

Yahoo group: SkyWires
Date: 2006-09-19 16:33:02 UTC
From: Hans Remeeus
Topic: 1784 Message: 1785

The best think to do (IMHO) is to make a ladder line yourself, from the same wire as the loop. Less than 4 inch between the two feeders. This will be about 600 Ohm and gives you less losses.

73,
Hans Remeeus (PA1HR)
http://www.remeeus.eu
Communication is about people, the rest is technology.

Christopher Zeman schreef:
>
>
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> ladder line. Would I be better off with 450 or 600 ohm ladder line? I've
> read a great deal of information online on the topic, but what do you
> guys prefer and why?
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> Chris
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>

1786. Re: [SkyWires] 450 or 600 ohm feedline?

Yahoo group: SkyWires
Date: 2006-09-19 17:07:41 UTC
From: Christopher Zeman
Topic: 1784 Message: 1786

"...the same wire as the loop." That is exactly what I was thinking, Hans. :)

Do you think 18 guage insulated wire would be sufficient, or should I get some 12 guage. The reason I ask is that I have a spool of 18 guage sitting here. My thoughts are that I should go for at least 14 guage, but I might be wrong. :)

Chris
N9XCR

----- Original Message -----
From: Hans Remeeus
To: SkyWires@yahoogroups.com
Sent: Tuesday, September 19, 2006 11:33 AM
Subject: Re: [SkyWires] 450 or 600 ohm feedline?

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same wire as the loop. Less than 4 inch between the two feeders. This
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> read a great deal of information online on the topic, but what do you
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> Chris
> N9XCR
>

1787. Re: [SkyWires] 450 or 600 ohm feedline?

Yahoo group: SkyWires
Date: 2006-09-19 18:15:37 UTC
From: Hans Remeeus
Topic: 1784 Message: 1787

Additional information: between 3 and 4 inches between the two feeders
will give you about 600 Ohm.

73,
Hans Remeeus (PA1HR)
http://www.remeeus.eu
Communication is about people, the rest is technology.

Hans Remeeus schreef:
>
>
> The best think to do (IMHO) is to make a ladder line yourself, from the
> same wire as the loop. Less than 4 inch between the two feeders. This
> will be about 600 Ohm and gives you less losses.
>

1788. Re: [SkyWires] 450 or 600 ohm feedline?

Yahoo group: SkyWires
Date: 2006-09-19 19:57:20 UTC
From: Hans Remeeus
Topic: 1784 Message: 1788

Hello Chris,

Unfortunately I am not very familiar with the diameter of 12, 14 or 18 gauge. However I found an interesting table on http://en.wikipedia.org/wiki/American_wire_gauge

For my antennas I use 2,5mm2 insulated 7x7 stranded copper wire. This is 10 AWG.

I would use at least 14 AWG for a loop.

73,
Hans Remeeus (PA1HR)
http://www.remeeus.eu
Communication is about people, the rest is technology.

Christopher Zeman schreef:
>
>
> "...the same wire as the loop." That is exactly what I was thinking,
> Hans. :)
>
> Do you think 18 guage insulated wire would be sufficient, or should I
> get some 12 guage. The reason I ask is that I have a spool of 18 guage
> sitting here. My thoughts are that I should go for at least 14 guage,
> but I might be wrong. :)
>
> Chris
> N9XCR
>

1789. Re: [SkyWires] 450 or 600 ohm feedline?

Yahoo group: SkyWires
Date: 2006-09-20 11:19:11 UTC
From: Dave Marling
Topic: 1784 Message: 1789

Hans Remeeus wrote:
>
>
> The best think to do (IMHO) is to make a ladder line yourself, from the
> same wire as the loop. Less than 4 inch between the two feeders. This
> will be about 600 Ohm and gives you less losses.

I'm just about finished building ladder line using cut up plastic coat hangers for the insulators. As soon as I finish, I'll post an article, complete with pictures, to the file area on here. The main problem I had, using covered #14 wire from Home Depot, was how to stick the plastic spacers to the wire covering. Stay tuned.

Dave
VE1VQ

1790. Re: [SkyWires] 450 or 600 ohm feedline?

Yahoo group: SkyWires
Date: 2006-09-20 15:25:22 UTC
From: erik@n0ew.org
Topic: 1784 Message: 1790

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> hangers for the insulators. As soon as I finish, I'll post an article,
> complete with pictures, to the file area on here. The main problem I
> had, using covered #14 wire from Home Depot, was how to stick the
> plastic spacers to the wire covering. Stay tuned.
>
> Dave
> VE1VQ

Hey Dave, BTW, if you go the wire-wrapping route, a fence tool from a farm and supply type store will make short work of that process! They look sorta like strange pliers, and a hammer combonation. They include a partially effective wire cutter, hammer, and grip the wire very well so you can manipulate it, including to quickly twist it about itself securely. (Take a little practice.)

I have never heard a more proper name for this tool. Simply called a fence tool. Any farmer with wire fencing likely knows what to call this, and has one, or something similar that is availble in your area.

It is a basic tool for working with wire fence, and the physics of that challenge can't differ area to area, so I'd expect similar tools evolved in each community.

-Erik n0ew

1791. Re: [SkyWires] 450 or 600 ohm feedline?

Yahoo group: SkyWires
Date: 2006-09-20 15:18:22 UTC
From: erik@n0ew.org
Topic: 1784 Message: 1791

> I'm just about finished building ladder line using cut up plastic coat
> hangers for the insulators. As soon as I finish, I'll post an article,
> complete with pictures, to the file area on here. The main problem I
> had, using covered #14 wire from Home Depot, was how to stick the
> plastic spacers to the wire covering. Stay tuned.
>
> Dave
> VE1VQ

Dave, I look forward to reading your future posting/report.

Here is one method I read about somewhere....

They made holes in the ends of their 'bones' (the insulator rods had somewhat larger ends than the rest, so they looked a little bit like a cartoon doggie bone). Then they threaded the wire through holes they had drilled in the wider ends of the insulator rods. Once they had sufficient number for their spacing they went back with small lengths of wire and tied the bones into place.

The wire looked a little like an unside down U with enough extra wire left over at each end of the small loop to wrap around the antenna wire/feed line wire. Once these were wraped snuggly on both sides of the bones, the insulator remained in place. Or so the story goes. I haven't tried it myself.

One could also complete the above by then twisting the two ends of the U-wire to one another.

They were using bare wire, so it is possible they finished off the twists with a bit of solder. That'd help keep the bones from slipping in the wind, up to a point.

For specific spacings and the resulting Ohms, I'm certain the "ARRL Antenna Book" has that formula in there somewhere. I'm not at home and I don't have a copy with me, so I can't tell you where. It's pretty basic formula. "Fill in the blanks" and hit enter!

You just need to know your wire dimensions and spacing (and dielectric material, of course, which in this case is air).

If you are going to use a transmatch, it won't make that much difference anyway, so long as your are in the ballpark. I seem to recall one 600-Ohm combination resulting from # 12 bare wire at a 6-inch spacing. I could be wrong however. There's no telling where that memory is bubbling up from! Hehehe...

Thanks for keeping us posted on your progress!
73-Erik n0ew

1792. Re: [SkyWires] 450 or 600 ohm feedline?

Yahoo group: SkyWires
Date: 2006-09-20 18:30:40 UTC
From: Ken Burchfield
Topic: 1784 Message: 1792

Hey Guys,
Here are a few links to good information on building open line feeders(Ladder line)

http://www.cebik.com/trans/par.html
http://www.cebik.com/gup/gup31.html
http://www.qsl.net/vk5br/MeritsOWLine.htm

73 Ken

erik@... wrote: finished building ladder line using cut up plastic coat
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> complete with pictures, to the file area on here. The main problem I
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farm and supply type store will make short work of that process! They
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-Erik n0ew

Talk is cheap. Use Yahoo! Messenger to make PC-to-Phone calls. Great rates starting at
1?/min.

1793. Re: 450 or 600 ohm feedline?

Yahoo group: SkyWires
Date: 2006-09-21 10:02:42 UTC
From: Dan Clark
Topic: 1784 Message: 1793

www.TheWireman.com
--
No virus found in this outgoing message.
Checked by AVG Free Edition.
Version: 7.1.405 / Virus Database: 268.12.6/453 - Release Date: 9/20/2006

1794. Re: [SkyWires] Bazooka On 160

Yahoo group: SkyWires
Date: 2006-09-22 03:44:15 UTC
From: budi santoso
Topic: 1780 Message: 1794

help me

please unsubcribe from forum

73, YF1AR

--- Thomas Giella KN4LF <flcyclone@...>
wrote:

> Bob,
>
> I doubt that you stumped anyone on the Topband
> Reflector. Unfortunately the Topband Reflector is
> home to some of the snobbiest elitist's on any
> e-list in amateur radio and probably didn't want to
> waste their time on your query.
>
> There are a couple of different design methods for a
> bazooka antenna and they are all for single band use
> only, no efficient harmonic operation possible. You
> could short the shack end of the coaxial feedline
> and feed the antenna as a current fed tee vertical
> but it will be poor for local or regional night time
> work because of the low take off angle and lack of
> ground radial counterpoise system.
>
> For 160 meter local/regional rag chewing I would
> suggest an end fed 3/8's wave inverted L made out of
> #14 stranded house wire to the single wire binding
> post of your antenna tuner. Using 1900 kc as a
> target frequency the formula for a 3/8's wave
> antenna is 351 versus 468 for a half wave. So 351
> divided by 1900 kc is 184.7 feet. I suggest a 3/8's
> wave length antenna as it get's the highest current
> point on the antenna outside in the air instead of
> inside right at your antenna tuner, so less RFI
> potential. Also a wire longer than a 1/2 wave has a
> higher radiation resistance and therefore is more
> efficient and helps to counteract losses in the
> ground from a poor ground radial counterpoise.
>
> The inverted L configuration will give you high
> angle horizontal signal on the horizontal flat top
> for local and regional rag chewing and a low angle
> vertical signal for DX out to 1000-1500 miles. Make
> the vertical section as long as possible (30-60 ft)

> and you will be very surprised at how well the
> antenna works without a bunch of counterpoise radial
> wires on the ground. You can get by with no ground
> radials but I would suggest one 123 foot one for the
> antenna to push against so to speak.
>
> I have four 160 meter antenna designs published on
> the WWW at www.kn4lf.com . Surf about half way down
> the site for the links.
>
> --... ...--,
> Thomas F. Giella, KN4LF
> Lakeland, FL, USA
> Grid Square EL97AW
> kn4lf@...
>
> KN4LF Amateur & SWL Radio History:
> http://www.kn4lf.com
> Radiowave Propagation Yahoo eGroup:
> http://groups.yahoo.com/group/radiowavepropagation
> New Scientific Evidence for the Existence of God:
>
http://www.cosmicfingerprints.com/audio/newevidence.htm
>
>
> Bazooka for 160?
> Posted by: "AD5VJ Bob" rtnmi@... rtnmi
> Sun Sep 17, 2006 12:50 pm (PST)
> Well I sent this to TopBand Reflector first but no
> one has responded so I guess I stumped 'em.
>
> Hello everyone:
>
> I am in a space limited environment and already have
> a double bazooka tuned for 80 meters that works fine
> on 80 meters. I also have
> a MFJ-949B Tuner and a manual antenna switch. Rig is
> an IC-775.
>
> I have two antennas already going to the MFJ the
> double bazooka and a TitanDX Vertical. Therefore
> both PL-259 connectors are being
> used.
>
> I do have a random wire input to the tuner and a
> balanced wire input that are open at this point.
>
> Does anyone know of a way I can use the Double
> Bazooka tuned for 80 meters (or something) at least
> for stateside work on 160.

>
> I realize that DX would be out of the question
> without, A LOT OF HEIGHT, a Vertical, Loop or
> Beverage, but those are not options for
> me at this point.
>
> My only chance at this point is to somehow use the
> Bazooka for local calls.
>
> Someone somewhere had said something about shorting
> it but if so where and how?
>
> 73 fer nw,
> Bob AD5VJ(AAR6VM)
> http://www.ad5vj.com/
>
>
> > No virus found in this outgoing message.
> Checked by AVG Free Edition.
> Version: 7.1.405 / Virus Database: 268.12.4/449 -
> Release Date: 9/15/2006
>

Do You Yahoo!?
Tired of spam? Yahoo! Mail has the best spam protection around
http://mail.yahoo.com

1795. Kite fest and DB9 help

Yahoo group: SkyWires
Date: 2006-09-22 04:42:05 UTC
From: icra@galaxynet.com
Topic: 1795 Message: 1795

Well....my planned ops at the kite fest this weekend is getting a little bigger than I had planned.....

Forecast at this time is not looking as good as I had hopped for....about 70F and mostly sunny.....not a good sign for kite flying winds around here...

If the wind is good, planning on 2 double extended zepp antennas supported by kites and 1 5 band vert modified to also cover the WARC bands. If winds are not very good, should be able to have a random long wire and the vert.

Rigs known to be available both days are a Kenwood 440sat and Icom IC-735.

Bands should be 20 and 15 for SSB and 30 for digital modes (if I can get this interface soldered up and working right tonight). May try 10, 12, and maybe 40 for SSB.

Known call will be N7OKL. Other calls may also be used....all depends who shows up that has expressed interest. All CQ calls will include Whidbey kite fest.

Now....any one have, or know of a site that has the pin outs for the DB-9 serial port? Thought I had it, but can not find it.....

Mel
N7OKL

1796. Re: [SkyWires] Bazooka On 160

Yahoo group: SkyWires
Date: 2006-09-22 09:43:08 UTC
From: David Shrum
Topic: 1780 Message: 1796

The info is at the bottom of each email you receive from Yahoo groups, I deleted all of the other info and only left the unsubscribe info, if that doesn't work for you, send me an email off of the group and I will see what I can do.
Dave N8PU
aq392@...

budi santoso wrote:
> help me
>
> please unsubcribe from forum
>
> 73, YF1AR
>
>
>
>
>
>

1797. Re: [SkyWires] Kite fest and DB9 help

Yahoo group: SkyWires
Date: 2006-09-22 12:32:59 UTC
From: Dr.Ace Ratliff
Topic: 1795 Message: 1797

Mel,
SEE

http://www.aggsoft.com/rs232-pinout-cable/nullmodem-db9-to-db9.htm

Ace - www.WH2T.com

----- Original Message -----
From: icra@...
To: Live-Wire@yahoogroups.com ; SkyWires@yahoogroups.com
Sent: Thursday, September 21, 2006 11:42 PM
Subject: [SkyWires] Kite fest and DB9 help

Well....my planned ops at the kite fest this weekend is getting a little bigger than I had planned.....

Forecast at this time is not looking as good as I had hopped for....about 70F and mostly sunny.....not a good sign for kite flying winds around here...

If the wind is good, planning on 2 double extended zepp antennas supported by kites and 1 5 band vert modified to also cover the WARC bands. If winds are not very good, should be able to have a random long wire and the vert.

Rigs known to be available both days are a Kenwood 440sat and Icom IC-735.

Bands should be 20 and 15 for SSB and 30 for digital modes (if I can get this interface soldered up and working right tonight). May try 10, 12, and maybe 40 for SSB.

Known call will be N7OKL. Other calls may also be used....all depends who shows up that has expressed interest. All CQ calls will include Whidbey kite fest.

Now....any one have, or know of a site that has the pin outs for the DB-9 serial port? Thought I had it, but can not find it.....

Mel
N7OKL

1798. Re: [SkyWires] Kite fest and DB9 help

Yahoo group: SkyWires
Date: 2006-09-22 13:59:27 UTC
From: Kyle
Topic: 1795 Message: 1798

That link for the null modem is helpful, but a little confusing. For clarity on RS-232 with a DB9:
1) Carrier Detect
2) Receive Data
3) Transmit Data
4) Data Terminal Ready
5) Ground
6) Data Communications Equipment Ready
7) Request To Send
8) Clear To Send
9) Ring Indicator

(http://www.zytrax.com/tech/layer_1/cables/tech_rs232.htm)

Kyle
W4KDA

Dr.Ace Ratliff wrote:
>
>
>
> Mel,
> SEE
>
> http://www.aggsoft.com/rs232-pinout-cable/nullmodem-db9-to-db9.htm
> <http://www.aggsoft.com/rs232-pinout-cable/nullmodem-db9-to-db9.htm>
>
> Ace - www.WH2T.com <http://www.WH2T.com>
> Now....any one have, or know of a site that has the pin outs for the
> DB-9 serial port?
> Thought I had it, but can not find it.....
>
> Mel
> N7OKL

1799. 80 Meter Loop

Yahoo group: SkyWires
Date: 2006-09-23 19:16:32 UTC
From: nn5g
Topic: 424 Message: 1799

I have an 80 meter loop at abt 35'. Has anyone using such a loop had any luck using this antenna on 160 meters..... Tnx Paul NN5G

1800. RE: [SkyWires] 80 Meter Loop

Yahoo group: SkyWires
Date: 2006-09-23 19:37:51 UTC
From: AD5VJ Bob
Topic: 424 Message: 1800

Hi Paul:

I was just reading about the K9AY loop antenna.

You might consider one of those sounds like you have a perfect setup and the wire ect to put one together.

From what I am reading they work better than beverages in many cases.

73 fer nw,
Bob AD5VJ(AAR6VM)
http://www.ad5vj.com/

Member: CTDXCC, NTCC
FISTS: # 12637
10X# 37210, FP#-1141
SMIRK#-5177, RARS #-149

> -----Original Message-----
> From: SkyWires@yahoogroups.com
> [mailto:SkyWires@yahoogroups.com] On Behalf Of nn5g
> Sent: Saturday, September 23, 2006 2:17 PM
> To: SkyWires@yahoogroups.com
> Subject: [SkyWires] 80 Meter Loop
>
> I have an 80 meter loop at abt 35'. Has anyone using such a
> loop had any luck using this antenna on 160 meters..... Tnx Paul NN5G
>
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> Yahoo! Groups Links
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1801. Whidbey kite fest....aaaarrrrrrrrrgggggggggg

Yahoo group: SkyWires
Date: 2006-09-24 04:09:08 UTC
From: icra@galaxynet.com
Topic: 1801 Message: 1801

Well.....Murphy sure had his way with me......

2 hours late leaving due to flat tire.....

No parking near where I was to set up....had to man pack every thing in.......

No help to set up.........finally got the table, rigs, gen, ect set up.....forgot some power cables, soldering iron and a couple other items....now about 2000GMT......

No wind to speak of.....gave up trying to get any wire up with kites......now about 2200GMT

Got the vertical set up....but forgot some parts, so no radials or ground......About 2230GMT......lets see if it will at least tune up........tuner got it to a flat 1:1 on 20...well, some thing is better than nothing....lets see if I can make some contacts.....

Several contacts made (some with repeats....but still got 59 reports...go figure) in Texas, Minnesota, and good old FLA....no CA and that should be easy from here....

Only on for about an hour.....not much air time, but lots of interest from visitors and kite fliers.....several QSTs handed out as well as cards on the local club.....at least some PR.....

Forecast for Sun looks even worse for wind....morning fog and N winds of 5-10 at best in the afternoon......will start right off fixing stuff that went wrong today and just throwing up an inverted V for 30mtr PSK31 and focus on 20 and 15 SSB...

Mel
N7OKL

1802. Whidbey kite fest...last day....planned freqs

Yahoo group: SkyWires
Date: 2006-09-24 15:22:19 UTC
From: icra@galaxynet.com
Topic: 1802 Message: 1802

Well.....last day.....

Look for me on the following freqs:

30mtrs.......10.142 PSK31

20mtrs.......14.285........first half of the hour

15mtrs........21.355.......last half of the hour

With the lack of wind yesterday, and the poor forecast for today, expect to be on the vert for SSB and an inverted V for PSK31.

If we get some wind (HA), will try to fly 1 wire doublet that can be bounced around the bands......do not hold your breath on it.......wish they could hold this thing in about May or July when we have a better chance of good wind

And, running late...as usual.....should be on the air about 1700-1730GMT

Mel
N7OKL

1803. 450 or 600 ohm feedline?

Yahoo group: SkyWires
Date: 2006-09-24 17:37:24 UTC
From: Dave Marling
Topic: 1784 Message: 1803

I posted a note here last week about a file I was getting together about making open wire line. The project is finished, the pictures are taken, and the line is in the air. The Adobe .pdf file has been sent off to VE5RC for proofing. I'm away for the next couple of weeks but as soon as I get back I'll post it to the file section on here.

Dave
VE1VQ/VA6NS

1804. Re: [SkyWires] 80 Meter Loop

Yahoo group: SkyWires
Date: 2006-09-26 19:43:28 UTC
From: Robert Mozulay
Topic: 424 Message: 1804

Hi Paul,

Yes, I use my 80 meter loop on the upper half of 160m.
Its height is about the same as yours.

I cannot tune the loop on the lower half of 160m---I assume
the impedance looking into the transmission line towards the loop on the lower half of 160m
is out of the range of my antenna tuner (Ten Tec L tuner, roller inductor type).

73s,
Bob/WB2UFE

nn5g <byrddawg@...> wrote:
I have an 80 meter loop at abt 35'. Has anyone using such a loop had
any luck using this antenna on 160 meters..... Tnx Paul NN5G

1805. What can go inside the loop

Yahoo group: SkyWires
Date: 2006-09-27 06:47:43 UTC
From: Paul
Topic: 1805 Message: 1805

I'm considering putting up four 40 foot metal masts, guyed with dacron, to support a 40M loop. I don't plan to cut it to a particular length because I don't have a lot of options for mast placement. The loop will probably be about 200 feet.

Underneath the loop, I guess about 4 feet below, I plan to run a 40M windom diagonal, under that, maybe another 4 feet, on the other diagonalon the opposite diagonal, I thought I'd string an extended 20M dipole.

So looking down from the top, it looks like a box with an X in it - except the box and each line of the X are at different heights.

Finally, somewhere inside the loop, I thought I'd put up a 20 foot mast with a Gap Titan on top if it. That would put the top of the titan at 45 feet.

The loop would extend over the house and back yard. the Titan's mast would be attached to the back end of the house so would be about 15 to 20 feet from the loop edges. Not sure about it's proximity to the dipoles.

If I only use one antenna at a time, are there any adverse issues about the close proximity to the various antennas.

If the above seems to ambitious, I could go with just the loop and interior mast/Vertical. Perhaps they will give me all the options I need.

But once I put the masts up, they are pretty much up. So I'm trying to get as much use out of them as I can. Maybe I can just install pullies and haul lines for any future wire.

What do you think?
Thank you for any advice.
73,
Paul

PS: The power company is building a new substation about a quarter mile away.

1806. Re: [SkyWires] What can go inside the loop

Yahoo group: SkyWires
Date: 2006-09-28 03:33:38 UTC
From: Dr.Ace Ratliff
Topic: 1805 Message: 1806

----- Original Message -----
From: Paul
To: SkyWires@yahoogroups.com
Sent: Wednesday, September 27, 2006 1:47 AM
Subject: [SkyWires] What can go inside the loop

I'm considering putting up four 40 foot metal masts, guyed with dacron, to support a 40M loop. I don't plan to cut it to a particular length because I don't have a lot of options for mast placement. The loop will probably be about 200 feet.

Underneath the loop, I guess about 4 feet below, I plan to run a 40M windom diagonal, under that, maybe another 4 feet, on the other diagonalon the opposite diagonal, I thought I'd string an extended 20M dipole.

So looking down from the top, it looks like a box with an X in it - except the box and each line of the X are at different heights.

Finally, somewhere inside the loop, I thought I'd put up a 20 foot mast with a Gap Titan on top if it. That would put the top of the titan at 45 feet.

The loop would extend over the house and back yard. the Titan's mast would be attached to the back end of the house so would be about 15 to 20 feet from the loop edges. Not sure about it's proximity to the dipoles.

If I only use one antenna at a time, are there any adverse issues about the close proximity to the various antennas.

If the above seems to ambitious, I could go with just the loop and interior mast/Vertical. Perhaps they will give me all the options I need.

But once I put the masts up, they are pretty much up. So I'm trying to get as much use out of them as I can. Maybe I can just install pullies and haul lines for any future wire.

What do you think?
Thank you for any advice.
73,
Paul

PS: The power company is building a new substation about a quarter mile away..___

.

Hi Paul,

I was waiting for anyone else to take your question , but I will give you my opinion . It sounds like your loop will be bigger than a full wave for 40 meters. Keep in mind that you can run Dacron or rope etc.. from each support to hang / suspend a smaller loop nearer the middle of the supports .
Almost all of electronics is a compromise is some way or another . By putting other antennas in the loop it will have some affects on pattern , impedance, gain, etc... But I would not be too concerned . If it works use it.
If you want to test the actual effects , put up the loop antenna and then introduce the other antennas one at a time . And you will be able to measure/see the practical implications . I very seriously doubt that the negatives will out way the positives .
Pulleys for future wires is always a good idea .
As far as the power co. substation a 1/4 mile away keep in mind that they are limited to their rf emissions by FCC rules . The ARRL helps members with such matters . My friend W4NTI had problems with his local power Co. that they refused to address. His complaint was rectified !
SEE Below-
Good Luck es 73 Ace - WH2T

January 30, 2002

Mr. Elmer B. Harris, CEO
Alabama Power Company, Inc.
P.O. Box 2641
Birmingham, AL 35291

Dear Mr. Harris:

The Federal Communications Commission has received complaints that equipment operated by your company may be causing harmful radio interference to operators in the Amateur Radio Service. The complainant is:

Daniel L. Jeswald, W4NTI
89 Wildman Road
Anniston, AL 36201

The FCC has the responsibility to require that utility companies rectify such problems within a reasonable time if the interference is caused by faulty power utility equipment. Under FCC rules, most power-line and related equipment is classified as an "incidental radiator." This term is used to describe equipment that does not intentionally generate any radio-frequency energy, but that may create such energy as an incidental part of its intended operation.

To help you better understand your responsibilities under FCC rules, here are the most important rules relating to radio and television interference from incidental radiators:

Title 47, CFR Section 15.5 General conditions of operation.

(b) Operation of an intentional, unintentional, or incidental radiator is subject to the conditions that no harmful interference is caused and that interference must be accepted that may be caused by the operation of an authorized radio station, by another intentional or unintentional radiator, by industrial, scientific and medical (ISM) equipment, or by an

incidental radiator.

(c) The operator of the radio frequency device shall be required to cease operating the device upon notification by a Commission representative that the device is causing harmful interference. Operation shall not resume until the condition causing the harmful interference has been corrected.

Title 47, CFR Section 15.13 Incidental radiators:

Manufacturers of these devices shall employ good engineering practices to minimize the risk of harmful interference.

Title 47, CFR Section 15.15 General technical requirements.

(c) Parties responsible for equipment compliance should note that the limits specified in this part will not prevent harmful interference under all circumstances. Since the operators of Part 15 devices are required to cease operation should harmful interference occur to authorized users of the radio frequency spectrum, the parties responsible for equipment compliance are encouraged to employ the minimum field strength necessary for communications, to provide greater attenuation of unwanted emissions than required by these regulations, and to advise the user as to how to resolve harmful interference problems (for example, see Sec. 15.105(b)).

The complainants have attempted unsuccessfully to work through your usual complaint resolution process and as a result the matter has been referred to our office. The FCC prefers that those responsible for the proper operation of power lines assume their responsibilities fairly. This means that your utility company should locate the source of any interference caused by its equipment and make necessary corrections within a reasonable time.

While the FCC has confidence that most utility companies are able to resolve these issues voluntarily, the FCC wants to make your office aware that this unresolved problem may be a violation of FCC rules and could result in a monetary forfeiture for each occurrence. At this stage, the FCC encourages the parties to resolve this problem without FCC intervention, but if necessary to facilitate resolution, the FCC may investigate possible rules violations and address appropriate remedies.

The American Radio Relay League, a national organization of Amateur Radio operators, may be able to offer help and guidance about radio interference that involves Amateur Radio operators.

American Radio Relay League
Radio Frequency Interference Desk
225 Main Street
Newington, CT 06111
860-594-0200
Email: rfi@...

Please advise the complainant within 30 days of what steps your utility company is taking to correct this reported interference problem. The FCC expects that most cases can be resolved within 90 days of the time they are first reported to the utility company. If you are unable to resolve this within 90 days, please advise this office about the nature of the problem, the steps you are taking to resolve it and the estimated time in which those steps can be accomplished.

If you have any questions about this matter, please contact:

W. Riley Hollingsworth
Special Counsel
Enforcement Bureau, FCC

Thank you for your cooperation.

Sincerely,

Jack Forsythe, Chief
Consumer Information Network Division
Consumer Information Bureau

1807. is this possible? an all band, tuned dipole??

Yahoo group: SkyWires
Date: 2006-09-30 03:34:56 UTC
From: chasm@texas.net
Topic: 1784 Message: 1807

Is it possible to put up a dipole of about 120', with ladder line coming from the centerpoint, and it be a resonant wire from 3.5 to 30mhz, no more than 2:1 swr or less? iow, an all band or broadband, tuned wire capable of a legal limit input??

we have a fellow on the net running a 170' wire with a center at ~60ft and the ends at >20'. This is the best signal in the state. but it requires 100ft of ladderline and a tuner. I would like to get it shorter as in a max of 115' and have a matching network in the center which would handle a kilowatt and be flat across the HF bands. continuous, all band coverage and no, not a folded dipole. but it would have the characteristics of a BWD-90.

I want to put this up flat at about 50' here in Houston.

thanks/chas
k5dam

...

1808. Re: [SkyWires] is this possible? an all band, tuned dipole??

Yahoo group: SkyWires
Date: 2006-09-30 08:32:25 UTC
From: vince werber
Topic: 1784 Message: 1808

Hi there!

Sure is possible as I've been doing it since I was a Novice but you will need a good antenna tuner...

I use 130 feet feed with home made ladder line spaced 3 or so inches... I use an old Johnson Match box for 80 - 10 and home made tuners for 6 and two meters... works quite well and I seldom see an SWR greater than 1.5 to 1... generally it is so low that my old Knight kit SWR meters can't even read it...

But don't get the idea that because you might have a low SWR that things are working hunky dore... sometimes it isn't that easy...

Try it out as I am sure once you get it set up you will be more than happy with it...

73
vince
ka1iic

On Saturday 30 September 2006 03:34 am, chasm@... wrote:
> Is it possible to put up a dipole of about 120', with ladder line coming
> from the centerpoint, and it be a resonant wire from 3.5 to 30mhz, no more
> than 2:1 swr or less? iow, an all band or broadband, tuned wire capable of
> a legal limit input??
>
> we have a fellow on the net running a 170' wire with a center at ~60ft and
> the ends at >20'. This is the best signal in the state. but it requires
> 100ft of ladderline and a tuner. I would like to get it shorter as in a
> max of 115' and have a matching network in the center which would handle a
> kilowatt and be flat across the HF bands. continuous, all band coverage and
> no, not a folded dipole. but it would have the characteristics of a BWD-90.
>
> I want to put this up flat at about 50' here in Houston.
>
> thanks/chas
> k5dam
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> Yahoo! Groups Links

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1809. Re: [SkyWires] is this possible? an all band, tuned dipole??

Yahoo group: SkyWires
Date: 2006-09-30 19:28:47 UTC
From: chasm@texas.net
Topic: 1784 Message: 1809

On Sat, 30 Sep 2006 08:32:25 +0000, vince werber <ka1iic@...> wrote:

>
>Sure is possible as I've been doing it since I was a Novice but you will need
>a good antenna tuner...

I don't suppose I clarified the specific points

1. about 115' and a single wire
2. balanced line/antenna
3. NOT require a tuner
4. essentially imitate a closed loop dipole as in BWD-90/T2DF
5. swr on all bands to be less than 2:1, capable of 500W
6. ALL HF bands 3-28 mcy at least, tuner above that perhaps.

is it possible to do this ?

The reason for this antenna

1. light weight
2. suspension at 50' flat topped, survive 90mph
3. capable of ALE/HF Digital modes -- iow, NO TUNING

apparently, it will need a "matching network" whatever that is, to eliminate
the tuner..

there are at least a couple of dipoles which will do what I want but they are
heavy, not enough wire in the sky, etc. one example is the Cobra, another is
the ubiquitous T2FD/Barker and Williamson embassy antenna which we used to see
on the roofs of most Texas DPS Regional HQ.

thanks

73/chas
--
K5DAM Houston EL29fu AAR6TU
chasm@...
http://tinyurl.com/df55x (BPL powerpt Presentation)
http://tinyurl.com/qzkat (BPL movie... ARRL)

1810. Re: [SkyWires] is this possible? an all band, tuned dipole??

Yahoo group: SkyWires
Date: 2006-10-01 13:43:40 UTC
From: Andy
Topic: 1784 Message: 1810

When you say 3-28 MHz, and "continuous," you are implying this is not a ham-band antenna, you want it to work on frequencies in between the ham bands too. Is that right?

If so, the simplest way to do it is with a dummy load. But then of course you won't be getting out! At least not very well.

For a tuner-less antenna, you could try designs like the T2FD (B&W etc.) which use resistors that dissipate varying amounts of power, and keep the SWR reasonably low over a wide frequency range. Just be aware that your efficiency won't be top notch. Some swear by them, others swear at them. The government seems to like them, probably because they don't require tuning, and their frequencies aren't harmonically related like the ham bands are.

If all you need are ham bands, there are alternatives. Ham bands are easier because symmetrical dipoles automagically work on odd harmonics too.

> 3. capable of ALE/HF Digital modes -- iow, NO TUNING

While partly true, you don't need an HF antenna to be matched or tuned when receiving (and in fact some antenna tuners bypass when not transmitting), you only need it matched for transmitting; and you can get auto tuners with memory that will match within milliseconds after starting transmitting, which works pretty well for ALE. Don't count it out.

> apparently, it will need a "matching network" whatever that is, to
> eliminate
> the tuner..

They are the same thing. (Though some might argue that one is used at the antenna feed point and the other at the rig end of your feedline.)

It's just that we've gotten accustomed to those antenna auto-tuners, that we forget it used to be commonplace to use a fixed-tuned network that would match an antenna (that wasn't already a good match) to a feedline. Now we let the auto-tuner take care of it. They do the same thing, except one is manually tuned (or fixed tuned), the other is automatic.

Regards,
Andy

1811. Re: [SkyWires] is this possible? an all band, tuned dipole??

Yahoo group: SkyWires
Date: 2006-10-04 05:04:38 UTC
From: Jim Dunstan
Topic: 1784 Message: 1811

At 10:34 PM 29/09/2006 -0500, you wrote:

>Is it possible to put up a dipole of about 120', with ladder line coming from
>the centerpoint, and it be a resonant wire from 3.5 to 30mhz, no more than
>2:1 swr or less? iow, an all band or broadband, tuned wire capable of a legal
>limit input

Yes, a dipole of any length fed by ladder line of any length can be fed power at any frequency between 3.5 and 30 Mhz and be matched to the transmitter with an appropriate antenna tuner. However, you will be operating on set Amateur frequencies and certain combinations produce favorable impedances on most Amateur bands .... but not all. If you Google Cebik you will find he has run some computer simulations of different combinations that work well on the Amateur bands.

This is a very effective all band antenna .... but don't confuse it with a broadband antenna ... it is not broadband ... as you change frequencies the impedance at the radio end of the feed line changes dramatically and a tuner must be used to match it to the radio input.

>we have a fellow on the net running a 170' wire with a center at ~60ft and the
>ends at >20'. This is the best signal in the state. but it requires 100ft
>of ladderline and a tuner.

As you describe this fellow's antenna it is an example of a tuned dipole antenna system.

>I would like to get it shorter as in a max of 115'
>and have a matching network in the center which would handle a kilowatt and be
>flat across the HF bands. continuous, all band coverage and no, not a folded
>dipole. but it would have the characteristics of a BWD-90.

Here, it sounds like you are talking about a different antenna system .... with a matching system at the center of the antenna. I am not sure what you mean by a matching system .... do you mean an automatic antenna tuner? What you are describing sounds more like a Terminated Folded Dipole (I know you don't want to hear 'folded dipole') ..... Cebik who I mentioned above has also modeled this antenna and he has an article on the internet on the subject. All of these "broadband" antennas are forms of terminated travelling wave antennas. The matching network you mention is simply a resistor (carbon ... non wire-wound) fed by lengths of wire in various configurations and often with a RF transformer to match the input impedance of the radio to the value of the resistor. In these antennas a large portion of the RF power is consumed in heat by the resistor and some in the travelling wave feed wire (which is radiated). If you want to run high power you need a resistor that can absorb the high power.

Years ago there was a manufacturer of a magic dipole that could be any length and produced a 1:1 SWR across all the HF bands. They provided a sealed "matching" network that you simply placed at the center of your dipole and fed it with coax cable. QST did an expose of the device (by breaking it open) and found it simply contained a 50 ohm resistor ..... it was a dummy load with connectors for wire. It radiated, but most of the energy was absorbed by the resistor.

True travelling wave antennas although terminated in a resistor are not as inefficient as the hoax example above .... but to be sure at least 50% of the power is absorbed by heat. To be effective travelling wave antennas are usually quite long. The advantage of these antennas is that they are quite broad banded, they can be fed by coax, and some of them exhibit gain due to their radiation pattern ...

Some of the configurations of the travelling wave antenna are the (folded) dipole version as in the BW, Inverted Vee with each end terminated to ground (see the Ten Tec site), The Rhombic .... a horizontal loop like antenna .... there are other types but used primarily for reception rather than transmitting .... such as the Beverage and K9AY loop.

I don't mean to be obstinate, but these broadband antennas are not 'tuned' .... The reason the antenna is 'terminated' in a fixed carbon resistor is to avoid resonance and the need for tuning. The RF travels along the wire to the terminating resistor and creates travelling RF waves (thus they are called travelling wave antennas). The B&W antenna is the only travelling wave antenna commercially available in a dipole configuration. If you are interested in building such an antenna I recommend looking at the Cebik site online .... he has modeled all the wire dimensions and the values of terminating resistor and impedance of the coupling transformer.

Jim, VE3CI

1812. Re: [SkyWires] is this possible? an all band, tuned dipole??

Yahoo group: SkyWires
Date: 2006-10-04 06:48:11 UTC
From: chasm@texas.net
Topic: 1784 Message: 1812

On Wed, 04 Oct 2006 01:04:38 -0400, Jim Dunstan <jdunstan@...> wrote:

>f you are
>interested in building such an antenna I recommend looking at the Cebik
>site online .... he has modeled all the wire dimensions and the values of
>terminating resistor and impedance of the coupling transformer.
>
>Jim, VE3CI

thank you jim
I have just recovered from a hdd failure and one of the few elists I regret losing are those posted here between the 13thSept and 4 Oct.

the one on the Bushcom was very good but I do not have it however, I can go to archives and download all of the stuff that is missing.

thanks again, this is all very much a learning experience.
73/chas
--
K5DAM Houston EL29fu AAR6TU
http://tinyurl.com/df55x (BPL Presentation)

1813. Re: [SkyWires] is this possible? an all band, tuned dipole??

Yahoo group: SkyWires
Date: 2006-10-04 15:02:46 UTC
From: erik@n0ew.org
Topic: 1784 Message: 1813

Hi Chas,

The simple answer is "no".

While you can receive (RX) wide-band (in this case 30 through 3.5 MHz) without too much trouble, you can not do the same while transmitting (TX) into anything other than a dummy load.

To expand on the thought....

First, even on RX you will find better performance from a tuned antenna. By tuned I mean some type of impedance matching network is being used in between the antenna and the transceiver (XCVR).

As another poster noted, this impedance matching network can take a number of different forms. A transmatch (antenna tuner) is most common for those occasions when band-hoping is desired.

If you are working a fixed frequency actually cutting or lengthening one or more of the antenna's elements (wires/pipes/etc) is common.

Other common impedance matches are accomplished by adding fixed or variable coils and capacitors at the antenna feed point.

But they all perform the same function: they eliminate reactance (which is resistance to alternating current, and either capacitive (electrostatic) or inductive (magnetic)), and then match the resulting purely resistive load value to the XCVR's output.

Since on RX you are not TX-ing (by definition) you can not damage your radio by listening out-of-band, so to speak. You may not hear as many faint and/or distant stations without tuning your RX-antenna, but you won't damage anything either. (Barring lightning or other giant sudden inputs.)

This is not always true when transmitting.

I can't explain the physics of reflective waves and the resulting heat build-up inside the transmitter, but I can tell you what you likely already know. If you transmit into a significant impedance miss-match you can damage your transmitter.

I do know (read "Reflections II" by Maxwell w2du) that poor swr isn't what damages the transmitter, it is the internal reaction of the transmitter (inside the transmitter, separate from the reflected wave that causes the poor swr) that causes the finals to blow. A fine point however when your XCVR is smoking on your desk!

It's like saying it isn't the engine that caused the drive shaft to twist apart, but that the drive shaft wasn't able to withstand that much torche, that caused it to twist apart. Either way, your done!

So, to answer your original question, you will need some type of impedance matching network, unless you use a dummy load.

As you know, a dummy load presents an essentially zero reactance (j0 Ohms) load to a wide range of input frequencies. In other words, a dummy load is close to a pure resistance, at the transmitters output impedance (typically 50-Ohms, j0-Ohms). But it doesn't radiate the RF very well, so it makes a poor antenna. Strike that from the list!

What remains is the host of transmitting antennas.

I don't recall if you discussed the height at which you plan to mount your antenna. If it is less than 25% of a full wavelength (WL), it is a NVIS antenna (as most of us have, at least on the longer bands).

For anyone new reading this, that formula is:

Height =~ 300 / MHz * 3.3 = Feet * 0.25

where, "Feet" is the full length of one wave at that frequency. To find x% multiply by the needed %. In my example I wanted to find how long 1/4 of the full wavelength was so I multiplied by 0.25 (the same as dividing by 4).

For example (in the phone portions):

20-Meters: 300 / 14.225 MHz * 3.3 * 0.25 = 16.9 feet;

40-Meters: 300 / 7.225 MHz * 3.3 * 0.25 = 34.3 feet;

80-Meters: 300 / 3.85 MHz * 3.3 * 0.25 = 64.3 feet;

The reason I bring this up is that you will be able to use two antennas at right angles to one another at these lower heights and not have much detrimental affects due to height. Another way of saying that, is there will be so much ground-clutter at these lower heights that you can cross a couple antennas without really adding any noticeable negative affects, hehehe....

You may find crossing two dipoles in your lot allows you to obtain a better match for any given frequency. Something to consider anyway.

I'd expect a transmatch of one type or another would be the best impedance matching network to use. It is the most flexible, meaning it'll match a greater range of possible impedance differences between your antenna system and the XCVR.

Most popular for manual transmatches is the T-network (C-L-C layout) but the pi-network also has a wide matching range, and some people really like those. I've only used the C-L-C design myself, so I have no opinion to offer on the pi.

Or you can buy an auto-tuner. You can also find transmatches designed specifically for use with balanced-wire feed lines too. (Open wire/ parallel wire/ balanced wire/ ladder line/ twin-lead/ window wire/ they are all the same basic type of transmission line.)

You can also achieve an impedance match by altering the length of your transmission line. This is the most bulky to use in my opinion, but it'll work. One thing many people do is keep one or more alternate lengths of transmission line around to switch in/out before entering the transmatch (either coax or ladder line may be used, but coax is easier to work with in terms of being able to pile it up anywhere - ladder line requires separation between the various bits of line to allow them to remain balanced, which is why they have such low loss (no closer to anything than one width of the space between the wires, and several such widths is even better)).

Speaking of transmission line.... so long as you use open wire of some kind your transmission line loss will likely be so low you won't have to worry about it at all. Open wire line is very nice for both long runs or operating at high swr.

With high swr it isn't that the RF isn't getting out your antenna. It is. The RF will reflect, re-reflect, and re-re-reflect ad nauseam until it gets out the antenna and into the atmosphere. That isn't the problem. The problem with high swr (other than potential transmitter damage) is the loss inside the transmission line. Since open wire has very little loss, this isn't a concern. If however, you are using coax this needs to be considered. It may be a problem or not, but you need to put a pencil to it anyway.

Imagine the RF bouncing between the antenna and the transmitter, back-and-forth, back-and-forth. If only 0.001% of RF is lost each trip, who cares? But if 5% or 10% is lost each trip you can see how that can much more quickly add up to a large loss after just a few trips back-and-forth. That is the loss issue with high swr and lossy transmission line. High swr means many bounces back-and-forth and lossy transmission line means a lot of RF is converted into heat along the way and is no longer available to radiate as the RF energy we desire.

Short runs (under 50-feet) and very low swr (under 1.5:1) shouldn't normally cause too much RF loss. As you begin to get over 2:1 swr or over 100-feet long runs of coax you need to be increasingly concerned about the losses.

So there you go!

Hehehehhe, we all always have an opinion, and leave it up to you to decide!

Have fun playing with your antenna system!

Erik n0ew

1814. Re: [SkyWires] is this possible? an all band, tuned dipole??

Yahoo group: SkyWires
Date: 2006-10-04 15:45:00 UTC
From: Andy
Topic: 1784 Message: 1814

Lots of excellent advice in Erik (N0EW)'s message.

But I do disagree with some points:

> With high swr it isn't that the RF isn't getting out your antenna. It
> is. The RF will reflect, re-reflect, and re-re-reflect ad nauseam
> until it gets out the antenna and into the atmosphere. That isn't the
> problem. The problem with high swr (other than potential transmitter
> damage) is the loss inside the transmission line.

Well ... that isn't entirely true. The power initially reaches the antenna, but it reflects back and probably gets either absorbed back into the transmitter, or is purely reactive power and doesn't really go anywhere (though some also gets re-reflected back). It is quite true that there is more loss in the feedline. But it isn't true that all of the remaining power eventually gets radiated.

Simply because of the fact that there is an impedance mismatch (from the impedance that the transmitter wants to see), means not all of the available power gets into the antenna from which it can radiate.

An SWR of close to infinity will be radiating very little power. Some of the rest heats the feedline, but by no means is it all of the rest.

Regards,
Andy

1815. Re: [SkyWires] is this possible? an all band, tuned dipole??

Yahoo group: SkyWires
Date: 2006-10-04 16:58:51 UTC
From: chasm@texas.net
Topic: 1784 Message: 1815

On Wed, 04 Oct 2006 10:02:46 -0500, erik@... wrote:

>
>The simple answer is "no".
>
>While you can receive (RX) wide-band (in this case 30 through 3.5 MHz)
>without too much trouble, you can not do the same while transmitting
>(TX) into anything other than a dummy load.
>
>To expand on the thought....
>
>First, even on RX you will find better performance from a tuned
>antenna. By tuned I mean some type of impedance matching network is
>being used in between the antenna and the transceiver (XCVR).
>
>As another poster noted, this impedance matching network can take a
>number of different forms. A transmatch (antenna tuner) is most common
>for those occasions when band-hoping is desired.

thanks for your input.

ok, now if I am going to be using an autotuner with an unbalanced antenna or mess of antennas, it seems to me that it needs to go between the amplifier and the antenna? or does the wattmeter/SWR need to go bettween the amp and the tuner? I am using an 811 (Ameritron) and mostly on 75 and 40 meters (MARS).

the primary antenna is my Alfadelta DX-CC at 40' with 25' ends. the length has been tuned to 4.1mcy where flat SWR is very narrow. for 40m, the harmonic seems to be about the 7.2s with equally flat SWR.

so, what kind of AT do I want which will tolerate about 500W ???
and, what is the proper sequence coming out of the amp for the AT and Wattmeter?

it is amazing how much more I learn from the elmers here than I can from all the ARRL library!! and I first started my licensing when I was about 10yo in the early 1950s hi hi

thanks
73/chas
--
K5DAM Houston EL29fu AAR6TU
http://tinyurl.com/df55x (BPL Presentation)

1816. Re: [SkyWires] is this possible? an all band, tuned dipole??

Yahoo group: SkyWires
Date: 2006-10-04 18:17:32 UTC
From: erik@n0ew.org
Topic: 1784 Message: 1816

Well Andy... we'll just have to agree to disagree. This a commonly misunderstood topic. I suggest "Reflections II" by W. Maxwell w2du. Very informative, although it requires more than one reading to 'get it' (that was my experience, and I don't claim to remember all of it yet! I need yet another reading!!!).

More below for those interested....
-Erik n0ew

> Lots of excellent advice in Erik (N0EW)'s message.
>
> But I do disagree with some points:
>
>> With high swr it isn't that the RF isn't getting out your antenna. It
>> is. The RF will reflect, re-reflect, and re-re-reflect ad nauseam
>> until it gets out the antenna and into the atmosphere. That isn't the
>> problem. The problem with high swr (other than potential transmitter
>> damage) is the loss inside the transmission line.
>
> Well ... that isn't entirely true. The power initially reaches the antenna,
> but it reflects back and probably gets either absorbed back into the
> transmitter, or is purely reactive power and doesn't really go anywhere
> (though some also gets re-reflected back). It is quite true that there
> is more loss in the feedline. But it isn't true that all of the remaining
> power eventually gets radiated.

I may not have given reactance a full measure of discussion. If it isn't eliminated from the antenna system, it will create an 'eddy' in the current, so to speak. Reactive power is lost to us as effective radiating RF. It gets caught up in a repetitive loop, doing no useful work for us.

But all power not lost as heat does radiate from the antenna, unless caught in a reactance loop. Conservation of energy tells us all energy does something. It must. RF becomes heat. RF is caught in a reactive loop. Or.... what is left? I can only think of radiation.

Reflected power is re-reflected from the XCVR (or transmatch, if used). No power is re-absorbed by the transmitter. That isn't why a transmitter is damaged under high swr, but it is the common view. It is the transmitter's reaction to being unable to properly load into the antenna system that in turn causes the damage to the transmitter. It is a subtle, but true, difference.

I will admit that the subtle difference doesn't hold much meaning to a person looking at a smoking XCVR that no longer works!

I can't fully verbalize it. Read "Reflections II" or some of the electrical engineers reports (IEE?) that I can't possibly recall where I came across.

> Simply because of the fact that there is an impedance mismatch (from the
> impedance that the transmitter wants to see), means not all of the available
> power gets into the antenna from which it can radiate.

In a word: yes.

Anytime an impedance mismatch is present not all power can be transmitted from one point to the next. What we amateurs think of as "impedance" can be thought of as a measure of the effectiveness of matching a source to a load. Or we can think of it as how much of the RF will get by the terminal, and how much is lost in the crossing (I'm watching a herd crossing the river, and seeing some lost to croc's, hehehe!)

Any time the impedance between the source and the load differs, we suffer an inefficiency in transmitting power across that junction, or node.

Now a load need not be the final destination. There are impedance changes at many points between the transmitter and the antenna. In a common amateur radio station's set up, many of us have a XCVR -> Coax -> Transmatch -> Feedline -> Antenna. There may be a balun in there too, which adds another component and length of feedline. At each junction (a point of transmission across the different materials) there is possibly (likely actually) a mismatch in impedance. It may a large or small mismatch in impedance.

We often use a transmatch to take all these lump-sum impedance changes as seen at the output of the transmatch (antenna tuner in common parlance) to be set equal to the transmatches input impedance, after off-setting any present reactance. The typical input impedance (from the XCVR to the transmatch) is a nominal 50-Ohms with little to zero reactance, and typical coax is a nominal 52-Ohms.

Not much difference so far. Maybe 2-Ohms, and some very small amount of reactance. These are just nominal values and may be off a little either way, so maybe they nearly offset each other (becoming a closer impedance match) or maybe they are both off in the same direction. In any event, given good materials and properly operating equipment, nearly no difference so far....

This is why the impedance change between the XCVR and transmatch's input is very small. Between the transmatches output terminal and the end-point (our (hopefully!) radiating antenna wire) there can be many difference impedance encountered.

Once the transmatch is properly adjusted, reactance is off-set (if -j 300 Ohms were presented to the transmatch, it'll inject + j 300 Ohms, leaving a net of j0 Ohms, or zero reactance (strictly speaking, it is

likely some small amount of reactance will remain, but be of quite small magnitude, so we say it is gone, because for any noticeable difference to us, it is gone)).

The remaining pure resistance difference is adjusted in such a way as when the reflected wave is re-reflected from the transmatches output terminal (no reflected wave reaches the XCVR) through the transmission line to the antenna feed point, it will now equal the antenna's impedance, and because the re-reflected wave's impedance matches the antenna's feed point impedance, the energy is absorbed by the antenna (the load) and then radiated into the atmosphere.

So while the adjustments happen simultaneously, we can construct a mental image showing a two-step process inside the transmatch. It brings the reactance to near-zero, and it alters the remaining purely resistive portion of the energy in such a way that the antenna will enjoy a well-matched impedance at it's feed point.

However, if we don't use an impedance matching network (I almost always use a transmatch if there is much of a mismatch, but there are other options), that reflected wave still re-reflects off the transmitter's output terminal. It still doesn't enter the transceiver. The XCVR is still damaged by it's own internal struggle to load into an impedance mismatched to it's designed generator's impedance (in our case the generator is the transmitted RF).

So the reflected wave becomes a re-reflected wave. Some of the energy in the second trip is again lost as heat. Some of this 2nd wave enters the antenna. Some of the 2nd wave is re-re-reflected back toward the XCVR.

As the second wave, the re-re-reflected wave, hits the XCVR, it becomes the third forward wave. This is the ad nauseam cycle. (We should remember there are additional initial forward waves being newly created as the earlier waves reflect and re-reflect. This takes place to make the issue more complex to reason out - just joking!)

So, if you isolate one instant of forward wave and watch it batter itself back-and-forth, ultimately one of three things happens to each mote of energy: (1) it is converted from RF into heat; (2) it is caught in a reactance loop and endlessly cycles back-and-forth in it's own little 'eddy' in the alternating current, doing essentially nothing; or (3) it is radiated from the antenna into the atmosphere.

I'll have to think more about the infinite swr question.... Off-hand I'd say it'd be important to know why it is infinite.

If due to reactance, then I'd say very little radiation can be expected because nearly all the energy is caught up in that repeating loop in which it does no useful work (no radiating RF). If due to a resistive mismatch, I'd expect the RF to radiate eventually because it is bouncing back and forth along the entire path. Each time some of it

will get radiated by the antenna, even if only a tiny fraction, so ultimately escape into the atmosphere. Of course, the XCVR may soon blow up. Also, we'd need to compare the tiny amount radiating to the amount lost as heat. It may be a much more efficient heater than a radiating element, so in that case, even if given a pure resistive and infinite swr, we might expect very little RF radiation. Sorta like a space heater!

Hmmmmm.... OK. I'll go with that. Infinite swr results is no measurable RF radiation, as the RF energy is either caught up in an endless reactive loop, or radiates fully as heat.

Or we blow up the XCVR and don't have to worry about those pesky motes of RF trying to trick us anymore, so there!!!

73-Erik n0ew

1817. Re: [SkyWires] is this possible? an all band, tuned dipole??

Yahoo group: SkyWires
Date: 2006-10-04 18:31:18 UTC
From: erik@n0ew.org
Topic: 1784 Message: 1817

> ok, now if I am going to be using an autotuner with an unbalanced antenna or
> mess of antennas, it seems to me that it needs to go between the
> amplifier and
> the antenna? or does the wattmeter/SWR need to go bettween the amp and the
> tuner? I am using an 811 (Ameritron) and mostly on 75 and 40 meters (MARS).

Hi Chas,

I'll stay out of this! I have a couple amps but have not yet put them
on the air. I'd expect anything rated for the amps output can go in
any position, and anything rated less than the amp needs to be between
the XCVR and the amp. But that is only an uninformed guess.

> it is amazing how much more I learn from the elmers here than I can from all
> the ARRL library!! and I first started my licensing when I was
> about 10yo in
> the early 1950s hi hi
> 73/chas

OMG! Don't get me started! The ARRL causes at least as many
misunderstandings as it helps to solve. I still buy ARRL literature,
but I don't expect to actually learn anything. Just disconnected or
incomplete bits, some of which I know from experience will be wrong.
It is up to the reader to determine the truth from the distorted or
outright wrong. Tough going if you are still trying to learn that topic!

I think of all ARRL materials as just one bit of resource material.
Treat it like a research paper. Starting out you don't know what is
true. You can only hope to figure it out either by eventually learning
the topic or by finding enough thought-to-be reliable source to form a
consensus.

Good luck!
Erik n0ew

1818. SWR mis-match...or...where does the power go.....

Yahoo group: SkyWires
Date: 2006-10-04 18:53:19 UTC
From: icra@galaxynet.com
Topic: 1784 Message: 1818

Eirik, et al....

From what I have seen, this is one of the great debates in the RF world.....

Am I going to chime in on it......no......it is a great mystery to me......

I do hope to see some of those with greater knowledge than me chime in on this....and hope that it is done in a manner that I can at least pick up a few bit of knowledge....

Just, please, I beg everyone, keep it civil....at least more than I am able when an issue I feel strongly about pops up on a list. It is very hard to keep emotion out of it....at least for me. You would be shocked at the hundreds of replies I draft that never get sent due to emotions coloring my reply......

One 'authority' (quotes used because there are some that disagree with pretty much every thing he says and refuse to grant him the title) that I have learned useful (for me) info from is Kurt Sterba...he writes the Aerials column for World Radio.

I will admit there are lots of time I see info put out on this issue that makes me scratch my head as it is totally opposite from what I thought I knew....not that they are wrong, just out from 'common knowledge'.....and often give good supporting arguments that I can understand and learn from.....

I hope to see some good discussion now that I can learn from.....

Mel
N7OKL

1819. Re: [SkyWires] is this possible? an all band, tuned dipole??

Yahoo group: SkyWires
Date: 2006-10-04 20:30:37 UTC
From: Dr.Ace Ratliff
Topic: 1784 Message: 1819

----- Original Message -----
From: chasm@...
To: SkyWires@yahoogroups.com
Sent: Wednesday, October 04, 2006 11:58 AM
Subject: Re: [SkyWires] is this possible? an all band, tuned dipole??

ok, now if I am going to be using an autotuner with an unbalanced antenna or
mess of antennas, it seems to me that it needs to go between the amplifier and
the antenna? or does the wattmeter/SWR need to go bettween the amp and the
tuner? I am using an 811 (Ameritron) and mostly on 75 and 40 meters (MARS).

the primary antenna is my Alfadelta DX-CC at 40' with 25' ends. the length
has been tuned to 4.1mc where flat SWR is very narrow. for 40m, the harmonic
seems to be about the 7.2s with equally flat SWR.

so, what kind of AT do I want which will tolerate about 500W ???
and, what is the proper sequence coming out of the amp for the AT and
Wattmeter?

it is amazing how much more I learn from the elmers here than I can from all
the ARRL library!! and I first started my licensing when I was about 10yo in
the early 1950s hi hi

thanks
73/chas
--
K5DAM Houston EL29fu AAR6TU
http://tinyurl.com/df55x (BPL Presentation)_

.

Hi Chas,
The antenna tuner goes between the amplifier and
the antenna . The antenna tuner should be the last item in line to the antenna .
The order should be Radio , Amp , Pwr/SWR Meter , antenna tuner .

You can get a good used antenna tuner on eBay .
A big factor is if you plan to use coax or balanced feedline !
I use a MFJ 989C and also a Murch Electronics Model UT-2000B.
The MFJ 989C will handle 1500 watts on 75/80 mtrs but only about 900 watts on 160 mtrs .

Many commercial tuners are very unbalanced on the "balanced" line
output.
Outside of the Johnson Matchbox series link coupled tuners (perfect
output balance) the only commercial tuner I know of with very good
balanced output (at least on 160 and 80M)is the Murch UT-2000B with
factory triple core balun.

FYI - Murch Info
The 2000A is 80 - 10 meters only.

The 2000B is 160 - 10 meters with a reflected power meter built in.

Based on Lew McCoy's ultimate transmatch design of the early 1970's, this tuner will tune just about anything.

Rated at a conservative 2000 watts and tunes all frequencies between 3.5 and 30 MHz, Coax or long wire.

One of the best high power tuners made. Roller inductor turns counter makes for easy re-setability.

Great for use with a G5RV, Carolina Windom or other coax fed multi-band antennas.

Here are some pricey antenna tuners

The Nye Viking MB-II Antenna tuner will handle 3KW into loads from 40 to 2000 ohms. Frequency range from 1.5 MHz to 30 MHz.

3KW capability.

Nye Viking MB-V-A Antenna Tuner Frequency Range: 1.8 to 30 MHz continuous (160 to 10 meters)*

*1.8 MHz will not tune on some antennas.

Drake MN-2000 10-80 Only NO meter 160 Coverage

Good Luck and very 73, Ace - www.WH2T.com

1820. Re: [SkyWires] SWR mis-match...or...where does the power go.....

Yahoo group: SkyWires
Date: 2006-10-04 20:35:31 UTC
From: Dr.Ace Ratliff
Topic: 1784 Message: 1820

Mel,
Kurt N. Sterba is a wonderful source of practical knowledge about RF and Aerials . He advocates if it works use it . It's hard to argue with success . Just my opinion . 73 all , Ace WH2T

----- Original Message -----
From: icra@...
To: SkyWires@yahoogroups.com
Sent: Wednesday, October 04, 2006 1:53 PM
Subject: [SkyWires] SWR mis-match...or...where does the power go.....

Eirik, et al....

>From what I have seen, this is one of the great debates in the RF world.....

Am I going to chime in on it......no......it is a great mystery to me......

I do hope to see some of those with greater knowledge than me chime in on this....and hope that it is done in a manner that I can at least pick up a few bit of knowledge....

Just, please, I beg everyone, keep it civil....at least more than I am able when an issue I feel strongly about pops up on a list. It is very hard to keep emotion out of it....at least for me. You would be shocked at the hundreds of replies I draft that never get sent due to emotions coloring my reply......

One 'authority' (quotes used because there are some that disagree with pretty much every thing he says and refuse to grant him the title) that I have learned useful (for me) info from is Kurt Sterba...he writes the Aerials column for World Radio.

I will admit there are lots of time I see info put out on this issue that makes me scratch my head as it is totally opposite from what I thought I knew....not that they are wrong, just out from 'common knowledge'.....and often give good supporting arguments that I can understand and learn from.....

I hope to see some good discussion now that I can learn from.....

Mel
N7OKL

1821. Easy to use antenna tuner for under 500W?

Yahoo group: SkyWires
Date: 2006-10-04 19:49:41 UTC
From: icra@galaxynet.com
Topic: 1784 Message: 1821

Looking for recommended antenna tuners that cover 160-10 (including WARC bands and 60mtrs), is easy to use, and is cheap.....max power I am able to use is about 200-300W and current rigs max out under that range (too many people living too close to use higher power within RF exposure levels).

Current tuners on hand:

Kenwood AT-180....very nice, easy to use, 160-10 but no WARC or 60mtrs, poor bal output (not that I use bal line much), built in antenna switch (2 coax, 1 'bal' line and dummy load), built in SWR/power meter.....Does not match a very wide range of antennas.....really only good if it is close to begin with.....at least not for me

Heathkit SA-2040....Full legal power, matches very wide range of antennas, good bal output (from what I can tell).....but....no antenna switch....limited to 1 antenna at a time (coax or single wire or bal line if you move a shorting bar on the back) and very hard to use (for me)....never gotten it to match any thing...mostly due to operator error....going to trade it for some thing easier to use and all ham band coverage.....why I am asking for input.....

Your thoughts?

Mel
N7OKL

1822. Tuners for 500W dipoles for MARS freqs

Yahoo group: SkyWires
Date: 2006-10-04 21:53:29 UTC
From: chasm@texas.net
Topic: 1784 Message: 1822

On Wed, 4 Oct 2006 15:30:37 -0500, "Dr.Ace Ratliff" <wh2t@...>
wrote:

>
>The 2000B is 160 - 10 meters with a reflected power meter built in.

thanks Ace

obviously this is not an auto tuner so,
when it is in its position between the amp and the antenna, with the
SWR/WATTmeter between it and the amp ---

how do you tune the Murch 2000B (the "B" just for its meter??) ?
again, I have NO interest in 160m... I am primarily into MARS freqs on 75 and
40m. using dipoles, mostly unbalanced but I do plan to put up a long (120'+)
wire at 60' flat topped with ladder line feed. will be running an antenna
switch behind the tuner with one lead into a 600W air load resistor

thanks
73/chas
--
K5DAM Houston EL29fu AAR6TU
http://tinyurl.com/df55x (BPL Presentation)

1823. Re: [SkyWires] is this possible? an all band, tuned dipole??

Yahoo group: SkyWires
Date: 2006-10-04 21:54:37 UTC
From: larry allen
Topic: 1784 Message: 1823

You can put up virtually any kind of antenna, and make it work, as long as
you feed it with an antenna couple that can handle the antenna's
characterists...
Larry ve3fxq

----- Original Message -----
From: <chasm@...>
To: <SkyWires@yahoogroups.com>
Sent: Friday, September 29, 2006 11:34 PM
Subject: [SkyWires] is this possible? an all band, tuned dipole??

> Is it possible to put up a dipole of about 120', with ladder line
> coming from
> the centerpoint, and it be a resonant wire from 3.5 to 30mhz, no more
> than
> 2:1 swr or less? iow, an all band or broadband, tuned wire capable of a
> legal
> limit input??
>
> we have a fellow on the net running a 170' wire with a center at ~60ft
> and the
> ends at >20'. This is the best signal in the state. but it requires
> 100ft
> of ladderline and a tuner. I would like to get it shorter as in a max
> of 115'
> and have a matching network in the center which would handle a kilowatt
> and be
> flat across the HF bands. continuous, all band coverage and no, not a
> folded
> dipole. but it would have the characteristics of a BWD-90.
>
> I want to put this up flat at about 50' here in Houston.
>
> thanks/chas
> k5dam
>
>
>
> ...
>

1824. Re: [SkyWires] Tuners for 500W dipoles for MARS freqs

Yahoo group: SkyWires
Date: 2006-10-04 23:09:54 UTC
From: Dr.Ace Ratliff
Topic: 1784 Message: 1824

Hi Chas ,
The Murch UT-200B has a built in "Relative" Reflected power meter . You just adjust the Inductor , Input , and Output controls until you get a minimum "Relative" Reflected power reading .
You can also have and use a SWR/WATTmeter between the Murch UT-200B and the amp.
Ace - WH2T

----- Original Message -----
From: chasm@...
To: SkyWires@yahoogroups.com
Sent: Wednesday, October 04, 2006 4:53 PM
Subject: [SkyWires] Tuners for 500W dipoles for MARS freqs

On Wed, 4 Oct 2006 15:30:37 -0500, "Dr.Ace Ratliff" <wh2t@...>
wrote:

>
>The 2000B is 160 - 10 meters with a reflected power meter built in.

thanks Ace

obviously this is not an auto tuner so,
when it is in its position between the amp and the antenna, with the
SWR/WATTmeter between it and the amp ---

how do you tune the Murch 2000B (the "B" just for its meter??) ?
again, I have NO interest in 160m... I am primarily into MARS freqs on 75 and
40m. using dipoles, mostly unbalanced but I do plan to put up a long (120'+)
wire at 60' flat topped with ladder line feed. will be running an antenna
switch behind the tuner with one lead into a 600W air load resistor

thanks
73/chas
--
K5DAM Houston EL29fu AAR6TU
http://tinyurl.com/df55x (BPL Presentation)

1825. New file uploaded to SkyWires

Yahoo group: SkyWires
Date: 2006-10-04 22:13:37 UTC
From: SkyWires@yahoogroups.com
Topic: 434 Message: 1825

Hello,

This email message is a notification to let you know that
a file has been uploaded to the Files area of the SkyWires
group.

File : /Logged Tuning Chart.jpg
Uploaded by : dr_ace1 <wh2t@...>
Description : A logged tuning chart for manual antenna tuners or amplifiers.

You can access this file at the URL:
http://groups.yahoo.com/group/SkyWires/files/Logged%20Tuning%20Chart.jpg

To learn more about file sharing for your group, please visit:
http://help.yahoo.com/help/us/groups/files

Regards,

dr_ace1 <wh2t@...>

1826. Re: [SkyWires] Easy to use antenna tuner for under 500W?

Yahoo group: SkyWires
Date: 2006-10-04 23:21:25 UTC
From: Dr.Ace Ratliff
Topic: 1784 Message: 1826

Mel,
Since you are only going to run 300 Watts max . An automatic antenna tuner might make the best choice for convenience . I know some of the guys in this group use remote automatic antenna tuners located near the antenna feedpoint ! You run coax from the station to the remote automatic antenna tuner.
I don't remember the brand name of the remote automatic antenna tuner, sorry .
Ace - WH2T

----- Original Message -----
From: icra@galaxynet.com
To: SkyWires@yahoogroups.com
Sent: Wednesday, October 04, 2006 2:49 PM
Subject: [SkyWires] Easy to use antenna tuner for under 500W?

Looking for recommended antenna tuners that cover 160-10 (including WARC bands and 60mtrs), is easy to use, and is cheap.....max power I am able to use is about 200-300W and current rigs max out under that range (too many people living too close to use higher power within RF exposure levels).

Current tuners on hand:

Kenwood AT-180....very nice, easy to use, 160-10 but no WARC or 60mtrs, poor bal output (not that I use bal line much), built in antenna switch (2 coax, 1 'bal' line and dummy load), built in SWR/power meter.....Does not match a very wide range of antennas.....really only good if it is close to begin with.....at least not for me

Heathkit SA-2040....Full legal power, matches very wide range of antennas, good bal output (from what I can tell).....but....no antenna switch....limited to 1 antenna at a time (coax or single wire or bal line if you move a shorting bar on the back) and very hard to use (for me)....never gotten it to match any thing...mostly due to operator error....going to trade it for some thing easier to use and all ham band coverage.....why I am asking for input.....

Your thoughts?

Mel
N7OKL

1827. Re: [SkyWires] New file uploaded to SkyWires

Yahoo group: SkyWires
Date: 2006-10-04 23:37:19 UTC
From: Dr.Ace Ratliff
Topic: 1641 Message: 1827

Hi Everyone,
I uploaded a file to the file sharing area for our group. It's a handy chart for logging the settings on a manual antenna tuner . I added the 5 Mhz / 60 meter band on the chart .
Note : The columns marked "Transmitter" and "Antenna" can be renamed Input and Output.
Also , The columns marked "Transmitter" and "Antenna" could also be renamed Tune and Load and the chart could be used to log the setting for a HF amplifier.
73 to all, Ace - WH2T

P.S. If anyone wants I can change the columns names and eMail you the new file .

----- Original Message -----
From: SkyWires@yahoogroups.com
To: SkyWires@yahoogroups.com
Sent: Wednesday, October 04, 2006 5:13 PM
Subject: [SkyWires] New file uploaded to SkyWires

Hello,

This email message is a notification to let you know that
a file has been uploaded to the Files area of the SkyWires
group.

File : /Logged Tuning Chart.jpg
Uploaded by : dr_ace1 <wh2t@...>
Description : A logged tuning chart for manual antenna tuners or amplifiers.

You can access this file at the URL:
http://groups.yahoo.com/group/SkyWires/files/Logged%20Tuning%20Chart.jpg

To learn more about file sharing for your group, please visit:
http://help.yahoo.com/help/us/groups/files

Regards,

dr_ace1 <wh2t@...>

1828. Re: [SkyWires] is this possible? an all band, tuned dipole??

Yahoo group: SkyWires
Date: 2006-10-05 01:53:40 UTC
From: Walter A Fipps Jr.
Topic: 1784 Message: 1828

TRANSLATION:

Grasshopper your journey has just begun, practice grabbing the stone!
When you are ready your swr will be 1:1 on all bands(sic)!
May you always have good DX!

73
de
KD4OVR
Walter

erik@... wrote:

>
> Well Andy... we'll just have to agree to disagree. This a commonly
> misunderstood topic. I suggest "Reflections II" by W. Maxwell w2du.
> Very informative, although it requires more than one reading to 'get
> it' (that was my experience, and I don't claim to remember all of it
> yet! I need yet another reading!!!).
>
> More below for those interested....
> -Erik n0ew
>
> > Lots of excellent advice in Erik (N0EW)'s message.
> >
> > But I do disagree with some points:
> >
> >> With high swr it isn't that the RF isn't getting out your antenna. It
> >> is. The RF will reflect, re-reflect, and re-re-reflect ad nauseam
> >> until it gets out the antenna and into the atmosphere. That isn't the
> >> problem. The problem with high swr (other than potential transmitter
> >> damage) is the loss inside the transmission line.
> >
> > Well ... that isn't entirely true. The power initially reaches the
> antenna,
> > but it reflects back and probably gets either absorbed back into the
> > transmitter, or is purely reactive power and doesn't really go anywhere
> > (though some also gets re-reflected back). It is quite true that there
> > is more loss in the feedline. But it isn't true that all of the
> remaining
> > power eventually gets radiated.
>
> I may not have given reactance a full measure of discussion. If it
> isn't eliminated from the antenna system, it will create an 'eddy' in
> the current, so to speak. Reactive power is lost to us as effective
> radiating RF. It gets caught up in a repetitive loop, doing no useful

> work for us.
>
> But all power not lost as heat does radiate from the antenna, unless
> caught in a reactance loop. Conservation of energy tells us all energy
> does something. It must. RF becomes heat. RF is caught in a reactive
> loop. Or.... what is left? I can only think of radiation.
>
> Reflected power is re-reflected from the XCVR (or transmatch, if
> used). No power is re-absorbed by the transmitter. That isn't why a
> transmitter is damaged under high swr, but it is the common view. It
> is the transmitter's reaction to being unable to properly load into
> the antenna system that in turn causes the damage to the transmitter.
> It is a subtle, but true, difference.
>
> I will admit that the subtle difference doesn't hold much meaning to a
> person looking at a smoking XCVR that no longer works!
>
> I can't fully verbalize it. Read "Reflections II" or some of the
> electrical engineers reports (IEE?) that I can't possibly recall where
> I came across.
>
> > Simply because of the fact that there is an impedance mismatch (from the
> > impedance that the transmitter wants to see), means not all of the
> available
> > power gets into the antenna from which it can radiate.
>
> In a word: yes.
>
> Anytime an impedance mismatch is present not all power can be
> transmitted from one point to the next. What we amateurs think of as
> "impedance" can be thought of as a measure of the effectiveness of
> matching a source to a load. Or we can think of it as how much of the
> RF will get by the terminal, and how much is lost in the crossing (I'm
> watching a herd crossing the river, and seeing some lost to croc's,
> hehehe!)
>
> Any time the impedance between the source and the load differs, we
> suffer an inefficiency in transmitting power across that junction, or
> node.
>
> Now a load need not be the final destination. There are impedance
> changes at many points between the transmitter and the antenna. In a
> common amateur radio station's set up, many of us have a XCVR -> Coax
> -> Transmatch -> Feedline -> Antenna. There may be a balun in there
> too, which adds another component and length of feedline. At each
> junction (a point of transmission across the different materials)
> there is possibly (likely actually) a mismatch in impedance. It may a
> large or small mismatch in impedance.
>
> We often use a transmatch to take all these lump-sum impedance changes

> as seen at the output of the transmatch (antenna tuner in common
> parlance) to be set equal to the transmatches input impedance, after
> off-setting any present reactance. The typical input impedance (from
> the XCVR to the transmatch) is a nominal 50-Ohms with little to zero
> reactance, and typical coax is a nominal 52-Ohms.
>
> Not much difference so far. Maybe 2-Ohms, and some very small amount
> of reactance. These are just nominal values and may be off a little
> either way, so maybe they nearly offset each other (becoming a closer
> impedance match) or maybe they are both off in the same direction. In
> any event, given good materials and properly operating equipment,
> nearly no difference so far....
>
> This is why the impedance change between the XCVR and transmatch's
> input is very small. Between the transmatches output terminal and the
> end-point (our (hopefully!) radiating antenna wire) there can be many
> difference impedance encountered.
>
> Once the transmatch is properly adjusted, reactance is off-set (if -j
> 300 Ohms were presented to the transmatch, it'll inject + j 300 Ohms,
> leaving a net of j0 Ohms, or zero reactance (strictly speaking, it is
> likely some small amount of reactance will remain, but be of quite
> small magnitude, so we say it is gone, because for any noticeable
> difference to us, it is gone)).
>
> The remaining pure resistance difference is adjusted in such a way as
> when the reflected wave is re-reflected from the transmatches output
> terminal (no reflected wave reaches the XCVR) through the transmission
> line to the antenna feed point, it will now equal the antenna's
> impedance, and because the re-reflected wave's impedance matches the
> antenna's feed point impedance, the energy is absorbed by the antenna
> (the load) and then radiated into the atmosphere.
>
> So while the adjustments happen simultaneously, we can construct a
> mental image showing a two-step process inside the transmatch. It
> brings the reactance to near-zero, and it alters the remaining purely
> resistive portion of the energy in such a way that the antenna will
> enjoy a well-matched impedance at it's feed point.
>
> However, if we don't use an impedance matching network (I almost
> always use a transmatch if there is much of a mismatch, but there are
> other options), that reflected wave still re-reflects off the
> transmitter's output terminal. It still doesn't enter the transceiver.
> The XCVR is still damaged by it's own internal struggle to load into
> an impedance mismatched to it's designed generator's impedance (in our
> case the generator is the transmitted RF).
>
> So the reflected wave becomes a re-reflected wave. Some of the energy
> in the second trip is again lost as heat. Some of this 2nd wave enters
> the antenna. Some of the 2nd wave is re-re-reflected back toward the

> XCVR.
>
> As the second wave, the re-re-reflected wave, hits the XCVR, it
> becomes the third forward wave. This is the ad nauseam cycle. (We
> should remember there are additional initial forward waves being newly
> created as the earlier waves reflect and re-reflect. This takes place
> to make the issue more complex to reason out - just joking!)
>
> So, if you isolate one instant of forward wave and watch it batter
> itself back-and-forth, ultimately one of three things happens to each
> mote of energy: (1) it is converted from RF into heat; (2) it is
> caught in a reactance loop and endlessly cycles back-and-forth in it's
> own little 'eddy' in the alternating current, doing essentially
> nothing; or (3) it is radiated from the antenna into the atmosphere.
>
> I'll have to think more about the infinite swr question.... Off-hand
> I'd say it'd be important to know why it is infinite.
>
> If due to reactance, then I'd say very little radiation can be
> expected because nearly all the energy is caught up in that repeating
> loop in which it does no useful work (no radiating RF). If due to a
> resistive mismatch, I'd expect the RF to radiate eventually because it
> is bouncing back and forth along the entire path. Each time some of it
> will get radiated by the antenna, even if only a tiny fraction, so
> ultimately escape into the atmosphere. Of course, the XCVR may soon
> blow up. Also, we'd need to compare the tiny amount radiating to the
> amount lost as heat. It may be a much more efficient heater than a
> radiating element, so in that case, even if given a pure resistive and
> infinite swr, we might expect very little RF radiation. Sorta like a
> space heater!
>
> Hmmmmm.... OK. I'll go with that. Infinite swr results is no
> measurable RF radiation, as the RF energy is either caught up in an
> endless reactive loop, or radiates fully as heat.
>
> Or we blow up the XCVR and don't have to worry about those pesky motes
> of RF trying to trick us anymore, so there!!!
>
> 73-Erik n0ew
>
>

1829. Re: [SkyWires] Easy to use antenna tuner for under 500W?

Yahoo group: SkyWires
Date: 2006-10-05 04:57:31 UTC
From: chasm@texas.net
Topic: 1784 Message: 1829

On Wed, 4 Oct 2006 18:21:25 -0500, "Dr.Ace Ratliff" <wh2t@...>
wrote:

>You run coax from the station to the remote automatic antenna tuner.
>I don't remember the brand name of the remote automatic antenna tuner, sorry .

http://www.hamcontact.com/SGC/sg230pro.html
SGC's line of remote tuners. low power... 200W or so.
but you can put them on the tower base, or mount them on the mast and feed
directly into the centerpoint of a dipole.

hope this helps
73/chas
--
K5DAM Houston EL29fu AAR6TU
http://tinyurl.com/df55x (BPL Presentation)

1830. Re: [SkyWires] SWR mis-match...or...where does the power go.....

Yahoo group: SkyWires
Date: 2006-10-05 12:45:05 UTC
From: erik@n0ew.org
Topic: 1784 Message: 1830

> Eirik, et al....

Hey, that's a first! At least you got my "K" in there! Hehehe....

> Just, please, I beg everyone, keep it civil....at least more than I
> am able when an
> issue I feel strongly about pops up on a list. It is very hard to
> keep emotion out of
> it....at least for me.

Good points; well said. I agree.

> One 'authority' (quotes used because there are some that disagree
> with pretty much
> every thing he says and refuse to grant him the title) that I have
> learned useful (for
> me) info from is Kurt Sterba...he writes the Aerials column for World Radio.

I am a great Sterba fan - as you noted, I just rallied some to the
cause, and alienated others. Well, just remember, if you don't
occasionally stir up some criticism the only certain thing is, you
have attempted nothing!

This is especially useful advice to recall when standing in front of
your local club listening to complaints. No matter what you do or say,
some will like it, some will dislike it and most aren't much moved
either way. Just like art.

There have been at least two Kurt's as well. Perhaps more.

The most recent Kurt offers incomplete information which the old Kurt
would never have done. This is a sad turn of events because it was the
completeness of his answers that made his work so much of a learning
experience. He helped connect many of the dots other works left
incomplete.

He is also nicer in his tone. I was originally attracted by the Krusty
Kurt, and that he spoke bluntly. I appreciate that in our overly
Politically Correct (and vague) world.

Off to the rest of the postings....

73-Erik n0ew

1832. My 1st post & some classic Loop questions please

Yahoo group: SkyWires
Date: 2006-10-10 10:40:34 UTC
From: madatweak
Topic: 1832 Message: 1832

Hello Loop Folk, This is my 1st Post. Im sure this has been asked many times before but if one desgned a large loop say for 1 wavelength of say 500khz & therefore it would operate on every harmonic so 1, 1.5, 2mhz etc & given its most useable highest frequency of 8x (because of excessive nulls & peaks in its horizontal plane would be 4mhz - Does this sound about right?

Anybody ever discussed lowering the Q of a loop by creating a caged wire similiar to the caged dipole's thus enabling perhaps a 7% bandwidth increase on at least the fundamental frequency?

I was toying with the idea of a near perfect loop. I pictured a neat clean conventional Loop Skywire with a classic square shape in a flat field but instead of wire I used nylon rope. The nylon roped loop was oversized for the funamental frequency but suspended inside this nylon square was a large number of small insulators that formed a neat circle shape that I fed with conventional wire for the actual antenn thus giving me a near perfect circle, thereby producing a cleaner omnidirectional pattern across all harmonics. Any thoughts on that crazy idea.

Fianl Question of feeding the beastie. I understand the basic impedence of a loop on its fundamental or even 1st harmonic is in the order of 125ohms. I always thought about feeding it with a parallel RG58 (52 Ohm) coax thus producing a balanced 100ohm feed or if primarily operating on a higher order harmonic then feeding it with parallel75Ohm coax for 150 Ohm balanced feed a giving Low loss balanced feed for a close match to its impedence. Does this sound Feasable to anyone else?

Thanks for reading my thoughts & questions

1833. Re: [SkyWires] My 1st post & some classic Loop questions please

Yahoo group: SkyWires
Date: 2006-10-10 17:47:40 UTC
From: Dr.Ace Ratliff
Topic: 1832 Message: 1833

Hi,
I will only take a couple of your questions and let someone else take the rest.
Ace - www.WH2T.com

----- Original Message -----
From: madatweak
To: SkyWires@yahoogroups.com
Sent: Tuesday, October 10, 2006 5:40 AM
Subject: [SkyWires] My 1st post & some classic Loop questions please

Hello Loop Folk, This is my 1st Post.

Snipped

Anybody ever discussed lowering the Q of a loop by creating a caged
wire similiar to the caged dipole's thus enabling perhaps a 7%
bandwidth increase on at least the fundamental frequency?

That idea sounds very similar to a rhombic antenna. I made my full wave horizontal loop using a single strand of bare, solid, copper, 8AWG wire. It covers 3.75 - 4 Mhz with a 2:1 or less SWR without a tuner.

Fianl Question of feeding the beastie. I understand the basic
impedence of a loop on its fundamental or even 1st harmonic is in the
order of 125 ohms. I always thought about feeding it with a parallel
RG58 (52 Ohm) coax thus producing a balanced 100 ohm Low loss
balanced feed for a close match to its impedence. Does this sound
Feasable to anyone else?

I have had the same idea. It should work well.

_·___

.

1834. Re: [SkyWires] My 1st post & some classic Loop questions please

Yahoo group: SkyWires
Date: 2006-10-10 17:16:38 UTC
From: Hans Remeeus
Topic: 1832 Message: 1834

madatweak wrote:
>
> Hello Loop Folk, This is my 1st Post. Im sure this has been asked many
> times before but if one desgned a large loop say for 1 wavelength of
> say 500khz & therefore it would operate on every harmonic so 1, 1.5,
> 2mhz etc & given its most useable highest frequency of 8x (because of
> excessive nulls & peaks in its horizontal plane would be 4mhz - Does
> this sound about right?

Yes.

> I was toying with the idea of a near perfect loop. I pictured a neat
> clean conventional Loop Skywire with a classic square shape in a flat
> field but instead of wire I used nylon rope. The nylon roped loop was
> oversized for the funamental frequency but suspended inside this nylon
> square was a large number of small insulators that formed a neat
> circle shape that I fed with conventional wire for the actual antenn
> thus giving me a near perfect circle, thereby producing a cleaner
> omnidirectional pattern across all harmonics. Any thoughts on that
> crazy idea.

Give it a try. First on paper, afterwards on small scale and thereafter
in your garden.

> Fianl Question of feeding the beastie. I understand the basic
> impedence of a loop on its fundamental or even 1st harmonic is in the
> order of 125ohms. I always thought about feeding it with a parallel
> RG58 (52 Ohm) coax thus producing a balanced 100ohm feed or if
> primarily operating on a higher order harmonic then feeding it with
> parallel75Ohm coax for 150 Ohm balanced feed a giving Low loss
> balanced feed for a close match to its impedence. Does this sound
> Feasable to anyone else?

The impedance of the (balanced, parallel, open) feederline will vary
because of the distance between the two feeders of the line.

A distance of about 3 to 4 inch between the feeders will give you about
600 Ohm. More distance than 4 to 5 inch will not give much more impedance.

Use not more then 1/100 wavelength distance between the feeders. E.g.:
for 10 Meters (28 MHz) the distance between the two feeders must not be
more than 10 cm (somewhat less than 4 inch). Otherwise the open
feederline will radiate which may cause LFD/TVI.

Why use coax? Just use good antennawire for your homemade open feederline.

73,
Hans Remeeus (PA1HR)
http://www.remeeus.eu
Communication is about people, the rest is technology.

1835. Re: [SkyWires] My 1st post & some classic Loop questions please

Yahoo group: SkyWires
Date: 2006-10-10 19:04:39 UTC
From: Jim Dunstan
Topic: 1832 Message: 1835

At 10:40 AM 10/10/2006 +0000, you wrote:

>Hello Loop Folk, This is my 1st Post. Im sure this has been asked many
>times before but if one desgned a large loop say for 1 wavelength of
>say 500khz & therefore it would operate on every harmonic so 1, 1.5,
>2mhz etc & given its most useable highest frequency of 8x (because of
>excessive nulls & peaks in its horizontal plane would be 4mhz - Does
>this sound about right?

Interesting ..... I assume this is an academic question hi hi .... I am not familiar with 8x rule in terms of useable harmonics. However, a 1 wavelength loop on 500Khz is a formidable amount of wire ... about 500' per side. Your saying such an antenna would be only marginally useful beyond 4 Mhz.

>Anybody ever discussed lowering the Q of a loop by creating a caged
>wire similiar to the caged dipole's thus enabling perhaps a 7%
>bandwidth increase on at least the fundamental frequency?

I have never seen discussion on this matter. However, I have given it some thought in relation to small loops (1/10 wavelength mag loops) where high Q represents the problem of very sharp resonance. In this case I was assuming that the Q could be lowered by using copper strapping to form the loop rather than copper tubing. However, in terms of a full 1 wavelength loop it never occurred to me as it already a relatively broad resonance. Again interesting.

>I was toying with the idea of a near perfect loop. I pictured a neat
>clean conventional Loop Skywire with a classic square shape in a flat
>field but instead of wire I used nylon rope. The nylon roped loop was
>oversized for the funamental frequency but suspended inside this nylon
>square was a large number of small insulators that formed a neat
>circle shape that I fed with conventional wire for the actual antenn
>thus giving me a near perfect circle, thereby producing a cleaner
>omnidirectional pattern across all harmonics. Any thoughts on that
>crazy idea.

By near perfect loop I assume you are referring to 'near circular' ..... The area inclosed by circle vs a square (where the perimeter and circumference is the same) is increased by about 25% which for all practical terms is the 'capture' area for a loop. All the work required in your example (like building a suspension bridge) might come close to increasing the capture area by 25% .... however, I can't hazard a guess as to what it would do the radiation pattern.

>Fianl Question of feeding the beastie. I understand the basic
>impedence of a loop on its fundamental or even 1st harmonic is in the

>order of 125ohms. I always thought about feeding it with a parallel
>RG58 (52 Ohm) coax thus producing a balanced 100ohm feed or if
>primarily operating on a higher order harmonic then feeding it with
>parallel75Ohm coax for 150 Ohm balanced feed a giving Low loss
>balanced feed for a close match to its impedence. Does this sound
>Feasable to anyone else?

The loop is a balanced antenna and in order to preserve some of its best characteristics it is best to feed it with a balanced feed line. I have more experience with vertically oriented loops and have always found the radiation pattern to be best with balanced feed line. Balanced is more important than impedance match in many cases. The arrangement you describe will come close to achieving both. However, using the twin coax route may be a bit of overkill. It will be useful in feed line runs that come next to metal objects and take bends as when you bring it into the operating position or if you have to tape the line to the metal tower. Ordinary 300 ohm twin lead or 450 ohm ladder line works vy well but you have to be more careful in how you 'dress' it. A simple tuner like a Z-match or a standard T-Match with balun will work well at the transmitter.

Jim, VE3CI

1836. Re: [SkyWires] My 1st post & some classic Loop questions please

Yahoo group: SkyWires
Date: 2006-10-10 22:13:50 UTC
From: Dr.Ace Ratliff
Topic: 1832 Message: 1836

----- Original Message -----
From: Hans Remeeus
To: SkyWires@yahoogroups.com
Sent: Tuesday, October 10, 2006 12:16 PM
Subject: Re: [SkyWires] My 1st post & some classic Loop questions please

madatweak wrote:

Snipped

>
> Fianl Question of feeding the beastie. I understand the basic
> impedence of a loop on its fundamental or even 1st harmonic is in the
> order of 125ohms. I always thought about feeding it with a parallel
> RG58 (52 Ohm) coax thus producing a balanced 100ohm feed or if
> primarily operating on a higher order harmonic then feeding it with
> parallel75Ohm coax for 150 Ohm balanced feed a giving Low loss
> balanced feed for a close match to its impedence. Does this sound
> Feasable to anyone else?

The impedance of the (balanced, parallel, open) feederline will vary
because of the distance between the two feeders of the line.

A distance of about 3 to 4 inch between the feeders will give you about
600 Ohm. More distance than 4 to 5 inch will not give much more impedance.

Use not more then 1/100 wavelength distance between the feeders. E.g.:
for 10 Meters (28 MHz) the distance between the two feeders must not be
more than 10 cm (somewhat less than 4 inch). Otherwise the open
feederline will radiate which may cause LFD/TVI.

Why use coax? Just use good antennawire for your homemade open feederline.

73,
Hans Remeeus (PA1HR)
http://www.remeeus.eu
Communication is about people, the rest is technology.

Hans,

If you take two pieces of equal lengths of coax, lay them side by side and solder the shields together at both ends. Then use the two center conductors as though they were twin lead or ladder line. This raises the impedance value of the line to exactly double its original value. If you use two pieces of 50 ohm coax then you have a near perfect match to a full wave loop antenna at the fundamental frequency! And, your coax is impervious to nearby metal objects such as gutters, aluminum siding etc.

You still need a tuner between your 50 Ohm transmitter and your "shielded twin lead" feed line for multi-band operation.

Ace - WH2T

.

__'_

1837. Re: [SkyWires] My 1st post & some classic Loop questions please

Yahoo group: SkyWires
Date: 2006-10-10 22:52:00 UTC
From: erik@n0ew.org
Topic: 1832 Message: 1837

> If you take two pieces of equal lengths of coax, lay them side by
> side and solder the shields together at both ends. Then use the two
> center conductors as though they were twin lead or ladder line. This
> raises the impedance value of the line to exactly double its
> original value. If you use two pieces of 50 ohm coax then you have a
> near perfect match to a full wave loop antenna at the fundamental
> frequency! And, your coax is impervious to nearby metal objects such
> as gutters, aluminum siding etc.
>
> You still need a tuner between your 50 Ohm transmitter and your
> "shielded twin lead" feed line for multi-band operation.

Great idea for passing through walls and passing nearby other objects that may react with the transmission line. The biggest detraction as far as I'm concerned is the weight. Why add all that weight to get up to your loop that may be 20 or 50-feet in the air, when you can get equally good service from much lighter balanced transmission line (homebrew, ladder line, whatever).
-Erik n0ew

1838. Re: [SkyWires] My 1st post & some classic Loop questions please

Yahoo group: SkyWires
Date: 2006-10-10 23:04:24 UTC
From: erik@n0ew.org
Topic: 1832 Message: 1838

> if one desgned a large loop say for 1 wavelength of
> say 500khz & therefore it would operate on every harmonic so 1, 1.5,
> 2mhz etc & given its most useable highest frequency of 8x (because of
> excessive nulls & peaks in its horizontal plane would be 4mhz - Does
> this sound about right?

As I recall, as you add harmonics -as you desribe, by adding length to the loop- you do increase the number of lobes, but the lobes tend to run together. I understood this is why an 80-meter loop that is actually one wavelength on 80-meters displays greater non-covered areas than a similar 80-meter loop made with twice as much wire (twice the 80-meter wavelength in other words).

I don't have my Antenna Book at hand, but there are plenty of pictures and text covering this material.

> Anybody ever discussed lowering the Q of a loop by creating a caged
> wire similiar to the caged dipole's thus enabling perhaps a 7%
> bandwidth increase on at least the fundamental frequency?

I think it would work in theory. It certainly works with other antennas. As you increase the diameter of the conductor you obtain better bandwidth, with the benefits that accompany that. This can be achieved by using a bigger diameter wire or pipe, or using a 'caged' version which simulates a larger diameter conductor.

I also think if you follow the advice of the other ham to first build this on paper, then build a scale model, and if still excited (and can afford it) building a full-scale version, you will find your answer along the way.

In other words, looks great on paper, but pales when you are standing there with your tools-in-hand trying to figure out where to plant all those masts or towers to make this happen.

This ties-in with your 'perfect circle' question too. Looks great on paper....

> I was toying with the idea of a near perfect loop. I pictured a neat
> clean conventional Loop Skywire with a classic square shape in a flat
> field but instead of wire I used nylon rope. The nylon roped loop was
> oversized for the funamental frequency but suspended inside this nylon
> square was a large number of small insulators that formed a neat
> circle shape that I fed with conventional wire for the actual antenn
> thus giving me a near perfect circle, thereby producing a cleaner
> omnidirectional pattern across all harmonics. Any thoughts on that
> crazy idea.

It should work if you have the patience for it. Buy highly resistant UV rope. You sure don't want to be re-weaving that spider web every year!

As I mentioned about your coax-made-into-balanced line... works great, but is generally reserved for problem areas due to the weight. Ladder line is a lot easier to work with than paired up 1/4-inch diameter coax, especially at 40 and 50-feet in the air!

73-Erik n0ew

1839. Re: [SkyWires] My 1st post & some classic Loop questions please

Yahoo group: SkyWires
Date: 2006-10-10 23:20:18 UTC
From: Jim Dunstan
Topic: 1832 Message: 1839

At 05:52 PM 10/10/2006 -0500, you wrote:

> > If you take two pieces of equal lengths of coax, lay them side by
> > side and solder the shields together at both ends. Then use the two
> > center conductors as though they were twin lead or ladder line. This
> > raises the impedance value of the line to exactly double its
> > original value. If you use two pieces of 50 ohm coax then you have a
> > near perfect match to a full wave loop antenna at the fundamental
> > frequency! And, your coax is impervious to nearby metal objects such
> > as gutters, aluminum siding etc.
> >
> > You still need a tuner between your 50 Ohm transmitter and your
> > "shielded twin lead" feed line for multi-band operation.
>
>Great idea for passing through walls and passing nearby other objects
>that may react with the transmission line. The biggest detraction as
>far as I'm concerned is the weight. Why add all that weight to get up
>to your loop that may be 20 or 50-feet in the air, when you can get
>equally good service from much lighter balanced transmission line
>(homebrew, ladder line, whatever).
>-Erik n0ew

Hi,

There is no reason you couldn't use both ! .... Low loss low weight ladder line where appropriate and the balanced coax arrangement when passing by metal objects and passing through walls etc ... no longer than necessary.

Jim, VE3CI

>

1840. Re: [SkyWires] My 1st post & some classic Loop questions please

Yahoo group: SkyWires
Date: 2006-10-11 00:45:45 UTC
From: erik@n0ew.org
Topic: 1832 Message: 1840

> There is no reason you couldn't use both ! .... Low loss low weight ladder
> line where appropriate and the balanced coax arrangement when passing by
> metal objects and passing through walls etc ... no longer than necessary.
>
> Jim, VE3CI

Absolutely! Use each where it is best suited.
Paired-coax out the wall, and ladder up to the loop....
-Erik n0ew

1841. New FCC Rules

Yahoo group: SkyWires
Date: 2006-10-12 18:21:50 UTC
From: Dr.Ace Ratliff
Topic: 1841 Message: 1841
Attachments: 1 described; binary payloads are missing from this source WARC

Clear Day
http://hraunfoss.fcc.gov/edocs_public/attachmatch/FCC-06-149A1.doc

The R&O released yesterday covers a plethora of stuff. On a quick read, here are my notes on things that interested me.

Novice bands eliminated. Novices/Tech+ have same CW Freqs as General on 80, 40, 15M. 80 and 40M.

Phone bands expanded, down to 3600 on 75M, down to 7125 on 40M.

Extra class phone segment on 75 expanded to 100kc (3600-3700), Advanced class similarly gets 100kc (3700-3800), General will start at 3800.

This isn't in effect yet !!! But will be soon.

Ace - WH2T

1842. Re: [SkyWires] New FCC Rules

Yahoo group: SkyWires
Date: 2006-10-12 20:39:25 UTC
From: David Shrum
Topic: 1841 Message: 1842

I'm not sure where to look to try to figure out when it is published, so
we can start the count down, so to speak.
Dave

Dr.Ace Ratliff wrote:
>
>
> http://hraunfoss.fcc.gov/edocs_public/attachmatch/FCC-06-149A1.doc
> <http://hraunfoss.fcc.gov/edocs_public/attachmatch/FCC-06-149A1.doc>
>
> The R&O released yesterday covers a plethora of stuff. On a quick
> read, here are my notes on things that interested me.
>
>
> Novice bands eliminated. Novices/Tech+ have same CW Freqs as General
> on 80, 40, 15M. 80 and 40M.
>
> Phone bands expanded, down to 3600 on 75M, down to 7125 on 40M.
>
> Extra class phone segment on 75 expanded to 100kc (3600-3700),
> Advanced class similarly gets 100kc (3700-3800), General will start at
> 3800.
>
> This isn't in effect yet !!! But will be soon.
>
> Ace - WH2T
>

1844. Fed as vertical for 160M

Yahoo group: SkyWires
Date: 2006-10-15 19:52:23 UTC
From: Tim
Topic: 1844 Message: 1844

I'm really looking for a way to get on 160M this fall-winter, so I went back and re-read the original skyloop article...where they mention shorting the feedline and using it as a top-hatted vertical.

The article mentions working the antenna against good ground. So here's my question. Has anyone gone to the trouble of putting in a ground wire system and then used their 80 meter horizontal loop in this manner? What kind of performance did you experience?

The vertical feedline to my loop is about 35-40 feet of ladder line. I feed the loop in the middle of one side (closest to my house). Because of the size of my lot, I'm reluctant to put up a different antenna for 160, such as an inverted L, because I'm afraid it might interact with the loop. There's just not enough room for two big antennas without them coming into close proximity.

I don't mind doing the work of putting in the ground system if I knew someone else had successfully used such a set up. All comments welcome.

73,
Tim
W9THD

1845. Re: [SkyWires] Fed as vertical for 160M

Yahoo group: SkyWires
Date: 2006-10-15 23:25:42 UTC
From: Jim Dunstan
Topic: 1844 Message: 1845

At 07:52 PM 10/15/2006 +0000, you wrote:

>I'm really looking for a way to get on 160M this fall-winter, so I
>went back and re-read the original skyloop article...where they
>mention shorting the feedline and using it as a top-hatted vertical.
>
>The article mentions working the antenna against good ground. So
>here's my question. Has anyone gone to the trouble of putting in a
>ground wire system and then used their 80 meter horizontal loop in
>this manner? What kind of performance did you experience?
>
>The vertical feedline to my loop is about 35-40 feet of ladder line. I
>feed the loop in the middle of one side (closest to my house).
>Because of the size of my lot, I'm reluctant to put up a different
>antenna for 160, such as an inverted L, because I'm afraid it might
>interact with the loop. There's just not enough room for two big
>antennas without them coming into close proximity.
>
>I don't mind doing the work of putting in the ground system if I knew
>someone else had successfully used such a set up. All comments welcome.
>
>73,
>Tim
>W9THD

Hi Tim,

I can tell you that this kind of arrangement works vy well. I had such a system using a 100' inverted Vee (also a balanced antenna) with the apex up on a 30' TV mast mounted on the peak of the roof of a 2 story house. The feed line was 300 ohm TV twinlead and the antenna was normally used on 80m and 20m. The shack was in the basement of the house which was hot water heated. The hot water heating pipes connecting all the radiators and furnace boiler were readily available for an RF ground. The feedline was at least 65-75 ft long from the top of the 30' mast to the shack next to the basement window.

As you said, I shorted the feed line and fed it to a tuner using the heating system as RF ground. I used the arrangement to call into a 160M net every morning all winter (all farmers) mostly in Saskatchewan and Manitoba, with the occasional Alberta rancher hi. (I was located in Winnipeg Manitoba) I used a Heathkit DX-100 AM transmitter and never missed a morning ... great signals and excellent copy.

Jim, VE3CI

1846. Re: Fed as vertical for 160M

Yahoo group: SkyWires
Date: 2006-10-16 10:48:09 UTC
From: Tim
Topic: 1844 Message: 1846

Thanks, Jim, for the reply. I think I'm going to give it a try and go ahead with the radial installation.

I run coax from the rig through the wall to a 4:1 balun followed by the ladder line to the feedpoint. Should I make my shorting jumper for inside the shack at the tuner, or should it be done on the other side of the balun at the ladder line?

73
Wim
W9THD

--- In SkyWires@yahoogroups.com, Jim Dunstan <jdunstan@...> wrote:

> Hi Tim,
>
> I can tell you that this kind of arrangement works vy well. I had such a
> system using a 100' inverted Vee (also a balanced antenna) with the apex up
> on a 30' TV mast mounted on the peak of the roof of a 2 story house. The
> feed line was 300 ohm TV twinlead and the antenna was normally used on 80m
> and 20m. The shack was in the basement of the house which was hot water
> heated. The hot water heating pipes connecting all the radiators and
> furnace boiler were readily available for an RF ground. The feedline was
> at least 65-75 ft long from the top of the 30' mast to the shack next to
> the basement window.
>
> As you said, I shorted the feed line and fed it to a tuner using the
> heating system as RF ground. I used the arrangement to call into a 160M
> net every morning all winter (all farmers) mostly in Saskatchewan and
> Manitoba, with the occasional Alberta rancher hi. (I was located in
> Winnipeg Manitoba) I used a Heathkit DX-100 AM transmitter and never
> missed a morning ... great signals and excellent copy.
>
> Jim, VE3CI
>

1847. Re: [SkyWires] Re: Fed as vertical for 160M

Yahoo group: SkyWires
Date: 2006-10-16 16:43:34 UTC
From: Jim Dunstan
Topic: 1844 Message: 1847

At 10:48 AM 10/16/2006 +0000, you wrote:

>Thanks, Jim, for the reply. I think I'm going to give it a try and go
>ahead with the radial installation.
>
>I run coax from the rig through the wall to a 4:1 balun followed by
>the ladder line to the feedpoint. Should I make my shorting jumper
>for inside the shack at the tuner, or should it be done on the other
>side of the balun at the ladder line?
>
>73
>Wim
>W9THD

Hi,
I would do it right at the tuner in the shack unless you have a remote ATU. I am sure you can jury rig a short piece of coax to accommodate the change. Some in this group have suggested that it would be as simple as unscrewing the PL259 connector and moving the outside shield from the frame of the tuner and leaving the center pin connected .... I am sure that would work but I would go for something more substantial hi hi.

Jim, VE3CI

1848. Re: [SkyWires] Re: Fed as vertical for 160M

Yahoo group: SkyWires
Date: 2006-10-17 04:14:26 UTC
From: JimMcSkate@aol.com
Topic: 1844 Message: 1848

For what it's worth... I run my 40m loop on twinlead. I am able to get the loop to load on 160 through 10. To get to 160, I at first tried the shorting trick at the feedline... and the shack was filled with RF (plus it got into the telephone, the television, the baby monitor, and in my fingers.)

Then - either serendipity or stupidity (you pick), I tried loading it by driving one half of the twinlead with the random wire output on my tuner, leaving the other half of the lead disconnected. THIS puts out like gangbusters, and gets the RF out of the shack and house and phone and baby monitor. One of you guys who are good at math might be able to explain it for the rest of us... as for me, I am happiest with "cut and try" engineering, and this seems to work. My tuner is the stock AT-200(?) toroid and switch unit that part of the Kenwood TS820 transmitter setup (I also have the matching outboard VFO - never use it but it looks cool.)

ANyway - this is my $0.02 - your mileage may vary!

73 de WA2LGN
Jim McAward
Blue Point, NY

In a message dated 10/16/2006 12:53:41 PM Eastern Standard Time, jdunstan@... writes:

> I run coax from the rig through the wall to a 4:1 balun followed by
> >the ladder line to the feedpoint. Should I make my shorting jumper
> >for inside the shack at the tuner, or should it be done on the other
> >side of the balun at the ladder line?
>

1849. New 80M loop Pictures

Yahoo group: SkyWires
Date: 2006-10-28 04:48:37 UTC
From: Keith Morris
Topic: 1849 Message: 1849

I've put my 80M horizontal loop skywire back up. I feed this with ladder line to a link coupled tuner.

I missed my loop. It is REALLY a nice antenna IF you can make one. (And they don't cost very much.)

You can see some pictures at: http://users.adelphia.net/~keithlm/586/

There is nothing really new here... but I do know that people like to see pictures when they're thinking about making something.

73
Keith
AC0DV

1850. Re: New 80M loop Pictures

Yahoo group: SkyWires
Date: 2006-10-29 02:08:35 UTC
From: Karel ZS6WN
Topic: 1849 Message: 1850

Keith,

Nice setup and I wish you lots of QSO and DX on that loop.

Mine is very similar except that its double the size but only 33ft up. I use it on all HF bands (never tried in VHF) and worked some 234 countries with it the last two odd years, including 55 on 160M.

10M was open today and I worked a number of stations in the CQWW contest, including XX9C and J3E.

I feed it directly with RG213 to a 1:1 balun but the ATU is a must (although not on 160M on its fundamental resonant frequency).

I want to try a balanced feedline sometime just to see if it makes a difference. Also considering to give it more height but as you said the height does not make much of a difference - maybe just on the lower bands.

As I have the space I'm also considering doubling the loop for that extra bit of gain and lower radiation angle on the lower bands.

I just love these loops - simple, cheap and very quiet (I have a HT power line running the length of the northern side of my plot so vertical is no use)

Hope to hear you on the bands, Keith.

73 de ZS6WN

Karel G J Bezuidenhout

Polokwane

Limpopo Province

South Africa

1851. how would i go about building this?

Yahoo group: SkyWires
Date: 2006-10-29 18:10:34 UTC
From: ROY & MARY PICKETT
Topic: 1851 Message: 1851

I have a BC246T and wonder how i could go about building a antenna for it? It goes from 25 mhz to 1300mhz.

Thanks

Roy

http://groups.yahoo.com/group/indianascannerfreqs/
<http://groups.yahoo.com/group/indianascannerfreqs/>

1852. Re: [SkyWires] how would i go about building this?

Yahoo group: SkyWires
Date: 2006-10-29 18:18:08 UTC
From: larry allen
Topic: 1851 Message: 1852

Envy... Envy....
Larry ve3fxq

----- Original Message -----
From: "ROY & MARY PICKETT" <roy_pickett@...>
To: <SkyWires@yahoogroups.com>
Sent: Sunday, October 29, 2006 1:10 PM
Subject: [SkyWires] how would i go about building this?

I have a BC246T and wonder how i could go about building a antenna for
it? It goes from 25 mhz to 1300mhz.

Thanks

Roy

http://groups.yahoo.com/group/indianascannerfreqs/
<http://groups.yahoo.com/group/indianascannerfreqs/>

1853. Re: [SkyWires] how would i go about building this?

Yahoo group: SkyWires
Date: 2006-10-29 18:20:54 UTC
From: larry allen
Topic: 1851 Message: 1853

Woops...
Sorry, I typed that message too fast, before I saw what it was....
For some reason, I thought it was a surplus radio... Sorry
Larry ve3fxq

----- Original Message -----
From: "ROY & MARY PICKETT" <roy_pickett@...>
To: <SkyWires@yahoogroups.com>
Sent: Sunday, October 29, 2006 1:10 PM
Subject: [SkyWires] how would i go about building this?

I have a BC246T and wonder how i could go about building a antenna for
it? It goes from 25 mhz to 1300mhz.

Thanks

Roy

http://groups.yahoo.com/group/indianascannerfreqs/
<http://groups.yahoo.com/group/indianascannerfreqs/>

1854. Re: [SkyWires] how would i go about building this?

Yahoo group: SkyWires
Date: 2006-10-29 18:53:49 UTC
From: Ace Ratliff
Topic: 1851 Message: 1854

Hi Roy,
I would probably put up a discone antenna or you could try a horizontal loop antenna.
See
http://www.northcountryradio.com/Articles/discone.htm

Good Luck, Ace - WH2T

----- Original Message -----
From: ROY & MARY PICKETT
To: SkyWires@yahoogroups.com
Sent: Sunday, October 29, 2006 1:10 PM
Subject: [SkyWires] how would i go about building this?

I have a BC246T and wonder how i could go about building a antenna for it? It goes from 25 mhz to 1300mhz.

Thanks

Roy

http://groups.yahoo.com/group/indianascannerfreqs/

1855. Re: how would i go about building this?

Yahoo group: SkyWires
Date: 2006-10-29 22:18:07 UTC
From: ROY & MARY PICKETT
Topic: 1851 Message: 1855

So then a loop antenna wont work? I am using what i just found out is a astroplane and we are picking up places a long ways off..But sence it is not nearly as wide banded as the scanner,i am sure we can do better with something else. Roy

--- In SkyWires@yahoogroups.com, "Ace Ratliff" <wh2t@...> wrote:
>
> Hi Roy,
> I would probably put up a discone antenna or you could try a horizontal loop antenna.
> See
> http://www.northcountryradio.com/Articles/discone.htm
>
> Good Luck, Ace - WH2T
>
>
> ----- Original Message -----
> From: ROY & MARY PICKETT
> To: SkyWires@yahoogroups.com
> Sent: Sunday, October 29, 2006 1:10 PM
> Subject: [SkyWires] how would i go about building this?
>
>
>
> I have a BC246T and wonder how i could go about building a antenna for it? It goes from 25 mhz to 1300mhz.
>
>
Thanks
>
>
Roy
>
> http://groups.yahoo.com/group/indianascannerfreqs/
>

1856. Re: [SkyWires] Re: how would i go about building this?

Yahoo group: SkyWires
Date: 2006-10-29 22:48:19 UTC
From: Ace Ratliff
Topic: 1851 Message: 1856

Roy,
A loop antenna will work I am just not sure how good it will work .
Ace - WH2T

----- Original Message -----
From: ROY & MARY PICKETT
To: SkyWires@yahoogroups.com
Sent: Sunday, October 29, 2006 5:18 PM
Subject: [SkyWires] Re: how would i go about building this?

So then a loop antenna wont work? I am using what i just found out is
a astroplane and we are picking up places a long ways off..But sence
it is not nearly as wide banded as the scanner,i am sure we can do
better with something else. Roy

--- In SkyWires@yahoogroups.com, "Ace Ratliff" <wh2t@...> wrote:
>
> Hi Roy,
> I would probably put up a discone antenna or you could try a
horizontal loop antenna.
> See
> http://www.northcountryradio.com/Articles/discone.htm
>
> Good Luck, Ace - WH2T
>
>
> ----- Original Message -----
> From: ROY & MARY PICKETT
> To: SkyWires@yahoogroups.com
> Sent: Sunday, October 29, 2006 1:10 PM
> Subject: [SkyWires] how would i go about building this?
>
>
>
> I have a BC246T and wonder how i could go about building a
antenna for it? It goes from 25 mhz to 1300mhz.
>
>
Thanks
>
>
Roy
>
> http://groups.yahoo.com/group/indianascannerfreqs/
>

1857. Making your own balanced feedline

Yahoo group: SkyWires
Date: 2006-10-29 23:11:20 UTC
From: Dave Marling
Topic: 1784 Message: 1857

I've finally finished up the article on making your own balanced feedline and posted it to the "Files" area. You will find it in my folder entitled "Loop and feedline building information" under the creator name "dbmklis".

If you find any errors, please let me know.

Dave
VE1VQ/VA6NS

1858. Re: how would i go about building this?

Yahoo group: SkyWires
Date: 2006-10-30 15:02:28 UTC
From: ROY & MARY PICKETT
Topic: 1851 Message: 1858

Thanks for the info.. I found out the name of the antenna i am using now.. I knew it was a base cb antenna and now was told it is a astroplane. It works well itself. May just leave it like it is..

Roy

--- In SkyWires@yahoogroups.com, "Ace Ratliff" <wh2t@...> wrote:
>
> Roy,
> A loop antenna will work I am just not sure how good it will work .
> Ace - WH2T
>
>
> ----- Original Message -----
> From: ROY & MARY PICKETT
> To: SkyWires@yahoogroups.com
> Sent: Sunday, October 29, 2006 5:18 PM
> Subject: [SkyWires] Re: how would i go about building this?
>
>
>
> So then a loop antenna wont work? I am using what i just found out is
> a astroplane and we are picking up places a long ways off..But sence
> it is not nearly as wide banded as the scanner,i am sure we can do
> better with something else. Roy
>
> --- In SkyWires@yahoogroups.com, "Ace Ratliff" wh2t@ wrote:
> >
> > Hi Roy,
> > I would probably put up a discone antenna or you could try a
> horizontal loop antenna.
> > See
> > http://www.northcountryradio.com/Articles/discone.htm
> >
> > Good Luck, Ace - WH2T
> >
> >
> > ----- Original Message -----
> > From: ROY & MARY PICKETT
> > To: SkyWires@yahoogroups.com
> > Sent: Sunday, October 29, 2006 1:10 PM
> > Subject: [SkyWires] how would i go about building this?
> >
> >
> >

> > I have a BC246T and wonder how i could go about building a
> antenna for it? It goes from 25 mhz to 1300mhz.
> >
> >
> Thanks
> >
> >
> Roy
> >
> > http://groups.yahoo.com/group/indianascannerfreqs/
> >
>

1859. Re: [SkyWires] how would i go about building this?

Yahoo group: SkyWires
Date: 2006-10-30 17:07:37 UTC
From: WILLIAM STEFFEL
Topic: 1851 Message: 1859

Use a Discone antenna. It works great on my RDO (40-3000 mc) & AR3000. With 3 Discones & an antenna switch you can cover the whole spectrum. Cut 1 for 30-1000 mc, 2nd for 1gc-2gc & 3rd for 2-3Gc-works for me.
----- Original Message -----
From: larry allen
To: SkyWires@yahoogroups.com
Sent: Sunday, October 29, 2006 12:18 PM
Subject: Re: [SkyWires] how would i go about building this?

Envy... Envy....
Larry ve3fxq

----- Original Message -----
From: "ROY & MARY PICKETT" <roy_pickett@...>
To: <SkyWires@yahoogroups.com>
Sent: Sunday, October 29, 2006 1:10 PM
Subject: [SkyWires] how would i go about building this?

I have a BC246T and wonder how i could go about building a antenna for
it? It goes from 25 mhz to 1300mhz.

Thanks

Roy

http://groups.yahoo.com/group/indianascannerfreqs/
<http://groups.yahoo.com/group/indianascannerfreqs/>

1861. Use 80 meter full wave loop for 160?

Yahoo group: SkyWires
Date: 2006-11-03 05:01:02 UTC
From: cewyattjr
Topic: 1861 Message: 1861

As the winter months approach I've been thinking about getting on 160. I have an 80 meter loop that worked well for DX last winter, at least getting into Europe seemed to be no problem.

I'm feeding with balanced line. Rather than make the loop bigger, would I be better off just shorting the leads together and feeding it like a big vertical with a giant capacitance hat? Or should I just bite the bullet and make it a full wave loop (as much as possible) with 500 or so feet of wire? I have the room to make it a bit bigger.

Thanks and 73,

Chuck
W1CEW

1862. Re: Use 80 meter full wave loop for 160?

Yahoo group: SkyWires
Date: 2006-11-03 07:35:22 UTC
From: madatweak
Topic: 1861 Message: 1862

From my understanding (& not yet having any practical experience) the recommended minimum length is 2 wavlengths on the lowest frequency as the the take off angle is only moderately OK so for 160 work you would look at a 320mtr loop & it would need to be up high. On the flipside using your loop effectively as a 1/2 wave vertical would send the signal straight up & back again which theoretically looks worse. - Perhaps your idea of making it longer is the better of 2 evils

--- In SkyWires@yahoogroups.com, "cewyattjr" <cewyattjr@...> wrote:
>
> As the winter months approach I've been thinking about getting on
> 160. I have an 80 meter loop that worked well for DX last winter,
at
> least getting into Europe seemed to be no problem.
>
> I'm feeding with balanced line. Rather than make the loop bigger,
> would I be better off just shorting the leads together and feeding
it
> like a big vertical with a giant capacitance hat? Or should I just
> bite the bullet and make it a full wave loop (as much as possible)
> with 500 or so feet of wire? I have the room to make it a bit
bigger.
>
> Thanks and 73,
>
> Chuck
> W1CEW
>

1863. 80m loop fed with coax

Yahoo group: SkyWires
Date: 2006-11-06 14:34:51 UTC
From: jsb@digistar.com
Topic: 1863 Message: 1863

hi,

Been reading the archives with interest but have a couple questions I can't answer...

Can I feed the loop with standard 9913 type coax without a tuner - I suppose I could but I would only be able to use it on its resonant frequency (80m in this case)?

If I run high power (1KW+) using a tuner at the rig will I destroy the coax? I don't really have a house that will accomodate ladder line because the shack is located in a room in the middle of the house - I can easily get coax out the wall of the shack through the garage and outside but everyone says ladder line won't work if it is within a foot of metal pieces. I'd have the run the ladder line near the garage door track in a few places so not sure how this would work. It would not run parallel to the track, it would cross perpendicular in a few places so not sure if that is ok.

I've got 5 dipoles hanging off of a 40 foot mast and it works ok but not as well as i'd like. I would really like to put up a 80m skywire so I can work all the bands without having a pile of antennas interfering with each other. i'd be more than happy to use ladder line if it would work, I just don't know how well it would work given that i'd have to hang it from the ceiling of my garage in the vicinity of garage door tracks. I also don't know what the preferred method is for running ladder line to the top of the mast given that the mast is metal.

Do I need to keep the ladder line 6 inches or 3 inches or a foot or more away from metal poles, and how far away for perpendicular paths?

Final question - what kind of poles are recommended for putting it up in the air? I don't trust the trees I have and I can't climb them either. I'd rather just put up 4 fiberglass poles and hang it that way. Any recommendations for where to buy good poles?

Thanks!
Jason

--
73 Jason N1SU
http://n1su.com/

1864. Re: [SkyWires] 80m loop fed with coax

Yahoo group: SkyWires
Date: 2006-11-06 15:46:23 UTC
From: Dave Marling
Topic: 1863 Message: 1864

Jason,

With all those places to get the feedline through, over and around, I would stick to coax. Running high power on balanced line in your situation would be asking for arcing and charred wood (or worse!). Even with low power, you've got proximity problems.

One answer would be to put an automatic tuner inside where the feedline exits the building and change to balanced line at that point.
That would keep the swr on your coax low for the transmitter's sake, on all bands it would tune.

That's a discustingly neat picture of your station, by the way! :)

73,
Dave
VE1VQ/VA6NS

1865. Re: 80m loop fed with coax

Yahoo group: SkyWires
Date: 2006-11-06 16:04:09 UTC
From: Don Keith
Topic: 1863 Message: 1865

Jason, you can certainly feed your loop with coax, but if you intend to use it elsewhere besides close to its resonant frequency or harmonics, and especially if you will be running considerable power, I don't think you will be happy with it.

Open-line or window-line feed is a much better choice because there will be far less loss (expended as heat in the coax, which with high power could be enough to be damaging) and your tuner will be looking at a much easier match. By the way, a balanced tuner would be the better choice but, if sufficiently rated for the kind of power you expect to run, a tuner using a balun for balanced feedline should work okay.

I don't think crossing perpindicular to your garage door track would be much of a problem, and especially if you can keep the run a few inches away. For other metal, including adjacent to runs of coax, the rule I've always heard is keep the open line at least twice its width away and avoid long adjacent runs within a foot or so entirely if possible. I think if you standoff from your tower a foot, you'll be fine.

Some recommend using a balun outside the house to couple the higher impedance open line to a coax run into the house. Some on this reflector may have been able to do that, but I don't see how you could without compromising the broadbandedness of the loop/open line. What type balun would work? 6:1? 8:1? You may not even be able to find a commercially made one that had the right denomination, and the impedance is going to vary depending on your operating frequency. Of course, you have the same problem using a tuner with a balun, but somehow, having it closer to the tuner and not having that long run of coax facing a possible serious impedance mismatch seems to make me feel better.

Here's a compromise I used and it seems to work fine. I took two equal length pieces of coax--I used RG-8--long enough to reach from outside (or wherever you'll encounter other metal) to the tuner. Keep it as short as possible, especially if you will be running power. Tie the braids together on each end. Hook the braid on the station end to your station ground. Tie each leg of your ladder line/window line to a center conductor of the coax. Hook the other two center conductors to the balanced line terminals on your tuner. The impedance of the two pieces of coax is closer to your ladder line and should present the tuner with a better match.

Let me know how it works.

73,

Don N4KC
www.donkeith.com

--- In SkyWires@yahoogroups.com, jsb@... wrote:
>
>
> hi,
>
> Been reading the archives with interest but have a couple questions
I
> can't answer...
>
>
> Can I feed the loop with standard 9913 type coax without a tuner - I
> suppose I could but I would only be able to use it on its resonant
> frequency (80m in this case)?
>
>
> If I run high power (1KW+) using a tuner at the rig will I destroy
the
> coax? I don't really have a house that will accomodate ladder line
> because the shack is located in a room in the middle of the house -
I can
> easily get coax out the wall of the shack through the garage and
outside
> but everyone says ladder line won't work if it is within a foot of
metal
> pieces. I'd have the run the ladder line near the garage door
track in a
> few places so not sure how this would work. It would not run
parallel to
> the track, it would cross perpendicular in a few places so not sure
if
> that is ok.
>
>
> I've got 5 dipoles hanging off of a 40 foot mast and it works ok
but not
> as well as i'd like. I would really like to put up a 80m skywire
so I can
> work all the bands without having a pile of antennas interfering
with each
> other. i'd be more than happy to use ladder line if it would work,
I just
> don't know how well it would work given that i'd have to hang it
from the
> ceiling of my garage in the vicinity of garage door tracks. I also
don't
> know what the preferred method is for running ladder line to the
top of

> the mast given that the mast is metal.
>
> Do I need to keep the ladder line 6 inches or 3 inches or a foot or
more
> away from metal poles, and how far away for perpendicular paths?
>
>
> Final question - what kind of poles are recommended for putting it
up in
> the air? I don't trust the trees I have and I can't climb them
either.
> I'd rather just put up 4 fiberglass poles and hang it that way. Any
> recommendations for where to buy good poles?
>
>
> Thanks!
> Jason
>
>
> --
> 73 Jason N1SU
> http://n1su.com/
>

1866. Re: [SkyWires] Re: 80m loop fed with coax

Yahoo group: SkyWires
Date: 2006-11-06 17:01:02 UTC
From: jsb@digistar.com
Topic: 1863 Message: 1866

On Mon, 6 Nov 2006, Don Keith wrote:

> I don't think crossing perpindicular to your garage door track would be
> much of a problem, and especially if you can keep the run a few inches
> away. For other metal, including adjacent to runs of coax, the rule
> I've always heard is keep the open line at least twice its width away
> and avoid long adjacent runs within a foot or so entirely if possible.
> I think if you standoff from your tower a foot, you'll be fine.

hi - lemme ask another dumb question... this is a hypothetical question only.... if I did run the ladder line so that it was perpendicular but only one inch above the track in a few places what does this do... does it set up a weird magnetic field near the track (TVI?) or does it cause the ladder line itself to couple somehow and get hot and potentially burn up on QRO transmit?

thanks,
Jason

1867. Re: [SkyWires] 80m loop fed with coax

Yahoo group: SkyWires
Date: 2006-11-06 17:50:17 UTC
From: Jim Dunstan
Topic: 1863 Message: 1867

At 09:34 AM 06/11/2006 -0500, you wrote:

>hi,
>
>Been reading the archives with interest but have a couple questions I
>can't answer...
>
>Can I feed the loop with standard 9913 type coax without a tuner - I
>suppose I could but I would only be able to use it on its resonant
>frequency (80m in this case)?

Yes, feeding directly with coax works well on the band for which the loop was designed ... eg 1 wavelength @ 80M. You will have higher SWR on other bands.

>If I run high power (1KW+) using a tuner at the rig will I destroy the
>coax? I don't really have a house that will accomodate ladder line
>because the shack is located in a room in the middle of the house - I can
>easily get coax out the wall of the shack through the garage and outside
>but everyone says ladder line won't work if it is within a foot of metal
>pieces. I'd have the run the ladder line near the garage door track in a
>few places so not sure how this would work. It would not run parallel to
>the track, it would cross perpendicular in a few places so not sure if
>that is ok.

The main difference (not the only one) between using a coax or open wire feed line between a 80M loop used for multi band operation is that the coax arrangement will introduce greater feed line loss than the open wire line. The other difference is that the open wire line maintains loop balance and minimizes feed line radiation. Full size coax like RG8 can stand a great deal of voltage and I doubt if voltage or heat will damage the coax ... even at 1 kw. However, the problem you may find transmitting with that arrangement is that you may have to deal with excessive RF in the shack.

As far as open wire line or TV twin lead and metal objects is concerned you don't have to be too concerned. TV twin lead accessory stand-off are usually only 6" long. On a number of occasions I have run TV twin lead down metal masts using these stand-offs and have had excellent performance .... In some instances I have actually taped the twin lead to the mast and again had excellent performance. If you use higher power and 450 ohm open wire line I would of course recommend the use of stand offs of at least 6" from the mast. They shouldn't be too hard to manufacture.

Bringing the feed line through the house is a different problem ... I have used TV twin lead to great success. Some people use open wire line to the

house .... then couple the balanced line to coax (via a Balun) for the run to the operating position. Another posting suggested running a parallel pair of coax leads configured in a balanced line arrangement to the operating position.

>I've got 5 dipoles hanging off of a 40 foot mast and it works ok but not
>as well as i'd like. I would really like to put up a 80m skywire so I can
>work all the bands without having a pile of antennas interfering with each
>other. i'd be more than happy to use ladder line if it would work, I just
>don't know how well it would work given that i'd have to hang it from the
>ceiling of my garage in the vicinity of garage door tracks. I also don't
>know what the preferred method is for running ladder line to the top of
>the mast given that the mast is metal.

Well you can experiment with multi band operation and your feed system before putting up the 4 poles and a horizontal loop. Take down your 5 dipoles and put up a single dipole (I assume you are using them in an inverted Vee configuration since you have a single 40' mast. Make the inverted vee about 100' long (50' per side) and feed it with TV twin lead for a start. A 100' inverted Vee with a 40' apex is an excellent antenna. Bring the twin lead into the shack the way you describe and connect it to your tuner via a balun. It will work like gangbusters. Once you establish the operation on the bands of your choice you can upgrade the feed system with open wire line/coax/balun etc for higher power.

You may find you don't want to make the physical and financial investment installing the 4 poles and skywire. If you do, then you will already have solved your feed system .... the needs will be almost the same whether you use the 100' inverted vee or 80M skywire.

Jim, VE3CI

1868. Re: [SkyWires] Re: 80m loop fed with coax

Yahoo group: SkyWires
Date: 2006-11-06 18:22:51 UTC
From: Jim Dunstan
Topic: 1863 Message: 1868

At 12:01 PM 06/11/2006 -0500, you wrote:

>On Mon, 6 Nov 2006, Don Keith wrote:
>
> > I don't think crossing perpindicular to your garage door track would be
> > much of a problem, and especially if you can keep the run a few inches
> > away. For other metal, including adjacent to runs of coax, the rule
> > I've always heard is keep the open line at least twice its width away
> > and avoid long adjacent runs within a foot or so entirely if possible.
> > I think if you standoff from your tower a foot, you'll be fine.
>
>hi - lemme ask another dumb question... this is a hypothetical question
>only.... if I did run the ladder line so that it was perpendicular but
>only one inch above the track in a few places what does this do... does
>it set up a weird magnetic field near the track (TVI?) or does it cause
>the ladder line itself to couple somehow and get hot and potentially burn
>up on QRO transmit?
>
>thanks,
>Jason

HI Jason,

Well the way balanced line works is that the RF currents in the parallel lines generated by your transmitter (including the standing waves) are 180 degrees out of phase at any particular point along its length. This means that in a perfectly balanced antenna/feed line system there will be no radiation from the feedline as the electromagnetic fields generated in the parallel lines in close proximity to each other cancel out. The danger in running balanced feed line close to metal objects is that the balance in the parallel fields will be disturbed which will cause radiation.

The electromagnetic field around the feedline is much reduced from say a single wire (eg end fed wire antenna). The field around the balanced line is much reduced because of the balancing effect. Any effect of metal objects seem to be negligible if 1 foot away. The effect is less if the object is narrow and perpendicular rather than parallel. If you are running close to a parallel mental object it useful to put a twist in the parallel line ... eg TV twinlead or in the case of wider space open wire line .... to keep each line an equal distance from the object .... always trying to maintain balance.

In high power installations (commercial) using open wire feed systems they go to great length to make sure each of the parallel wires is affected equally by surrounding metal objects. With close spaced parallel lines like TV twin lead the effect of nearby metal objects is much less critical

than 450 ohm line and much much less than home made wide spaced line that has 4" or more separation.

When dressing open wire parallel feed line the objective is to minimize the disturbance to the balance of the electromagnetic fields and thus radiation from the feedline.

Jim, VE3CI

>

1869. Re: [SkyWires] 80m loop fed with coax

Yahoo group: SkyWires
Date: 2006-11-06 18:40:22 UTC
From: MAXXOUT2@AOL.COM
Topic: 1863 Message: 1869

Is this a typo?
40* APEX? Or Is that 40 feet ' or 40 degrees?
BOB
AF2Q

In a message dated 11/6/2006 10:05:47 AM Pacific Standard Time,
jdunstan@... writes:

A 100' inverted Vee with a 40' apex is an excellent
antenna. Bring the twin lead into the shack the way you describe and
connect it to your tuner via a balun. It will work like gangbusters. Once
you establish the operation on the bands of your choice you can upgrade the
feed system with open wire line/coax/balun etc for higher power.

1870. Re: [SkyWires] Re: 80m loop fed with coax

Yahoo group: SkyWires
Date: 2006-11-06 19:42:17 UTC
From: py1vhf - anderson colla
Topic: 1863 Message: 1870

Great post, Jim! Nothing left to be said. Thanks a lot, OM.

Jim Dunstan escreveu:
> At 12:01 PM 06/11/2006 -0500, you wrote:
>
>
>> On Mon, 6 Nov 2006, Don Keith wrote:
>>
>>
>>> I don't think crossing perpindicular to your garage door track would be
>>> much of a problem, and especially if you can keep the run a few inches
>>> away. For other metal, including adjacent to runs of coax, the rule
>>> I've always heard is keep the open line at least twice its width away
>>> and avoid long adjacent runs within a foot or so entirely if possible.
>>> I think if you standoff from your tower a foot, you'll be fine.
>>>
>> hi - lemme ask another dumb question... this is a hypothetical question
>> only.... if I did run the ladder line so that it was perpendicular but
>> only one inch above the track in a few places what does this do... does
>> it set up a weird magnetic field near the track (TVI?) or does it cause
>> the ladder line itself to couple somehow and get hot and potentially burn
>> up on QRO transmit?
>>
>> thanks,
>> Jason
>>
>
> HI Jason,
>
> Well the way balanced line works is that the RF currents in the parallel
> lines generated by your transmitter (including the standing waves) are 180
> degrees out of phase at any particular point along its length. This means
> that in a perfectly balanced antenna/feed line system there will be no
> radiation from the feedline as the electromagnetic fields generated in the
> parallel lines in close proximity to each other cancel out. The danger in
> running balanced feed line close to metal objects is that the balance in
> the parallel fields will be disturbed which will cause radiation.
>
> The electromagnetic field around the feedline is much reduced from say a
> single wire (eg end fed wire antenna). The field around the balanced line
> is much reduced because of the balancing effect. Any effect of metal
> objects seem to be negligible if 1 foot away. The effect is less if the
> object is narrow and perpendicular rather than parallel. If you are
> running close to a parallel mental object it useful to put a twist in the
> parallel line ... eg TV twinlead or in the case of wider space open wire

> line .... to keep each line an equal distance from the object .... always
> trying to maintain balance.
>
> In high power installations (commercial) using open wire feed systems they
> go to great length to make sure each of the parallel wires is affected
> equally by surrounding metal objects. With close spaced parallel lines
> like TV twin lead the effect of nearby metal objects is much less critical
> than 450 ohm line and much much less than home made wide spaced line that
> has 4" or more separation.
>
> When dressing open wire parallel feed line the objective is to minimize the
> disturbance to the balance of the electromagnetic fields and thus radiation
> from the feedline.
>
> Jim, VE3CI
>

--
+++
- _____
- /_____\
- (|<*,*>|) PY1VHF * Anderson Colla
- [`-'] GG97co * p y 1 v h f AT amsat.org
- -"-"- Maca? RJ * Brazil
-
- Those that can, DX. Those that can't DX, do nets...

1871. Re: [SkyWires] 80m loop fed with coax

Yahoo group: SkyWires
Date: 2006-11-06 20:43:57 UTC
From: erik@n0ew.org
Topic: 1863 Message: 1871

The original poster had a 40-foot tower, which already supported
several dipoles.

So I took this to mean using the tower as the tallest point of the
inverted vee antenna, and the feed point for the antenna, and each leg
of the antenna to be 50-ft. in length.

Rules of thumb would say to aim for at least a 120-degree angle
between those legs. Practical rules will first ask where the support
points are located on the property and then get as close to horizontal
as possible, and leave it at that, be it, 90-degrees, 150-degrees, or
x-degrees.

We might add that keeping the end-most tips of those legs above the
earth to be a good idea. Rule of thumb says 10-ft. is good. I'm not
personally certain wether that is so much due to earth effects upon
the antenna, or being pretty certain no neighborhood kids are playing
with your antenna when you transmit.

Good rule of thumb in either event.

-Erik n0ew

> Is this a typo?
> 40* APEX? Or Is that 40 feet ' or 40 degrees?
> BOB
> AF2Q
>
>
> A 100' inverted Vee with a 40' apex is an excellent
> antenna. Bring the twin lead into the shack the way you describe and
> connect it to your tuner via a balun. It will work like gangbusters. Once
> you establish the operation on the bands of your choice you can upgrade the
> feed system with open wire line/coax/balun etc for higher power.

1872. Re: [SkyWires] 80m loop fed with coax

Yahoo group: SkyWires
Date: 2006-11-06 21:01:36 UTC
From: Jim Dunstan
Topic: 1863 Message: 1872

At 01:40 PM 06/11/2006 -0500, you wrote:

>Is this a typo?
>40* APEX? Or Is that 40 feet ' or 40 degrees?
>BOB
>AF2Q
>
>In a message dated 11/6/2006 10:05:47 AM Pacific Standard Time,
>jdunstan@... writes:
>>A 100' inverted Vee with a 40' apex is an excellent
>>antenna. Bring the twin lead into the shack the way you describe and
>>connect it to your tuner via a balun. It will work like gangbusters. Once
>>you establish the operation on the bands of your choice you can upgrade the
>>feed system with open wire line/coax/balun etc for higher power.

I was referring to the fact Jason mentioned that he was using a 40 ft metal mast. I was saying that a 100 ft inverted vee antenna fed with TV twin lead with the apex at the top of the 40 ft mast makes an excellent all band antenna.

Jim, VE3CI

1873. Re: [SkyWires] 80m loop fed with coax

Yahoo group: SkyWires
Date: 2006-11-06 21:09:59 UTC
From: jsb@digistar.com
Topic: 1863 Message: 1873

On Mon, 6 Nov 2006, Jim Dunstan wrote:

> I was referring to the fact Jason mentioned that he was using a 40 ft
> metal mast. I was saying that a 100 ft inverted vee antenna fed with TV
> twin lead with the apex at the top of the 40 ft mast makes an excellent
> all band antenna.

I've got a 160m dipole that I may retrofit with ladder line once I find a tuner. it's currently fed with RG8X but I feel empowered to get 86' of ladder line and a tuner to try it out. i've got the room to put up a 160m loop also, so now it's Tuner hunting time for me.

Thanks!
Jason

--
73 Jason N1SU
http://n1su.com/

1874. reuse old copper?

Yahoo group: SkyWires
Date: 2006-11-06 21:17:46 UTC
From: jsb@digistar.com
Topic: 1874 Message: 1874

I've got the remains of several dipoles that I took down a few years ago. When I took them down the wire had tarnished a bit and I couldn't ever get solder to take to it to use on other antennas, even with some flux. I used radio shack paste flux so perhaps it wasn't up to the job. But I was wondering if I could clean that up some other way and use that wire instead of buying a spool of new wire. I read here and there where you can remove the tarnish from copper for antiques restoration but I also read that some of those anti-tarnish ideas can screw up the conductivity of the copper.

Anyone got any good ideas how to remove the tarnish off the last inch of each piece so I can solder it together into one long piece of wire?

thanks

--
73 Jason N1SU
http://n1su.com/

1875. Re: [SkyWires] 80m loop fed with coax

Yahoo group: SkyWires
Date: 2006-11-06 21:28:26 UTC
From: MAXXOUT2@AOL.COM
Topic: 1863 Message: 1875

OK,
Well I use 125 to 145* apex angle
As far as the end of the wire goes if you have good ground conductivity you should try to keep the ends a 1/4 up from the ground.
Difficult for most hams who have an 80 meter dipole.
Thats why I use an end fed for 80 because I just use a tiny home brew tuner and I put the wire right to the center conductor on the back of the rig.
I built up several loops but never got into the larger ones.
I sort of stick the 3-4 foot diameter MAG loops.
They seem to do good for what they are
It;s got more hams like me back on the air because were not allowed any wires.
They actually hunt down 32 GA magnet wire.
BOB
AF2Q _http://groups.yahoo.com/group/CW-QRP-Covert-Antennas/_ (http://groups.yahoo.com/group/CW-QRP-Covert-Antennas/)
So that others may live.
http://www.bearsearchandrescue.org/ (http://www.bearsearchandrescue.org/)

In a message dated 11/6/2006 12:46:36 PM Pacific Standard Time, erik@... writes:

We might add that keeping the end-most tips of those legs above the earth to be a good idea. Rule of thumb says 10-ft. is good. I'm not personally certain wether that is so much due to earth effects upon the antenna, or being pretty certain no neighborhood kids are playing with your antenna when you transmit

1876. Re: 80m loop fed with coax

Yahoo group: SkyWires
Date: 2006-11-06 23:00:12 UTC
From: Don Keith
Topic: 1863 Message: 1876

--- In SkyWires@yahoogroups.com, Jim Dunstan <jdunstan@...> wrote:
>
> At 09:34 AM 06/11/2006 -0500, you wrote:
>
>
> >hi,
> >
> >Been reading the archives with interest but have a couple
questions I
> >can't answer...
> >
> >Can I feed the loop with standard 9913 type coax without a tuner -
I
> >suppose I could but I would only be able to use it on its resonant
> >frequency (80m in this case)?
>
> Yes, feeding directly with coax works well on the band for which
the loop
> was designed ... eg 1 wavelength @ 80M. You will have higher SWR
on other
> bands.
>
>
> >If I run high power (1KW+) using a tuner at the rig will I destroy
the
> >coax? I don't really have a house that will accomodate ladder line
> >because the shack is located in a room in the middle of the house -
I can
> >easily get coax out the wall of the shack through the garage and
outside
> >but everyone says ladder line won't work if it is within a foot of
metal
> >pieces. I'd have the run the ladder line near the garage door
track in a
> >few places so not sure how this would work. It would not run
parallel to
> >the track, it would cross perpendicular in a few places so not
sure if
> >that is ok.
>
> The main difference (not the only one) between using a coax or
open wire
> feed line between a 80M loop used for multi band operation is that
the coax
> arrangement will introduce greater feed line loss than the open

wire
> line. The other difference is that the open wire line maintains
loop
> balance and minimizes feed line radiation. Full size coax like RG8
can
> stand a great deal of voltage and I doubt if voltage or heat will
damage
> the coax ... even at 1 kw. However, the problem you may find
transmitting
> with that arrangement is that you may have to deal with excessive
RF in the
> shack.
>
> As far as open wire line or TV twin lead and metal objects is
concerned you
> don't have to be too concerned. TV twin lead accessory stand-off
are
> usually only 6" long. On a number of occasions I have run TV twin
lead
> down metal masts using these stand-offs and have had excellent
performance
> .... In some instances I have actually taped the twin lead to the
mast and
> again had excellent performance. If you use higher power and 450
ohm open
> wire line I would of course recommend the use of stand offs of at
least 6"
> from the mast. They shouldn't be too hard to manufacture.
>
> Bringing the feed line through the house is a different problem ...
I have
> used TV twin lead to great success. Some people use open wire line
to the
> house .... then couple the balanced line to coax (via a Balun) for
the run
> to the operating position. Another posting suggested running a
parallel
> pair of coax leads configured in a balanced line arrangement to the
> operating position.
>
> >I've got 5 dipoles hanging off of a 40 foot mast and it works ok
but not
> >as well as i'd like. I would really like to put up a 80m skywire
so I can
> >work all the bands without having a pile of antennas interfering
with each
> >other. i'd be more than happy to use ladder line if it would work,
I just
> >don't know how well it would work given that i'd have to hang it
from the

> >ceiling of my garage in the vicinity of garage door tracks. I also
don't
> >know what the preferred method is for running ladder line to the
top of
> >the mast given that the mast is metal.
>
> Well you can experiment with multi band operation and your feed
system
> before putting up the 4 poles and a horizontal loop. Take down
your 5
> dipoles and put up a single dipole (I assume you are using them in
an
> inverted Vee configuration since you have a single 40' mast. Make
the
> inverted vee about 100' long (50' per side) and feed it with TV
twin lead
> for a start. A 100' inverted Vee with a 40' apex is an excellent
> antenna. Bring the twin lead into the shack the way you describe
and
> connect it to your tuner via a balun. It will work like
gangbusters. Once
> you establish the operation on the bands of your choice you can
upgrade the
> feed system with open wire line/coax/balun etc for higher power.
>
> You may find you don't want to make the physical and financial
investment
> installing the 4 poles and skywire. If you do, then you will
already have
> solved your feed system .... the needs will be almost the same
whether you
> use the 100' inverted vee or 80M skywire.
>
> Jim, VE3CI
>

Jim, VE3CI, says much of what I did only much better! And his suggestion on another post about twisting the balanced feedline is another trick I've learned. It not only helps to keep it from coupling with metal objects it may pass but it also keeps wind resistance down.

I use 450-ohm "window" line, primarily because it is easy to handle and relatively cheap (or as cheap as anything with copper in it these days). I buy mine from The Wireman but there are several suppliers. If you buy the line with stranded conductor (best choice) Be sure to tin the wire with solder after removing the insulation or you'll have a mess trying to solder it to anything.

And Jim is also absolutely correct about trying a balanced-feedline dipole at 40 feet. I'd make mine longer...maybe 135 feet total for

80/75 or 270 feet for 160. It should then be a fine antenna for all ham bands, maybe even including six meters if you have a matchbox that can handle it. My 450-foot loop is working well but I'm itching to try the longwire, too. Literally itching! I got into a mess of poison oak when I was putting up the skywire!

Good luck!

73,

Don N4KC
www.donkeith.com

1877. Re: [SkyWires] reuse old copper?

Yahoo group: SkyWires
Date: 2006-11-06 23:47:56 UTC
From: Dan KB6NU
Topic: 1874 Message: 1877

I can't think of a good reason why you shouldn't re-use the wire. As for cleaning the tarnish off the wire so you can solder it, I'd guess there is some kind of copper cleaner at a hardware store. I believe I've taken sandpaper to copper wire, too.

73!

Dan KB6NU

CW Geek and MI Affiliated Club Coordinator
Read my ham radio blog at www.kb6nu.com
LET'S GET MORE KIDS INTO HAM RADIO!

On Nov 6, 2006, at 4:17 PM, jsb@... wrote:
> I've got the remains of several dipoles that I took down a few
> years ago.
> When I took them down the wire had tarnished a bit and I couldn't
> ever get
> solder to take to it to use on other antennas, even with some flux. I
> used radio shack paste flux so perhaps it wasn't up to the job. But
> I was
> wondering if I could clean that up some other way and use that wire
> instead of buying a spool of new wire. I read here and there where you
> can remove the tarnish from copper for antiques restoration but I also
> read that some of those anti-tarnish ideas can screw up the
> conductivity
> of the copper.
>
> Anyone got any good ideas how to remove the tarnish off the last
> inch of
> each piece so I can solder it together into one long piece of wire?
>
> thanks
>
> --
> 73 Jason N1SU
> http://n1su.com/

1878. Re: [SkyWires] reuse old copper?

Yahoo group: SkyWires
Date: 2006-11-07 00:37:59 UTC
From: larry allen
Topic: 1874 Message: 1878

Try using a knife to scrap off the oxide...
Larry ve3fxq

----- Original Message -----
From: "Dan KB6NU" <kb6nu@...>
To: <SkyWires@yahoogroups.com>
Sent: Monday, November 06, 2006 6:47 PM
Subject: Re: [SkyWires] reuse old copper?

>I can't think of a good reason why you shouldn't re-use the wire. As
> for cleaning the tarnish off the wire so you can solder it, I'd guess
> there is some kind of copper cleaner at a hardware store. I believe
> I've taken sandpaper to copper wire, too.
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> 73!
>
> Dan KB6NU
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> CW Geek and MI Affiliated Club Coordinator
> Read my ham radio blog at www.kb6nu.com
> LET'S GET MORE KIDS INTO HAM RADIO!
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>> each piece so I can solder it together into one long piece of wire?
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>> thanks
>>

>> --
>> 73 Jason N1SU
>> http://n1su.com/
>

1879. 160 or 80

Yahoo group: SkyWires
Date: 2006-11-07 01:02:13 UTC
From: Jason Buchanan
Topic: 1879 Message: 1879

hi,

I took a walk around the house earlier to get a rough idea where I can put up different loops. I can put up an 80m full-wave skywire loop that is clear of trees, etc. in open field OR I can put up a 160m full-wave loop that will partially have to be "threaded" through the trees. I?m not sure if this is a good or bad idea. I?d sure like to be on 160m but if it?s not possible then I?ll go the 80m route.

The shape of the 80m loop is not perfectly square though. From the feedpoint (corner) I have 68 feet to a good tree on the left and right side of the loop but the distance from the feedpoint to the 2nd pole is probably about 50 feet. It was dark by the time I finished measuring out the sides. So I guess it would look more like a rhombic with the feedpoint on the obtuse "wide" side of the angle rather than the acute "narrow" side.

The shape of the 160m loop would be more rectangular and be 20 feet at most above ground. I would have to run the wire through the trees here and there along the property line. The northwest corner of the loop would be 10 feet lower than the other corners because that part of the yard slopes down about 10 feet at the far corner. Eventually I could get a fiberglass pole or something to support it higher but initially I would secure it to a tree about 10 feet off the ground.

So..... just curious what everyone's opinion might be about what the pros and cons would be for either antenna. A squished 80m loop (very broad to east/west) or a more rectangular 160m loop about 20 feet off the ground with the NW corner about 10 feet down.

Thanks!!
Jason N1SU

1880. Re: [SkyWires] reuse old copper?

Yahoo group: SkyWires
Date: 2006-11-07 01:10:48 UTC
From: MAXXOUT2@AOL.COM
Topic: 1874 Message: 1880

I looked but I missed the post or there was no mention of the wire being solid or strand.
Anyway I cleaned the ends of stranded wire by fanning out the strands then scraping the fine wires with the edge of a knife.
I twisted both ends together and used a 150 watt iron and the hot solder just works itself into the twisted joint.
You shouldn't need any flux and come to think of it I can't ever recall using any type of flux on wires or on PC boards
When you twist the ends together hold the iron under the joint and keep heating it until solder will flow from the top, through the twisted joint down to the iron
BOB
AF2Q _http://www.bearsearchandrescue.org/_
(http://www.bearsearchandrescue.org/)
So that Others May Live

In a message dated 11/6/2006 3:54:53 PM Pacific Standard Time, kb6nu@... writes:

I can't think of a good reason why you shouldn't re-use the wire. As for cleaning the tarnish off the wire so you can solder it, I'd guess there is some kind of copper cleaner at a hardware store. I believe I've taken sandpaper to copper wire, too

1881. Re: [SkyWires] reuse old copper?

Yahoo group: SkyWires
Date: 2006-11-07 02:17:00 UTC
From: Dennis
Topic: 1874 Message: 1881

Try dipping the ends of the wire in some muriatic acid, rinse them with water, twist them together and solder.

Regards,
Dennis
VE7YM

----- Original Message -----
From: larry allen
To: SkyWires@yahoogroups.com
Sent: Monday, November 06, 2006 4:37 PM
Subject: Re: [SkyWires] reuse old copper?

Try using a knife to scrap off the oxide...
Larry ve3fxq

----- Original Message -----
From: "Dan KB6NU" <kb6nu@...>
To: <SkyWires@yahoogroups.com>
Sent: Monday, November 06, 2006 6:47 PM
Subject: Re: [SkyWires] reuse old copper?

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> for cleaning the tarnish off the wire so you can solder it, I'd guess
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> 73!
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> Dan KB6NU
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> CW Geek and MI Affiliated Club Coordinator
> Read my ham radio blog at www.kb6nu.com
> LET'S GET MORE KIDS INTO HAM RADIO!
>
>
>
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>> each piece so I can solder it together into one long piece of wire?
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>> thanks
>>
>> --
>> 73 Jason N1SU
>> http://n1su.com/
>

1882. RE: [SkyWires] 160 or 80

Yahoo group: SkyWires
Date: 2006-11-07 04:50:20 UTC
From: Eric Skaggs
Topic: 1879 Message: 1882

If NVIS work is all you want than its fine....Anything else, forget it...Eric W7NNN

From: Jason Buchanan
Reply-To: SkyWires@yahoogroups.com
To: SkyWires@yahoogroups.com
Subject: [SkyWires] 160 or 80
Date: Mon, 06 Nov 2006 20:02:13 -0500
>
>
>hi,
>
>I took a walk around the house earlier to get a rough idea where I can
>put up different loops. I can put up an 80m full-wave skywire loop that
>is clear of trees, etc. in open field OR I can put up a 160m full-wave
>loop that will partially have to be "threaded" through the trees. I?m
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>
>
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>
>Thanks!!
>Jason N1SU

>
>
>
>Yahoo! Groups Links
>
><*> To visit your group on the web, go to:
> http://groups.yahoo.com/group/SkyWires/
>
><*> Your email settings:
> Individual Email | Traditional
>
><*> To change settings online go to:
> http://groups.yahoo.com/group/SkyWires/join
> (Yahoo! ID required)
>
><*> To change settings via email:
> mailto:SkyWires-digest@yahoogroups.com
> mailto:SkyWires-fullfeatured@yahoogroups.com
>
><*> To unsubscribe from this group, send an email to:
> SkyWires-unsubscribe@yahoogroups.com
>
><*> Your use of Yahoo! Groups is subject to:
> http://docs.yahoo.com/info/terms/
>
>

1883. Re: [SkyWires] reuse old copper?

Yahoo group: SkyWires
Date: 2006-11-07 04:48:17 UTC
From: Eric Skaggs
Topic: 1874 Message: 1883

Make sure wire isn't burnt up from previous usage. Eric W7NNN

From: "Dennis"
Reply-To: SkyWires@yahoogroups.com
To:
Subject: Re: [SkyWires] reuse old copper?
Date: Mon, 6 Nov 2006 18:17:00 -0800

Try dipping the ends of the wire in some muriatic acid, rinse them with water, twist them together and solder.

Regards,

Dennis

VE7YM

----- Original Message -----

From: larry allen

To: SkyWires@yahoogroups.com

Sent: Monday, November 06, 2006 4:37 PM

Subject: Re: [SkyWires] reuse old copper?

Try using a knife to scrap off the oxide...
Larry ve3fxq

----- Original Message -----
From: "Dan KB6NU" <kb6nu@w8pgw.org>
To: <SkyWires@yahoogroups.com>
Sent: Monday, November 06, 2006 6:47 PM
Subject: Re: [SkyWires] reuse old copper?

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> Dan KB6NU
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> CW Geek and MI Affiliated Club Coordinator
> Read my ham radio blog at www.kb6nu.com
> LET'S GET MORE KIDS INTO HAM RADIO!

>
>
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>> --
>> 73 Jason N1SU
>> http://n1su.com/
>

1884. Re: [SkyWires] reuse old copper?

Yahoo group: SkyWires
Date: 2006-11-07 14:20:13 UTC
From: JimMcSkate@aol.com
Topic: 1874 Message: 1884

My favorite trick (which works on copper-bottom pots as well) is to mix up some vinegar and salt (lots of salt) and then dip the ends in, twist them between your fingers to get the strands all covered, then rinse well... I've also used baking soda after the rinse to neutralize the vinegar... then rinse again.

Works like a charm... and the ingredients are in your kitchen cupboard, not the garage ;-)

73 de WA2LGN
Jim
Blue Point, NY

-----Original Message-----
From: dennis.hollingsworth@...
To: SkyWires@yahoogroups.com
Sent: Mon, 6 Nov 2006 9:17 PM
Subject: Re: [SkyWires] reuse old copper?

Try dipping the ends of the wire in some muriatic acid, rinse them with water, twist them together and solder.

Regards,
Dennis
VE7YM

----- Original Message -----
From: larry allen
To: SkyWires@yahoogroups.com
Sent: Monday, November 06, 2006 4:37 PM
Subject: Re: [SkyWires] reuse old copper?

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Larry ve3fxq

----- Original Message -----
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Sent: Monday, November 06, 2006 6:47 PM
Subject: Re: [SkyWires] reuse old copper?

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> 73!
>
> Dan KB6NU

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>> http://n1su.com/
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_____
Check out the new AOL. Most comprehensive set of free safety and security tools, free access to millions of high-quality videos from across the web, free AOL Mail and more.

1885. Re: [SkyWires] reuse old copper?

Yahoo group: SkyWires
Date: 2006-11-07 15:33:22 UTC
From: Kyle
Topic: 1874 Message: 1885

What about Tarn-X? It's the stuff that in the advertisement has an old, corroded, tarnished penny half in and half out of the liquid. The half that's in looks brand new. My wife, my mother, and even my grandmother use it. Without any scrubbing, I have seen it make copper look brand new before.

Has anyone tried Tarn-X for this application?

Kyle
W4KDA

JimMcSkate@... wrote:
>
>
> My favorite trick (which works on copper-bottom pots as well) is to mix
> up some vinegar and salt (lots of salt) and then dip the ends in, twist
> them between your fingers to get the strands all covered, then rinse
> well... I've also used baking soda after the rinse to neutralize the
> vinegar... then rinse again.
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> Works like a charm... and the ingredients are in your kitchen cupboard,
> not the garage ;-)
>
> 73 de WA2LGN
> Jim
> Blue Point, NY

1886. Re: 80m loop fed with coax

Yahoo group: SkyWires
Date: 2006-11-07 15:17:46 UTC
From: Jim Coe
Topic: 1863 Message: 1886

Jason,

I second what was put forth by Don (N4KC) with some slight differences:
>Here's a compromise I used and it seems to work fine. I took two
>equal length pieces of coax--I used RG-8--long enough to reach from
>outside (or wherever you'll encounter other metal) to the tuner.
>Keep it as short as possible, especially if you will be running
>power. Tie the braids together on each end. Hook the braid on the
>station end to your station ground. Tie each leg of your ladder
>line/window line to a center conductor of the coax. Hook the other
>two center conductors to the balanced line terminals on your tuner.
>The impedance of the two pieces of coax is closer to your ladder line
>and should present the tuner with a better match.
>Don N4KC
I regularly use two lengths of RG-8 or RG-213 (up to about 15-feet,
shorter is better)
to route RF from my indoor tuner to my outdoor loops fed with open
wire line. I connect
the braids together only at the shack end and tie them to my tuner or shack
ground. I leave the other end of the braids open and just seal the
ends with coax
seal. I do it this way as I have seen some impedance bumps on the upper bands
(17m and 10m) when the shields were connected at both ends. I do not use
RG-58 or RG-8X simply because of the lower breakdown voltage ratings as I
often run legal limit SSB and AM. The paralleled coax will result in
approx a 100-ohm
line, but the mismatch to the 450-ohm or 600-ohm open wire line will not be a
problem. Tape the two pieces of coax together every 6-inches or so to keep
the balance under control.

I do not recommend the use of a balun at the end of a single coax run from the
shack to convert to open wire line because the high impedances and high RF
voltages involved. Also, the impedances you will see at the junction
of the coax
and open wire line will vary all over the place and a 4:1 balun will seldom see
a 4:1 matched condition.

As for the open wire line itself, I use only the W7FG open wire line.
It is nominally
600-ohms, is very sturdy and I have experienced no failure of any
kind with it in
the five years I've used it. Even the best windowed 450-ohm line I've used has
experienced breakage due to wind and ice during the same time period.

As for a tuner to use, do not try to use a tuner which has a balun at
the output to

match open wire line. The balun will seldom see it's design values of
impedance,
will saturate easily and may even experience voltage breakdown. Either move the
existing balun to the input of the tuner or better yet, buy or build
a true balanced
tuner such as the one described by Rich Measures, and others, in the
ham magazines.
I use a balanced PalStar and a homebrew balanced tuner.

Another problem a lot of hams have with loops and dipoles fed with
coax or open wire
lines is that certain feed line lengths will result in extremely high
(or low) impedances
or high RF voltages at the tuner end of the line on specific bands.
Often, this will either
cause RF in the shack or will be such that the tuner cannot match the
line. One solution
is to be able to insert (or remove) a section of line to avoid the
problem on that band.
A second solution is to install the line using a non-resonant length
to begin with. The
ARRL and other handbooks list lengths to avoid in the sections
related to conductive
guy wires for towers.

73.....Jim W5JI

1887. Re: [SkyWires] Re: 80m loop fed with coax

Yahoo group: SkyWires
Date: 2006-11-07 17:14:03 UTC
From: jsb@digistar.com
Topic: 1863 Message: 1887

On Tue, 7 Nov 2006, Jim Coe wrote:

> I regularly use two lengths of RG-8 or RG-213 (up to about 15-feet,
> shorter is better) to route RF from my indoor tuner to my outdoor loops
> fed with open wire line. I connect the braids together only at the shack
> end and tie them to my tuner or shack ground. I leave the other end of
> the braids open and just seal the ends with coax seal.

I'll give that a try. I've got a pile of RG8 that i'm not using which
would make a good test run.

> I do not recommend the use of a balun at the end of a single coax run
> from the shack to convert to open wire line because the high impedances
> and high RF voltages involved. Also, the impedances you will see at the
> junction of the coax and open wire line will vary all over the place and
> a 4:1 balun will seldom see a 4:1 matched condition.

I bought one of those ladder lock gizmos to take the ladder line and
connect it to the loop.

> As for the open wire line itself, I use only the W7FG open wire line.
> It is nominally 600-ohms, is very sturdy and I have experienced no
> failure of any kind with it in the five years I've used it. Even the
> best windowed 450-ohm line I've used has experienced breakage due to
> wind and ice during the same time period.

I will look for that. A local ham gave me a 100' piece of 450ohm #16AWG
ladder line to try - will see how that goes and will look for the line
you're talking about.

> As for a tuner to use, do not try to use a tuner which has a balun at
> the output to match open wire line. The balun will seldom see it's
> design values of impedance, will saturate easily and may even experience
> voltage breakdown. Either move the existing balun to the input of the
> tuner or better yet, buy or build a true balanced tuner such as the one
> described by Rich Measures, and others, in the ham magazines. I use a
> balanced PalStar and a homebrew balanced tuner.

I picked up a Dentron "Super Super Tuner" (the big 3KW PEP model) -
wondering if that would be ok?

> Another problem a lot of hams have with loops and dipoles fed with coax
> or open wire lines is that certain feed line lengths will result in
> extremely high (or low) impedances or high RF voltages at the tuner end
> of the line on specific bands. Often, this will either cause RF in the
> shack or will be such that the tuner cannot match the line. One solution
> is to be able to insert (or remove) a section of line to avoid the

> problem on that band. A second solution is to install the line using a
> non-resonant length to begin with. The ARRL and other handbooks list
> lengths to avoid in the sections related to conductive guy wires for
> towers.

I have a run about 60 feet maximum from the shack to the antenna mast. I am going to cut it away from a multiple length of the bands. I found a neat page by KV5R http://www.athensarc.org/ladder.htm about non-resonant lengths of 43 and 86 feet. I don't think i'll need 86 feet to get to the antenna but I can put some of the excess outside along the foundation of the house.

thanks!
Jason

1888. Re: [SkyWires] reuse old copper?

Yahoo group: SkyWires
Date: 2006-11-07 18:46:55 UTC
From: Jim Dunstan
Topic: 1874 Message: 1888

At 04:17 PM 06/11/2006 -0500, you wrote:

>I've got the remains of several dipoles that I took down a few years ago.
>When I took them down the wire had tarnished a bit and I couldn't ever get
>solder to take to it to use on other antennas, even with some flux. I
>used radio shack paste flux so perhaps it wasn't up to the job. But I was
>wondering if I could clean that up some other way and use that wire
>instead of buying a spool of new wire. I read here and there where you
>can remove the tarnish from copper for antiques restoration but I also
>read that some of those anti-tarnish ideas can screw up the conductivity
>of the copper.
>
>Anyone got any good ideas how to remove the tarnish off the last inch of
>each piece so I can solder it together into one long piece of wire?
>
>thanks

HI,

Use some steel wool .... or better yet get a sheet of emery paper .... you
will see clean bare copper in no time flat.

Jim, VE3CI

1889. Re: reuse old copper?

Yahoo group: SkyWires
Date: 2006-11-07 18:55:01 UTC
From: Jack Holgate
Topic: 1874 Message: 1889

"Try dipping the ends of the wire in some muriatic acid, rinse them
with water, twist them together and solder."

Remember that inhaling the fumes from heated MURIATIC ACID is very
toxic and should be attempted only in a well ventilated area. i.e.
The use of fans are recomended.

--- In SkyWires@yahoogroups.com, JimMcSkate@... wrote:
>
> My favorite trick (which works on copper-bottom pots as well) is to
mix up some vinegar and salt (lots of salt) and then dip the ends in,
twist them between your fingers to get the strands all covered, then
rinse well... I've also used baking soda after the rinse to
neutralize the vinegar... then rinse again.
>
> Works like a charm... and the ingredients are in your kitchen
cupboard, not the garage ;-)
>
> 73 de WA2LGN
> Jim
> Blue Point, NY
>
>
> -----Original Message-----
> From: dennis.hollingsworth@...
> To: SkyWires@yahoogroups.com
> Sent: Mon, 6 Nov 2006 9:17 PM
> Subject: Re: [SkyWires] reuse old copper?
>
>
> Try dipping the ends of the wire in some muriatic acid, rinse them
with water, twist them together and solder.
>
> Regards,
> Dennis
> VE7YM
>
> ----- Original Message -----
> From: larry allen
> To: SkyWires@yahoogroups.com
> Sent: Monday, November 06, 2006 4:37 PM
> Subject: Re: [SkyWires] reuse old copper?
>
>
> Try using a knife to scrap off the oxide...

> Larry ve3fxq
>
> ----- Original Message -----
> From: "Dan KB6NU" <kb6nu@...>
> To: <SkyWires@yahoogroups.com>
> Sent: Monday, November 06, 2006 6:47 PM
> Subject: Re: [SkyWires] reuse old copper?
>
> >I can't think of a good reason why you shouldn't re-use the wire.
As
> > for cleaning the tarnish off the wire so you can solder it, I'd
guess
> > there is some kind of copper cleaner at a hardware store. I
believe
> > I've taken sandpaper to copper wire, too.
> >
> > 73!
> >
> > Dan KB6NU
> > --
> > CW Geek and MI Affiliated Club Coordinator
> > Read my ham radio blog at www.kb6nu.com
> > LET'S GET MORE KIDS INTO HAM RADIO!
> >
> >
> >
> > On Nov 6, 2006, at 4:17 PM, jsb@... wrote:
> >> I've got the remains of several dipoles that I took down a few
> >> years ago.
> >> When I took them down the wire had tarnished a bit and I
couldn't
> >> ever get
> >> solder to take to it to use on other antennas, even with some
flux. I
> >> used radio shack paste flux so perhaps it wasn't up to the job.
But
> >> I was
> >> wondering if I could clean that up some other way and use that
wire
> >> instead of buying a spool of new wire. I read here and there
where you
> >> can remove the tarnish from copper for antiques restoration but
I also
> >> read that some of those anti-tarnish ideas can screw up the
> >> conductivity
> >> of the copper.
> >>
> >> Anyone got any good ideas how to remove the tarnish off the last
> >> inch of
> >> each piece so I can solder it together into one long piece of

wire?
> >>
> >> thanks
> >>
> >> --
> >> 73 Jason N1SU
> >> http://n1su.com/
> >
>
>
>

> Check out the new AOL. Most comprehensive set of free safety and security tools, free access to millions of high-quality videos from across the web, free AOL Mail and more.
>

1890. Re: [SkyWires] Re: reuse old copper?

Yahoo group: SkyWires
Date: 2006-11-07 20:14:17 UTC
From: larry allen
Topic: 1874 Message: 1890

When you mentioned MURIATIC ACID a light bulb when off in my memory bank..
I seem to recall a teacher telling us to be ultra carefully with that
stuff....
Personally, I would stay away from muriatic acid....
If I have wire that was oxided.. I would try scraping it with a knife
first....
Larry ve3fxq

----- Original Message -----
From: "Jack Holgate" <j.holgate@...>
To: <SkyWires@yahoogroups.com>
Sent: Tuesday, November 07, 2006 1:55 PM
Subject: [SkyWires] Re: reuse old copper?

"Try dipping the ends of the wire in some muriatic acid, rinse them
with water, twist them together and solder."

Remember that inhaling the fumes from heated MURIATIC ACID is very
toxic and should be attempted only in a well ventilated area. i.e.
The use of fans are recomended.

--- In SkyWires@yahoogroups.com, JimMcSkate@... wrote:
>
> My favorite trick (which works on copper-bottom pots as well) is to
mix up some vinegar and salt (lots of salt) and then dip the ends in,
twist them between your fingers to get the strands all covered, then
rinse well... I've also used baking soda after the rinse to
neutralize the vinegar... then rinse again.
>
> Works like a charm... and the ingredients are in your kitchen
cupboard, not the garage ;-)
>
> 73 de WA2LGN
> Jim
> Blue Point, NY
>
>
> -----Original Message-----
> From: dennis.hollingsworth@...
> To: SkyWires@yahoogroups.com
> Sent: Mon, 6 Nov 2006 9:17 PM
> Subject: Re: [SkyWires] reuse old copper?
>
>
> Try dipping the ends of the wire in some muriatic acid, rinse them
with water, twist them together and solder.

>
> Regards,
> Dennis
> VE7YM
>
> ----- Original Message -----
> From: larry allen
> To: SkyWires@yahoogroups.com
> Sent: Monday, November 06, 2006 4:37 PM
> Subject: Re: [SkyWires] reuse old copper?
>
>
> Try using a knife to scrap off the oxide...
> Larry ve3fxq
>
> ----- Original Message -----
> From: "Dan KB6NU" <kb6nu@...>
> To: <SkyWires@yahoogroups.com>
> Sent: Monday, November 06, 2006 6:47 PM
> Subject: Re: [SkyWires] reuse old copper?
>
> >I can't think of a good reason why you shouldn't re-use the wire.
As
> > for cleaning the tarnish off the wire so you can solder it, I'd
guess
> > there is some kind of copper cleaner at a hardware store. I
believe
> > I've taken sandpaper to copper wire, too.
> >
> > 73!
> >
> > Dan KB6NU
> > --
> > CW Geek and MI Affiliated Club Coordinator
> > Read my ham radio blog at www.kb6nu.com
> > LET'S GET MORE KIDS INTO HAM RADIO!
> >
> >
> >
> > On Nov 6, 2006, at 4:17 PM, jsb@... wrote:
> >> I've got the remains of several dipoles that I took down a few
> >> years ago.
> >> When I took them down the wire had tarnished a bit and I
couldn't
> >> ever get
> >> solder to take to it to use on other antennas, even with some
flux. I
> >> used radio shack paste flux so perhaps it wasn't up to the job.
But
> >> I was

> >> wondering if I could clean that up some other way and use that
wire
> >> instead of buying a spool of new wire. I read here and there
where you
> >> can remove the tarnish from copper for antiques restoration but
I also
> >> read that some of those anti-tarnish ideas can screw up the
> >> conductivity
> >> of the copper.
> >>
> >> Anyone got any good ideas how to remove the tarnish off the last
> >> inch of
> >> each piece so I can solder it together into one long piece of
wire?
> >>
> >> thanks
> >>
> >> --
> >> 73 Jason N1SU
> >> http://n1su.com/
> >
>
>
>

--
> Check out the new AOL. Most comprehensive set of free safety and
security tools, free access to millions of high-quality videos from
across the web, free AOL Mail and more.
>

1891. Naive question...

Yahoo group: SkyWires
Date: 2006-11-07 22:08:45 UTC
From: renopithicus
Topic: 1891 Message: 1891

I don't have the real estate to build a horizontal loop that's cut specifically for the frequencies I normally listen on. Now, I know that when someone wants to use a relatively short wire they can attach it to a matching transformer and it will have a more even frequency response as you move from one end of the HF spectrum to the other. This makes it more useful as a SWL antenna. I wonder whether this is true of loops as well? If I made a relatively small loop (say 80 ft total length) but fed it with coax and a matching transformer, would it be effective on HF? And would it have any of the characteristic strengths of horizontal loops (low noise, e.g.) or would it be functionally equivalent to a random wire?

Thanks in advance.

1892. Homebrew 2/440 mobile help needed

Yahoo group: SkyWires
Date: 2006-11-07 22:37:11 UTC
From: icra@galaxynet.com
Topic: 1879 Message: 1892

My VHF antenna reference books are in storage and cut off by standing water......

Currently have a Hustler 5/8 2mtr mag mount....works great for 2mtrs but not at all for 440...

Looking to either home-brew a 2/440 mobile antenna with gain (not just a 1/4 wave 2mtr antenna) or add to the Hustler to get 440 on it also....

My thoughts were to use some of the fiberglass rod for electric fences and put a 5/8 wave 2 mtr antenna on it and a 440 1/2 over 1/2 wave 440 collinear and heatshrink over the whole thing. Is this do able? Any advise on how to do it?

My other idea (should be easier and faster to do) is to add a strip or steel to the bottom of the Hustler and put the 440 antenna up from it. Advise on how to do this?

Mel
N7OKL

1893. Re: [SkyWires] Homebrew 2/440 mobile help needed

Yahoo group: SkyWires
Date: 2006-11-08 00:14:27 UTC
From: J. Harrell
Topic: 1879 Message: 1893

Mel and the Group,

I was getting ready to post something very similar to yours. I have a the same problem and I have been looking for a solution but I have not found one as of yet. I took a wilson little will antenna and took out the coil and hooked the center conductor from my coax to it and put in a piece of fencewire about 19inches long. The thing works good for vhf but I have no idea how to add uhf to it. Im like you Mel, if you find something let me know.

Thanks,
Joey
KI4HNN

icra@... wrote:
>
> My VHF antenna reference books are in storage and cut off by standing
> water......
>
> Currently have a Hustler 5/8 2mtr mag mount....works great for 2mtrs
> but not at all
> for 440...
>
> Looking to either home-brew a 2/440 mobile antenna with gain (not just
> a 1/4 wave
> 2mtr antenna) or add to the Hustler to get 440 on it also....
>
> My thoughts were to use some of the fiberglass rod for electric fences
> and put a 5/8
> wave 2 mtr antenna on it and a 440 1/2 over 1/2 wave 440 collinear and
> heatshrink
> over the whole thing. Is this do able? Any advise on how to do it?
>
> My other idea (should be easier and faster to do) is to add a strip or
> steel to the
> bottom of the Hustler and put the 440 antenna up from it. Advise on
> how to do this?
>
> Mel
> N7OKL
>
>

1894. Re: [SkyWires] Naive question...

Yahoo group: SkyWires
Date: 2006-11-08 00:28:01 UTC
From: Jim Dunstan
Topic: 1891 Message: 1894

At 10:08 PM 07/11/2006 +0000, you wrote:

>I don't have the real estate to build a horizontal loop that's cut
>specifically for the frequencies I normally listen on. Now, I know that
>when someone wants to use a relatively short wire they can attach it to
>a matching transformer and it will have a more even frequency response
>as you move from one end of the HF spectrum to the other. This makes it
>more useful as a SWL antenna. I wonder whether this is true of loops as
>well? If I made a relatively small loop (say 80 ft total length) but
>fed it with coax and a matching transformer, would it be effective on
>HF? And would it have any of the characteristic strengths of horizontal
>loops (low noise, e.g.) or would it be functionally equivalent to a
>random wir e?
>
>Thanks in advance.

You don't mention the frequencies you normally listen on. You mention SWL ... so I assume you are talking about receiving antenna only. An 80' loop is not really a small antenna hi hi as it is a full wavelength loop at a frequency just about in the middle of the HF spectrum .... eg around 12mhz. I am sure you could couple to it with an RF transformer wound on a ferrite core and it would make an excellent receiving antenna for SW.

The transformer would not provide uniform matching across the spectrum as such a loop would represent quite a range of impedances ..... however for receiving that should not be a problem as modern receivers have plenty of gain and close matching is not necessary. It is more important to locate the antenna as far from local noise generating devices as possible. However, if you want to use an 80 ft loop to transmit on the amateur bands from 160m to 10m that is a different story. You will not get effective power coupling coax to loop using a simple RF transformer for the reasons already mentioned. That doesn't mean that an 80' loop isn't an effective transmitting antenna right across the spectrum .... but it is only naturally resonant at 12 mhz .... at other frequencies you will have to tune and match the loop to the coax. or use a balanced feed line.

In fact SGC advertises an identical 80 ft loop as an all band antenna when tuned (at the feed point) with their remote automatic antenna tuners (they call them antenna couplers). I have used this kind of antenna using the SGC technique with a remote antenna coupler as well as the more economical method of feeding it with an open wire feed line (TV twinlead). The antenna would be a square 20' to a side. It is possible to arrange the 80' into a 2, 3 or 4 turn loop and resonant it across the hf spectrum .... but then it wouldn't be what you would call a 'skywire' hi hi. It is an effective antenna .... but as with most antennas, the higher you mount it the better it works. PS

If you can get it high enough I can assure you that you will work the world on 40-15 mtrs.

Jim, VE3CI

Jim, VE3CI

1895. loop tilt

Yahoo group: SkyWires
Date: 2006-11-08 02:45:42 UTC
From: Jason Buchanan
Topic: 1895 Message: 1895

hi,

I'm curious how the tilt of the skywire affects its radiation pattern
and possibly the take-off angle. If a corner-fed skywire is fed higher
than the other corners does the antenna push the signal into the
ground... or does a tilt counteract a high take-off angle...

Thanks

--
73 Jason N1SU

Jason Buchanan - Boxboro, MA
Website: http://n1su.com/

1896. Re: Use 80 meter full wave loop for 160?

Yahoo group: SkyWires
Date: 2006-11-08 12:10:10 UTC
From: cewyattjr
Topic: 1861 Message: 1896

--- In SkyWires@yahoogroups.com, "madatweak" <mada69@...> wrote:
>
> From my understanding (& not yet having any practical experience)
> the recommended minimum length is 2 wavlengths on the lowest
> frequency as the the take off angle is only moderately OK so for 160
> work you would look at a 320mtr loop & it would need to be up high.

OK, so that's new to me, I hadn't heard that the minimum length for a skyloop is 2 wavelengths -- I've also heard that what is recommended is using the loop most effectively is odd multiples of the fundamental wavelength.

Just curious of others have the same/differing thoughts?

Thx & 73!

Chuck
W1CEW

1897. Re: [SkyWires] Use 80 meter full wave loop for 160?

Yahoo group: SkyWires
Date: 2006-11-07 14:35:56 UTC
From: charles Allison
Topic: 1861 Message: 1897

Chuck,

Reccommended loop height tends to be 20-40 ft. But this seems to be for using a 40 or 80m loop on 20-10m for great dx. Most people don't tend to use a loop for dx on 80m, more likely, they use it for regional - state wide communications.

What is happening with the loop at its fundamental frequency very much depends upon height over ground. When the height is only 20 ft above ground with an 80m loop on 80m, the major radiation of the loop is almost straight up. This creates an NVIS style antenna which virtually blankets the state of TX with a good signal - far better than my 80m vertical which has a much lower angle of radiation.

As you go up in frequency to higher multiples of the fundamental loop frequency, the angle of major radiation is reduced - making it more suitable for DX and less useful for NVIS (which is pretty much good only on 80 and 40). Also, when you go to 2x the fundamental loop, the results are not real good. See the Super-loop write up for a clever way to automatically turn an 80m loop into a pair of 40m loops.

What happens if you do a 2 wavelength loop is that your major radiation angle drops from almost straight up to closer to 45 degrees. However, the loop isn't going to want to work as well at 2 wavelengths. It should be perfectly happy at 3 wavelengths and the angle will be even lower.

Again, this is primarily a problem with lower frequencies and of not being able to get the loop up to a substantial fraction of a wavelength. However, we have our 80m loop at 12-15 ft precisely in order to take advantage of the NVIS mode and the improvement over my vertical for most of the state of TX is in excess of the equivalent of going from our normal 100 Watts up to 1000 Watts were I to use the vertical - and the effect is on both transmit and on receive - and the loop provides us with a lower noise rx antenna than the vertical or our g5rv inverted vee. However, 80m DX is not in the arena of our interests except the occaisional contest.

We had been planning a 1 wavelength 160 loop and had acquired the wire and the 36ft pushup poles 2 years ago. So far, we have not tried to put it up and I'm not sure we will. I think we will do something else - to be determined.

Going to 3 wavelengths on the 160 is quite a chunk of real estate and wire. The practical problems of such an antenna might be more than its worth. It's also questionable just how much improvement you'll get over lesser loops but at least on paper it says it's better.

best regards,

Charles
wb5izd

>
> 6. Re: Use 80 meter full wave loop for 160?
> Posted by: "cewyattjr" cewyattjr@... cewyattjr
> Date: Wed Nov 8, 2006 4:14 am (PST)
>
> --- In SkyWires@yahoogroups.com, "madatweak" <mada69@...> wrote:
> >
> > From my understanding (& not yet having any practical experience)
> > the recommended minimum length is 2 wavlengths on the lowest
> > frequency as the the take off angle is only moderately OK so for 160
> > work you would look at a 320mtr loop & it would need to be up high.
>
> OK, so that's new to me, I hadn't heard that the minimum length for a
> skyloop is 2 wavelengths -- I've also heard that what is recommended
> is using the loop most effectively is odd multiples of the fundamental
> wavelength.
>
> Just curious of others have the same/differing thoughts?
>
> Thx & 73!
>
> Chuck
> W1CEW
>
>
>

1898. Re: 80m loop fed with coax

Yahoo group: SkyWires
Date: 2006-11-08 14:54:15 UTC
From: Jim Coe
Topic: 1863 Message: 1898

Jason,

You can find the W7FG open wire line by doing a Google search. They primarily sell manual copies for radio gear, but also sell open wire fed dipoles and open wire line. www.w7fg.com

The Dentron is one of the better tuners available, but it has the balun at the output. That puts the balun at the point where it will experience wide swings of impedance and RF voltages and that is tough on baluns. Take a look at Rich Measures site for info on balanced tuners. www.somis.org

73......Jim W5JI

1899. Re: Use 80 meter full wave loop for 160?

Yahoo group: SkyWires
Date: 2006-11-08 15:06:49 UTC
From: Jim Coe
Topic: 1861 Message: 1899

Chuck,

My experience is if the loop is a full wavelength on 160m, then it will be hard to match on 80m. If it is a full wavelength on 80m, then it will be hard to match on 40m, etc.

I don't tend to use my loops on 30m to 10m, so I don't have a lot of data to share. My experience does seem to support the odd wavelength issue you referenced.

I use open wire line to feed my loops and use a balanced tuner, not an unbalanced tuner with an output balun. If you feed the loop with coax, I would guess the problem might be worse.

From my first paragraph above, it would seem that using 3 wavelengths or 5 wavelengths would minimize the "next band" problem I have seen on the 160m, 80m and 40m bands.

73.....Jim W5JI

1900. Re: Use 80 meter full wave loop for 160?

Yahoo group: SkyWires
Date: 2006-11-08 15:17:48 UTC
From: Don Keith
Topic: 1861 Message: 1900

Chuck:

I like WB5IZD's answers to your questions. Truth is, most of us can't put up a quarter mile of copper wire, and we certainly can't hang it 200 feet in the air at all points. I'd put up all I could, not worry about how long it was (so long as you get at least a wavelength on 160, though shorter will certainly work), and hang it as high as you can. If it ends up 20 feet off the ground, you will have a very effective 300-to-500-mile 160-meter antenna.

My own loop is 470 feet long and varies in height from 35 feet to 15 feet. That's where the tree limbs were! And I consistently work (with good signal reports) into East Texas, Kentucky, South Carolina and Florida from Central Alabama with 100 watts on 160 meters...when the QRN is not too daunting. I don't expect DX on 160 with this antenna, but I did get into South America on 75 several times in the past month. Still, it will not be a stellar DX antenna on those bands.

On higher bands, you do achieve gain over a dipole, but you also get multiple lobes with sharp nulls...the higher the frequency, the more lobes and nulls. You're stronger than dragon's breath to one station but another a few hundred miles away from the other has trouble hearing you.

And one of the advantages of a loop is you don't have to worry about even and odd multiple wavelengths. It should work equally well on all of them if you are feeding with balanced line and tuner.

Try it!

73,

Don N4KC
www.donkeith.com

--- In SkyWires@yahoogroups.com, "charles Allison" <charles@...>
wrote:
>
> Chuck,
>
> Reccommended loop height tends to be 20-40 ft. But this seems to
be for
> using a 40 or 80m loop on 20-10m for great dx. Most people don't
tend to
> use a loop for dx on 80m, more likely, they use it for regional -
state wide

> communications.
>
> What is happening with the loop at its fundamental frequency very
much
> depends upon height over ground. When the height is only 20 ft
above ground
> with an 80m loop on 80m, the major radiation of the loop is almost
straight
> up. This creates an NVIS style antenna which virtually blankets
the state
> of TX with a good signal - far better than my 80m vertical which
has a much
> lower angle of radiation.
>
> As you go up in frequency to higher multiples of the fundamental
loop
> frequency, the angle of major radiation is reduced - making it more
suitable
> for DX and less useful for NVIS (which is pretty much good only on
80 and
> 40). Also, when you go to 2x the fundamental loop, the results are
not real
> good. See the Super-loop write up for a clever way to
automatically turn an
> 80m loop into a pair of 40m loops.
>
> What happens if you do a 2 wavelength loop is that your major
radiation
> angle drops from almost straight up to closer to 45 degrees.
However, the
> loop isn't going to want to work as well at 2 wavelengths. It
should be
> perfectly happy at 3 wavelengths and the angle will be even lower.
>
> Again, this is primarily a problem with lower frequencies and of
not being
> able to get the loop up to a substantial fraction of a wavelength.
However,
> we have our 80m loop at 12-15 ft precisely in order to take
advantage of the
> NVIS mode and the improvement over my vertical for most of the
state of TX
> is in excess of the equivalent of going from our normal 100 Watts
up to 1000
> Watts were I to use the vertical - and the effect is on both
transmit and on
> receive - and the loop provides us with a lower noise rx antenna
than the
> vertical or our g5rv inverted vee. However, 80m DX is not in the
arena of

> our interests except the occaisional contest.
>
> We had been planning a 1 wavelength 160 loop and had acquired the
wire and
> the 36ft pushup poles 2 years ago. So far, we have not tried to
put it up
> and I'm not sure we will. I think we will do something else - to be
> determined.
>
> Going to 3 wavelengths on the 160 is quite a chunk of real estate
and wire.
> The practical problems of such an antenna might be more than its
worth.
> It's also questionable just how much improvement you'll get over
lesser
> loops but at least on paper it says it's better.
>
> best regards,
>
> Charles
> wb5izd
>
>
> >
> > 6. Re: Use 80 meter full wave loop for 160?
> > Posted by: "cewyattjr" cewyattjr@... cewyattjr
> > Date: Wed Nov 8, 2006 4:14 am (PST)
> >
> > --- In SkyWires@yahoogroups.com, "madatweak" <mada69@> wrote:
> > >
> > > From my understanding (& not yet having any practical
experience)
> > > the recommended minimum length is 2 wavlengths on the lowest
> > > frequency as the the take off angle is only moderately OK so
for 160
> > > work you would look at a 320mtr loop & it would need to be up
high.
> >
> > OK, so that's new to me, I hadn't heard that the minimum length
for a
> > skyloop is 2 wavelengths -- I've also heard that what is
recommended
> > is using the loop most effectively is odd multiples of the
fundamental
> > wavelength.
> >
> > Just curious of others have the same/differing thoughts?
> >
> > Thx & 73!
> >

> > Chuck
> > W1CEW
> >
> >
> >
>

1901. Re: [SkyWires] Re: Use 80 meter full wave loop for 160?

Yahoo group: SkyWires
Date: 2006-11-08 16:19:53 UTC
From: erik@n0ew.org
Topic: 1861 Message: 1901

>> From my understanding (& not yet having any practical experience)
>> the recommended minimum length is 2 wavlengths on the lowest
>> frequency as the the take off angle is only moderately OK so for 160
>> work you would look at a 320mtr loop & it would need to be up high.
>
> OK, so that's new to me, I hadn't heard that the minimum length for a
> skyloop is 2 wavelengths -- I've also heard that what is recommended
> is using the loop most effectively is odd multiples of the fundamental
> wavelength.
>
> Just curious of others have the same/differing thoughts?

Well, Rule #1: If you make contacts that you are interested in making, the antenna works just fine for you.

I have heard that rule of thumb about the loop antenna being twice the lowest band you plan to operate upon. But a friend and I have used a square footprint 80-meter loop (about 30-ft tall) a couple times at field day. Works great. Including 80-meters, although that band was normally only used in the darkness hours, so it didn't account for the majority of contacts (I'm just guessing really - going by memory of the events, not comparing logs of any kind).

I may be wrong, but I seem to recall the x2 lowest band suggestion is mainly to get the area of coverage to be closer to a circle, as opposed to a four-lobe pattern. (The ARRL Antenna Book has a section that shows these patterns pretty well. I may not be remembering this correctly, so double check me on that.)

Height is a major factor in take off angle. One big exception is vertical antennas, which is why many DXers like them.

My loop is very bent and twisted. It certainly isn't that neat appearing square skyloop you see on covers of books!

For starters it is 3-sided with a small vertical portion.

Exit the shack window at the corner of the house (one story). Likely become unbalanced at this point. Then go up and slowly outwards to about 12-to-15-feet height. From here (the lowest point) each wire shoots off in a difference directions, both to trees. One at about 40-45-feet height, and one about 50-60-ft-ht. Then they connect to one another.

Why?

That is what fit my land and tree layout the best.

So study as much as possible, get an many opinions as possible (remembering some of them will be wrong because (1) they aren't looking at your setup or (2) some people just don't understand where their knowledge stops), and then look at your situation.

Whatever antenna(s) you put up, they must always fit the property in which they'll reside. Apartment dwellers have different major concerns than poertable operators, who are challenged differently than mobile operators or home owners.

So good luck, and take time out to build some experimental antennas. They can be cheap and a lot of fun to play with!

Keep reading, and keep asking questions! Hams are seldom out of opinoins! Hehehe....
Erik n0ew

1902. Feeline length for loop used as multiband antenna...

Yahoo group: SkyWires
Date: 2006-11-08 22:09:42 UTC
From: zendoc62
Topic: 1902 Message: 1902

Hello Group,

I'm new to your group and have recently put up an 80m full-wave loop which I'm feeding with 300 ohm ladder line. I use the loop as a multi-band antenna from 80 through 15 m. I use an MFJ 993b to match the system.

Can anyone tell me if there is an optimal length of ladder line to feed this antenna for multi-band use? I'm sure the question has been asked many times before but I couldn't find a direct answer in the archives.

Many thanks and 73 from down under,

John
VK7VQR

1903. RE: [SkyWires] Re: Use 80 meter full wave loop for 160?

Yahoo group: SkyWires
Date: 2006-11-08 22:17:54 UTC
From: Paul MW0CDO
Topic: 1861 Message: 1903

Hi Chuck,

I have a 60m tilted loop up presently, and have had 50 and 40m versions previously.

The current 60m of wire is in a rectangular shape and is supported at the perimeter of my 60ft X 30ft back yard.
My 2 storey house is at one end of the back yard and the shack is on the top floor in a spare room overlooking the yard.
At the house end of the yard I have 2 6m (20ft) fibreglass fishing rods supporting the loop, and at the far end of the yard I have 2 30ft aluminium masts with 20ft fishing poles attached to the top sections.
So the loop slopes from around 50ft AGL down to 20ft AGL over what is normally good wet ground about 1/2 mile inland from salt water.
The feed point is in the centre of the house end 30ft wire and in fact is simply an extension of the rest of the loop coming in through the window (I used thin wire about 1mm diameter) and into an SGC-239 auto tuner.
The "feed line" could be thought of as parallel lines about 2 inches apart.
The SGC seems perfectly happy with the loop and will tune it on all bands 160 - 10m.
The loop is quite reactive on 80m, the SGC gets warm with 100w RF. All other bands are fine.
I can work EU, UK and eastern NA on 160m phone with 100w. NA reports range from 56 - 59+, propagation / QRN allowing.
UK and EU reports vary as well, but most contacts seem to think the loop is doing a good job bearing in mind my restricted real estate.
There's just no way I could have a 132ft inverted L or end fed or inverted V etc.

As a bonus it really holds it's own on 40 & 20m as well, excellent reports from EU on both bands.
I haven't really tried it much on 17, 15, 12 or 10m as propagation hasn't been good when I have the time.
I've worked NA on 80m with similar loops as well, reports are on average 2 - 3 S points better than my ground mounted Butternut HF6v, but the vertical doesn't have much of a radial system.. 4 X 40ft buried wires.
I have also used a manual tuner with the 40 and 50m loops, and could match them both on all bands but 80m has always been a problem.
I melted the inductor supports in a MFJ-949e tuner while running 100w on 80m, no problems at all on 160 though.

I say just put however much wire you can get up as high as possible and try it.

You can see some pictures of my current loop at < HYPERLINK "http://homepage.ntlworld.com/paultom/"http://homepage.ntlworld.com/paultom/

>

Of course your particular mileage may vary!

73..

Paul MW0CDO.
HYPERLINK
"http://homepage.ntlworld.com/paultom/"http://homepage.ntlworld.com/paultom/

From: SkyWires@yahoogroups.com [mailto:SkyWires@yahoogroups.com] On Behalf
Of cewyattjr
Sent: 08 November 2006 12:10
To: SkyWires@yahoogroups.com
Subject: [SkyWires] Re: Use 80 meter full wave loop for 160?

--- In HYPERLINK
"mailto:SkyWires%40yahoogroups.com"SkyWires@..., "madatweak"
<mada69@...> wrote:
>
> From my understanding (& not yet having any practical experience)
> the recommended minimum length is 2 wavlengths on the lowest
> frequency as the the take off angle is only moderately OK so for 160
> work you would look at a 320mtr loop & it would need to be up high.

OK, so that's new to me, I hadn't heard that the minimum length for a
skyloop is 2 wavelengths -- I've also heard that what is recommended
is using the loop most effectively is odd multiples of the fundamental
wavelength.

Just curious of others have the same/differing thoughts?

Thx & 73!

Chuck
W1CEW

--
No virus found in this incoming message.
Checked by AVG Free Edition.
Version: 7.5.430 / Virus Database: 268.14.0/524 - Release Date: 08/11/2006
13:40

--
No virus found in this outgoing message.
Checked by AVG Free Edition.
Version: 7.5.430 / Virus Database: 268.14.0/524 - Release Date: 08/11/2006
13:40

1904. Re: [SkyWires] Use 80 meter full wave loop for 160?

Yahoo group: SkyWires
Date: 2006-11-09 00:28:16 UTC
From: erik@n0ew.org
Topic: 1861 Message: 1904

> However, the
> loop isn't going to want to work as well at 2 wavelengths. It should be
> perfectly happy at 3 wavelengths and the angle will be even lower.

If you recall off hand, would you expand upon this comparison.
Thanks, Erik n0ew

1905. Can this work?

Yahoo group: SkyWires
Date: 2006-11-09 01:02:47 UTC
From: ROY & MARY PICKETT
Topic: 1905 Message: 1905

This may be a stupid question but can you build a loop antenna to use as a mobile cb antenna? Or would it be to big to use?

Roy

1906. Re: [SkyWires] Feeline length for loop used as multiband antenna...

Yahoo group: SkyWires
Date: 2006-11-09 01:03:07 UTC
From: erik@n0ew.org
Topic: 1902 Message: 1906

> I'm new to your group and have recently put up an 80m full-wave loop
> which I'm feeding with 300 ohm ladder line. I use the loop as a multi-
> band antenna from 80 through 15 m. I use an MFJ 993b to match the
> system.
>
> Can anyone tell me if there is an optimal length of ladder line to feed
> this antenna for multi-band use? I'm sure the question has been asked
> many times before but I couldn't find a direct answer in the archives.

Two off-hand answers come to mind.

1. The ARRL Antenna Book has a table with lengths of guy wires to
avoid. You could use one of these lengths.

2. (What I'd do) Run whatever length fits. If you find a trouble spot,
make a method for adding a length of additional transmission line.
This will alter the impedance.

Erik n0ew

1907. Re: [SkyWires] Can this work?

Yahoo group: SkyWires
Date: 2006-11-09 01:44:05 UTC
From: erik@n0ew.org
Topic: 1905 Message: 1907

Quoting ROY & MARY PICKETT <roy_pickett@...>:

> This may be a stupid question but can you build a loop antenna to use
> as a mobile cb antenna? Or would it be to big to use?
>
> Roy

What size vehicle?

1/4-wavelength on CB is around 8.5 to 9-feet. Obviously you won't get a full wave square loop. Too wide. So if you do this it'll be a rectangle, or smaller than one wavelength.

I am not certain this is a good plan due to the frequency. CB is too high to allow NVIS (Near Vertical Incident Skywave). That is where the RF goes pretty close to straight up, bounces off the atmosphere, and back down. This allows good coverage of large regions.

But CB is too high frequency. It'll just cut through the atmosphere. 40-meters is about the highest frequency you can use and have reliable NVIS effects (7 MHz).

This is the main reason I don't think this is a good plan.

Going with the traditional vertical antenna (of whatever flavour) will propagate more outwards, providing good coverage for mobile cb.

That's my 2-cents!
73-Erik n0ew

1908. Re: [SkyWires] Can this work?

Yahoo group: SkyWires
Date: 2006-11-09 02:10:20 UTC
From: Walter A Fipps Jr.
Topic: 1905 Message: 1908

No offense, but you answered your own question correctly!

Walter

ROY & MARY PICKETT wrote:

> This may be a stupid question but can you build a loop antenna to use
> as a mobile cb antenna? Or would it be to big to use?
>
> Roy
>
>

1909. Re: Use 80 meter full wave loop for 160?

Yahoo group: SkyWires
Date: 2006-11-09 02:34:49 UTC
From: cewyattjr
Topic: 1861 Message: 1909

--- In SkyWires@yahoogroups.com, Jim Coe <jcoe@...> wrote:
>
> Chuck,
>
> My experience is if the loop is a full wavelength on
> 160m, then it will be hard to match on 80m. If it
> is a full wavelength on 80m, then it will be hard to
> match on 40m, etc.
>
> I don't tend to use my loops on 30m to 10m, so I
> don't have a lot of data to share. My experience
> does seem to support the odd wavelength issue you
> referenced.
>
> I use open wire line to feed my loops and use a
> balanced tuner, not an unbalanced tuner with an
> output balun. If you feed the loop with coax, I would
> guess the problem might be worse.
>
> From my first paragraph above, it would seem that
> using 3 wavelengths or 5 wavelengths would minimize
> the "next band" problem I have seen on the 160m, 80m
> and 40m bands.
>
> 73.....Jim W5JI
>

Hi Jim (and everybody else)!

Thanks so much for your thoughts on this. I'm not so much interested in NVIS as DX, and be as it may, I've had pretty good experience last winter working into Europe from here in New England around 3800 kc on 75 meters. Granted some were super stations with vertical arrays!

Probably the same thing couldn't be replicated on 160, tho'. Dang verticals are so noisy though.

I can say that my 80 meter loop has done very well on 20 meters, and with a modest amp, I felt that I could actually compete in some of those awful pileups. More recently I've enjoyed PSK31, a low power mode, and it works great for that on 20 meters as well using 15-20 watts. I suppose like others on the thead have mentioned, there would be awful nulls and fabulous lobes.

Fun stuff...

-Chuck

1910. Re: [SkyWires] Use 80 meter full wave loop for 160?

Yahoo group: SkyWires
Date: 2006-11-09 04:07:01 UTC
From: Eric Skaggs
Topic: 1861 Message: 1910

Read the latest issue of QST on Loops . Eric W7NNN

From: "charles Allison"
Reply-To: SkyWires@yahoogroups.com
To:
Subject: Re: [SkyWires] Use 80 meter full wave loop for 160?
Date: Tue, 7 Nov 2006 08:35:56 -0600

Chuck,

Reccommended loop height tends to be 20-40 ft. But this seems to be for using a 40 or 80m loop on 20-10m for great dx. Most people don't tend to use a loop for dx on 80m, more likely, they use it for regional - state wide communications.

What is happening with the loop at its fundamental frequency very much depends upon height over ground. When the height is only 20 ft above ground with an 80m loop on 80m, the major radiation of the loop is almost straight up. This creates an NVIS style antenna which virtually blankets the state of TX with a good signal - far better than my 80m vertical which has a much lower angle of radiation.

As you go up in frequency to higher multiples of the fundamental loop frequency, the angle of major radiation is reduced - making it more suitable for DX and less useful for NVIS (which is pretty much good only on 80 and 40). Also, when you go to 2x the fundamental loop, the results are not real good. See the Super-loop write up for a clever way to automatically turn an 80m loop into a pair of 40m loops.

What happens if you do a 2 wavelength loop is that your major radiation angle drops from almost straight up to closer to 45 degrees. However, the loop isn't going to want to work as well at 2 wavelengths. It should be perfectly happy at 3 wavelengths and the angle will be even lower.

Again, this is primarily a problem with lower frequencies and of not being able to get the loop up to a substantial fraction of a wavelength. However, we have our 80m loop at 12-15 ft precisely in order to take advantage of the NVIS mode and the improvement over my vertical for most of the state of TX is in excess of the equivalent of going from our normal 100 Watts up to 1000 Watts were I to use the vertical - and the effect is on both transmit and on receive - and the loop provides us with a lower noise rx antenna than the vertical or our g5rv inverted vee. However, 80m DX is not in the arena of our interests except the occaisional contest.

We had been planning a 1 wavelength 160 loop and had acquired the wire and the 36ft pushup poles 2 years ago. So far, we have not tried to put it up and I'm not sure we will. I think we will do something else - to be

determined.

Going to 3 wavelengths on the 160 is quite a chunk of real estate and wire.
The practical problems of such an antenna might be more than its worth.
It's also questionable just how much improvement you'll get over lesser
loops but at least on paper it says it's better.

best regards,

Charles
wb5izd

>
> 6. Re: Use 80 meter full wave loop for 160?
> Posted by: "cewyattjr" cewyattjr@yahoo.com cewyattjr
> Date: Wed Nov 8, 2006 4:14 am (PST)
>
> --- In SkyWires@yahoogroups.com, "madatweak" wrote:
> >
> > From my understanding (& not yet having any practical experience)
> > the recommended minimum length is 2 wavlengths on the lowest
> > frequency as the the take off angle is only moderately OK so for 160
> > work you would look at a 320mtr loop & it would need to be up high.
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> OK, so that's new to me, I hadn't heard that the minimum length for a
> skyloop is 2 wavelengths -- I've also heard that what is recommended
> is using the loop most effectively is odd multiples of the fundamental
> wavelength.
>
> Just curious of others have the same/differing thoughts?
>
> Thx & 73!
>
> Chuck
> W1CEW
>
>
>

1911. metal pulleys for support

Yahoo group: SkyWires
Date: 2006-11-09 14:16:55 UTC
From: jsb@digistar.com
Topic: 1911 Message: 1911

hi,

just wondering how much trouble i'll be in if I use metal pulleys attached to ropes tied to trees... I could buy ceramic insulators but I wonder how much rubbing the wire will withstand instead of using brass pulleys to let the wire move around with less friction..

thanks,
Jason

1912. Re: [SkyWires] metal pulleys for support

Yahoo group: SkyWires
Date: 2006-11-09 14:39:59 UTC
From: Christopher Zeman
Topic: 1911 Message: 1912

I did just that a few days ago and my antenna works great! :) I hung a 40M end-fed dipole from a mast on top of my house to an oak tree in my backyard, and have had no problems tuning it up.

Good luck!
Chris
N9XCR

----- Original Message -----
From: jsb@...
To: SkyWires@yahoogroups.com
Sent: Thursday, November 09, 2006 8:16 AM
Subject: [SkyWires] metal pulleys for support

hi,

just wondering how much trouble i'll be in if I use metal pulleys attached to ropes tied to trees... I could buy ceramic insulators but I wonder how much rubbing the wire will withstand instead of using brass pulleys to let the wire move around with less friction..

thanks,
Jason

1913. Hi All.. I'm new and i am interested in building a directional AM antenna..

Yahoo group: SkyWires
Date: 2006-11-09 17:06:06 UTC
From: passn_thru2
Topic: 1913 Message: 1913

i an not familiar with a lot of the terminology..
am new to electronics, i have built circuit boards for the F22 and Delta3 Rocket.. but i am just finding out about how it works.

i live in an area with a lot of AM stations.. i have built some loop antennas that worked well in the rural area in TN, but here in Winston-Salem NC there is a lot more stations and the one i want is weak and far away.. i bought a roll of 14g coated wire, but then figured if i could just build a directional antenna i could eliminate having to build a couple dozen variometers.

I need some information on how to build a simple or even a high tech directional AM, i am good at making things..

any sugestions.... thanks for any info or links.

1914. Re: [SkyWires] metal pulleys for support

Yahoo group: SkyWires
Date: 2006-11-09 18:20:00 UTC
From: Jim Dunstan
Topic: 1911 Message: 1914

At 09:16 AM 09/11/2006 -0500, you wrote:

>hi,
>
>just wondering how much trouble i'll be in if I use metal pulleys attached
>to ropes tied to trees... I could buy ceramic insulators but I wonder how
>much rubbing the wire will withstand instead of using brass pulleys to let
>the wire move around with less friction..
>
>thanks,
>Jason

Hi Jason,

Pulleys work great .... and rope last almost forever. However, A trick I have used with rope over tree branches is to make the rope double where it fits over the branch ... with one rope tight and the other loose. If a rope brakes the other one keeps it up. I just lower the rope and replace the double (over the tree) section hi hi ... After all, unless you climb the tree and tie the halyard to the branch there will always be some wear at the point the rope crosses the branch. I never climb the tree .... I use my slingshot and fishing pole .... and it is pain if the rope parts and comes to the ground hi hi. And be sure, the rope always breaks sooner or later.

Jim

1915. Re: [SkyWires] Hi All.. I'm new and i am interested in building a directional AM antenna..

Yahoo group: SkyWires
Date: 2006-11-09 18:43:51 UTC
From: Ace Ratliff
Topic: 1913 Message: 1915

----- Original Message -----
From: passn_thru2
To: SkyWires@yahoogroups.com
Sent: Thursday, November 09, 2006 12:06 PM
Subject: [SkyWires] Hi All.. I'm new and i am interested in building a directional AM antenna..

i an not familiar with a lot of the terminology..
am new to electronics, i have built circuit boards for the F22 and
Delta3 Rocket.. but i am just finding out about how it works.

i live in an area with a lot of AM stations.. i have built some loop
antennas that worked well in the rural area in TN, but here in
Winston-Salem NC there is a lot more stations and the one i want is
weak and far away.. i bought a roll of 14g coated wire, but then
figured if i could just build a directional antenna i could eliminate
having to build a couple dozen variometers.

I need some information on how to build a simple or even a high tech
directional AM, i am good at making things..

any sugestions.... thanks for any info or links.

If you are mainly interested in getting one station , you should try a rhombic antenna .

The rhombic antenna is WIDELY used for long-distance, high-frequency transmission and reception. It is one of the most popular fixed-station antennas because it is very useful in point-to-point communications.

Advantages

The rhombic antenna is useful over a wide frequency range. Although some changes in gain, directivity, and characteristic impedance do occur with a change in operating frequency, these changes are small enough to be neglected.

The rhombic antenna is much easier to construct and maintain than other antennas of comparable gain and directivity. Only four supporting poles of common heights from 15 to 20 meters are needed for the antenna.

The rhombic antenna also has the advantage of being noncritical as far as operation and adjustment are concerned. This is because of the broad frequency characteristics of the antenna.

http://www.tpub.com/neets/book10/42o.htm

Ace - WH2T

1916. Re: [SkyWires] metal pulleys for support

Yahoo group: SkyWires
Date: 2006-11-09 19:41:50 UTC
From: jsb@digistar.com
Topic: 1911 Message: 1916

On Thu, 9 Nov 2006, Jim Dunstan wrote:

> Pulleys work great .... and rope last almost forever. However, A trick
> I have used with rope over tree branches is to make the rope double
> where it fits over the branch ... with one rope tight and the other
> loose. If a rope brakes the other one keeps it up. I just lower the
> rope and replace the double (over the tree) section hi hi ... After all,
> unless you climb the tree and tie the halyard to the branch there will
> always be some wear at the point the rope crosses the branch. I never
> climb the tree .... I use my slingshot and fishing pole .... and it is
> pain if the rope parts and comes to the ground hi hi. And be sure, the
> rope always breaks sooner or later.

FB on rope trick. I will do that - anything to save hassle later. This
kind of work is done fairly easily in the late fall or winter but by
summer time the poison ivy makes it impossible to get through the woods.

I picked up some cheapie pulleys at Ace Hardware for the middle sections
of the loop and for the corners I got some nice marine grade Harken #224
microblock free running blocks (see
http://www.westmarine.com/webapp/wcs/stores/servlet/producte/10001/-1/10001/245853/0/0/harken%20block/All_2/mode%20matchallpartial/30/0
for details). The #224 block is good for 200lbs and the sheave is delrin
so conductivity should not be an issue even if the insulation wears
through. The Harken blocks are on sale ($7 bucks ea.) - thankfully it was
a quick 10 minute drive to Woburn during lunch.

--
73 Jason N1SU
http://n1su.com/

1917. Re: [SkyWires] metal pulleys for support

Yahoo group: SkyWires
Date: 2006-11-09 20:34:20 UTC
From: larry allen
Topic: 1911 Message: 1917

Greetings...
Unless I missed something, may I make a suggestion....
Connect your antenna, via an egg insulator, to the rope.... Run the rope through the metal pulleys.. Don't run the antenna wire through the pulleys....
As the wire is pulled through the pulley, the charactoristics of the antenna will change...
Larry ve3fxq

----- Original Message -----
From: <jsb@...>
To: <SkyWires@yahoogroups.com>
Sent: Thursday, November 09, 2006 2:41 PM
Subject: Re: [SkyWires] metal pulleys for support

> On Thu, 9 Nov 2006, Jim Dunstan wrote:
>
>> Pulleys work great .... and rope last almost forever. However, A trick
>> I have used with rope over tree branches is to make the rope double
>> where it fits over the branch ... with one rope tight and the other
>> loose. If a rope brakes the other one keeps it up. I just lower the
>> rope and replace the double (over the tree) section hi hi ... After
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>> rope always breaks sooner or later.
>
> FB on rope trick. I will do that - anything to save hassle later. This
> kind of work is done fairly easily in the late fall or winter but by
> summer time the poison ivy makes it impossible to get through the woods.
>
> I picked up some cheapie pulleys at Ace Hardware for the middle sections
> of the loop and for the corners I got some nice marine grade Harken #224
> microblock free running blocks (see
> http://www.westmarine.com/webapp/wcs/stores/servlet/producte/10001/-1/10001/245853/0/0/harken%20block/All_2/mode%20matchallpartial/30/0
> for details). The #224 block is good for 200lbs and the sheave is
> delrin
> so conductivity should not be an issue even if the insulation wears
> through. The Harken blocks are on sale ($7 bucks ea.) - thankfully it
> was
> a quick 10 minute drive to Woburn during lunch.
>

>
> --
> 73 Jason N1SU
> http://n1su.com/
>

1918. Re: [SkyWires] metal pulleys for support

Yahoo group: SkyWires
Date: 2006-11-09 20:53:14 UTC
From: Dave Marling
Topic: 1911 Message: 1918

I picked up some small nylon pulleys a few years ago at a Lowes or Home Depot while in the USA. They are about 2 5/8" in diameter. I use a rope over the tree top to a bungee cord with hooks on each end. The rope fastens to one hook and the pulley to the other. I also have a safety line of heavy twine double the length of the bungee in case the latter breaks.

I usually have to replace the bungee every two years while the rope (3/8" polyprop) has lasted for over five years.

Dave
VE1VQ/VA6NS

1920. Metal Pulleys

Yahoo group: SkyWires
Date: 2006-11-10 18:09:19 UTC
From: Skip Prinsen
Topic: 1920 Message: 1920

HI All,

I use metal pulleys on the Loop itself and then on the ropes I also use metal pulleys. That way it do not worry about the pulleys de-tuning the antenna. The Loop will float in the four pulleys that suspend the Loop. It makes it handy to be able to raise and lower the Loop for maintenance and tuning. I am using a 160 meter full wave Loop and am just now getting it in the air. I have used this configuration before with good results. Using 450 ohm ladder line for feeding the Loop it loads on all bands using an old Heathkit SA-2060 tuner.

73 de Skip W7PN

1921. Re: Use 80 meter full wave loop for 160?

Yahoo group: SkyWires
Date: 2006-11-14 08:29:45 UTC
From: madatweak
Topic: 1861 Message: 1921

--- In SkyWires@yahoogroups.com, "cewyattjr" <cewyattjr@...> wrote:
>
> --- In SkyWires@yahoogroups.com, "madatweak" <mada69@> wrote:
> >
> > From my understanding (& not yet having any practical experience)
> > the recommended minimum length is 2 wavlengths on the lowest
> > frequency as the the take off angle is only moderately OK so for 160
> > work you would look at a 320mtr loop & it would need to be up high.
>
> OK, so that's new to me, I hadn't heard that the minimum length for a
> skyloop is 2 wavelengths -- I've also heard that what is recommended
> is using the loop most effectively is odd multiples of the fundamental
> wavelength.
>
> Just curious of others have the same/differing thoughts?
>
> Thx & 73!
>
> Chuck
> W1CEW
>

I've have read from the Cebik articles that a min of 2 wavlentghs at a good hieght above ground will radiate its main lobe at around 53% off the wires angle. Having a 1 wavelength loop It seems logical to me its just like a 1 wave vertical loop whereas the main lobe it is 90% off the wire. Place the same vertical loop horizontal & your signal goes straight up again at 90% & its mirror 90% towards the ground that would distort the pattern asit shot back up in the air (perhaps at a slightly better angle than 90%. I must admit I've read Cebik's article at least 20 times & what I've quoted is from memory.

In the ideal horizontal loop world that we sometimes dream about a good loop at say 160mtr band would be 4 x 160m = 640mtrs in length & near perfectly circular fed with 200 (or perhaps 300ohm twinlead) & at least 80mtrs off the ground (but preferbly much higher. That way you get 8 main lobes in all directions with a takeoff angle of 14deg or less (as the higher you raise the loop.

Pls tell me if you think Im wrong because I would appreciate any other thoughts to help me grasp this concept even more.

Thanks

1922. FR Doc E6-19189

Yahoo group: SkyWires
Date: 2006-11-15 10:44:46 UTC
From: David Shrum
Topic: 1922 Message: 1922

|Didn't take time to read and digest, so not exactly sure what it is all about.
Dave N8PU

http://a257.g.akamaitech.net/7/257/2422/01jan20061800/edocket.access.gpo.gov/2006/E6-19189.htm

or if it wraps, try this one, link to same page.

http://myturl.com/08MqB|

1923. Re: Use 80 meter full wave loop for 160?

Yahoo group: SkyWires
Date: 2006-11-15 21:05:54 UTC
From: cewyattjr
Topic: 1861 Message: 1923

--- In SkyWires@yahoogroups.com, "madatweak" <mada69@...> wrote:
have read from the Cebik articles that a min of 2 wavlentghs at a
> good hieght above ground will radiate its main lobe at around 53%
off
> the wires angle. Having a 1 wavelength loop It seems logical to me
its
> just like a 1 wave vertical loop whereas the main lobe it is 90%
off
> the wire. Place the same vertical loop horizontal & your signal
goes
> straight up again at 90% & its mirror 90% towards the ground that
> would distort the pattern asit shot back up in the air (perhaps at
a
> slightly better angle than 90%. I must admit I've read Cebik's
article
> at least 20 times & what I've quoted is from memory.
>
> In the ideal horizontal loop world that we sometimes dream about a
> good loop at say 160mtr band would be 4 x 160m = 640mtrs in length
&
> near perfectly circular fed with 200 (or perhaps 300ohm twinlead)
& at
> least 80mtrs off the ground (but preferbly much higher. That way
you
> get 8 main lobes in all directions with a takeoff angle of 14deg or
> less (as the higher you raise the loop.
>
> Pls tell me if you think Im wrong because I would appreciate any
other
> thoughts to help me grasp this concept even more.
>
> Thanks
>

That explanation certainly makes sense to me. So, what it tells me is that I might do better to get something like a Carolina Windom, in terms of angle of radiation on 160. Not sure how it would compete with a loop on other bands.

On the other hand there are always the practical experiences: For examplle, 75/80 meters was hopping last night, and I did hear folks running full wave 80 mtr loops doing quite well with European DX. Granted these were east coast stations, but seems like they most be getting some low-angle radiation to get across the pond and compete in the pileups?

-Chuck

1924. which balun?

Yahoo group: SkyWires
Date: 2006-11-16 00:45:29 UTC
From: Cesar Maligalig
Topic: 1924 Message: 1924

dear all,

I am building a full wave delta loop. Could I use a 4:1 balun or 2:1 balun. In my readings other hams use 4:1 balun, some say 2:1 balun is also ok? So now which really is true?
Thanks

73 de kc dw1nsm

1925. which balun?

Yahoo group: SkyWires
Date: 2006-11-16 01:03:20 UTC
From: Cesar Maligalig
Topic: 1924 Message: 1925

dear all,

I 'd like to add that I am buliding a 40m full wave delta loop to be specific. thanks

73 de kc dw1nsm

1926. Re: [SkyWires] which balun?

Yahoo group: SkyWires
Date: 2006-11-16 02:36:54 UTC
From: py1vhf - anderson colla
Topic: 1924 Message: 1926

Cesar, in general, full wave delta loops have an impedance close to 100/120 ohms. So, the 2:1 balun is recomended. Notice you could substitute the balun for a quarter wave (electric) lenght of 75 ohms coax, then add 50 ohms coax to the rig. Remember to apply the velocity factor when calculating the 1/4 WL. Of course the impedance seen by the rig will be OK only for the 40m band, in this case.

Cheers!

Cesar Maligalig escreveu:
> dear all,
>
> I 'd like to add that I am buliding a 40m full wave delta loop to be
> specific. thanks
>
> 73 de kc dw1nsm
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- _____
- /_____\
- (|<*,*>|) PY1VHF * Anderson Colla
- [`-'] GG97co * p y 1 v h f AT amsat.org
- -"-"- Maca? RJ * Brazil
-
- Those that can, DX. Those that can't DX, do nets...

1927. Re: [SkyWires] which balun?

Yahoo group: SkyWires
Date: 2006-11-16 02:58:11 UTC
From: Ace Ratliff
Topic: 1924 Message: 1927

Hello DW1NSM,
I am using a full wave horizontal delta loop. I don't use any balun .
Where do you plan to place the balun ?
What type of feedline are you going to use?
Ace - WH2T

----- Original Message -----
From: Cesar Maligalig
To: SkyWires@yahoogroups.com
Sent: Wednesday, November 15, 2006 7:45 PM
Subject: [SkyWires] which balun?

dear all,

I am building a full wave delta loop. Could I use a 4:1 balun or 2:1
balun. In my readings other hams use 4:1 balun, some say 2:1 balun is
also ok? So now which really is true?
Thanks

73 de kc dw1nsm

1928. 160m loop is up and humming

Yahoo group: SkyWires
Date: 2006-11-16 04:37:46 UTC
From: Jason Buchanan
Topic: 1928 Message: 1928

hi,

Got the tuner hooked up a couple hours ago and have made lots of good contacts on the loop. Great reports by all stations. I was pretty sure it would work but I didn't know it would work this well! Signals buried in noise are easier to copy than with my existing dipoles (I left them up for comparison and they are 40+ feet away).

I guess the main thing that strikes me is it is quieter and signals received are stronger.

Many thanks to all for help and recommendations!

--
73 Jason N1SU
http://n1su.com/

1929. Re: [SkyWires] 160m loop is up and humming

Yahoo group: SkyWires
Date: 2006-11-16 14:33:45 UTC
From: erik@n0ew.org
Topic: 1928 Message: 1929

Glad to hear it is working so well for you.

How about a site report? Dimensions, feed, nearby objects and
work-arounds. That sort of thing.

Erik n0ew

1930. Re: [SkyWires] 160m loop is up and humming

Yahoo group: SkyWires
Date: 2006-11-16 17:36:18 UTC
From: Ace Ratliff
Topic: 1928 Message: 1930

Hi Jason,
I remember the first time I put up a loop . It was so much quieter, I thought it didn't work, until I tuned across a signal .
73, Ace - WH2T

----- Original Message -----
From: Jason Buchanan
To: SkyWires@yahoogroups.com
Sent: Wednesday, November 15, 2006 11:37 PM
Subject: [SkyWires] 160m loop is up and humming

hi,

Got the tuner hooked up a couple hours ago and have made lots of good contacts on the loop. Great reports by all stations. I was pretty sure it would work but I didn't know it would work this well! Signals buried in noise are easier to copy than with my existing dipoles (I left them up for comparison and they are 40+ feet away).

I guess the main thing that strikes me is it is quieter and signals received are stronger.

Many thanks to all for help and recommendations!

--
73 Jason N1SU
http://n1su.com/

1931. Re: [SkyWires] 160m loop is up and humming

Yahoo group: SkyWires
Date: 2006-11-16 18:32:57 UTC
From: Jed Petrovich
Topic: 1928 Message: 1931
Attachments: 2 described; binary payloads are missing from this source WARC

[Attachment content not displayed]

1932. Re: [SkyWires] 160m loop is up and humming

Yahoo group: SkyWires
Date: 2006-11-16 20:54:27 UTC
From: jsb@digistar.com
Topic: 1928 Message: 1932

On Thu, 16 Nov 2006 erik@... wrote:

> Glad to hear it is working so well for you.
>
> How about a site report? Dimensions, feed, nearby objects and
> work-arounds. That sort of thing.

Will do for sure - I was up until after midnight last night enjoying its huge ears on 80 meters! I really have to crank the RF gain back now as there's so much signal coming in.

thanks,
jason

--
73 Jason N1SU
http://n1su.com/

1933. Re: [SkyWires] which balun?

Yahoo group: SkyWires
Date: 2006-11-17 00:40:49 UTC
From: cesar maligalig
Topic: 1924 Message: 1933

Maraming Salamat from the Philippines! (Thank you from the Philippines)
Mabuhay! (Long Live!)

Thanks Anderson!

73 KC dw1nsm

----- Original Message ----
From: py1vhf - anderson colla <andersoncolla@...>
To: SkyWires@yahoogroups.com
Sent: Thursday, November 16, 2006 10:36:54 AM
Subject: Re: [SkyWires] which balun?

Cesar, in general, full wave delta loops have an impedance close to
100/120 ohms. So, the 2:1 balun is recomended. Notice you could
substitute the balun for a quarter wave (electric) lenght of 75 ohms
coax, then add 50 ohms coax to the rig. Remember to apply the velocity
factor when calculating the 1/4 WL. Of course the impedance seen by the
rig will be OK only for the 40m band, in this case.

Cheers!

Cesar Maligalig escreveu:
> dear all,
>
> I 'd like to add that I am buliding a 40m full wave delta loop to be
> specific. thanks
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> 73 de kc dw1nsm
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- _____
- /_____\
- (|<*,*>|) PY1VHF * Anderson Colla

- [`-'] GG97co * p y 1 v h f AT amsat.org
- -"-"- Macaé RJ * Brazil
-
- Those that can, DX. Those that can't DX, do nets...

1934. Re: [SkyWires] which balun?

Yahoo group: SkyWires
Date: 2006-11-17 00:36:49 UTC
From: cesar maligalig
Topic: 1924 Message: 1934

hi ace,

my nickname is kc. its apex is tied with a pulley on an old coconut treeand the two corners are tied also to a tree. The angle from the coconut tree to the other two corners is about 45 degrees and the orientation of the side near my shack is east-west. I made them equilateral, the feedline is connected to a 1:1 balun right now - for the simple reason that i have not made a simple connector to the feedline. I still have to cut about 2.4 meters to become resonant at 7.05mhz - which is the midpoint in our 40m allocation here in the Philippine Islands. right now I'm using a manual tuner to lower the swr to 1.1 from 2.5. From the balun I have a tranformer rg59 cut to about 21 ft. then the 50 ohm coax.

73 kc dw1nsm

----- Original Message ----
From: Ace Ratliff <wh2t@...>
To: SkyWires@yahoogroups.com
Sent: Thursday, November 16, 2006 10:58:11 AM
Subject: Re: [SkyWires] which balun?

Hello DW1NSM,
I am using a full wave horizontal delta loop. I don't use any balun .
Where do you plan to place the balun ?
What type of feedline are you going to use?
Ace - WH2T

----- Original Message -----
From: Cesar Maligalig
To: SkyWires@yahoogroup s.com
Sent: Wednesday, November 15, 2006 7:45 PM
Subject: [SkyWires] which balun?

dear all,

I am building a full wave delta loop. Could I use a 4:1 balun or 2:1 balun. In my readings other hams use 4:1 balun, some say 2:1 balun is also ok? So now which really is true?
Thanks

73 de kc dw1nsm

1935. Re: 160m loop is up and humming

Yahoo group: SkyWires
Date: 2006-11-17 00:50:45 UTC
From: cewyattjr
Topic: 1928 Message: 1935

--- In SkyWires@yahoogroups.com, "Jason Buchanan" <jsb@...> wrote:
feet away).
>
> I guess the main thing that strikes me is it is quieter and
signals received are stronger.
>
> Many thanks to all for help and recommendations!
>
>
> --
> 73 Jason N1SU
> http://n1su.com/
>

Station looks great, Jason. Love the Drake equipment and the
awesome amp. Do you work any PSK?

73,

Chuck
W1CEW
www.chuckwyatt.com
Holliston, MA

1936. Re: 160m loop is up and humming

Yahoo group: SkyWires
Date: 2006-11-17 02:05:40 UTC
From: Don Keith
Topic: 1928 Message: 1936

--- In SkyWires@yahoogroups.com, "cewyattjr" <cewyattjr@...> wrote:
>
> --- In SkyWires@yahoogroups.com, "Jason Buchanan" <jsb@> wrote:
> feet away).
> >
> > I guess the main thing that strikes me is it is quieter and
> signals received are stronger.
> >
> > Many thanks to all for help and recommendations!
> >
> >
> > --
> > 73 Jason N1SU
> > http://n1su.com/
> >
>
> Station looks great, Jason. Love the Drake equipment and the
> awesome amp. Do you work any PSK?
>
> 73,
>
> Chuck
> W1CEW
> www.chuckwyatt.com
> Holliston, MA
>

Jason:

I'll add my congrats on the antenna (and my envy for your ownership of that beautiful Drake gear!). I know you have learned a lot with this project. I know I did as I researched, built, tested and continue to tweak mine. The nature of our hobby is that there are fewer areas in which we can experiment, and one of the best is with antennas. I've had my own loop up about six weeks and I'm having a blast with it. Hard to tell at this point but I believe it is the best antenna I've ever had. On some bands and under certain conditions, the G5RV or my vertical do slightly better, but the skywire consistently wins in most cases...and it lets me work efficiently from 160 through 10 meters.

It's 60 feet short of a full wavelength long for 160 and it's only anywhere from 15 feet to 40 feet above ground. It runs through tree branches all around its perimeter. I'm using the dual-coax method of getting from the twin lead outside into the tuner in the shack, and I'm not using a balanced tuner (it's an MFJ-993B

Intellituner's "balanced" input).

But the bad boy works beautifully! I'll look for you on the air.
Please do the same.

73,

Don N4KC
www.donkeith.com

1937. Re: [SkyWires] which balun?

Yahoo group: SkyWires
Date: 2006-11-17 03:13:07 UTC
From: Ace Ratliff
Topic: 1924 Message: 1937

Hi KC ,
I am using a 272' horizontal loop , it's SWR is flat at 3875 khz without any tuner. No balun here just a RG11 transformer down to the RG 8 that runs to the rig. My rig has a built in auto tuner that I sometimes use . When I run one of my amps I use a manual tuner .
Very 73, Ace - WH2T

----- Original Message -----
From: cesar maligalig
To: SkyWires@yahoogroups.com
Sent: Thursday, November 16, 2006 7:36 PM
Subject: Re: [SkyWires] which balun?

hi ace,

my nickname is kc. its apex is tied with a pulley on an old coconut treeand the two corners are tied also to a tree. The angle from the coconut tree to the other two corners is about 45 degrees and the orientation of the side near my shack is east-west. I made them equilateral, the feedline is connected to a 1:1 balun right now - for the simple reason that i have not made a simple connector to the feedline. I still have to cut about 2.4 meters to become resonant at 7.05mhz - which is the midpoint in our 40m allocation here in the Philippine Islands. right now I'm using a manual tuner to lower the swr to 1.1 from 2.5. From the balun I have a tranformer rg59 cut to about 21 ft. then the 50 ohm coax.

73 kc dw1nsm

----- Original Message ----
From: Ace Ratliff <wh2t@bloomington.in.us>
To: SkyWires@yahoogroups.com
Sent: Thursday, November 16, 2006 10:58:11 AM
Subject: Re: [SkyWires] which balun?

Hello DW1NSM,
I am using a full wave horizontal delta loop. I don't use any balun .
Where do you plan to place the balun ?
What type of feedline are you going to use?
Ace - WH2T

----- Original Message -----
From: Cesar Maligalig
To: SkyWires@yahoogroup s.com
Sent: Wednesday, November 15, 2006 7:45 PM
Subject: [SkyWires] which balun?

dear all,

I am building a full wave delta loop. Could I use a 4:1 balun or 2:1 balun. In my readings other hams use 4:1 balun, some say 2:1 balun is

also ok? So now which really is true?
Thanks

73 de kc dw1nsm

1938. Re: [SkyWires] 160m loop is up and humming

Yahoo group: SkyWires
Date: 2006-11-17 03:11:19 UTC
From: Jason Buchanan
Topic: 1928 Message: 1938

> Glad to hear it is working so well for you.
>
> How about a site report? Dimensions, feed, nearby objects and
> work-arounds. That sort of thing.

I will take photos this saturday, for now the details:

I took my 160, 15 and 17 meter dipoles down so I don't have them for A/B comparisons but the 20 and 40 are still up. In my tests the receive performance of the loop has met or exceeded my inverted vees on the CW portion of the band where they are cut. The dipoles are definitely noisier and by using some tricks with MixW I do not see that the noisier dipoles have any stronger signal reception - the dipoles are down slightly with more noise where the loop has less noise and more signal. PSK and other digital modes show an improved SNR over the dipoles regardless of the distant station's location around the globe. The VK9CCG DX this morning was easier to copy with the loop.

Even if the loop had equivalent receive performance to my dipoles the loop to me is clearly the winner as I can use every HF band, top to bottom, QRO and with more signal to the radio. If I had only enough space for a 20 meter loop I would put that up. Dipoles are a real bore after having been spoiled by the loop.

I like the ability to run CW near the bottom of 160m and then go to the top and work AM with only a minor touch-up on the tuner. 80 meters works wonderfully, same for 40 and 20. I haven't been home during the daytime to put 20 meters through its paces but I will this weekend.

I use VE3SUN's DX Monitor for spots - it's a thrill to have every HF band displayed and know that I can use each one.

Parts:

544' insulated #14 AWG Flex-weave wire
12 pulleys
#16 AWG copperweld ladder line
WA1FFL ladder lock

The shape of the loop is very nearly square. The run on the south and east side is slightly longer than the other sides by about 3 feet, all sides except the northwest corner are 30 feet high, the northwest corner is about 15 feet high (no tall trees unfortunately). The feedpoint uses a WA1FFL ladder lock which is the only way to do this if you ask me. Way more easier than drilling holes in sheets of lucite, etc.

I have a Dentron Super Super Tuner (AT-3K) that does a nice job of matching to the rig.

It's a shame that loops don't get any more attention than they do - it's the best wire antenna i've ever used. I don't really have any intention of pursuing a yagi now...

thanks!

--
73 Jason N1SU
http://n1su.com/

1939. Re: [SkyWires] Re: 160m loop is up and humming

Yahoo group: SkyWires
Date: 2006-11-17 03:29:41 UTC
From: Jason Buchanan
Topic: 1928 Message: 1939

> Station looks great, Jason. Love the Drake equipment and the
> awesome amp. Do you work any PSK?

Yep - haven't lately but I like it. Hellschreiber too. We'll have to give it a try sometime!

73 Jason N1SU

1940. Re: [SkyWires] 160m loop is up and humming

Yahoo group: SkyWires
Date: 2006-11-17 03:23:41 UTC
From: Jason Buchanan
Topic: 1928 Message: 1940

hi,

Mine's up 30 feet except one corner. Its receive performance is as good as my inverted vees without a doubt. I haven't had a chance to test the TX performance however I am able to work places in the US that I never have before with the dipoles. The places where I have worked before seem to give me better reports.

I don't know how much i'd worry about the loop being resonant - if you have a strong enough tuner i'd put up as much wire as you can as circular as you can and let the tuner take care of things. I know that's an unscientific approach but there are plenty of guys on this list with loops that are nowhere near any resonance point that are having great results. The weak link in the chain appears to be the balun - my 3KW Dentron tuner has a balun inside of it that may be put under stress trying to match a strange impedance at 1500W RTTY but I don't have that kind of amp here.

I'd say the most important parts of the loop are the length, the feed line (preferably ladder line) and height. A loop with all sides at nearly the same height seems to perform better than a loop with high and low points based on the experiences of others on this list.

hope this helps.

--
73 Jason N1SU
http://n1su.com/

----- Original Message -----
From: Jed Petrovich
To: SkyWires@yahoogroups.com
Sent: Thursday, November 16, 2006 13:32
Subject: Re: [SkyWires] 160m loop is up and humming

Jason:

I'd also be very interested in the details on your loop... length, wire type, height, tuner, etc. I've considered a loop, but my space is restricted and I could only put it up around 30 feet or so. Any info would be appreciated...

Thanks,

Jed
AD7KG

On 11/15/06, Jason Buchanan <jsb@...> wrote:

hi,

Got the tuner hooked up a couple hours ago and have made lots of good contacts on the loop. Great reports by all stations. I was pretty sure it would work but I didn't know it would work this well! Signals buried in noise are easier to copy than with my existing dipoles (I left them up for comparison and they are 40+ feet away).

I guess the main thing that strikes me is it is quieter and signals received are stronger.

Many thanks to all for help and recommendations!

--
73 Jason N1SU
http://n1su.com/

1941. Re: [SkyWires] Re: 160m loop is up and humming

Yahoo group: SkyWires
Date: 2006-11-17 03:39:33 UTC
From: Jason Buchanan
Topic: 1928 Message: 1941

> I'll add my congrats on the antenna (and my envy for your ownership
> of that beautiful Drake gear!).

I'm a Drake and Ten-Tec fan. The L4 is stragegically placed so I can bask in the glow of those 3-400Z tubes (see http://n1su.com/tubes/3-400Z-idle.jpg) but the Centurion sits where the L4 was in the photo on my website. I can't see the tubes glow in the Centurion but the QSK makes up for it.

> It's 60 feet short of a full wavelength long for 160 and it's only
> anywhere from 15 feet to 40 feet above ground. It runs through tree
> branches all around its perimeter. I'm using the dual-coax method of
> getting from the twin lead outside into the tuner in the shack, and
> I'm not using a balanced tuner (it's an MFJ-993B
> Intellituner's "balanced" input).
>
> But the bad boy works beautifully! I'll look for you on the air.
> Please do the same.

you bet - once the weekend gets here I plan to spend a fair bit of time in the shack. maybe we'll have to put together some kind of skywires net hi

cul Jason

--
73 Jason N1SU
http://n1su.com/

1942. Re: [SkyWires] Re: 160m loop is up and humming

Yahoo group: SkyWires
Date: 2006-11-17 17:25:38 UTC
From: Ace Ratliff
Topic: 1928 Message: 1942

I'm game for a skywires net. Please let the group know if you guys are going to get on the air sometime. I will try to check in .
Ace - WH2T
www.WH2T.com

----- Original Message -----
From: Jason Buchanan
To: SkyWires@yahoogroups.com
Sent: Thursday, November 16, 2006 10:39 PM
Subject: Re: [SkyWires] Re: 160m loop is up and humming

Snipped

- once the weekend gets here I plan to spend a fair bit of time in
the shack. maybe we'll have to put together some kind of skywires net hi

cul Jason

--
73 Jason N1SU
http://n1su.com/

1943. Re: [SkyWires] Re: 160m loop is up and humming

Yahoo group: SkyWires
Date: 2006-11-17 17:52:52 UTC
From: Christopher Zeman
Topic: 1928 Message: 1943

I think a Sky Wire site would be great! I'm sick of all the antenna sites that are full of dead links. I'd like to see a site that hosts the information itself, rather than solely providing a bunch of links.

Well, I was going to offer to register and host skywires.net, but it looks like someone already has .com and .net. Neither one even works. All I get is "Access Forbidden". :(

Chris
N9XCR

----- Original Message -----
From: Ace Ratliff
To: SkyWires@yahoogroups.com
Sent: Friday, November 17, 2006 11:25 AM
Subject: Re: [SkyWires] Re: 160m loop is up and humming

I'm game for a skywires net. Please let the group know if you guys are going to get on the air sometime. I will try to check in .
Ace - WH2T
www.WH2T.com

----- Original Message -----
From: Jason Buchanan
To: SkyWires@yahoogroups.com
Sent: Thursday, November 16, 2006 10:39 PM
Subject: Re: [SkyWires] Re: 160m loop is up and humming

Snipped

- once the weekend gets here I plan to spend a fair bit of time in
the shack. maybe we'll have to put together some kind of skywires net hi

cul Jason

--
73 Jason N1SU
http://n1su.com/

1944. Re: 160m loop is up and humming

Yahoo group: SkyWires
Date: 2006-11-17 18:50:39 UTC
From: Don Keith
Topic: 1928 Message: 1944

--- In SkyWires@yahoogroups.com, "Jason Buchanan" <jsb@...> wrote:
>
>
> > I'll add my congrats on the antenna (and my envy for your
ownership
> > of that beautiful Drake gear!).
>
> I'm a Drake and Ten-Tec fan. The L4 is stragegically placed so I
can bask
> in the glow of those 3-400Z tubes (see
> http://n1su.com/tubes/3-400Z-idle.jpg) but the Centurion sits
where the L4
> was in the photo on my website. I can't see the tubes glow in the
Centurion
> but the QSK makes up for it.
>
> > It's 60 feet short of a full wavelength long for 160 and it's only
> > anywhere from 15 feet to 40 feet above ground. It runs through
tree
> > branches all around its perimeter. I'm using the dual-coax
method of
> > getting from the twin lead outside into the tuner in the shack,
and
> > I'm not using a balanced tuner (it's an MFJ-993B
> > Intellituner's "balanced" input).
> >
> > But the bad boy works beautifully! I'll look for you on the air.
> > Please do the same.
>
> you bet - once the weekend gets here I plan to spend a fair bit of
time in
> the shack. maybe we'll have to put together some kind of skywires
net hi
>
> cul Jason
>
> --
> 73 Jason N1SU
> http://n1su.com/
>
Jason:

I think that's a capital idea! Since we are so far-flung, we might
consider 20 meters SSB daytime or 40 at night. Roundtables are hard
to manage on CW but I'm game for that, too.

My weekends are typically not my own but I should be able to steal some time late Saturday or Sunday afternoons...2100Z to 0000Z. Jason, you started this thing. You want to pick a frequency and time and let's see who shows up?

Don N4KC
www.donkeith.com

1945. Re: [SkyWires] Re: 160m loop is up and humming

Yahoo group: SkyWires
Date: 2006-11-17 19:05:03 UTC
From: Christopher Zeman
Topic: 1928 Message: 1945

Sorry, I'm an idiot. lol

That's what I get for reading groups at work while I'm programming. lol

----- Original Message -----
From: Christopher Zeman
To: SkyWires@yahoogroups.com
Sent: Friday, November 17, 2006 11:52 AM
Subject: Re: [SkyWires] Re: 160m loop is up and humming

I think a Sky Wire site would be great! I'm sick of all the antenna sites that are full of dead links. I'd like to see a site that hosts the information itself, rather than solely providing a bunch of links.

Well, I was going to offer to register and host skywires.net, but it looks like someone already has .com and .net. Neither one even works. All I get is "Access Forbidden". :(

Chris
N9XCR

----- Original Message -----
From: Ace Ratliff
To: SkyWires@yahoogroups.com
Sent: Friday, November 17, 2006 11:25 AM
Subject: Re: [SkyWires] Re: 160m loop is up and humming

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Ace - WH2T
www.WH2T.com

----- Original Message -----
From: Jason Buchanan
To: SkyWires@yahoogroups.com
Sent: Thursday, November 16, 2006 10:39 PM
Subject: Re: [SkyWires] Re: 160m loop is up and humming

Snipped

- once the weekend gets here I plan to spend a fair bit of time in
the shack. maybe we'll have to put together some kind of skywires net hi

cul Jason

--
73 Jason N1SU
http://n1su.com/

1946. Re: [SkyWires] Re: 160m loop is up and humming

Yahoo group: SkyWires
Date: 2006-11-17 19:14:27 UTC
From: Paul Quillen
Topic: 1928 Message: 1946

>I think a Sky Wire site would be great! I'm sick of all the antenna
>sites that are full of dead links. I'd like to see a site that hosts
>the information itself, rather than solely providing a bunch of links.

loopskywire.com and skywires.org are available

1947. Re: [SkyWires] Re: 160m loop is up and humming

Yahoo group: SkyWires
Date: 2006-11-17 19:51:25 UTC
From: Christopher Zeman
Topic: 1928 Message: 1947

Well, even though I was completely off-track when I posted that, it is a good idea. :) Unfortunately, however, I lack the time and talent to develop a good website. I'd register and host it if someone else wants to design it. Just email me. chris@...

Chris
N9XCR

----- Original Message -----
From: Paul Quillen
To: SkyWires@yahoogroups.com
Sent: Friday, November 17, 2006 1:14 PM
Subject: Re: [SkyWires] Re: 160m loop is up and humming

I think a Sky Wire site would be great! I'm sick of all the antenna sites that are full of dead links. I'd like to see a site that hosts the information itself, rather than solely providing a bunch of links.

loopskywire.com and skywires.org are available

1948. Re: [SkyWires] Re: 160m loop is up and humming

Yahoo group: SkyWires
Date: 2006-11-17 18:59:13 UTC
From: Ace Ratliff
Topic: 1928 Message: 1948

Chris,
Here's a link that works!
http://www.bloomington.in.us/~wh2t/ant.htm

Ace - WH2T

----- Original Message -----
From: Christopher Zeman
To: SkyWires@yahoogroups.com
Sent: Friday, November 17, 2006 12:52 PM
Subject: Re: [SkyWires] Re: 160m loop is up and humming

I think a Sky Wire site would be great! I'm sick of all the antenna sites that are full of dead links. I'd like to see a site that hosts the information itself, rather than solely providing a bunch of links.

Well, I was going to offer to register and host skywires.net, but it looks like someone already has .com and .net. Neither one even works. All I get is "Access Forbidden". :(

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N9XCR

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Subject: Re: [SkyWires] Re: 160m loop is up and humming

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Ace - WH2T
www.WH2T.com

----- Original Message -----
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To: SkyWires@yahoogroups.com
Sent: Thursday, November 16, 2006 10:39 PM
Subject: Re: [SkyWires] Re: 160m loop is up and humming

Snipped

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cul Jason

--
73 Jason N1SU

http://n1su.com/

1949. Re: [SkyWires] Re: 160m loop is up and humming

Yahoo group: SkyWires
Date: 2006-11-17 20:10:04 UTC
From: Christopher Zeman
Topic: 1928 Message: 1949

...and that's a site I like, Ace! I've visited quite a few times. Nice job!

Chris

----- Original Message -----
From: Ace Ratliff
To: SkyWires@yahoogroups.com
Sent: Friday, November 17, 2006 12:59 PM
Subject: Re: [SkyWires] Re: 160m loop is up and humming

Chris,
Here's a link that works!
http://www.bloomington.in.us/~wh2t/ant.htm

Ace - WH2T

----- Original Message -----
From: Christopher Zeman
To: SkyWires@yahoogroups.com
Sent: Friday, November 17, 2006 12:52 PM
Subject: Re: [SkyWires] Re: 160m loop is up and humming

I think a Sky Wire site would be great! I'm sick of all the antenna sites that are full of dead links. I'd like to see a site that hosts the information itself, rather than solely providing a bunch of links.

Well, I was going to offer to register and host skywires.net, but it looks like someone already has .com and .net. Neither one even works. All I get is "Access Forbidden". :(

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www.WH2T.com

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- once the weekend gets here I plan to spend a fair bit of time in
the shack. maybe we'll have to put together some kind of skywires net hi

cul Jason

--
73 Jason N1SU
http://n1su.com/

1950. tuner question

Yahoo group: SkyWires
Date: 2006-11-19 15:26:25 UTC
From: Jason Buchanan
Topic: 1950 Message: 1950

hi,

Quick tuner question...

I've noticed that with this Dentron tuner I can tune to a given band in a few ways.

For example, on 20 meters, I can tune the SWR to 1.0:1 using the A, B or C position but the more inductance I add the sharper the peak is and more critical I tune carefully. On the A position I can be off +/- .5 on the antenna or transmitter controls but on the C position it has to be exactly right on target to get the SWR low, there's no room for slop.

The main question I have is How much stress am I putting on the tuner by using the least inductance (position A) vs. rotating the inductance knob CW (position C) and running with 1 KW? The receive performance seems to be the same although I guess you could say that as I increase the inductance i'm narrowing the peak of the passband.

I don't want to stress the tuner components/coils by running high power and not using the right amount of inductance, etc.

Thanks,
Jason

--
73 Jason N1SU
http://n1su.com/

1951. Re: [SkyWires] tuner question

Yahoo group: SkyWires
Date: 2006-11-19 16:16:14 UTC
From: erik@n0ew.org
Topic: 1950 Message: 1951

> I've noticed that with this Dentron tuner I can tune to a given band
> in a few ways.
>
> For example, on 20 meters, I can tune the SWR to 1.0:1 using the A,
> B or C position but the more inductance I add the sharper the peak
> is and more critical I tune carefully. On the A position I can be
> off +/- .5 on the antenna or transmitter controls but on the C
> position it has to be exactly right on target to get the SWR low,
> there's no room for slop.
>
> The main question I have is How much stress am I putting on the
> tuner by using the least inductance (position A) vs. rotating the
> inductance knob CW (position C) and running with 1 KW? The receive
> performance seems to be the same although I guess you could say that
> as I increase the inductance i'm narrowing the peak of the passband.
>
> I don't want to stress the tuner components/coils by running high
> power and not using the right amount of inductance, etc.

All other things being equal, the best efficiency comes from using the smallest amount of inductance. Coils are where you'll have your greatest loss (via heat generation). That is why most people use the smallest amount of coil given otherwise equivalent tuning solutions.

The sharper tuning is a result of greater efficency, better Q, and all that stuff. As you note, you are seeing the 'bandpass' or 'bandwidth' changing at the various settings.

Provided you are operating within the design parameters of the transmatch I'd not be concerned about damaging it. Just be aware of how far you can traverse from the original tuning point before you need to re-tune and use your judgement for ease of operation vs. greater efficiency.

I'd expect the broader tuning is putting more stress upon the transmatch because it is operating with less efficency and therefore is dissipating more power inside its components. But even if this is true, that is not the same thing as saying you are operating outside the transmatches designed parameters.

If you are really worried about it, measure your impedance and voltage at the various tuning solutions and compare this to the transmatches design parameters.

Erik n0ew

1952. Re: [SkyWires] tuner question

Yahoo group: SkyWires
Date: 2006-11-19 17:14:58 UTC
From: Jason Buchanan
Topic: 1950 Message: 1952

> All other things being equal, the best efficiency comes from using the
> smallest amount of inductance. Coils are where you'll have your greatest
> loss (via heat generation). That is why most people use the smallest
> amount of coil given otherwise equivalent tuning solutions.
>
> The sharper tuning is a result of greater efficency, better Q, and all
> that stuff. As you note, you are seeing the 'bandpass' or 'bandwidth'
> changing at the various settings.

Sounds good - well that's kinda where it gets confusing because the Dentron tuner appears to have the least use of the coil on the A, B. etc. position, where the Q and R position use almost all of it.

> I'd expect the broader tuning is putting more stress upon the transmatch
> because it is operating with less efficency and therefore is dissipating
> more power inside its components. But even if this is true, that is not
> the same thing as saying you are operating outside the transmatches
> designed parameters.

I'm careful to tune the SWR to near 1.0:1 before cranking up the power. But i'm just not sure if position A (least coil) is preferable over position C (more coil) with SWR at 1:1 in terms of long-term component life.

It's a real big job to get inside the tuner so before I spend 15 minutes opening it up I thought i'd ask the list here for their advice hi

Thanks,
Jason

--
73 Jason N1SU
http://n1su.com/

1953. Re: [SkyWires] tuner question

Yahoo group: SkyWires
Date: 2006-11-19 18:24:08 UTC
From: erik@n0ew.org
Topic: 1950 Message: 1953

> Sounds good - well that's kinda where it gets confusing because the
> Dentron tuner appears to have the least use of the coil on the A, B.
> etc. position, where the Q and R position use almost all of it.

The next time you open it, also verify the capacitor knob(s) is(are) properly lined up. You'll want the marks on the transmatch face to be accurately indicate the caps position, and note which end signifies fully open and which end signifies fully meshed.

While you're at it look for any scorch marks (black burnt looking areas). If you see any, it has likely been arced at some point. Too much voltage caused a spark to jump from one point to another inside the transmatch. This doesn't always cause damage but it is never a good condition for the transmatch to operate under.

> I'm careful to tune the SWR to near 1.0:1 before cranking up the power.

Yes, extremely wise!

> But i'm just not sure if position A (least coil) is preferable over
> position C (more coil) with SWR at 1:1 in terms of long-term component
> life.

Theoretically position A (min. coil) is better.

From a real-world practical point of view if you are getting a 1.1:1 swr at both settings I can't imagine it makes any difference to the receiving station at all. There simply is not much mismatch in either case, so I'd expect the party with whom you are communicating will never hear any difference between the two 1.1:1 swr settings.

If the transmatch gets overly warm then I'd worry. Since you are running fairly high power you need to be aware of small changes which may indicate a potential problem is brewing. It's always better to catch trouble before the smoke gets out!

That is the only practical reason I'd consider always running the minimum coil even at equal swr. Greater efficiency will result in less heat dissipating inside the transmatch by its components.

However, also remember most amateur radio equipment can't measure accurately with great precision. Obviously it depends upon the components used by the manufacturer, but I've always heard a 5% to 10% margin of error is considered good for amateur radio gear at HF, and it tends to rise at UHF/VHF, unless special care and attention is given. Inaccuracy also tends to rise with the cheapo knock-off brands; when they use inferior components they get inferior results.

Perhaps someone else that has experience with Dentron equipment can chip in here and let us all know what level of accuracy they've noted with their Dentron gear. I have no idea, but I've always heard it is good quality equipment, so I'd expect it to be pretty accurate, meaning closer to the 5% error. But that is just me guessing.

Erik n0ew

1954. Re: [SkyWires] tuner question

Yahoo group: SkyWires
Date: 2006-11-19 19:59:12 UTC
From: Jim Dunstan
Topic: 1950 Message: 1954

At 10:26 AM 19/11/2006 -0500, you wrote:

>
>hi,
>
>Quick tuner question...
>
>I've noticed that with this Dentron tuner I can tune to a given band in a
>few ways.
>
>For example, on 20 meters, I can tune the SWR to 1.0:1 using the A, B or C
>position but the more inductance I add the sharper the peak is and more
>critical I tune carefully. On the A position I can be off +/- .5 on the
>antenna or transmitter controls but on the C position it has to be exactly
>right on target to get the SWR low, there's no room for slop.
>
>The main question I have is How much stress am I putting on the tuner by
>using the least inductance (position A) vs. rotating the inductance knob
>CW (position C) and running with 1 KW? The receive performance seems to
>be the same although I guess you could say that as I increase the
>inductance i'm narrowing the peak of the passband.
>
>I don't want to stress the tuner components/coils by running high power
>and not using the right amount of inductance, etc.
>
>Thanks,
>Jason

Hi Jason,

My rule of thumb has always been to start with the lowest inductance. It is a bit more awkward with switched inductance than a Rotary inductor. I connect the antenna to the tuner and the tuner to my xcvr via a noise bridge (be sure you don't transmit into the noise bridge!). I then adjust the rotary inductor from the minimum direction and adjust the capacitors until i reach a satisfactory match. I write down the inductor settings (an old WWII surplus unit) and then put the noise bridge away and use the swr meter to do the adjustments when operating.

I like to set the inductor to the minimum value that will allow the capacitors to handle adjustments on the particular sections of the band that I use.

Jim, VE3CI

1955. Re: [SkyWires] tuner question

Yahoo group: SkyWires
Date: 2006-11-19 21:36:01 UTC
From: Ace Ratliff
Topic: 1950 Message: 1955
Attachments: 1 described; binary payloads are missing from this source WARC

----- Original Message -----
From: Jason Buchanan
To: SkyWires@yahoogroups.com
Sent: Sunday, November 19, 2006 10:26 AM
Subject: [SkyWires] tuner question

hi,

Quick tuner question...

I've noticed that with this Dentron tuner I can tune to a given band in a few ways.

For example, on 20 meters, I can tune the SWR to 1.0:1 using the A, B or C position but the more inductance I add the sharper the peak is and more critical I tune carefully. On the A position I can be off +/- .5 on the antenna or transmitter controls but on the C position it has to be exactly right on target to get the SWR low, there's no room for slop.

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I don't want to stress the tuner components/coils by running high power and not using the right amount of inductance, etc.

Thanks,
Jason

--
73 Jason N1SU
http://n1su.com/

1956. Loop supports?

Yahoo group: SkyWires
Date: 2006-11-21 01:24:07 UTC
From: wn5gxf
Topic: 1956 Message: 1956

I am considering putting up a 160M full wave loop and am curious on what works for supports. I would like to get it up to 40'. I have some old Rohn 25 that I think will work for two self supporting points. The yard in densely populated with Pin Oak trees, 20' to 25' tall, therefore, I would like to avoid guy's if at all possible. I have a bunch of 2-3/8" oil field pipe. Does any one have any idea how much of it can be stood up un-guyed with a good concrete base?

Mark, N5WEB

1958. loop resonance

Yahoo group: SkyWires
Date: 2006-11-23 16:09:02 UTC
From: Jason Buchanan
Topic: 1958 Message: 1958

hi,

Well it seems that having a 544' loop works well for 160, 80, 40 and 20 but above 20 the feedline seems to become the radiator, or at my QTH anyway. I can't match to the loop on 15 meters as the loop is resonant at 22.170MHz with 544' of wire.

If I lengthen the loop to around 560' for better resonance on 20, 15, etc. this would put the loop resonant at around 1.79MHz. How badly does this screw up operation on 160 meters? I guess this is more a function of the tuner and its ability to match those impedances... but I was wondering if anyone did the same and how their 160m operation was affected?

and I guess the other question is whether or not it is worth it to do this... how well does a 560' loop work on 15, 12 and 10 meters?

Thanks!

--
73 Jason N1SU
http://n1su.com/

1959. Re: loop resonance

Yahoo group: SkyWires
Date: 2006-11-23 17:29:25 UTC
From: Don Keith
Topic: 1958 Message: 1959

Jason, remind me: how are you feeding your loop? As mentioned before, mine is electrically short for a full wavelength on 160 (it's about 470 feet...that's just how much wire I had and room to string it up), it's really too low to the ground, but it works fine on most of 160, 75/80, 40, 30, 17, 15 and 12. My MFJ autotuner won't match it on 10, but I think that's more a factor of the method I use to bring the open line into the shack past six runs of coax, a ground strap, water pipes, etc. I use 450-ohm window line to the center conductors of a 20-foot-long run of two pieces of coax taped together, and with their shields shorted on each end.

The only balun in the mix is the 4:1 current balun at the balanced input in the tuner. I can unshort the coax shields on the window-line end of the two coax cables and load fine on 10, but then I lose 75 and a portion of 160.

I'm delighted with my skywire! I've gotten downright evangelical about the silly thing! It's low to the ground...no higher than 35 feet and as low as 15 feet...but it seems to work wonderfully. I worked 5A7A (Libya) last night on 75 SSB, breaking through the pileup on the third call. Got him on the first call on 30 CW the other night. And that's with 100 powerful, pulsating watts!

That's a long way to say that if you are feeding with ladder line, you shouldn't have to worry about resonance.

Still like to try to get some of us skywire guys together on the air sometime so we can compare notes. I'm free off and on today, all day Friday, and all day Sunday. don@... or n4kc@....

Don N4KC
www.donkeith.com

--- In SkyWires@yahoogroups.com, "Jason Buchanan" <jsb@...> wrote:
>
>
> hi,
>
> Well it seems that having a 544' loop works well for 160, 80, 40 and 20 but above 20 the feedline seems to become the radiator, or at my QTH anyway. I can't match to the loop on 15 meters as the loop is resonant at 22.170MHz with 544' of wire.
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more a function of the tuner and its ability to match those
impedances... but I was wondering if anyone did the same and how
their 160m operation was affected?
>
>
> and I guess the other question is whether or not it is worth it to
do this... how well does a 560' loop work on 15, 12 and 10 meters?
>
> Thanks!
>
> --
> 73 Jason N1SU
> http://n1su.com/
>

1960. Re: [SkyWires] Re: loop resonance

Yahoo group: SkyWires
Date: 2006-11-23 20:39:20 UTC
From: Jason Buchanan
Topic: 1958 Message: 1960

> Jason, remind me: how are you feeding your loop?

hi - i've got somewhere around 90 feet of #16 ladder line that makes a few twists and turns from the shack, through the garage and out the window up to the roof line and then about 30 feet horizontal to the feed point. That's the best I could do due to the layout of the house. The shack is in the middle part of the house in the room next to the 2 car garage.

The loop itself is about 25' high in all places, some places closer to 35' but mostly 25' with the NW corner at around 15' (no tall trees).

The Dentron 3KW super super duper tuner does a good job of tuning pretty much everything to 1:1 except for 30 meters which won't tune when feeding my rig from the tuner through the amplifier to the rig. If I go direct from the tuner to the rig it is fine. Weird.

160, 80, 40 and 20 work and tune fine but 17 never goes below 1.5:1 and 15 causes everything in the shack to pulsate and hum when I key down; I am pretty well convinced that the ladder line itself is what is being tuned and radiating. My thoughts were that because the 544' of wire is resonant at 22.169MHz the tuner finds the feed line more attractive than the loop. I have 20 feet of unshielded wire that i'm thinking about adding on Saturday which would bring the loop in resonance on 15 meters around 21.382MHz and more reasonable for the tuner to work with. I'm not sure if this would really help - I hate to screw up 160 meters when there's more action there for me than 15 meters right now.

I worked 5A7A 3 times in the last few days on 160 meters (quite effortlessly I might add). The first time I didn't appear in the log so I worked 5A7A last night 2 times 5 minutes apart just to make certain that I made it to their log! hi The antenna is definitely a force to be reckoned with despite being so low to the ground. I think i'm lucky in that I have a lobe in their direction but I haven't worked enough with the new antenna yet to derive a pattern. Life and work are getting in the way hi

Its performance on 80 meters is excellent but I haven't had enough time to put it through its paces on 40. On 20 meters it's a toss-up between my vee at 40 feet and the loop in terms of QSB, etc. The signal is about the same but when QSB hits the 20m vee the loop is relatively unaffected - only when the remote station is suffering QSB do I notice it at the same time on both antennas (remote's greyline times). Otherwise QSB is greatly reduced and noise is a few dB less, too.

> Still like to try to get some of us skywire guys together on the air
> sometime so we can compare notes. I'm free off and on today, all day
> Friday, and all day Sunday. don@... or n4kc@....

Friday's sort of a wash for me but Sunday may work. There is another contest going on this weekend so while I may not be in the contest I will try to figure out where I'm hearing and try to figure out what the loop's pattern is. May be hard to determine this if the California kilowatt stations are ionizing the air hi

cul Jason

--
73 Jason N1SU
http://n1su.com/

1961. Re: [SkyWires] Re: loop resonance

Yahoo group: SkyWires
Date: 2006-11-24 03:07:26 UTC
From: Jason Buchanan
Topic: 1958 Message: 1961

> The Dentron 3KW super super duper tuner does a good job of tuning pretty
> much everything to 1:1 except for 30 meters which won't tune when feeding
> my
> rig from the tuner through the amplifier to the rig. If I go direct from
> the tuner to the rig it is fine. Weird.

A goof on my part. I've verified it a few different ways and the SWR is
1:1. Picked up a bunch of new DX today on 30 meters.

Working DX on 40 meters is like scooping minnows out of a tank.

I have noticed that the radiation pattern is very much like the side-fed
pattern on L.B. Cebik's page at http://www.cebik.com/wire/hl.html when
comparing my 40m vee vs. the loop.

--
73 Jason N1SU
http://n1su.com/

1962. Re: [SkyWires] loop resonance

Yahoo group: SkyWires
Date: 2006-11-24 19:46:35 UTC
From: Ken Burchfield
Topic: 1958 Message: 1962

Jason , I like my loop too! random about 500ft.
Jason nice home page of yours
http://n1su.com/
Good loop information and links,
I think this would be a good addition to your links. This file is found on the Skywires Group site in the files area.
Nice work you have done.
73 Ken

Ladder line homebrew.
In files section:
Loop and feedline building information
Info on loop installation and bal. line making

bfline3.pdf
Balanced Feed Line - Roll Your Own
By: VE1VQ

----- Original Message ----
From: Jason Buchanan <jsb@...>
To: SkyWires@yahoogroups.com
Sent: Thursday, November 23, 2006 10:09:02 AM
Subject: [SkyWires] loop resonance

Do you Yahoo!?
Everyone is raving about the all-new Yahoo! Mail beta.
http://new.mail.yahoo.com

1963. Re: loop resonance

Yahoo group: SkyWires
Date: 2006-11-24 23:12:37 UTC
From: Don Keith
Topic: 1958 Message: 1963

Also a pretty good article on building your own ladder line in the
December issue of QST.

73,

Don N4KC
www.donkeith.com

--- In SkyWires@yahoogroups.com, Ken Burchfield <k5jxl@...> wrote:
>
> Jason , I like my loop too! random about 500ft.
> Jason nice home page of yours
> http://n1su.com/
> Good loop information and links,
> I think this would be a good addition to your links. This file is
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> ----- Original Message ----
> From: Jason Buchanan <jsb@...>
> To: SkyWires@yahoogroups.com
> Sent: Thursday, November 23, 2006 10:09:02 AM
> Subject: [SkyWires] loop resonance
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> Do you Yahoo!?
> Everyone is raving about the all-new Yahoo! Mail beta.
> http://new.mail.yahoo.com
>

1964. Re: loop resonance

Yahoo group: SkyWires
Date: 2006-11-27 17:56:51 UTC
From: Hal
Topic: 1958 Message: 1964

You thnk so Don? I was hoping that someone would find it helpful

Hal AC0AX

--- In SkyWires@yahoogroups.com, "Don Keith" <n4kc@...> wrote:
>
> Also a pretty good article on building your own ladder line in the
> December issue of QST.
>
> 73,
>
> Don N4KC
> www.donkeith.com
>
> --- In SkyWires@yahoogroups.com, Ken Burchfield <k5jxl@> wrote:
> >
> > Jason , I like my loop too! random about 500ft.
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> > By: VE1VQ
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> > Do you Yahoo!?
> > Everyone is raving about the all-new Yahoo! Mail beta.
> > http://new.mail.yahoo.com
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1965. Re: loop resonance

Yahoo group: SkyWires
Date: 2006-11-28 01:58:10 UTC
From: Don Keith
Topic: 1958 Message: 1965

Hal, I do! Yes, it is a good, practical, well-written article. Lord knows, we need as many of those as we can get! Hope you'll do more.

I've come late to the ladder line/window line camp as I was always lured to the ease of use of coax. I've seen the light...and it's thru those little rectangular holes in my 450-ohm window line. But I may well use your method to make a short run of open line for a ten meter vertical loop I now have fed with coax. I'd like to try it on 6 meters.

73,

Don N4KC
www.donkeith.com

--- In SkyWires@yahoogroups.com, "Hal" <kc0bdw@...> wrote:
>
> You thnk so Don? I was hoping that someone would find it helpful
>
> Hal AC0AX
>
>
> --- In SkyWires@yahoogroups.com, "Don Keith" <n4kc@> wrote:
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> > Also a pretty good article on building your own ladder line in
the
> > December issue of QST.
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> > 73,
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> > Don N4KC
> > www.donkeith.com
> >
> > --- In SkyWires@yahoogroups.com, Ken Burchfield <k5jxl@> wrote:
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> > > Jason , I like my loop too! random about 500ft.
> > > Jason nice home page of yours
> > > http://n1su.com/
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> > found on the Skywires Group site in the files area.
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> > > Ladder line homebrew.
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> > > ----- Original Message ----
> > > From: Jason Buchanan <jsb@>
> > > To: SkyWires@yahoogroups.com
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> > > Do you Yahoo!?
> > > Everyone is raving about the all-new Yahoo! Mail beta.
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1966. Re: loop resonance

Yahoo group: SkyWires
Date: 2006-11-28 16:55:31 UTC
From: Hal
Topic: 1958 Message: 1966

You can use other things for the spacers besides pvc pipe. I just happen to have that on hand. Someone suggested using plastic clothes hangers, as that would be lighter the the pipe.
Just remember its the spacing between the wires that is important.

Hal AC0AX

--- In SkyWires@yahoogroups.com, "Don Keith" <n4kc@...> wrote:
>
> Hal, I do! Yes, it is a good, practical, well-written article. Lord
> knows, we need as many of those as we can get! Hope you'll do more.
>
> I've come late to the ladder line/window line camp as I was always
> lured to the ease of use of coax. I've seen the light...and it's
> thru those little rectangular holes in my 450-ohm window line. But I
> may well use your method to make a short run of open line for a ten
> meter vertical loop I now have fed with coax. I'd like to try it on
> 6 meters.
>
> 73,
>
> Don N4KC
> www.donkeith.com
>
>
> --- In SkyWires@yahoogroups.com, "Hal" <kc0bdw@> wrote:
> >
> > You thnk so Don? I was hoping that someone would find it helpful
> >
> > Hal AC0AX
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> > --- In SkyWires@yahoogroups.com, "Don Keith" <n4kc@> wrote:
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> > > > Jason , I like my loop too! random about 500ft.
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> > > > ----- Original Message ----
> > > > From: Jason Buchanan <jsb@>
> > > > To: SkyWires@yahoogroups.com
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> > > > Everyone is raving about the all-new Yahoo! Mail beta.
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1967. RF going back to station

Yahoo group: SkyWires
Date: 2006-11-29 15:01:56 UTC
From: Bostjan Voncina - S55O
Topic: 1967 Message: 1967

Hellow!

I have some problems with Rf with my loop. Should i put a 1:1 balun on the cable to the antenna, to choke the RF coming back to the station ?

The loop is a 80m hor. loop with 400 ohm open wire feed.

Thank you

Bostjan S55O

1968. Re: [SkyWires] RF going back to station

Yahoo group: SkyWires
Date: 2006-11-29 17:31:59 UTC
From: larry allen
Topic: 1967 Message: 1968

May I ask.. Does the 400 ohm open wire feed.. go all the way into your ham shack and how is it connected to the radio......
Larry ve3fxq

----- Original Message -----
From: "Bostjan Voncina - S55O" <s55o@...>
To: <SkyWires@yahoogroups.com>
Sent: Wednesday, November 29, 2006 10:01 AM
Subject: [SkyWires] RF going back to station

> Hellow!
>
> I have some problems with Rf with my loop. Should i put a 1:1 balun on
> the cable to the antenna, to choke the RF coming back to the station ?
>
> The loop is a 80m hor. loop with 400 ohm open wire feed.
>
> Thank you
>
> Bostjan S55O
>
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>
> Yahoo! Groups Links
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1969. Fw: [DX1MK] drawing of 40m delta loop

Yahoo group: SkyWires
Date: 2006-12-01 02:00:27 UTC
From: cesar maligalig
Topic: 1969 Message: 1969
Attachments: 1 described; binary payloads are missing from this source WARC

Dear All,

I have successfully built a 40m delta loop, after hoisting it up and down for about ten times! Attached is a very poor drawing, any suggestion for a better software that MS Paint. The loop is slanting to about 45 degrees down to the lower corners. It is attached to a pulley tied to a coconut tree, and used 12" bungee cord on the 2 lower corners. I removed the 1:1 balun and replaced it with a homebrewed center connector. Please don't hesitate to ask about construction and tuning. I tuned it with my Vectronics manual antenna tuner - no antenna analyser - can't afford one! hihihi

73 KC de DW1NSM

Everyone is raving about the all-new Yahoo! Mail beta.

Do you Yahoo!?
Everyone is raving about the all-new Yahoo! Mail beta.
http://new.mail.yahoo.com

1971. polarity

Yahoo group: SkyWires
Date: 2006-12-09 20:27:16 UTC
From: Jason Buchanan
Topic: 1971 Message: 1971

hi,

Just wondering if it was typical to alter the pattern of the loop by changing the polarity of the ladder line? Seems like I can hear well east/west with the polarity one way, and then more favorable to the north/south when I switch the polarity around.

I've done some rough testing on 20 meters using a DPDT 125V toggle switch and can produce consistent results to favor east/west or north/south by changing the polarity going to the tuner.

My loop is nearly square, the feedpoint is along the southern side about 2/3rds to the right.

I am on the prowl for a nice ceramic DPDT knife switch if anyone has a spare.

thanks

--
73 Jason N1SU
http://n1su.com/

1972. Re: [SkyWires] polarity

Yahoo group: SkyWires
Date: 2006-12-09 21:21:16 UTC
From: JimMcSkate@aol.com
Topic: 1971 Message: 1972

Jason
I've noticed a similar phenomena, though my loop isn't square so there's not much science to be done at my place... I am hoping one of the rocket scientists among us will weigh in on your question. For me, I hear about the same no matter what the polarity, but on transmit I see the effect pretty clearly. I am typically running low power (sub 10 watts on CW) so every little thing helps.
73 my friend,
de WA2LGN
Jim
Blue Point, NY

-----Original Message-----
From: jsb@...
To: SkyWires@yahoogroups.com
Sent: Sat, 9 Dec 2006 3:27 PM
Subject: [SkyWires] polarity

hi,

Just wondering if it was typical to alter the pattern of the loop by changing the polarity of the ladder line? Seems like I can hear well east/west with the polarity one way, and then more favorable to the north/south when I switch the polarity around.

I've done some rough testing on 20 meters using a DPDT 125V toggle switch and can produce consistent results to favor east/west or north/south by changing the polarity going to the tuner.

My loop is nearly square, the feedpoint is along the southern side about 2/3rds to the right.

I am on the prowl for a nice ceramic DPDT knife switch if anyone has a spare.

thanks

--
73 Jason N1SU
http://n1su.com/

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Check out the new AOL. Most comprehensive set of free safety and security tools, free access to millions of high-quality videos from across the web, free AOL Mail and more.

1973. Re: Fw: [DX1MK] drawing of 40m delta loop

Yahoo group: SkyWires
Date: 2006-12-10 17:29:26 UTC
From: wayneg
Topic: 1969 Message: 1973

--- In SkyWires@yahoogroups.com, cesar maligalig <cmaligs@...> wrote:
>
> Dear All,
>
> I have successfully built a 40m delta loop, after hoisting it up and down for about ten times! Attached is a very poor drawing, any suggestion for a better software that MS Paint. The loop is slanting to about 45 degrees down to the lower corners. It is attached to a pulley tied to a coconut tree, and used 12" bungee cord on the 2 lower corners. I removed the 1:1 balun and replaced it with a homebrewed center connector. Please don't hesitate to ask about construction and tuning. I tuned it with my Vectronics manual antenna tuner - no antenna analyser - can't afford one! hihihi
>
> 73 KC de DW1NSM
>

Hello,
You may find this "freebie" drawing program helpful:
http://www.cs.uu.nl/~markov/kids/draw.html

I use it for all my antenna construction projects. Very simple program but after you get used to using it most helpful to say the least.
Good luck and 73,
Wayne

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> Everyone is raving about the all-new Yahoo! Mail beta.
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> Do you Yahoo!?

> Everyone is raving about the all-new Yahoo! Mail beta.
> http://new.mail.yahoo.com
>

1974. Re: [SkyWires] polarity

Yahoo group: SkyWires
Date: 2006-12-10 19:55:25 UTC
From: jsb@digistar.com
Topic: 1971 Message: 1974

On Sat, 9 Dec 2006 JimMcSkate@... wrote:

> I've noticed a similar phenomena, though my loop isn't square so there's
> not much science to be done at my place... I am hoping one of the
> rocket scientists among us will weigh in on your question. For me, I
> hear about the same no matter what the polarity, but on transmit I see
> the effect pretty clearly. I am typically running low power (sub 10
> watts on CW) so every little thing helps.

sounds good - well from what I've tested so far it makes a pretty big
difference for receive sometimes when I flip the polarity... 20 meters
anyway... I haven't had enough time to compare on the lower bands.

cul Jason

--
73 Jason N1SU
http://n1su.com/

1975. Re: [SkyWires] Re: Fw: [DX1MK] drawing of 40m delta loop

Yahoo group: SkyWires
Date: 2006-12-12 01:31:43 UTC
From: cesar maligalig
Topic: 1969 Message: 1975

Wayne,

Thanks for the info. Right now I have installed my delta loop tied to 3 coconut trees with two bungee cords on the two corners across the feedpoint. Though I could not achieve the 1.1:1 swr anymore, I am happy with the present 1.4:1 swr. 73

KC dw1nsm

----- Original Message ----
From: wayneg <wayne15857@...>
To: SkyWires@yahoogroups.com
Sent: Monday, December 11, 2006 1:29:26 AM
Subject: [SkyWires] Re: Fw: [DX1MK] drawing of 40m delta loop

--- In SkyWires@yahoogroup s.com, cesar maligalig <cmaligs@... > wrote:
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> Dear All,
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> I have successfully built a 40m delta loop, after hoisting it up and down for about ten times! Attached is a very poor drawing, any suggestion for a better software that MS Paint. The loop is slanting to about 45 degrees down to the lower corners. It is attached to a pulley tied to a coconut tree, and used 12" bungee cord on the 2 lower corners. I removed the 1:1 balun and replaced it with a homebrewed center connector. Please don't hesitate to ask about construction and tuning. I tuned it with my Vectronics manual antenna tuner - no antenna analyser - can't afford one! hihihi
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> 73 KC de DW1NSM
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http://www.cs. uu.nl/~markov/ kids/draw. html

I use it for all my antenna construction projects. Very simple program but after you get used to using it most helpful to say the least.
Good luck and 73,
Wayne
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Do you Yahoo!?
Everyone is raving about the all-new Yahoo! Mail beta.
http://new.mail.yahoo.com

1976. loops

Yahoo group: SkyWires
Date: 2006-12-15 17:01:48 UTC
From: Bruce Rattray
Topic: 1976 Message: 1976

Just joined up - running a 40 mtr delta loop here - am thinking of trying horizontal loop - 73 Bruce ve5rc/ve5qrp

1977. Re: [SkyWires] loops

Yahoo group: SkyWires
Date: 2006-12-15 19:43:14 UTC
From: Dave Marling
Topic: 1976 Message: 1977

Bruce Rattray wrote:
>
>
> Just joined up - running a 40 mtr delta loop here - am thinking of
> trying horizontal loop - 73 Bruce ve5rc/ve5qrp

Hi Bruce. Fancy meeting you on here!

For the info of others on here, Bruce and I co-manage the qrp-canada
reflector.

Dave
VE1VQ

1978. RE: [SkyWires] loops

Yahoo group: SkyWires
Date: 2006-12-15 21:49:41 UTC
From: rattray
Topic: 1976 Message: 1978

Hello Dave - tnx for your email - 73 Bruce.

72/73 - Bruce ve5rc/ve5qrp - QRP-C#1, QRP-L#886, A1 Operator
Enter QRP-Canada's "RUN with RAC" contest -
details - http://www.qrp-canada.com <http://www.qrp-canada.com/>

-----Original Message-----
From: SkyWires@yahoogroups.com [mailto:SkyWires@yahoogroups.com] On Behalf
Of Dave Marling
Sent: Friday, December 15, 2006 1:43 PM
To: SkyWires@yahoogroups.com
Subject: Re: [SkyWires] loops

Bruce Rattray wrote:
>
>
> Just joined up - running a 40 mtr delta loop here - am thinking of
> trying horizontal loop - 73 Bruce ve5rc/ve5qrp

Hi Bruce. Fancy meeting you on here!

For the info of others on here, Bruce and I co-manage the qrp-canada
reflector.

Dave
VE1VQ

1979. New member,loop vs dipole question

Yahoo group: SkyWires
Date: 2006-12-18 04:46:54 UTC
From: Mike
Topic: 1979 Message: 1979

Hi all, Looks like I may give the hobby a try again. I gave up after years of trying to copy code with no luck. I got so aggrivated I haven't even been on VHF/UHF in over a year. Anyway, I have a 160-10m Doublet (Dipole - 240ft) with 100ft of 600 OHM feedline I got from W7FG a few years ago that I never put up.I have a few trees but most are only around 20ft high. If I were to string up the dipole it would run NW to SE because of the tree locations.I've read a little about the loops and have a few questions. I'm thinking I could add another 388ft+/- to the dipole I have to make the loop.It would be more of a triangle shape with the longest leg running north to south. Would the loop work better than the dipole at the low height? What about maybe getting 30ft high by using some PVC pipe against the trees for support? Would 10 ft higher make much difference? My HF equipment consist of a Kenwood TS-850, Yaesu FT-990, Johnson "Match Box" & Ameritron ATR-30 Tuners and a Heathkit SB-1000 amplifier. Thanks for any suggestions, Mike

1980. Re: New member,loop vs dipole question

Yahoo group: SkyWires
Date: 2006-12-18 05:42:35 UTC
From: Mike
Topic: 1979 Message: 1980

oooops, I hit the wrong button . Should need to add 318 ft +/- not 388.

1981. Re: [SkyWires] New member,loop vs dipole question

Yahoo group: SkyWires
Date: 2006-12-18 07:44:38 UTC
From: Donald Sanders
Topic: 1979 Message: 1981

Mike, I run a short 1 wavelength 40 meter loop at 20 foot and a longer 1 wave 160 loop at 50 feet high. They both work well for US and some DX contacts. I am building a 80 meter loop for a friend and it will be supported by four 30 foot plastic pipe masts and 450 ladder line feed. I tried it out here and it worked very well 40 and up and OK on 80- contacts 300 to 1500 miles with good reports on the 100 watts.

Healthfully yours,
Don W4BWS
----- Original Message -----
From: Mike
To: SkyWires@yahoogroups.com
Sent: Sunday, December 17, 2006 10:46 PM
Subject: [SkyWires] New member,loop vs dipole question

. Would the
loop work better than the dipole at the low height? What about maybe
getting 30ft high by using some PVC pipe against the trees for support?
Would 10 ft higher make much difference?
Recent Activity
a.. 15New Members
Visit Your Group
SPONSORED LINKS
a.. Ham radio sales
b.. Loop antenna
c.. Ham radio outlet
Biz Tools
Y! Small Business

Track packages,

get forms, & more

Y! GeoCities
Share Your Passion

Join the web's lar- gest community.

Yahoo! Groups
Start a group

in 3 easy steps.

Connect with others.
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1983. New with 2 MT mobile ant question

Yahoo group: SkyWires
Date: 2006-12-18 16:33:38 UTC
From: Carol
Topic: 1983 Message: 1983

Hi group. My husband has a geo metro (chevy metro actually) and he is looking to put a 2 MT mobile antenna on it. As there is NO room between the rooftop and the head liner, he is thinking that a 5/8's ant is out of the question. My personal experience has been that 5/8's work better than anything else. The car is pretty small. Any suggestions for an antenna? Thanks, Carol B (KJ6OC)

1985. Re: polarity

Yahoo group: SkyWires
Date: 2006-12-18 22:07:09 UTC
From: n6vl
Topic: 1971 Message: 1985

Jason,

Does your tuning change when reversing the polarity? Just curious.

73,

Steve N6VL

1986. Re: [SkyWires] New with 2 MT mobile ant question

Yahoo group: SkyWires
Date: 2006-12-19 04:04:52 UTC
From: WILLIAM STEFFEL
Topic: 1983 Message: 1986

I have used a 5/8 whip with a magnetic mount. I have always gotten good recption reports.
----- Original Message -----
From: Carol
To: SkyWires@yahoogroups.com
Sent: Monday, December 18, 2006 10:33 AM
Subject: [SkyWires] New with 2 MT mobile ant question

Hi group. My husband has a geo metro (chevy metro actually) and he is looking to put a 2 MT mobile antenna on it. As there is NO room between the rooftop and the head liner, he is thinking that a 5/8's ant is out of the question. My personal experience has been that 5/8's work better than anything else. The car is pretty small. Any suggestions for an antenna? Thanks, Carol B (KJ6OC)

1987. Re: [SkyWires] New with 2 MT mobile ant question

Yahoo group: SkyWires
Date: 2006-12-19 04:13:38 UTC
From: Sarge
Topic: 1983 Message: 1987

I use mag mounts on all of our vehicles. I use a 5/8 on the truck for longer range simplex but if you're using mostly repeaters there is nothing wrong with 1/4 wave.

I have used a 5/8 whip with a magnetic mount. I have always gotten good recption reports.
----- Original Message -----
From: Carol
To: SkyWires@yahoogroups.com
Sent: Monday, December 18, 2006 10:33 AM
Subject: [SkyWires] New with 2 MT mobile ant question

Hi group. My husband has a geo metro (chevy metro actually) and he is looking to put a 2 MT mobile antenna on it. As there is NO room between the rooftop and the head liner, he is thinking that a 5/8's ant is out of the question. My personal experience has been that 5/8's work better than anything else. The car is pretty small. Any suggestions for an antenna? Thanks, Carol B (KJ6OC)

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1988. Re: New with 2 MT mobile ant question

Yahoo group: SkyWires
Date: 2006-12-19 04:40:12 UTC
From: Carol
Topic: 1983 Message: 1988

He's concerned with scratching the roof. I suggested putting a wash cloth under it. Then there's the problem of having to run the coax through an open window in the rain. On my car, he drilled a hole and ran the coax through the liner. There's no room to do that on the geo without the possibity of someone hitting there head on the connectors. He has thought of using a round ashtray from one of our parts cars (long story LOL) to cover over it. He just thought there might be a better idea or another place to put the antenna besides the roof. I'll pass this along to him. THANKS, Carol (KJ6OC)
P.S. Tell me about 1/4 wave antennas. Have you had good reception with them? We tried a through the glass one years ago and I was very UNIMPRESSED with the reception.

--- In SkyWires@yahoogroups.com, "Sarge" <sarge@...> wrote:
>
> I use mag mounts on all of our vehicles. I use a 5/8 on the truck for longer range simplex but if you're using mostly repeaters there is nothing wrong with 1/4 wave.
>
>
> I have used a 5/8 whip with a magnetic mount. I have always gotten good recption reports.
> ----- Original Message -----
> From: Carol
> To: SkyWires@yahoogroups.com
> Sent: Monday, December 18, 2006 10:33 AM
> Subject: [SkyWires] New with 2 MT mobile ant question
>
>
> Hi group. My husband has a geo metro (chevy metro actually) and he is
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>

1989. Re: [SkyWires] New member,loop vs dipole question

Yahoo group: SkyWires
Date: 2006-12-19 04:50:27 UTC
From: JimMcSkate@aol.com
Topic: 1979 Message: 1989

Mike,
The very very best thing about loops is that you can throw up a few versions in a single day and try them all out before you decide which one you like best. My antenna here evolved from an end fed Zepp to what I called a Zeppalooper - sort of a folded doublet that was triangular in shape though electrically a double Zepp. Both these antennae worked. Once I sorta-squared the triangle by figuring out how to throw a support line over a bendy white pine in the yard, I had a 40m Skywire Loop. The whole thing is about 15' high on average over level ground, fed at one corner with 300 ohm TV twinlead. Works wonderfully - not unheard of for me to work phone to Brazil with 30 watts or Europe on CW with 5 watts. Strangely, this CHEAP antenna (all told, about $12) busts through pileups and makes my little bitty signal sound huge.

Being one of the few non-scientists on the list (I'm a corporate spook) I am not able to make a credible stab at the mathematics to explain how it all works - the great thing about antennas is that you can get out and try stuff to see what works best.

The SB-1000? You might find you can get away without it.

Have a great evening,
73,
Jim
WA2LGN

-----Original Message-----
From: KD5VHF@...
To: SkyWires@yahoogroups.com
Sent: Sun, 17 Dec 2006 11:46 PM
Subject: [SkyWires] New member,loop vs dipole question

Hi all, Looks like I may give the hobby a try again. I gave up after years of trying to copy code with no luck. I got so aggrivated I haven't even been on VHF/UHF in over a year. Anyway, I have a 160-10m Doublet (Dipole - 240ft) with 100ft of 600 OHM feedline I got from W7FG a few years ago that I never put up.I have a few trees but most are only around 20ft high. If I were to string up the dipole it would run NW to SE because of the tree locations.I've read a little about the loops and have a few questions. I'm thinking I could add another 388ft+/- to the dipole I have to make the loop.It would be more of a triangle shape with the longest leg running north to south. Would the loop work better than the dipole at the low height? What about maybe getting 30ft high by using some PVC pipe against the trees for support? Would 10 ft higher make much difference? My HF equipment consist of a Kenwood TS-850, Yaesu FT-990, Johnson "Match Box" & Ameritron ATR-30 Tuners and a Heathkit SB-1000 amplifier. Thanks for any suggestions,
Mike

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1990. Re: [SkyWires] Re: New with 2 MT mobile ant question

Yahoo group: SkyWires
Date: 2006-12-19 05:18:49 UTC
From: Sarge
Topic: 1983 Message: 1990

NEVER use a thru the glass antenna. Pure crap! haha! If you are in an area with repeaters all around on towers or high buildings,the 1/4 wave is the way to go because they propogate upward more quickly. 5/8 wave are flatter to the ground for longer simplex coverage or hitting a repeater that is out there a ways.
Listen, the are all kinds of antenna mounts these days. Trunk lip mounts, bumper mounts, etc. Look around on the net and you'll likely find something you can live with.
Heck,I found a wife there once! hahahaha! Now with our mag mounts, coax runs thru trunk deck lip or the truck door on passenger side and is never moved. Cut a piece of clear plastic like drop cloth or something for under the mount. Keep it clean and waxed under there and no problemo grande.

> He's concerned with scratching the roof. I suggested putting a wash
> cloth under it. Then there's the problem of having to run the coax
> through an open window in the rain. On my car, he drilled a hole and
> ran the coax through the liner. There's no room to do that on the geo
> without the possibity of someone hitting there head on the connectors.
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>> From: Carol
>> To: SkyWires@yahoogroups.com
>> Sent: Monday, December 18, 2006 10:33 AM
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1991. Re: [SkyWires] Re: New with 2 MT mobile ant question

Yahoo group: SkyWires
Date: 2006-12-19 05:49:34 UTC
From: Robert Ower
Topic: 1983 Message: 1991

Carol wrote:

>He's concerned with scratching the roof. I suggested putting a wash
>cloth under it. Then there's the problem of having to run the coax
>through an open window in the rain. On my car, he drilled a hole and
>ran the coax through the liner. There's no room to do that on the geo
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>P.S. Tell me about 1/4 wave antennas. Have you had good reception with
>them? We tried a through the glass one years ago and I was very
>UNIMPRESSED with the reception.
>
I've had good luck with ? wave 2m mag mounts here in mountain country.
But if you're worried about scratching paint, you need to remove the mag
mount regularly and clean under it. No matter what, at least here in AZ,
dust will collect under that magnet, and eat the paint like sand paper.
Also, I've gotten along fine running the coax past the rubber seal
around the door, rather than out the window. But that said, just pull
the mag mount off when you park, stick it inside the car, and put it out
again when you're ready to drive again.

--

Bob Ower
Humboldt, AZ

Leather Craftsman
dba _The Leather Horseshoe_ <http://owerr.tripod.com/>
Member: International Internet Leathercrafters Guild <http://iilg.org/>

Amateur Radio Operator: WA7YUL WA7YUL Home Page
<http://geocities.com/rcowerpc/>
Life Member: ARRL ARRL <http://arrl.org/>
Member: Yavapai Amateur Radio Club YARC <www.w7yrc.org>
Member: Quarter Century Wireless Association
Member: FISTS 11282
QSL via ARRL's LOTW or eQSL.cc

1992. Re: New with 2 MT mobile ant question

Yahoo group: SkyWires
Date: 2006-12-19 06:33:54 UTC
From: Carol
Topic: 1983 Message: 1992

Thanks Much to everyone. I'll pass this along. He came up with another idea tonight. Will let you know what he does when he gets around to it. LOL Probably after Christmas. Carol (KJ6OC)

P.S. He is blessed with a wife (35 years) who LOVES ham radio (even though we haven't been active in recent years (another story) among other things. LOL He's currently cleaning up my old Hallecrafters (first HF rig) which has been in storage so I can get back to at least listening. Espeically to CW my first love. LOL

1993. Introduction...

Yahoo group: SkyWires
Date: 2006-12-19 07:18:28 UTC
From: n6vl
Topic: 1993 Message: 1993

Hi,

I am new to this group.

Here is my current situation. I have a pseudo-horizontal delta loop. It is a tilted delta loop with about 225 foot of wire with the apex at 40 and the lower corners at 6 feet or so. It is based on a design by Doug DeMaw, W1FB. It is described in one of the ARRL Wire Antenna Classics volumes. His version was a full size 1 wave length on 80 meters while mine is about 80% of full size. The lower horizontal side is about 80 feet long. The other two sides hang a drooping 45 degrees from the apex. Per Doug's article, I feed it at a lower corner with REAL 450 ohm ladder line. I found some old line at a swap meet with 1 inch spacers every 6 inches. This was before the days of windowed ladder line. Oh yes, I feed it with the 275 watt Johnson Matchbox. I take Cebik's preference for link coupled tuners seriously.

So here is my dilemma. I live on a typical Southern California postage stamp lot. It is 60 by 100 feet, with 60 by 80 really being usable. The lower corner feed lowers the angle of radiation some and I have had good luck working into the midwest on 80 from the west coast. It seems to be a good all around antenna on 40 comparing favorably with a GAP vertical in many comparisons. On 20 it generally hears better than the vertical, though EZNEC does not show it be a real low angle radiator. On 17 and above, the vertical is almost always a better on receive and I don't even try the loop.

I would like to have a smaller purely horizontal loop for the higher HF bands. Yet I don't want get rid of tilted delta loop for the lower bands. I only have so many options on my lot. I have considered a 40 meter loop since a larger one does not really help on higher bands. A recent QST article says to limit a horizontal loop to 5 wave lengths at the highest frequency. But is is hard to mount it and keep my current delta loop.

I am also considering a loop only 28 feet on each side. I have four SD-20 fish pole blanks from World Radio magazine. They are each 20 foot long. They could be mounted on central hub 90 degrees apart. The distance from the end of each pole is 28 feet. The resonant frequency would be 8.8 MHz. This way only one support is needed. Again the problem is finding room.

I could take my 225 feet of wire (or similar length) and make it all horizontal. The problem is the cloud warmer effect on 80 and 40. Also I would need to find 4 high supports. I have one 40 foot support and don't want to alarm the neighbors further.

Has anyone had experience with two loops very close to each other/ Any other suggestions are welcome.

73,

Steve N6VL

1994. Re: [SkyWires] Re: polarity

Yahoo group: SkyWires
Date: 2006-12-19 14:40:50 UTC
From: jsb@digistar.com
Topic: 1971 Message: 1994

On Mon, 18 Dec 2006, n6vl wrote:

> Does your tuning change when reversing the polarity? Just curious.

hi - yes - the SWR is a little higher when reversing the polarity - if I tune to 1:1 with the tuner and then reverse the polarity the SWR may be 1.1:1 depending on the band, but never more than 1.15:1.

But there is a tremendous difference when changing polarity it seems - especially when the conditions were poor last weekend I could change polarity and I would see a 3 S unit difference mostly due to an elimination of multipath. On modes like WinDRM or AOR where there is 2.5KHz of wide digital signal I can see where the multipath is greatly reduced from one station to the next. The only problem was I was having to stand up in front of the switch most of the time flipping the switch as I would go from one station to the other... and as the propagation varied sometimes I would switch back in the opposite direction... and then some guys were better on the little 20 meter dipole...

Based on these experiences, i've formed the opinion that the length of a wire antenna and its placement appears to be the main benefit to the loop because the cancellation of signals is reduced with the greater capture area of the loop, compared to the smaller surface area of the dipole which can capture only 1/4 wavelength on the center conductor.

Now if I could just figure out a way to put up a loop around my property that is 320 meters long! hi

--
73 Jason N1SU
http://n1su.com/

1995. Re: polarity

Yahoo group: SkyWires
Date: 2006-12-19 16:43:07 UTC
From: n6vl
Topic: 1971 Message: 1995

Jason,

Thanks!

Did you ever find a ceramic DPDT knife switch? I sure would like to find one. I think a knife switch would also better preserve the balance since is like shaped like balanced line. I don't think a ganged pair of ceramic wafer switches would be a problem either.

Check out the W5DXP page at http://www.qsl.net/w5dxp/notuner.htm. Cecil is using DPDT knife switches to change the feedline length. His don't seem to be ceramic. I wonder where he got them.

Are you transmitting on WinDRM or just listening? I think you can transmit with an SDR-1000 rig. I know a ham locally who has an AOR unit, but I never asked him about it. I am on a CW kick at the moment, but not that good at it.

73,

Steve N6VL

1996. Re: polarity/ ceramic DPDT knife switch

Yahoo group: SkyWires
Date: 2006-12-19 18:16:03 UTC
From: Mike
Topic: 1971 Message: 1996

There is one on ebay. Good luck.
>
>
>
>
>
>
"n6vl" wrote:
> Did you ever find a ceramic DPDT knife switch? I sure would like to
> find one.
> 73,
>
> Steve N6VL
>

1997. Re: polarity/ ceramic DPDT knife switch

Yahoo group: SkyWires
Date: 2006-12-19 21:04:22 UTC
From: n6vl
Topic: 1971 Message: 1997

Hmmm... I did a search on Ebay and came up empty. What should I be searching on?

73,

Steve N6VL

1998. Re: [SkyWires] Re: New with 2 MT mobile ant question

Yahoo group: SkyWires
Date: 2006-12-19 21:19:10 UTC
From: Paul@N4LCD.com
Topic: 1983 Message: 1998

>He's concerned with scratching the roof. I suggested putting a wash
>cloth under it. Then there's the problem of having to run the coax
>through an open window in the rain. On my car, he drilled a hole and
>ran the coax through the liner. There's no room to do that on the geo
>without the possibity of someone hitting there head on the connectors.
>He has thought of using a round ashtray from one of our parts cars
>(long story LOL) to cover over it. He just thought there might be a
>better idea or another place to put the antenna besides the roof. I'll
>pass this along to him. THANKS, Carol (KJ6OC)
>P.S. Tell me about 1/4 wave antennas. Have you had good reception with
>them? We tried a through the glass one years ago and I was very
>UNIMPRESSED with the reception.

If you don't want to drill a hole in the roof because the headliner
is too close, and are concerned about rain coming in around the coax
on a mag mount, why don't you try one of the thru-glass mounts?

One example is the Larsen KG144UDPL

1999. Re: [SkyWires] Re: polarity

Yahoo group: SkyWires
Date: 2006-12-19 23:12:20 UTC
From: Jason Buchanan
Topic: 1971 Message: 1999

n6vl wrote:
> Jason,
>
> Thanks!
>
> Did you ever find a ceramic DPDT knife switch? I sure would like to
> find one. I think a knife switch would also better preserve the
> balance since is like shaped like balanced line. I don't think a
> ganged pair of ceramic wafer switches would be a problem either.
>
>

I found some on ebay off and on. There's actually quite a few of them so if you see one that looks cruddy and would rather wait for one that looks better, just wait. Search for knife switch and ignore all the switchblades.

I just bought one which should be here in a few days. Figure on spending $25 for one in good condition.

> Check out the W5DXP page at http://www.qsl.net/w5dxp/notuner.htm.

The ones that W5DXP is using look like the Philmore brand that are about $5 each. Made out of plastic with nickel plate on the switch itself. I could be wrong but that's what they look like. Probably just as good but I envision myself needing only 2 switches so i'm going to go for the old ceramic ones. That's a good page though as i'm going to do some fiddle-faddling with the polarity and feedline length to tune the bands higher than 20 meters.

> Are you transmitting on WinDRM or just listening? I think you can
> transmit with an SDR-1000 rig. I know a ham locally who has an AOR
> unit, but I never asked him about it. I am on a CW kick at the moment,
> but not that good at it.
>

There's a big WinDRM net on Saturday and Sunday at 2000UTC at 14.236 USB. AOR Net is at 1900UTC. I'm usually at both except for the coming weekends (family coming into town). There's an AOR contest to win a new AOR 9000 - check out http://www.hamradio-dv.org/aor/digital-ssb/special-events/hello-dv-contest.htm for more details.

hope this helps!

cul Jason

--
73 Jason N1SU

Jason Buchanan - Boxboro, MA
Website: http://n1su.com/

2000. Re: [SkyWires] Re: polarity

Yahoo group: SkyWires
Date: 2006-12-20 00:32:03 UTC
From: Jason Buchanan
Topic: 1971 Message: 2000

n6vl wrote:
> Are you transmitting on WinDRM or just listening? I think you can
> transmit with an SDR-1000 rig. I know a ham locally who has an AOR
> unit, but I never asked him about it. I am on a CW kick at the moment,
> but not that good at it.
>

My uncle Mel K0PFX uses his SDR-1000 with the AOR and WinDRM, and CW too!

I spend the majority of my time on CW but AOR and WinDRM during the day
on the weekends - 14.236 USB.

Now that i've got the loop up I can always find a band to use regardless
of solar conditions.

73 Jason N1SU

--
73 Jason N1SU

Jason Buchanan - Boxboro, MA
Website: http://n1su.com/

2002. Re: polarity/ ceramic DPDT knife switch

Yahoo group: SkyWires
Date: 2006-12-20 06:11:30 UTC
From: Mike
Topic: 1971 Message: 2002

I just did a search for DPDT ceramic switch and got this....
http://tinyurl.com/y8lsbv
>
>
>
>
>
--- In SkyWires@yahoogroups.com, "n6vl" <n6vl@...> wrote:
>
> Hmmm... I did a search on Ebay and came up empty. What should I be
> searching on?
>
> 73,
>
> Steve N6VL
>

2003. Re: [SkyWires] New with 2 MT mobile ant question

Yahoo group: SkyWires
Date: 2006-12-20 15:47:51 UTC
From: Andy
Topic: 1983 Message: 2003

Hmm, kind of off-topic for Skywires....

We used magmount 2 meter antennas for a few years with no problem, no scratching that I could see (except when some idiot tries to move it by dragging). Did notice the circle after the thing had been in place for a very long time (less oxidizing under the magmount), but it soon disappeared. But I'm in the northeast USA where dry sand doesn't happen.

We ran the coax in along the rubber door seal, not through the window. No leaks. Just quick-and-dirty. Yes it squashes the cable a bit, but in our minivan there was almost no compression. We did have problems with the connector on the end of the cable, but not with the cable itself.

I have read that there's very little practical difference between 1/4's and 5/8's in actual use, when center-mounted on a vehicle roof. Yes, I understand the theoretical differences (even studied them in college, starting with Maxwell's equations). But people have made measurements looking for differences and finding not much if any difference when you come down to it on top of a typical car roof or trunk. It's only a couple dB difference anyway, if there were one.

A through-the-window-mount antenna is crummy because it's so far off-center and doesn't work against a groundplane, among other things.

Andy

2004. Re: New with 2 MT mobile ant question

Yahoo group: SkyWires
Date: 2006-12-20 17:26:54 UTC
From: Carol
Topic: 1983 Message: 2004

Thanks Andy. I knew it was off topic but we read about this group and figured maybe we could get away with it. :-) His car is small enough that a 5/8 is ok. It was just a matter of where to run the coax etc. We like the idea of drilling the hole and making it permanent. That way we don't have to keep messing with it. I think he mentioned the possibility of running along the door seal. He tells me he thinks he's figured out what he wants to do. Thanks for all the suggestions. Carol (KJ6OC)

-- In SkyWires@...m, Andy <Andy.groups@...> wrote:
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> Hmm, kind of off-topic for Skywires....
>
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> looking for differences and finding not much if any difference when you come
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> difference anyway, if there were one.
>
> A through-the-window-mount antenna is crummy because it's so far off-center
> and doesn't work against a groundplane, among other things.
>
> Andy
>

2006. Re: [SkyWires] New with 2 MT mobile ant question

Yahoo group: SkyWires
Date: 2006-12-21 02:31:46 UTC
From: Paul@N4LCD.com
Topic: 1983 Message: 2006

>A through-the-window-mount antenna is crummy because it's so far off-center
>and doesn't work against a groundplane, among other things.

Since this was brought up, and in fairness to
Larsen, they do disclose all potential
installation problems up front in their online
literature. I've pasted in the appropriate sections below.

Additionally, their glass mount antenna only has
0.5 dB loss compared to a hole-mount 1/4 wave
mounted in the center of the roof. A center of
the roof mag mount has 0.2 dB loss. So the loss is essentially insignificant.

The glass mount antenna is a half wavelength. Does it need a ground plane?

From Larsen:

Q. I moved my on-glass antenna from my old car to
a new one. It worked great on the old car, but I
have a very high VSWR on my new car? Why?

A. Your new car probably has passivated glass ---
glass impregnated with tiny metal particles which
render the glass incapable of coupling RF between
the inside and outside couplers.

Q.How can I tell if the glass on my vehicle is
suitable for one of Radiall/Larsen□s on-glass antennas?

A. First, look near a corner of a window for
words meaning or relating to "sun" or referring
to ultraviolet or other forms of radiation. If
you find terms like "Soft-Ray", "EZE-Cool",
"Solar-Coat", "Solar-Cool", "Insta-Clear" your
glass is probably passivated and won□t work with
on-glass antennas. If you don't find these
helpful words on the glass and want to be 100%
certain, ask a 2-way or cellular shop technician
to test your glass with a capacitance meter.

Q: I purchased one of your KG series through
glass mount antennas, specifically one for VHF
144-146 MHz. I installed the antenna according to
your directions, and have obtained an SWR of
1.5:1. But, the antenna is "deaf", it receives
poorly. I have tried another transceiver and
changed the UHF connector on the fixed coax end,

and my results are the same. Is there something I can do to make it work better?

A. Many factors can affect the performance of on-glass antennas. These include:
Glass Thickness: KGs are designed for glass with a typical thickness of .0151 ± .002". Anything greater or less will result in a frequency shift. Most automobile manufacturers have side and rear glass panels within this tolerance. If the mounting surface is thicker or thinner, this value will change the dielectric constant and change the resonant frequency of the antenna.

Height on glass: The lower on the glass the antenna is placed, the greater the reflection from the roof. This will cause the VSWR to increase.

Tint: Various tints affect the dielectric constant causing a higher VSWR, poor reception or no performance.

Dielectric Constant: The couplers (inside / outside) function as a capacitor. The distance and glass material content between these two plates affects the capacitive value. If you are using a Radiall/Larsen GT Coupler (a glass tester for capacitive values), the galss may not exceed 3 pF of capacitance. Anything greater than 3 pF and FR will not pass through the glass.

UV Glass: Many newer vehicles are manufactured with UV resistant or passivated glass containing metal flakes which destroy the capacitive function. One way to tell if your vehicle has passivated glass is to look in the window for the manufacturers' stamp. If the brand has the word SOLAR in it, the glass is not adaptable for RF purposes.

Q: I finally saved enough to buy my first new car! What type of antenna can I buy that won't require drilling a hole in the car?

A: Glass mount antennas are easy to install and do not require drilling a hole. Just be sure the antenna is mounted high up on the glass and not over defogger wires or on reflective window tint as this could impede performance.

Q:Does the black paint around the edge of the window reduce antenna performance?

A: No. The black mast paint used around the
perimeter of the rear window glass on domestic
vehicles has not been shown to be detrimental to
the glass mount installation. The only difficulty
in this preferred installation is the inside to
outside alignment of the coupling box to base foot.

Q:Does it make a difference if I mount the
antenna on a corner of the window instead of the center of the glass?

A: The best location is near the center of the
roofline. If the installation required mounting
to the corner, there should not be significant
performance degradation. Always install the
antenna as high on the glass as possible.

Q:Does it make a difference if the antenna is
mounted on the front or back window?

A: Glass mount antennas are designed for tempered
automobile glass with a nominal thickness of
5/32". Front windshield glass is a laminated
safety glass, which is thicker and causes some
degradation to the VSWR match. Expect a VSWR match to be nominally 2:1.

Q:Can I put a glass mount antenna on glass treated with Rain-X?

A: No. Chemical properties of Rain-X reduce the
holding ability of the adhesive tape used on
glass mount antennas by over 50%. If Rain-X or
another acidified alcohol surface treatment has
been applied to the glass, it must be removed
from the mounting area. Try Bon Ami cleanser or
Ultra Brite fluoride toothpaste.

Q:Any quick tips for installing "on-glass" antennas?

A:Remember:
* Install only on INSIDE of window.
* Do not mount antenna on any dark tinted
area or on an area where an after market tinting film has been applied.
* Do not install over in-glass AM/FM dipole antenna.
* Do not install on glass with metallic
content (passivated glass i.e. "solar-coat", "solar-cool").
* If possible, avoid installing antenna on curved glass.
* Clean inside mounting area with alcohol pad
provided in the installation kit. Wipe off excess
alcohol. Do not allow alcohol to dry on the
glass. If window film is apparent, use a mildly
abrasive detergent-type cleanser. Do not use
ammonia-based or similar type of glass cleaner.
* Vehicle glass should be near room
temperature (70° F / 21° C) prior to installation

and remain at this temperature for 3 days
following installation for maximum antenna-to-glass bond strength.
Here's what some hams said about the glass
mounts: http://www.eham.net/reviews/detail/1062

I don't own one and have no connection to
Larsen. I do know hams that use this antenna and
all tell me that they can't tell any difference
between it and a 1/4 wave mag mount on the center of the roof.

2008. Re: [SkyWires] New with 2 MT mobile ant question

Yahoo group: SkyWires
Date: 2006-12-21 18:00:22 UTC
From: Andy
Topic: 1983 Message: 2008

Some other things to watch out for with glass-mount antennas:

1. Avoid the shortened ones (usually with a coil in the middle) that are made to look like car-phone antennas.

2. Tinted glass may have conductive material in it, as the previous reply says.

3. Watch out for embedded wires for defroster, or for the AM/FM antenna. I've been told some AM/FM antenna wires are so fine you can barely see them.

If it's a halfwave antenna, I think you're right, it shouldn't need a ground plane. Regardless, the presence of the roof, to one side (and only one side) of any antenna, will affect its radiation pattern somewhat.

Many window-mount antennas I recall seeing were short, much less than 1/2 wave, probably even shorter than 1/4 wave.

You can also get through-the-window couplers without antenna, that you can use with a center-mounted antenna to bring the signal in without cutting holes or running the coax along a door seal. They are more rare, but I've heard of them.

Andy

2009. Re: polarity

Yahoo group: SkyWires
Date: 2006-12-21 18:35:52 UTC
From: n6vl
Topic: 1971 Message: 2009

Jason,

This is off topic, but here goes:

Is there way to do WinDRM without an SDR-1000 rig? I have one that needs a simple repair and do need to get it back to Flex soon. I also have an ICOM 756 Pro 2. Not sure if I can get that rig to do WinDRM. What are you using?

73,

Steve N6VL

2010. Re: [SkyWires] New with 2 MT mobile ant question

Yahoo group: SkyWires
Date: 2006-12-21 19:58:53 UTC
From: Harold Burton
Topic: 1983 Message: 2010

Did something similar years ago with a TV twinlead from an antenna.
Didn't want to drill thru the walls in my new house, so I glued 2" diam.
copper discs with a short machine screw soldered to the center on the
inside and outside of a window. I brought the twinlead down from the
antenna to the outside discs and took more twinlead from the inside
discs to the TV set connections. It worked as if the wires were
continuous. Wonder if one could interupt coax with capacitive connectors
like that on car windows?

Harold
KD5SAK

----- Original Message -----
From: "Andy" <Andy.groups@...>
To: <SkyWires@yahoogroups.com>
Sent: Thursday, December 21, 2006 12:00 PM
Subject: Re: [SkyWires] New with 2 MT mobile ant question

> Some other things to watch out for with glass-mount antennas:
>
> 1. Avoid the shortened ones (usually with a coil in the middle) that
> are
> made to look like car-phone antennas.
>
> 2. Tinted glass may have conductive material in it, as the previous
> reply
> says.
>
> 3. Watch out for embedded wires for defroster, or for the AM/FM
> antenna.
> I've been told some AM/FM antenna wires are so fine you can barely see
> them.
>
> If it's a halfwave antenna, I think you're right, it shouldn't need a
> ground
> plane. Regardless, the presence of the roof, to one side (and only
> one
> side) of any antenna, will affect its radiation pattern somewhat.
>
> Many window-mount antennas I recall seeing were short, much less than
> 1/2
> wave, probably even shorter than 1/4 wave.
>
> You can also get through-the-window couplers without antenna, that you
> can
> use with a center-mounted antenna to bring the signal in without

> cutting
> holes or running the coax along a door seal. They are more rare, but
> I've
> heard of them.
>
> Andy
>
>
>
>
>
> Yahoo! Groups Links
>
>
>
>
>
> --
> No virus found in this incoming message.
> Checked by AVG Free Edition.
> Version: 7.5.432 / Virus Database: 268.15.26/594 - Release Date:
> 12/20/2006 3:54 PM
>
>

2011. Ladder line length?

Yahoo group: SkyWires
Date: 2006-12-22 17:53:34 UTC
From: Mike
Topic: 2011 Message: 2011

I will be using 600 ohm ladder line to the 540ft.+/- loop. I can make a short run approx 20-25ft from the window and almost straight up to the loop. Would this be OK or should I try to route a longer run?

2012. Re: Ladder line length?

Yahoo group: SkyWires
Date: 2006-12-22 20:41:44 UTC
From: madatweak
Topic: 2011 Message: 2012

--- In SkyWires@yahoogroups.com, "Mike" <KD5VHF@...> wrote:
>
> I will be using 600 ohm ladder line to the 540ft.+/- loop. I can make a
> short run approx 20-25ft from the window and almost straight up to the
> loop. Would this be OK or should I try to route a longer run?
>

G'day Mike , It sounds like you have the perfect feed 25ft of ladder straight up sounds perfect. I believe you then have the opportunity should you want to & joint the twinlead leads together & feed your system with a godd ground & then have a vertical.

good one mate

2013. Re: Ladder line length?

Yahoo group: SkyWires
Date: 2006-12-24 02:11:44 UTC
From: Paul
Topic: 2011 Message: 2013

Is it just my imagination or did I read someplace that it's good to
put a twist or twists in the ladder line or twin lead. Or maybe I was
supposed to keep the twists out? Does it make any difference?

73,
Paul

>
> G'day Mike , It sounds like you have the perfect feed 25ft of ladder
> straight up sounds perfect. I believe you then have the opportunity
> should you want to & joint the twinlead leads together & feed your
> system with a godd ground & then have a vertical.
>
> good one mate
>

2014. Re: [SkyWires] Re: Ladder line length?

Yahoo group: SkyWires
Date: 2006-12-24 02:43:11 UTC
From: Sarge
Topic: 2011 Message: 2014

> Is it just my imagination or did I read someplace that it's good to
> put a twist or twists in the ladder line or twin lead. Or maybe I was
> supposed to keep the twists out? Does it make any difference?
>
> 73,
> Paul

yep, for wind strength.

2015. Re: [SkyWires] Re: Ladder line length?

Yahoo group: SkyWires
Date: 2006-12-24 19:10:00 UTC
From: Andy
Topic: 2011 Message: 2015

> Is it just my imagination or did I read someplace that it's good to
> put a twist or twists in the ladder line or twin lead. Or maybe I was
> supposed to keep the twists out? Does it make any difference?

If you have ladderline running close to something else metallic, including another line, some twists can be useful to help maintain electrical balance (minimize differential mode coupling) between the ladderline and the something else.

Otherwise I don't think it does anything, electrically.

In the old days of open-wire telephone lines (like you might still see running along railroad track beds), each of the wire pairs is transposed (flipped) every so often, for the same reason. The multiconductor cables that replaced them, do the same thing, with each pair in the bundle having a calculated twist.

Andy

2016. Re: [SkyWires] Re: Ladder line length?

Yahoo group: SkyWires
Date: 2006-12-24 23:54:08 UTC
From: Paul@N4LCD.com
Topic: 2011 Message: 2016

> > Is it just my imagination or did I read someplace that it's good to
> > put a twist or twists in the ladder line or twin lead. Or maybe I was
> > supposed to keep the twists out? Does it make any difference?

Someone told me years ago that the twisting of ladder line minimized
whipping around when the wind was strong.

I have also noticed twists on tie-down straps on large trucks. I
asked one trucker about that and he gave the same answer.

2018. Re: Source for more 450 ohm ladderline?

Yahoo group: SkyWires
Date: 2006-12-27 01:36:15 UTC
From: Mike
Topic: 556 Message: 2018

Hi,

Looking at old msgs and saw yours. radio-ware, davis-rf and thewireman are some sources of ladder-line. I want to put up a loop. and should be able to fit a 80m 2wl loop but want to get on 160 and not warm clouds. A 160m 2wl loop is around 1100'. How is your 1080 loop working out and how high is it? What do you have for 40-10 and why are you keeping it up rather than use the 1080' loop for all bands?

Tnx,

Mike

--- In SkyWires@yahoogroups.com, "nc9k" <jasminemeese@...> wrote:
>
> Hello all,
>
> My stock of commercial 450 ohm ladderline I bought in 1990 at
> LAMARSFEST is down to 15 feet. I now live in the middle of nowhere
> on 40 acres and want to order more commercial (not TV) ladderline
> online so I can connect to the 1080 foot loop I am putting up for 160
> through 40M (I am keeping my 40M loop up for 20 through 10M - it
> really gets out!). If you know of good sources to order new
> commercial ladderline from please advise by posting on this Skywires
> site - others need to know as well.
>
> Thanks,
>
> Leland NC9K
>

2019. Re: Source for more 450 ohm ladderline?

Yahoo group: SkyWires
Date: 2006-12-27 01:38:56 UTC
From: Mike
Topic: 556 Message: 2019

Hi,

How high is your 1080' loop? I can put a 1wl 80m loop with room but dont want to warm clouds on 160m so may try a 2wl 160m loop. What are you feeding it with and what kind of ant wire r u usingA?

Tnx,

Mike KA2FIR

--- In SkyWires@yahoogroups.com, keith currie <kecurrie@...> wrote:
>
> Hi Leland
> I got my 1080 loop up a couple weeks ago and love it , even though I was
> told my many it would be no better then one wl would be. It hears great
> and tunes all the way to 10m with a tuner of corse. Wish I had a
> balanced tuner like we talked about before on it.
> I get my ladder line here in Canada so it wouldnt help you much I guess
> .
> Take care Keith VE5HKC
>
> nc9k wrote:
>
> > Hello all,
> >
> > My stock of commercial 450 ohm ladderline I bought in 1990 at
> > LAMARSFEST is down to 15 feet. I now live in the middle of nowhere
> > on 40 acres and want to order more commercial (not TV) ladderline
> > online so I can connect to the 1080 foot loop I am putting up for 160
> > through 40M (I am keeping my 40M loop up for 20 through 10M - it
> > really gets out!). If you know of good sources to order new
> > commercial ladderline from please advise by posting on this Skywires
> > site - others need to know as well.
> >
> > Thanks,
> >
> > Leland NC9K
> >
> >
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> > SkyWires-unsubscribe@...m
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> > * Your use of Yahoo! Groups is subject to the Yahoo! Terms of
> > Service.
> >
>

2020. Re: Source for more 450 ohm ladderline?

Yahoo group: SkyWires
Date: 2006-12-27 02:18:32 UTC
From: Don Keith
Topic: 556 Message: 2020

I would say any of the three outlets mentioned below would be a good source of ladder line via the web. I bought mine from The Wireman (http://thewireman.com) and thought the price to be reasonable and the quality excellent. I've also had good experiences ordering from Radioware, though not ladder line. They do sell it as low as 33 cents a foot.

W4RNL suggests that a 2-wavelength loop works better than 1-wavelength, but not necessarily enough better to justify it unless you have the wire, supports, and acreage to stick up over a thousand feet of wire. I didn't even have enough of any of that stuff for a full wavelength on 160, but with about 470 feet in a rough octagonal shape, I'm having a blast way down there. It doesn't want to load on the lower 50 khz or on 10 meters, but it works like a champ everywhere else in the HF spectrum. It's not that high, either--15 to 35 feet above ground--but I doubt I'll be working much DX on 160 with 100 watts. I do get good reports out to 350 to 400 miles at night.

After more than four decades of more-or-less active ham radio experience, I've just recently become downright evangelical about the big loop. And don't even get me started on open wire/ladder line as opposed to coax!

73,

Don N4KC
www.donkeith.com

--- In SkyWires@yahoogroups.com, "Mike" <ion_op@...> wrote:
>
> Hi,
>
> Looking at old msgs and saw yours. radio-ware, davis-rf and thewireman
> are some sources of ladder-line. I want to put up a loop. and should be
> able to fit a 80m 2wl loop but want to get on 160 and not warm clouds.
> A 160m 2wl loop is around 1100'. How is your 1080 loop working out and
> how high is it? What do you have for 40-10 and why are you keeping it
> up rather than use the 1080' loop for all bands?
>
> Tnx,

>
> Mike
>
> --- In SkyWires@yahoogroups.com, "nc9k" <jasminemeese@> wrote:
> >
> > Hello all,
> >
> > My stock of commercial 450 ohm ladderline I bought in 1990 at
> > LAMARSFEST is down to 15 feet. I now live in the middle of
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> > on 40 acres and want to order more commercial (not TV) ladderline
> > online so I can connect to the 1080 foot loop I am putting up for
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> > through 40M (I am keeping my 40M loop up for 20 through 10M - it
> > really gets out!). If you know of good sources to order new
> > commercial ladderline from please advise by posting on this
Skywires
> > site - others need to know as well.
> >
> > Thanks,
> >
> > Leland NC9K
> >
>

2021. Re: Height of 160 meter loop, 40 feet or 60 feet

Yahoo group: SkyWires
Date: 2006-12-27 04:18:03 UTC
From: Mike
Topic: 1014 Message: 2021

Hi,

How did you get the length of 980' How does it work on 160 for dx?

Tnx,

Mike

--- In SkyWires@yahoogroups.com, keith currie <kecurrie@...> wrote:
>
> My loop is up at about 50' but it is very long so I think it changes the
> pattern a bit. Mine is 980' so the lobes are very close and it works
> great on all bands.
> Just my experience not real sure, I just go with what works
> for me.
> VE5HKC
> Keith
>
> johnisella wrote:
>
> >
> > Does anyone have experience or opinion on the height of a 160 meter
> > loop? I am going to
> > be installing 4 phone poles and can get them 40, 50 or 60 feet above
> > ground, other than
> > the higher is better approach does anyone have hard experience or
> > theory to support
> > higher, 60 feet, or lower, 40 foot installation?
> >
> > Thanks, John K1KSC
> >
> >
> >
> >
> > --
> > Yahoo! Groups Links
> >
> > * To visit your group on the web, go to:
> > http://groups.yahoo.com/group/SkyWires/
> >
> > * To unsubscribe from this group, send an email to:
> > SkyWires-unsubscribe@yahoogroups.com
> >
> > * Your use of Yahoo! Groups is subject to the Yahoo! Terms of
> > Service.
> >

>

2022. Re: [SkyWires] Re: Source for more 450 ohm ladderline?

Yahoo group: SkyWires
Date: 2006-12-27 12:18:43 UTC
From: adam
Topic: 556 Message: 2022
Attachments: 2 described; binary payloads are missing from this source WARC

[Attachment content not displayed]

2023. More loop questions

Yahoo group: SkyWires
Date: 2006-12-27 16:28:00 UTC
From: Mike
Topic: 2023 Message: 2023

Hi,

After reading some of the archives I've decided to try the 540' 2wl 80m loop. I was considering a 2wl 160m loop because I want to work DX on 160 but it might be more trouble than it's worth. I may try a 135' center-fed L for 160m as per Cebik if the loop is not good on DX. I have a little more than an acre and my guess the trees top out at 60-80' so I should be able to get the loop up high but lots of limbs to snake the wire through.

Home Depot has lots of wire but the biggest role is 500'. Has anyone spliced more wire onto their loop using what method? I would think soldering the joint would not stand up to the strain. Maybe a Western Union splice?

Has anyone compared the 2wl 80m to say a 80 or 160m doublet? Have they experienced the nulls that Cebik talks about on the higher bands?

I read that window ladder line gets lossy when wet and changes tuning when wet and exposed to wind, ice, etc and true open-wire line is best. Has anyone experienced this problem? I'm considering W7FG's 600ohm open-wire line for the loop.

Tnx & 73,

Mike KA2FIR

2024. Re: [SkyWires] More loop questions

Yahoo group: SkyWires
Date: 2006-12-27 21:30:46 UTC
From: Donald Sanders
Topic: 2023 Message: 2024

I spliced the wire on my loop by doing the WE splice and wrap and then soldering the joint. coated it with Glyptol, wrapped it with Scotch 66 black tape and then put heat shrink tubing over it. Maybe over kill but I didn't want it to break, corrode, and oxidize. Mine is 80 full wave and I used 450 ohm line and #14 THHN insulated wire from Home Depot. I plan to make my own 600 ohm line as described in QST Dec 2006 Page 55. This will be for replacement of the ladder line. Wish I could train a squirrel to run the wire through the limbs of the trees.

Healthfully yours,
Don W4BWS
----- Original Message -----
From: Mike
To: SkyWires@yahoogroups.com
Sent: Wednesday, December 27, 2006 10:28 AM
Subject: [SkyWires] More loop questions

Hi,

After reading some of the archives I've decided to try the 540' 2wl 80m loop. I was considering a 2wl 160m loop because I want to work DX on 160 but it might be more trouble than it's worth. I may try a 135' center-fed L for 160m as per Cebik if the loop is not good on DX. I have a little more than an acre and my guess the trees top out at 60-80' so I should be able to get the loop up high but lots of limbs to snake the wire through.

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Tnx & 73,

Mike KA2FIR

2025. Re: [SkyWires] More loop questions

Yahoo group: SkyWires
Date: 2006-12-27 21:38:08 UTC
From: ken hutson (wb5uyj)
Topic: 2023 Message: 2025

hi mike
yu might check with your local weldigg supply we used to handle copper mig weldimg wire in different copper alloys for build up on electrode for dow chemical co
the were 20 and 50 lb rolls .045 to 1/4 dia wire quess on length
would be say no 12 gauge aboute 5000 ft
have used on loops before

ken 73s
wb5uyj

2026. Re: [SkyWires] More loop questions

Yahoo group: SkyWires
Date: 2006-12-28 00:38:33 UTC
From: Dr. Ace Ratliff
Topic: 2023 Message: 2026

Hi Don,
It has been my experience that if you solder the splice it will break after some time . I just wrap the 2 ends together very well .
Good Luck es 73 ,
Ace - WH2T

----- Original Message -----
From: Donald Sanders
To: SkyWires@yahoogroups.com
Sent: Wednesday, December 27, 2006 4:30 PM
Subject: Re: [SkyWires] More loop questions

I spliced the wire on my loop by doing the WE splice and wrap and then soldering the joint. coated it with Glyptol, wrapped it with Scotch 66 black tape and then put heat shrink tubing over it. Maybe over kill but I didn't want it to break, corrode, and oxidize. Mine is 80 full wave and I used 450 ohm line and #14 THHN insulated wire from Home Depot. I plan to make my own 600 ohm line as described in QST Dec 2006 Page 55. This will be for replacement of the ladder line. Wish I could train a squirrel to run the wire through the limbs of the trees.

Healthfully yours,
Don W4BWS
----- Original Message -----
From: Mike
To: SkyWires@yahoogroups.com
Sent: Wednesday, December 27, 2006 10:28 AM
Subject: [SkyWires] More loop questions

Hi,

After reading some of the archives I've decided to try the 540' 2wl 80m loop. I was considering a 2wl 160m loop because I want to work DX on 160 but it might be more trouble than it's worth. I may try a 135' center-fed L for 160m as per Cebik if the loop is not good on DX. I have a little more than an acre and my guess the trees top out at 60-80' so I should be able to get the loop up high but lots of limbs to snake the wire through.

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I read that window ladder line gets lossy when wet and changes tuning when wet and exposed to wind, ice, etc and true open-wire line is best. Has anyone experienced this problem? I'm considering W7FG's 600ohm open-wire line for the loop.

Tnx & 73,

Mike KA2FIR

2027. For ADAM in Australia Re: [SkyWires] Re: Source for more 450 ohm ladderline?

Yahoo group: SkyWires
Date: 2006-12-28 01:13:52 UTC
From: Donald Sanders
Topic: 2027 Message: 2027

Adam
You can make your own open wire 600 ohm line and it will work for any folded dipole antenna or to feed other antennas. I can send a copy of the article from Dec 2006 QST if you provide your e-mail address. Yahoo will not take attachments.

Healthfully yours,
Don W4BWS
----- Original Message -----
From: adam
To: SkyWires@...m
Sent: Wednesday, December 27, 2006 6:18 AM
Subject: [Norton AntiSpam] Re: [SkyWires] Re: Source for more 450 ohm ladderline?

Im sorry I cant advise on any ladder line - being in Australia my brother told me he can get some 450 ohm line in from the US at 60cents per foot (thats around US .47c/ft). I mean its near impossible to find black 300ohm TV twinlead here but I've managed to pickup a 200mtr roll of white TV twinlead for AU $35. Im just not sure how its going to go as the conductors are so tiny. Anyway good luck folks

On 12/27/06, Mike <ion_op@...> wrote:
Hi,

Looking at old msgs and saw yours. radio-ware, davis-rf and thewireman
are some sources of ladder-line. I want to put up a loop. and should be
able to fit a 80m 2wl loop but want to get on 160 and not warm clouds.
A 160m 2wl loop is around 1100'. How is your 1080 loop working out and
how high is it? What do you have for 40-10 and why are you keeping it
up rather than use the 1080' loop for all bands?

Tnx,

Mike

--- In SkyWires@yahoogroups.com, "nc9k" <jasminemeese@...> wrote:
>
> Hello all,
>
> My stock of commercial 450 ohm ladderline I bought in 1990 at
> LAMARSFEST is down to 15 feet. I now live in the middle of nowhere
> on 40 acres and want to order more commercial (not TV) ladderline
> online so I can connect to the 1080 foot loop I am putting up for 160
> through 40M (I am keeping my 40M loop up for 20 through 10M - it
> really gets out!). If you know of good sources to order new
> commercial ladderline from please advise by posting on this Skywires
> site - others need to know as well.

>
> Thanks,
>
> Leland NC9K
>

--
Identified as person or persons sent in response from an electronic messaging system hereby known as gmail this solely and exclusively indemnifies mada69 as the originator only in the subject of said gmail and not withstanding little or bugger all else or what ones trying to communicate is im not responsible for the body but only the subject line of my emails

2028. Re: [SkyWires] More loop questions

Yahoo group: SkyWires
Date: 2006-12-28 14:27:42 UTC
From: Dave Marling
Topic: 2023 Message: 2028

In our close-to-the-Atlantic ocean climate, mechanical wire joints alone without soldering become intermittent quickly. I use the "western union" splice, solder, then cover it with fingernail polish, and after that dries, shrink tubing or the stretchy self adhesive electrical tape.

Dave
VE1VQ

2030. Re: [SkyWires] More loop questions

Yahoo group: SkyWires
Date: 2006-12-28 17:19:49 UTC
From: Donald Sanders
Topic: 2023 Message: 2030

I won't dispute your experience. I haven't had that happen yet maybe because I have the overwraps that support the joint and reduce flexing of the splice-Don't know. Any way, when in Florida for 40+ years I had the copper corrode in joints unless they were soldered and covered. So I just repeat what has worked for me in the past-always eager to learn something new however.

Healthfully yours,
Don W4BWS
----- Original Message -----
From: Dr. Ace Ratliff
To: SkyWires@yahoogroups.com
Sent: Wednesday, December 27, 2006 6:38 PM
Subject: Re: [SkyWires] More loop questions

Hi Don,
It has been my experience that if you solder the splice it will break after some time . I just wrap the 2 ends together very well .
Good Luck es 73 ,
Ace - WH2T

----- Original Message -----
From: Donald Sanders
To: SkyWires@yahoogroups.com
Sent: Wednesday, December 27, 2006 4:30 PM
Subject: Re: [SkyWires] More loop questions

I spliced the wire on my loop by doing the WE splice and wrap and then soldering the joint. coated it with Glyptol, wrapped it with Scotch 66 black tape and then put heat shrink tubing over it. Maybe over kill but I didn't want it to break, corrode, and oxidize. Mine is 80 full wave and I used 450 ohm line and #14 THHN insulated wire from Home Depot. I plan to make my own 600 ohm line as described in QST Dec 2006 Page 55. This will be for replacement of the ladder line. Wish I could train a squirrel to run the wire through the limbs of the trees.

Healthfully yours,
Don W4BWS
----- Original Message -----
From: Mike
To: SkyWires@yahoogroups.com
Sent: Wednesday, December 27, 2006 10:28 AM
Subject: [SkyWires] More loop questions

Hi,

After reading some of the archives I've decided to try the 540' 2wl
80m loop. I was considering a 2wl 160m loop because I want to work DX
on 160 but it might be more trouble than it's worth. I may try a 135'

center-fed L for 160m as per Cebik if the loop is not good on DX. I have a little more than an acre and my guess the trees top out at 60-80' so I should be able to get the loop up high but lots of limbs to snake the wire through.

Home Depot has lots of wire but the biggest role is 500'. Has anyone spliced more wire onto their loop using what method? I would think soldering the joint would not stand up to the strain. Maybe a Western Union splice?

Has anyone compared the 2wl 80m to say a 80 or 160m doublet? Have they experienced the nulls that Cebik talks about on the higher bands?

I read that window ladder line gets lossy when wet and changes tuning when wet and exposed to wind, ice, etc and true open-wire line is best. Has anyone experienced this problem? I'm considering W7FG's 600ohm open-wire line for the loop.

Tnx & 73,

Mike KA2FIR

2031. Re: [SkyWires] More loop questions

Yahoo group: SkyWires
Date: 2006-12-28 18:45:17 UTC
From: Dr. Ace Ratliff
Topic: 2023 Message: 2031

Hi Don ,
Here in Indiana I was using insulated stranded 14 AWG copper wire . I tried soldering the splice and then leaving it bare at that point . The wire would always break at the soldered point after some time due to flexing. I won't argue with success.
Very 73 and good DX, Ace - WH2T

----- Original Message -----
From: Donald Sanders
To: SkyWires@yahoogroups.com
Sent: Thursday, December 28, 2006 12:19 PM
Subject: Re: [SkyWires] More loop questions

I won't dispute your experience. I haven't had that happen yet maybe because I have the overwraps that support the joint and reduce flexing of the splice-Don't know. Any way, when in Florida for 40+ years I had the copper corrode in joints unless they were soldered and covered. So I just repeat what has worked for me in the past-always eager to learn something new however.

Healthfully yours,
Don W4BWS
----- Original Message -----
From: Dr. Ace Ratliff
To: SkyWires@yahoogroups.com
Sent: Wednesday, December 27, 2006 6:38 PM
Subject: Re: [SkyWires] More loop questions

Hi Don,
It has been my experience that if you solder the splice it will break after some time . I just wrap the 2 ends together very well .
Good Luck es 73 ,
Ace - WH2T

----- Original Message -----
From: Donald Sanders
To: SkyWires@yahoogroups.com
Sent: Wednesday, December 27, 2006 4:30 PM
Subject: Re: [SkyWires] More loop questions

I spliced the wire on my loop by doing the WE splice and wrap and then soldering the joint. coated it with Glyptol, wrapped it with Scotch 66 black tape and then put heat shrink tubing over it. Maybe over kill but I didn't want it to break, corrode, and oxidize. Mine is 80 full wave and I used 450 ohm line and #14 THHN insulated wire from Home Depot. I plan to make my own 600 ohm line as described in QST Dec 2006 Page 55. This will be for replacement of the ladder line. Wish I could train a squirrel to run the wire through the limbs of the trees.

Healthfully yours,
Don W4BWS
_’_·___
.

2032. For ADAM in Australia Re: [SkyWires] Re: Source for more 450 ohm ladderline?

Yahoo group: SkyWires
Date: 2006-12-28 19:24:18 UTC
From: Hal
Topic: 2027 Message: 2032

Yes, making your own feedline is easy, all it takes is a little bit of your time, some wire and spreaders of some-sort

Hal AC0AX

> Adam
> You can make your own open wire 600 ohm line and it will work for any folded dipole antenna or to feed other antennas. I can send a copy of the article from Dec 2006 QST if you provide your e-mail address. Yahoo will not take attachments.
>
> Healthfully yours,
> Don W4BWS
> ----- Original Message -----
> From: adam
> To: SkyWires@yahoogroups.com
> Sent: Wednesday, December 27, 2006 6:18 AM
> Subject: [Norton AntiSpam] Re: [SkyWires] Re: Source for more 450 ohm ladderline?
>
>
> Im sorry I cant advise on any ladder line - being in Australia my brother told me he can get some 450 ohm line in from the US at 60cents per foot (thats around US .47c/ft). I mean its near impossible to find black 300ohm TV twinlead here but I've managed to pickup a 200mtr roll of white TV twinlead for AU $35. Im just not sure how its going to go as the conductors are so tiny. Anyway good luck folks
>
>
>
>
>
> On 12/27/06, Mike <ion_op@...> wrote:
> Hi,
>
> Looking at old msgs and saw yours. radio-ware, davis-rf and thewireman
> are some sources of ladder-line. I want to put up a loop. and should be
> able to fit a 80m 2wl loop but want to get on 160 and not warm clouds.
> A 160m 2wl loop is around 1100'. How is your 1080 loop working out and
> how high is it? What do you have for 40-10 and why are you

keeping it
> up rather than use the 1080' loop for all bands?
>
> Tnx,
>
> Mike
>
> --- In SkyWires@...m, "nc9k" <jasminemeese@> wrote:
> >
> > Hello all,
> >
> > My stock of commercial 450 ohm ladderline I bought in 1990 at
> > LAMARSFEST is down to 15 feet. I now live in the middle of
nowhere
> > on 40 acres and want to order more commercial (not TV) ladderline
> > online so I can connect to the 1080 foot loop I am putting up
for 160
> > through 40M (I am keeping my 40M loop up for 20 through 10M - it
> > really gets out!). If you know of good sources to order new
> > commercial ladderline from please advise by posting on this
Skywires
> > site - others need to know as well.
> >
> > Thanks,
> >
> > Leland NC9K
> >

2033. Stopping SPAM???

Yahoo group: SkyWires
Date: 2006-12-28 20:23:03 UTC
From: Jed Petrovich
Topic: 2033 Message: 2033
Attachments: 2 described; binary payloads are missing from this source WARC

[Attachment content not displayed]

2034. Re: [SkyWires] More loop questions

Yahoo group: SkyWires
Date: 2006-12-28 20:51:29 UTC
From: WILLIAM STEFFEL
Topic: 2023 Message: 2034

Years ago when splicing wires on commercial aircraft (before Raychem environmental splices) we would use a but splice or WE splice & solder & shring tubing. Before shrinking the tubing we would fill it with BLACK silicone RTV. When the shrink tubing was shrunk it would force the rtv into all the voids of the splice.The black rtv doesnt have acetic acid in it so it wont corrode the splice. Look at some of the original underwing splices on an older 747, thats how Boeing did it back then.
----- Original Message -----
From: Dave Marling
To: SkyWires@yahoogroups.com
Sent: Thursday, December 28, 2006 8:27 AM
Subject: Re: [SkyWires] More loop questions

In our close-to-the-Atlantic ocean climate, mechanical wire joints alone without soldering become intermittent quickly. I use the "western union" splice, solder, then cover it with fingernail polish, and after that dries, shrink tubing or the stretchy self adhesive electrical tape.

Dave
VE1VQ

2035. Re: [SkyWires] More loop questions

Yahoo group: SkyWires
Date: 2006-12-28 22:21:56 UTC
From: ken hutson (wb5uyj)
Topic: 2023 Message: 2035

Don
ive been using ..052 copper mig welding wire with twisted/ butt and twisted soldered splices then sealed with 4 coats of liquid tape) lowes or wall wart)
on a full wave lopp 160 meters for five yrs now about 1000 ft from the beach here on the texas coast with no problems.

73s ken home qth longview tx
wb5uyj

2036. Re: [SkyWires] More loop questions

Yahoo group: SkyWires
Date: 2006-12-29 00:54:37 UTC
From: Dave Marling
Topic: 2023 Message: 2036

WILLIAM STEFFEL wrote:

> shring tubing. Before shrinking the tubing we would fill it with BLACK
> silicone RTV. When the shrink tubing was shrunk it would force the rtv
> into all the voids of the splice.The black rtv doesnt have acetic acid
> in it so it wont corrode the splice. Look at some of the original

Good idea. Better than fingernail polish.

Dave
VE1VQ

2037. Re: [SkyWires] Stopping SPAM???

Yahoo group: SkyWires
Date: 2006-12-29 01:01:21 UTC
From: David Shrum
Topic: 2033 Message: 2037

Yes Jed it would be nice IF we (the moderators) had that ability, but we don't. We can only ban the offenders after the fact, we looked into this before, but we weren't given that ability, sorry.

Dave N8PU

Jed Petrovich wrote:
> Hello all:
>
> I would imagine that the rest of you are getting hit with the same
> spam messages I'm receiving... Isn't there a way to "close" the group
> so we don't get this junk?
>
> 73,
>
> Jed
> AD7KG

2038. Re: For ADAM in Australia Re: [SkyWires] Re: Source for more 450 ohm ladderline?

Yahoo group: SkyWires
Date: 2006-12-29 01:52:33 UTC
From: ken hutson (wb5uyj)
Topic: 2027 Message: 2038

hi
i get mine from radio works

www.radioworks.com

order number 1 800 280 8327
tech line 1 757 484 0140
fax 1 757 483 1873

go to their webb site download cat no 261 go to page19 lower right hand corner of page you will find ladder line
i get mine from jim and have had no problems with any of his products
73s
ken wb5uyj longview tx

2039. 160m 2wl loop suggestions

Yahoo group: SkyWires
Date: 2006-12-29 04:22:12 UTC
From: donkunst
Topic: 2039 Message: 2039

I have been doing research on a new antenna to put up and found your group.

I have the room to put up a 2 or 3 wl 160m loop in roughly a rectangular shape. I plan to use aluminum 14 ga un-insulated fencing wire,(1/4 mile spool for $35) feed with 450ohm ladderline. I hope to get it between 50 to 75 feet off the ground. The ladderline should be 25 to 50 feet long roughly straight up. I plan to use a plastic or plexi-glass tee for the connection plate and use two short sections of coax with the braids tied together to go through the wall. I plan to use a MFJ 941D antenna tuner.

I live in a little bit of a valley with a hill/mountain to the north about 700 ft in height that will be at a distance of 1,500 feet parallel to the antenna. It will also be suspended over a 400 by 150 foot pond.

1. Will the aluminum wire be strong enough?
2. Should I use the 1/4 mile or just 2 wl, 1,120 feet?
3. Is it worth it to go to 3wl if possible?
4. For 2 wl, what is the optimum length of ladderline?
5. How do I determine that?
6. Is 50 ft above the ground enough?
7. What is the optimum height above the ground?
8. Will I get any benefit to have the north side higher than the south to cant the antenna away from the mountainside?
9. Will the MFJ be adequate for this antenna with 100 to 150 watts?
10. Looking for any other comments or suggestions.

Thanks KB3HJS

2040. Re: [SkyWires] Stopping SPAM???

Yahoo group: SkyWires
Date: 2006-12-29 07:36:26 UTC
From: chasm@texas.net
Topic: 2033 Message: 2040

On Thu, 28 Dec 2006 20:01:21 -0500, David Shrum <aq392@...> wrote:

>Yes Jed it would be nice IF we (the moderators) had that ability, but we
>don't. We can only ban the offenders after the fact, we looked into this
>before, but we weren't given that ability, sorry.
>
>Dave N8PU

sigh

you guys really need to read the Management instructions for the list.
Set the list to MODERATED.
NO ONE posts a message to the list until one of you approves it.
ALSO, set the polls, links, photos, files, etc to not allow members to post
to them. Members can read them but cannot put stuff in them.
etc...

all 15 or so of my cancer and patriot and shooting/reloading lists are set
this way. My 5,000 or so members have no problem with these rules. I have
been running elists since before ONELIST and this is the quickest way to stop
spam that there is. it just means that messages do not get posted as quickly
(moot for the digest people) and more work for the moderators/owners. You all
do have TWO listowners per list don't you???

snuff
73/chas
--
K5DAM Houston EL29fu AAR6TU
http://tinyurl.com/df55x (BPL Presentation)
Happy NEW YEARS !!!

2041. Re: [SkyWires] Stopping SPAM???

Yahoo group: SkyWires
Date: 2006-12-29 13:12:22 UTC
From: Kyle
Topic: 2033 Message: 2041

Jed,

There is a simple way to get rid of the list spam. Require list applicants to answer an easy question that all hams would know. Spammers won't waste their time trying to research it to get into the group. This works on yahoo groups I have set up in the past. I floated this idea about 6 months ago, and although many of the list readers replied that they thought it was a great idea, the moderator couldn't be bothered, and said there is not enough spam for us to worry about it. It is a trivial amount of work to make the change, but I guess that's just too much.

73 and Happy New Year,
Kyle
W4KDA

Jed Petrovich wrote:
>
>
> Hello all:
>
> I would imagine that the rest of you are getting hit with the same spam
> messages I'm receiving... Isn't there a way to "close" the group so we
> don't get this junk?
>
> 73,
>
> Jed
> AD7KG

2042. Re: Stopping SPAM???

Yahoo group: SkyWires
Date: 2006-12-29 17:56:33 UTC
From: Mike
Topic: 2033 Message: 2042

I haven't seen any spam posted. I guess the moderators are cleaning it up before I visit the site. Good Job! 73 , Mike

>
>
>
>
>
>
> Jed Petrovich wrote:
I would imagine that the rest of you are getting hit with the same spam messages I'm receiving... Isn't there a way to "close" the group so we don't get this junk?
73,
Jed
AD7KG

2043. Re: [SkyWires] Re: Stopping SPAM???

Yahoo group: SkyWires
Date: 2006-12-29 18:13:07 UTC
From: Richards
Topic: 2033 Message: 2043

Yeah. I agree. I have seen more complaints about spam than
actual spam on this group. It just is not significant or bothersome
here. Yet some guys are bothered by even one instance. I just
delete it and move on. Takes more time to complain than to just
delete it.

Nice work Mr. Moderator.

////////////////// JHR //////////////
==========

Mike wrote:
> I haven't seen any spam posted. I guess the moderators are cleaning it
> up before I visit the site. Good Job! 73 , Mike

2044. Re: [SkyWires] Re: Stopping SPAM???

Yahoo group: SkyWires
Date: 2006-12-29 20:18:27 UTC
From: Sarge
Topic: 2033 Message: 2044

> Yeah. I agree. I have seen more complaints about spam than
> actual spam on this group. It just is not significant or bothersome
> here. Yet some guys are bothered by even one instance. I just
> delete it and move on. Takes more time to complain than to just
> delete it.
>
> Nice work Mr. Moderator.
>
> ////////////////// JHR //////////////

DITTO!

2046. wire joint insulation

Yahoo group: SkyWires
Date: 2006-12-30 15:11:24 UTC
From: w2blc
Topic: 2046 Message: 2046

I use Liquid Tape. Get it at any hardware store and just brush it on. I use it for connectors, solder joints, etc. No mechanical only joints here - don't trust them.

Remains semi-flexible and lasts for years. I usually put on two coats. Some of my wires have been up for 10 years and the stuff is still clinging tight.

2047. Re: [SkyWires] Re: Stopping SPAM???

Yahoo group: SkyWires
Date: 2006-12-30 21:42:54 UTC
From: Andy
Topic: 2033 Message: 2047

> I haven't seen any spam posted. I guess the moderators are cleaning it
> up before I visit the site. Good Job! 73 , Mike

That's because you read messages by going to the website. Those like me who get the messages via email, see all the spam. 43 in the last year, half a dozen in the last week or two. Not as bad as some, but the trend is toward increasing.

Instead of setting everyone to "Moderated," why not just make only new members Moderated until they post one real message? I think that's how most other lists handle it, and it works pretty well with far fewer headaches.

Andy

2048. Re: [SkyWires] Re: Stopping SPAM???

Yahoo group: SkyWires
Date: 2006-12-31 00:03:41 UTC
From: David Shrum
Topic: 2033 Message: 2048

Andy and the group,
I am one of three moderators, we looked through ALL the settings a while back to see if we could do any or all of the good suggestions that have been made, but in the spam and/or new member department we CAN NOT set them to be moderated or approve the first few messages. It would be nice if we could. All we can do basically do is to clean up after the fact.

To answer a question from another member, this list only has one owner.

Dave N8PU

Andy wrote:
>> I haven't seen any spam posted. I guess the moderators are cleaning it
>> up before I visit the site. Good Job! 73 , Mike
>>
>
> That's because you read messages by going to the website. Those like me who
> get the messages via email, see all the spam. 43 in the last year, half a
> dozen in the last week or two. Not as bad as some, but the trend is toward
> increasing.
>
> Instead of setting everyone to "Moderated," why not just make only new
> members Moderated until they post one real message? I think that's how most
> other lists handle it, and it works pretty well with far fewer headaches.
>
> Andy

2049. Re: [SkyWires] Re: Stopping SPAM???

Yahoo group: SkyWires
Date: 2006-12-31 02:51:40 UTC
From: Andy
Topic: 2033 Message: 2049

> Andy and the group,
> I am one of three moderators, we looked through ALL the settings a while
> back to see if we could do any or all of the good suggestions that have
> been made, but in the spam and/or new member department we CAN NOT set
> them to be moderated or approve the first few messages. It would be nice
> if we could. All we can do basically do is to clean up after the fact.

I'm afraid I don't understand.

Are you saying you can't find the options to change this, or that this group
is somehow set so that those moderator options have become unavailable?

Or that your policy is such that you won't moderate new members?

Under Posting options for Moderation, there should be three choices:
Unmoderated,
Moderated, or
New members.

Admittedly it's a pain to deal with already-subscribed members (with a group
as large as this one is), but it ought to effectively handle most if not all
new members, those who join for a day or a week just to post spam.

Andy

2050. Re: [SkyWires] Re: Stopping SPAM???

Yahoo group: SkyWires
Date: 2006-12-31 03:06:05 UTC
From: David Shrum
Topic: 2033 Message: 2050

Those options are not available to us.
Dave N8PU

Andy wrote:
>> Andy and the group,
>> I am one of three moderators, we looked through ALL the settings a while
>> back to see if we could do any or all of the good suggestions that have
>> been made, but in the spam and/or new member department we CAN NOT set
>> them to be moderated or approve the first few messages. It would be nice
>> if we could. All we can do basically do is to clean up after the fact.
>>
>
> I'm afraid I don't understand.
>
> Are you saying you can't find the options to change this, or that this group
> is somehow set so that those moderator options have become unavailable?
>
> Or that your policy is such that you won't moderate new members?
>
> Under Posting options for Moderation, there should be three choices:
> Unmoderated,
> Moderated, or
> New members.
>
> Admittedly it's a pain to deal with already-subscribed members (with a group
> as large as this one is), but it ought to effectively handle most if not all
> new members, those who join for a day or a week just to post spam.
>
> Andy
>
>

2051. Re: [SkyWires] Re: Stopping SPAM???

Yahoo group: SkyWires
Date: 2006-12-30 22:13:05 UTC
From: Vince Werber
Topic: 2033 Message: 2051

Now you've got me wondering... I co-moderate a number of 'closed' yahoo
groups and no one can post without being a member or lacking that, by
permission of the moderators...

Perhaps the groups I work with are under a different TOS...

But then we do require a questionair be replied to and seven moderators to act
on each membership request before anyone can become a member and if not a
member no posting what-so-ever...

who knows///

have a happy New Year and my delete key isn't broken hi hi

73
vince
ka1iic

On Sunday 31 December 2006 02:51 am, Andy wrote:
> > Andy and the group,
> > I am one of three moderators, we looked through ALL the settings a while
> > back to see if we could do any or all of the good suggestions that have
> > been made, but in the spam and/or new member department we CAN NOT set
> > them to be moderated or approve the first few messages. It would be nice
> > if we could. All we can do basically do is to clean up after the fact.
>
> I'm afraid I don't understand.
>
> Are you saying you can't find the options to change this, or that this
> group is somehow set so that those moderator options have become
> unavailable?
>
> Or that your policy is such that you won't moderate new members?
>
> Under Posting options for Moderation, there should be three choices:
> Unmoderated,
> Moderated, or
> New members.
>
> Admittedly it's a pain to deal with already-subscribed members (with a
> group as large as this one is), but it ought to effectively handle most if
> not all new members, those who join for a day or a week just to post spam.
>
> Andy
>
>

>
>
>
> Yahoo! Groups Links
>
>
>

2052. Re: [SkyWires] Re: Stopping SPAM???

Yahoo group: SkyWires
Date: 2006-12-31 04:41:09 UTC
From: Andy
Topic: 2033 Message: 2052

> Those options are not available to us.

I'm no Yahoogroup expert, mind you ... but this doesn't sound right.

Not that Yahoo wouldn't do anything like that, of course; but why would they make some groups NOT have all of the controls that other groups do?

Have you tried discussing this with Yahoo support? Do they have an explanation for why this option is missing?

Andy

2053. Re: Stopping SPAM???

Yahoo group: SkyWires
Date: 2006-12-31 05:10:17 UTC
From: Mike
Topic: 2033 Message: 2053

I joined a Heathkit amp group on Yahoo a few days ago and my first post had to be approved by a moderator before it was posted to the list. 73 , Mike

>
>
>
>
>
--- In SkyWires@yahoogroups.com, David Shrum <aq392@...> wrote:
>
> Andy and the group,
> I am one of three moderators, we looked through ALL the settings a while
> back to see if we could do any or all of the good suggestions that have
> been made, but in the spam and/or new member department we CAN NOT set
> them to be moderated or approve the first few messages. It would be nice
> if we could. All we can do basically do is to clean up after the fact.
>
> To answer a question from another member, this list only has one owner.
>
> Dave N8PU
>

2054. Re: [SkyWires] Re: Stopping SPAM???

Yahoo group: SkyWires
Date: 2006-12-31 05:18:33 UTC
From: David Shrum
Topic: 2033 Message: 2054

I'm also a moderator on Amateur Radio (Yahoo) and there is more options there for the moderators than there are here. So I know there are more, they were not made availably to us here.

Dave N8PU

Mike wrote:
> I joined a Heathkit amp group on Yahoo a few days ago and my first
> post had to be approved by a moderator before it was posted to the
> list. 73 , Mike

2055. Re: [SkyWires] Re: Stopping SPAM???

Yahoo group: SkyWires
Date: 2006-12-31 06:37:29 UTC
From: NØATH
Topic: 2033 Message: 2055

Gentlemen - it appears to me the moderators of this group
are doing all they can possibly do - Give them a break -
obviously they have tried every avenue available to them -
They are not the ones generating the spam - Chill and
enjoy a Happy New Year with your delete key. It's only a
keystroke away Dave / NØATH
----- Original Message -----
From: David Shrum
To: SkyWires@yahoogroups.com
Sent: Saturday, December 30, 2006 11:18 PM
Subject: Re: [SkyWires] Re: Stopping SPAM???

I'm also a moderator on Amateur Radio (Yahoo) and there is more options
there for the moderators than there are here. So I know there are more,
they were not made availably to us here.

Dave N8PU

Mike wrote:
> I joined a Heathkit amp group on Yahoo a few days ago and my first
> post had to be approved by a moderator before it was posted to the
> list. 73 , Mike

2056. Re: [SkyWires] Re: Stopping SPAM???

Yahoo group: SkyWires
Date: 2006-12-31 08:07:28 UTC
From: chasm@texas.net
Topic: 2033 Message: 2056

On Sat, 30 Dec 2006 19:03:41 -0500, David Shrum <aq392@...> wrote:

>Andy and the group,
>I am one of three moderators, we looked through ALL the settings a while
>back to see if we could do any or all of the good suggestions that have
>been made, but in the spam and/or new member department we CAN NOT set
>them to be moderated or approve the first few messages. It would be nice
>if we could. All we can do basically do is to clean up after the fact.

SPAM settings are on already by yahoo.
and yes you can change these settings, more or less

go to the webpage for the elist
down the left column to MANAGEMENT
then click on GROUP SETTINGS
then on MEMBERSHIP
then click on the (edit) at the end of MEMBERSHIP TYPE & WELCOME

if common sense does not help you figure this out, let me know

you can not set someone to moderated for n number of messages
you CAN set everyone NEW to moderated. Give them a short message telling
them you want to know WHY they want to join, their CALL SIGN, and the
state/county they live in. Tell them in the message that if you do not get
the reply to those questions in 12 hrs, you will deny their application to the
list. I use something similar to this for all 15 of my lists. once you
approve them, you then have to keep track of who has posted a couple of
righteous questions or not. THEN you can turn moderation off. All that is
too much trouble for my 1100 member lists so I just leave everyone moderated.
that stops a lot of flames or insults, etc....

oh, be sure to have the owner set the moderators so that they see applications
for new members and also, new message and new photos, new files requests.
I do all the new members as the owner. the mods do the messages, and so on.

now, in addition... you want to turn off attachments because that is the
fastest way to spread malware and viruses, etc... most intelligent and
cautious people will immediately sign off a list if attachments are allowed.

so, go to MANAGEMENT
then to GROUP SETTINGS > WEBTOOLS (edit)

go there and change most of those to moderator or owner access for posting,
changes, etc. It will allow the members to look at what is in FILES, PHOTOS,
etc Be SURE that members can NOT look at the membership lists. Moderators
and owners CAN.

if common sense does not handle setting these, let me know and I will help you. Again, I have been running elists since at least the early 90s and before that, fidonet and BBS groups, etc back into the early 80s

>To answer a question from another member, this list only has one owner.

you better hope that he does not die or turn up brain dead some morning then. you will have a list you can do nothing with.

the owner should choose someone he trusts if only his wife or ??? who can transfer the list to one of the moderators when bad things happen.

73/chas
--
K5DAM Houston EL29fu AAR6TU
http://tinyurl.com/df55x (BPL Presentation)
HAPPY NEW YEAR!!

2057. Re: [SkyWires] Re: Stopping SPAM???

Yahoo group: SkyWires
Date: 2006-12-31 18:02:52 UTC
From: Sarge
Topic: 2033 Message: 2057

Yeah, what he said.....

Gentlemen - it appears to me the moderators of this group
are doing all they can possibly do - Give them a break -
obviously they have tried every avenue available to them -
They are not the ones generating the spam - Chill and
enjoy a Happy New Year with your delete key. It's only a
keystroke away Dave / NØATH
----- Original Message -----
From: David Shrum
To: SkyWires@yahoogroups.com
Sent: Saturday, December 30, 2006 11:18 PM
Subject: Re: [SkyWires] Re: Stopping SPAM???

I'm also a moderator on Amateur Radio (Yahoo) and there is more options
there for the moderators than there are here. So I know there are more,
they were not made availably to us here.

Dave N8PU

Mike wrote:
> I joined a Heathkit amp group on Yahoo a few days ago and my first
> post had to be approved by a moderator before it was posted to the
> list. 73 , Mike

No virus found in this incoming message.
Checked by AVG Free Edition.
Version: 7.5.432 / Virus Database: 268.16.0/609 - Release Date: 12/29/2006 4:48 PM

2058. #12 insulated vs aluminum fence wire?

Yahoo group: SkyWires
Date: 2007-01-01 19:56:13 UTC
From: Mike
Topic: 2058 Message: 2058

Is there much difference in performance between #12 insulated and aluminum fence wire? I have some #12 stranded copper insulated wire and some aluminum fence wire. Which would you prefer?

2059. Re: [SkyWires] #12 insulated vs aluminum fence wire?

Yahoo group: SkyWires
Date: 2007-01-01 21:26:31 UTC
From: Vince Werber
Topic: 2058 Message: 2059

I'd stick with the copper wire if only for soldering purposes...

I have use aluminum but great care should be taken to keep all connections perfectly clean and free from oxidation on all joints... oxidation can cause serious rectification problems...

73 & happy New Year
de
vince
ka1iic

On Mon, 1 Jan 2007, Mike wrote:

> Is there much difference in performance between #12 insulated and
> aluminum fence wire? I have some #12 stranded copper insulated wire and
> some aluminum fence wire. Which would you prefer?
>
>
>
>
> Yahoo! Groups Links
>
>
>
>

2060. Re: [SkyWires] #12 insulated vs aluminum fence wire?

Yahoo group: SkyWires
Date: 2007-01-01 20:26:40 UTC
From: Sarge
Topic: 2058 Message: 2060

I can tell you that aluminum fence wire stretches bad.

> Is there much difference in performance between #12 insulated and
> aluminum fence wire? I have some #12 stranded copper insulated wire and
> some aluminum fence wire. Which would you prefer?
>
>
>
>
> Yahoo! Groups Links
>
>
>
>
>
> --
> No virus found in this incoming message.
> Checked by AVG Free Edition.
> Version: 7.5.432 / Virus Database: 268.16.1/611 - Release Date: 12/31/2006
> 12:47 PM
>
>

2061. Re: [SkyWires] #12 insulated vs aluminum fence wire?

Yahoo group: SkyWires
Date: 2007-01-01 20:18:02 UTC
From: Christopher Zeman
Topic: 2058 Message: 2061

I haven't tried aluminum fence wire, but I'm currently using #12 THHN for my 67' end-fed and it seems to have worked well so far. I've only had it about about a month, but have made a few contacts when I've had time for PSK31.

Chris

Mike wrote:
>
> Is there much difference in performance between #12 insulated and
> aluminum fence wire? I have some #12 stranded copper insulated wire and
> some aluminum fence wire. Which would you prefer?
>
>

2062. Re: [SkyWires] #12 insulated vs aluminum fence wire?

Yahoo group: SkyWires
Date: 2007-01-01 21:02:58 UTC
From: Donald Sanders
Topic: 2058 Message: 2062

I have used both. I found the aluminum fatigued in the wind
quicker than the copper. It is easier to solder to. I had to
make loop in the ends of the aluminum and use lugs and
bolts and nuts to make a good connection to the aluminum.
SO, take your pick.I still want to try steel fence wire for a big loop.

Healthfully yours,
Don W4BWS
----- Original Message -----
From: Mike
To: SkyWires@yahoogroups.com
Sent: Monday, January 01, 2007 1:56 PM
Subject: [SkyWires] #12 insulated vs aluminum fence wire?

Is there much difference in performance between #12 insulated and
aluminum fence wire? I have some #12 stranded copper insulated wire and
some aluminum fence wire. Which would you prefer?

2063. Re: #12 insulated vs aluminum fence wire?

Yahoo group: SkyWires
Date: 2007-01-01 22:44:01 UTC
From: w2blc
Topic: 2058 Message: 2063

Galvanized electric fence wire: can be soldered to easily when still shiney and new. Cheap - $17 or so for a half mile of #17. I would suggest liquid tape over solder joints. Stuff lasts for years - I know from experience.

2064. Galvanized electric fence wire

Yahoo group: SkyWires
Date: 2007-01-01 22:54:14 UTC
From: Paul@N4LCD.com
Topic: 2058 Message: 2064

>Galvanized electric fence wire: can be soldered to easily when still
>shiney and new. Cheap - $17 or so for a half mile of #17. I would
>suggest liquid tape over solder joints. Stuff lasts for years - I know
>from experience.

What loop formula do you use for galvanized steel wire, instead of
the usual 1005/f formula?

2065. Re: Galvanized electric fence wire

Yahoo group: SkyWires
Date: 2007-01-02 01:49:30 UTC
From: w2blc
Topic: 2058 Message: 2065

Not sure. It was when I was living in Virginia. The loop was cut for 75 meters. I fed it with coax and just trimmed for low SWR. Feed line was only 25 feet long - feed point was right over the shack. Used a tuner to do all bands - worked fine.

But - I once had a "G.E. engineer" from Lynchburg, VA tell me that it was impossible to use galvanized coated wire as an antenna. The galvanizaation was an RF insulator, everyone knew that. Not sure what college he went to, must have been different than mine.

2066. Reposted message

Yahoo group: SkyWires
Date: 2007-01-02 03:17:41 UTC
From: David Shrum
Topic: 2066 Message: 2066

One of our newer member had posted a message just recently and hadn't received any replies yes, so I am reposting it for them.

If you have any suggestions please offer them, Thanks.
Dave N8PU

==========
I have been doing research on a new antenna to put up and found your group.

I have the room to put up a 2 or 3 wl 160m loop in roughly a rectangular shape. I plan to use aluminum 14 ga un-insulated fencing wire,(1/4 mile spool for $35) feed with 450ohm ladderline. I hope to get it between 50 to 75 feet off the ground. The ladderline should be 25 to 50 feet long roughly straight up. I plan to use a plastic or plexi-glass tee for the connection plate and use two short sections of coax with the braids tied together to go through the wall. I plan to use a MFJ 941D antenna tuner.

I live in a little bit of a valley with a hill/mountain to the north about 700 ft in height that will be at a distance of 1,500 feet parallel to the antenna. It will also be suspended over a 400 by 150 foot pond.

1. Will the aluminum wire be strong enough?
2. Should I use the 1/4 mile or just 2 wl, 1,120 feet?
3. Is it worth it to go to 3wl if possible?
4. For 2 wl, what is the optimum length of ladderline?
5. How do I determine that?
6. Is 50 ft above the ground enough?
7. What is the optimum height above the ground?
8. Will I get any benefit to have the north side higher than the south to cant the antenna away from the mountainside?
9. Will the MFJ be adequate for this antenna with 100 to 150 watts?
10. Looking for any other comments or suggestions.

2067. Re: [SkyWires] Reposted message

Yahoo group: SkyWires
Date: 2007-01-02 05:05:35 UTC
From: adam
Topic: 2066 Message: 2067
Attachments: 2 described; binary payloads are missing from this source WARC

[Attachment content not displayed]

2068. Re: [SkyWires] #12 insulated vs aluminum fence wire?

Yahoo group: SkyWires
Date: 2007-01-02 09:14:56 UTC
From: Richards
Topic: 2058 Message: 2068

Can any electrical engineer tell us the difference in conductivity
between alu and cu wire? I suspect one conducts better than
the other.... but lack the reference manuals to prove which.

///////// RIchards //////////
=======================================

Vince Werber wrote:
> I'd stick with the copper wire if only for soldering purposes...

2069. Re: [SkyWires] #12 insulated vs aluminum fence wire?

Yahoo group: SkyWires
Date: 2007-01-02 13:27:33 UTC
From: Dan KB6NU
Topic: 2058 Message: 2069

There is a table of resistivities at http://hyperphysics.phy-astr.gsu.edu/hbase/Tables/rstiv.html#c1. The table lists the resistivity of copper as 1.68 * 10**-8 and aluminum as 2.65 * 10**-8.

To calculate the resistance of a particular piece of wire, the formula is R = resistivity * length / cross sectional area.

73!

Dan KB6NU

CW Geek and MI Affiliated Club Coordinator
Read my ham radio blog at www.kb6nu.com
LET'S GET MORE KIDS INTO HAM RADIO!

On Jan 2, 2007, at 4:14 AM, Richards wrote:

> Can any electrical engineer tell us the difference in conductivity
> between alu and cu wire? I suspect one conducts better than
> the other.... but lack the reference manuals to prove which.
>
> ///////// RIchards //////////
> ==
>
> Vince Werber wrote:
> > I'd stick with the copper wire if only for soldering purposes...
>
>

2070. Re: [SkyWires] #12 insulated vs aluminum fence wire?

Yahoo group: SkyWires
Date: 2007-01-02 15:19:48 UTC
From: van lincoln
Topic: 2058 Message: 2070

So I figure then that Aluminum is 58% higher resistively,
is that correct? and a long antenna wire that might be
3 ohms, is therefore now almost 5 ohms.? That is DC resistance,
what about rf resistivity?

van wd8aam

At 08:27 AM 1/2/2007 -0500, you wrote:
>>>>
There is a table of resistivities
at <http://hyperphysics.phy-astr.gsu.edu/hbase/Tables/rstiv.html#c1>http://h
yperphysics.phy-astr.gsu.edu/hbase/Tables/rstiv.html#c1. The table lists
the resistivity of copper as 1.68 * 10**-8 and aluminum as 2.65 * 10**-8.

To calculate the resistance of a particular piece of wire, the formula is R
= resistivity * length / cross sectional area.

73!

Dan KB6NU

CW Geek and MI Affiliated Club Coordinator
Read my ham radio blog at <http://www.kb6nu.com>www.kb6nu.com
LET'S GET MORE KIDS INTO HAM RADIO!

On Jan 2, 2007, at 4:14 AM, Richards wrote:

Can any electrical engineer tell us the difference in conductivity
between alu and cu wire? I suspect one conducts better than
the other.... but lack the reference manuals to prove which.

///////// RIchards /////////
==========

Vince Werber wrote:
> I'd stick with the copper wire if only for soldering purposes...

<<<<

2071. Re: [SkyWires] Galvanized electric fence wire

Yahoo group: SkyWires
Date: 2007-01-02 14:49:55 UTC
From: Andy
Topic: 2058 Message: 2071

> Galvanized electric fence wire

I've always thought electric fence wire might be a poor choice for an antenna because (most?) electric fence wire is designed to be rather resistive and lossy (since in its intended usage it supports a voltage and the current is limited). However, I've heard of so many people using it, that it must be acceptable.

> What loop formula do you use for galvanized steel wire, instead of the
> usual 1005/f formula?

This is just a guess ... but I'd say the formula doesn't depend on the wire. I'd think that the size is determined by the space around the wire (i.e., air) where the electro-magnetic fields live, not by the medium that happens to carry the electrons.

Andy

2072. Re: Galvanized electric fence wire

Yahoo group: SkyWires
Date: 2007-01-02 16:33:40 UTC
From: Greg W:-)
Topic: 2058 Message: 2072

Many people do drugs and drink excessive amounts of booze too ..
doesn't make it a smart choice.

gregW:-)

http://www.swdxer.co.nr/

==========

--- In SkyWires@yahoogroups.com, Andy <Andy.groups@...> wrote:
>
> > Galvanized electric fence wire
>
SNIP
>However, I've heard of so many people using it,
> that it must be acceptable.

2073. Re: [SkyWires] Galvanized electric fence wire

Yahoo group: SkyWires
Date: 2007-01-02 17:17:36 UTC
From: Donald Sanders
Topic: 2058 Message: 2073

I always use the 1005/f and then trim to freq. I find the location, height, time of day and humidity all can affect the length. Formulas are for starting points. Best way if over 200 watts is to feed with 450 ohm or 600 ohm line and a good balanced line tuner, "Z" Match, and not worry about it. For lower power, the auto tuners from SGC or LDG are super. My Johnson Match box work well with my SB200 and the SGC tuner with the 100 watt drivers and the QRP rigs..

Healthfully yours,
Don W4BWS
----- Original Message -----
From: Paul@...
To: SkyWires@yahoogroups.com
Sent: Monday, January 01, 2007 4:54 PM
Subject: [SkyWires] Galvanized electric fence wire

Galvanized electric fence wire: can be soldered to easily when still
shiney and new. Cheap - $17 or so for a half mile of #17. I would
suggest liquid tape over solder joints. Stuff lasts for years - I know
from experience.

What loop formula do you use for galvanized steel wire, instead of the usual 1005/f formula?

2074. Re: [SkyWires] Galvanized electric fence wire

Yahoo group: SkyWires
Date: 2007-01-02 17:41:51 UTC
From: van lincoln
Topic: 2058 Message: 2074

What stores would you recommend?

and is #17 heavyweight enough for spans of 200-250'
stretched to about 100 pounds pull?

How does it survive the corner insulators, and wind whipping.
I would appreciate 'your experience' in THIS area....Thanks

van wd8aam

At 05:54 PM 1/1/2007 -0500, Paul@... wrote:

Galvanized electric fence wire: can be soldered to easily when still
shiney and new. Cheap - $17 or so for a half mile of #17. I would
suggest liquid tape over solder joints. Stuff lasts for years - I know
from experience.

2075. Re: [SkyWires] Galvanized electric fence wire

Yahoo group: SkyWires
Date: 2007-01-02 18:08:47 UTC
From: Donald Sanders
Topic: 2058 Message: 2075

Fence wire is available at most farm supply stores and
possibly Home Depot and Sears Farm catalog. The
steel center makes it strong so it should stretch less
than copper.

Healthfully yours,
Don W4BWS
----- Original Message -----
From: van lincoln
To: Paul@N4LCD.com ; SkyWires@yahoogroups.com
Sent: Tuesday, January 02, 2007 11:41 AM
Subject: Re: [SkyWires] Galvanized electric fence wire

What stores would you recommend?

and is #17 heavyweight enough for spans of 200-250'
stretched to about 100 pounds pull?

How does it survive the corner insulators, and wind whipping.
I would appreciate 'your experience' in THIS area....Thanks

van wd8aam

At 05:54 PM 1/1/2007 -0500, Paul@... wrote:

Galvanized electric fence wire: can be soldered to easily when still
shiney and new. Cheap - $17 or so for a half mile of #17. I would
suggest liquid tape over solder joints. Stuff lasts for years - I know
from experience.

2076. Re: [SkyWires] #12 insulated vs aluminum fence wire?

Yahoo group: SkyWires
Date: 2007-01-02 18:38:45 UTC
From: Richards
Topic: 2058 Message: 2076

THANKS -- (I took Physics in 1977... so it goes a little way back for me...)

So... armed with that information, I say it is a matter of mathematics as to which is the better antenna choice...

(Of course I am sure there are other variables I am missing, but that is where I might start my analysis.)

Happy trails to all. /// Richards ///
==========

Dan KB6NU wrote:
> There is a table of resistivities
> at http://hyperphysics.phy-astr.gsu.edu/hbase/Tables/rstiv.html#c1. The
> table lists the resistivity of copper as 1.68 * 10**-8 and aluminum as
> 2.65 * 10**-8.
>
> To calculate the resistance of a particular piece of wire, the formula
> is R = resistivity * length / cross sectional area.

2077. Re: [SkyWires] Galvanized electric fence wire

Yahoo group: SkyWires
Date: 2007-01-02 17:54:35 UTC
From: Donald Sanders
Topic: 2058 Message: 2077

I recently read an article on making a fan dipole, 4 legs, for 75/80 meters from the fence wire. It was shorter and had increased band width. It also had increased loss, 85% vs 95%, if I remember correctly. That is a small loss for the increased band width to cover the whole band with the new phone band width.

Healthfully yours,
Don W4BWS
----- Original Message -----
From: Andy
To: SkyWires@yahoogroups.com
Sent: Tuesday, January 02, 2007 8:49 AM
Subject: Re: [SkyWires] Galvanized electric fence wire

> Galvanized electric fence wire

I've always thought electric fence wire might be a poor choice for an antenna because (most?) electric fence wire is designed to be rather resistive and lossy (since in its intended usage it supports a voltage and the current is limited). However, I've heard of so many people using it, that it must be acceptable.

> What loop formula do you use for galvanized steel wire, instead of the
> usual 1005/f formula?

This is just a guess ... but I'd say the formula doesn't depend on the wire. I'd think that the size is determined by the space around the wire (i.e., air) where the electro-magnetic fields live, not by the medium that happens to carry the electrons.

Andy

2078. Re: [SkyWires] Re: Galvanized electric fence wire

Yahoo group: SkyWires
Date: 2007-01-02 20:28:01 UTC
From: Andy
Topic: 2058 Message: 2078

> Many people do drugs and drink excessive amounts of booze too ..
> doesn't make it a smart choice.

Yeah, good point. :-)

It's only anecdotal evidence, of course, but a few people have written that their electric fence wire antennas performed as well as good copper wire.

I've also seen at least one reference (from I believe a respectable source) that says antenna wire resistance isn't very important anyway, even magnet wire makes a pretty good antenna.

Andy

2079. Re: [SkyWires] Re: Galvanized electric fence wire

Yahoo group: SkyWires
Date: 2007-01-02 21:11:12 UTC
From: Richards
Topic: 2058 Message: 2079

I acknowledge that, but I have found some of those claims lacking
in credibility. Some of the claims were that the operator connected
to an existing fence and it worked swell. But what can one compare
that to? I did not think the operator had a copper wire fence of the
same dimensions and layout to compare with.

Of course, it is different if one makes a similar run of each - but I
thought
the fence guys were actually trying their fences...at least in some of the
cases.

/////// Just my take. -- JHR /////////
==========

Andy wrote:
>
> It's only anecdotal evidence, of course, but a few people have written that
> their electric fence wire antennas performed as well as good copper wire.

2080. Re: [SkyWires] Digest Number 633

Yahoo group: SkyWires
Date: 2007-01-02 21:54:17 UTC
From: charles Allison
Topic: 2080 Message: 2080

#12 ga cu insulated wire is pretty good although you need to use less wire while the insulation lasts as the lengths should be less by maybe about 5%.

I've sucessfully used Aluminum electric fence wire (17 Ga) for a friend's stealth antenna that was routed underneath the eaves of a house. One must be careful with connections and use that aluminum conductor goop at the connections. Also, aluminum is very soft and will eventually break where it's flexed. We used lots of electric fence insulators (in this case painted to match the house paint for stealth). The antenna has worked for over a year now, maybe approaching 2 years. I do have some rolls of aluminum wire for setting up temporary emergency antennas in the event of a hurricane but I've no intent to use it for anything permanent as without lots of support points like every 12 feet or so, it won't last long. In normal weather conditions, I expect the aluminum to last for weeks or maybe months. Our 80m loop here is made from insulated 14ga wire and it has been up over 2 years without breakage. We keep it up with small nylon cords at the top of some old 15 ft tv antenna masts although we've had several cord breaks - necessitating a few minute of repair.

Our antenna does a super job of blanketing the whole state with nvis mode on 80 and 40m, making my vertical appear almost like a dummy load in comparison. My vertical does do 40 m dx (and presumably 80m dx) that the loop can't touch though.

best regards,

Charles
wb5izd

1a. #12 insulated vs aluminum fence wire?
Posted by: "Mike" KD5VHF@... kd5vhf
Date: Mon Jan 1, 2007 12:12 pm ((PST))

Is there much difference in performance between #12 insulated and aluminum fence wire? I have some #12 stranded copper insulated wire and some aluminum fence wire. Which would you prefer?

2081. Re: Galvanized electric fence wire

Yahoo group: SkyWires
Date: 2007-01-02 23:58:21 UTC
From: w2blc
Topic: 2058 Message: 2081

--- In SkyWires@yahoogroups.com, van lincoln <vlincoln@...> wrote:
>
> What stores would you recommend?
>
Buy it at a farm supply store, such as a Tractor Supply Store (found in most locales. It is available as #17 and #12. You can tow a car with the #12.

2082. Re: [SkyWires] Re: Galvanized electric fence wire

Yahoo group: SkyWires
Date: 2007-01-03 00:05:12 UTC
From: Jim Dunstan
Topic: 2058 Message: 2082

At 03:28 PM 1/2/2007 -0500, you wrote:

> > Many people do drugs and drink excessive amounts of booze too ..
> > doesn't make it a smart choice.
>
>Yeah, good point. :-)
>
>It's only anecdotal evidence, of course, but a few people have written that
>their electric fence wire antennas performed as well as good copper wire.
>
>I've also seen at least one reference (from I believe a respectable source)
>that says antenna wire resistance isn't very important anyway, even magnet
>wire makes a pretty good antenna.
>
>Andy

HI,

For what it's worth, I have used steel electric fence wire (real cheap and strong) for both antennas and buried ground systems .... The particular antenna system I used it for was to run a long beverage antenna .... hanging it in trees about 7 or 8 ft above the ground .... I used the insulated nail in holders they use for fences. It is also good for buried radials as the wire that i used comes in 2 1/2 ft rolls and comes off very easy .... I just run it along the cut in the sod ... I used a hand wheel .... the kind they use for forcing the rubber spline on window screens .... looks a little like a pizza cutter.

They only problem I found was that it was not great stuff to solder.

Jim, VE3CI

>

2083. Re: [SkyWires] Re: Galvanized electric fence wire

Yahoo group: SkyWires
Date: 2007-01-03 00:21:35 UTC
From: Sarge
Topic: 2058 Message: 2083

TSC is great to buy a lot of wire. My favorite store in the world! LOL!

> --- In SkyWires@yahoogroups.com, van lincoln <vlincoln@...> wrote:
>>
>> What stores would you recommend?
>>
> Buy it at a farm supply store, such as a Tractor Supply Store (found
> in most locales. It is available as #17 and #12. You can tow a car
> with the #12.
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> Yahoo! Groups Links
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>
>
>
> --
> No virus found in this incoming message.
> Checked by AVG Free Edition.
> Version: 7.5.432 / Virus Database: 268.16.2/613 - Release Date: 1/1/2007
> 2:50 PM
>
>

2084. Ladderline vs Coax

Yahoo group: SkyWires
Date: 2007-01-03 04:14:32 UTC
From: AD5VJ Bob
Topic: 2084 Message: 2084

I am thinking of doing something I probably should have done from the beginning long ago and that is to use 400ohm ladderline as
feedline to my Homebrew 80 meter double bazooka instead of double shielded 75 ohm cable TV coax.

My goal is to end up with less incoming signal loss than with coax feedline. That is what I understand is the advantage to 400 ohm
ladderline, is that it is "less lossy" to the point of being totally lossless.

So my question is this three fold:

1. If I use part 400 ohm ladderline and part 75ohm coax, at what point (percent difference in lengths) does it start to make a
considerable difference in feedline impedance?
2. Will changing out part of the coax to ladderline make *any* noticeable difference in reception or do I have to change it all to
notice a difference?
3. Is it worth the trouble at all for received low level signal strength or should I just stay with what I have?

73 fer nw es gud DX,
QSL VIA: BUR, LotW, e-QSL
Bob AD5VJ(AAR6VM)
Old calls: WY5L/KH3-KE5CTY-N5IET
http://www.ad5vj.com/

Member: CTDXCC, NTCC, STXDXCC
FISTS: # 12637, SKCC# 2369
10X# 37210, FP#-1141
SMIRK#-5177, RARS #-149

2085. Re: [SkyWires] Ladderline vs Coax

Yahoo group: SkyWires
Date: 2007-01-03 05:50:50 UTC
From: Donald Sanders
Topic: 2084 Message: 2085

It's a matter of what you are needing or intending to do.
If only 80 meters, keep the coax. Loss is low for 100 foot at 80 meters.
If multiband, use 450 ohm line and tuner.
If it has a long feed line, over 100 feet, use 450 ohm line.
If over 300 watts, use 450 ohm line.

Healthfully yours,
Don W4BWS
----- Original Message -----
From: AD5VJ Bob
To: SkyWires@yahoogroups. Com
Sent: Tuesday, January 02, 2007 10:14 PM
Subject: [SkyWires] Ladderline vs Coax

I am thinking of doing something I probably should have done from the beginning long ago and that is to use 400ohm ladderline as
feedline to my Homebrew 80 meter double bazooka instead of double shielded 75 ohm cable TV coax.

My goal is to end up with less incoming signal loss than with coax feedline. That is what I understand is the advantage to 400 ohm
ladderline, is that it is "less lossy" to the point of being totally lossless.

So my question is this three fold:

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considerable difference in feedline impedance?
2. Will changing out part of the coax to ladderline make *any* noticeable difference in reception or do I have to change it all to
notice a difference?
3. Is it worth the trouble at all for received low level signal strength or should I just stay with what I have?

73 fer nw es gud DX,
QSL VIA: BUR, LotW, e-QSL
Bob AD5VJ(AAR6VM)
Old calls: WY5L/KH3-KE5CTY-N5IET
http://www.ad5vj.com/

Member: CTDXCC, NTCC, STXDXCC
FISTS: # 12637, SKCC# 2369
10X# 37210, FP#-1141
SMIRK#-5177, RARS #-149

2086. RE: [SkyWires] Ladderline vs Coax

Yahoo group: SkyWires
Date: 2007-01-03 06:34:53 UTC
From: AD5VJ Bob
Topic: 2084 Message: 2086

No multiband I have a Titan DX vertical for that this is only for 80 es 160

From: SkyWires@yahoogroups.com [mailto:SkyWires@yahoogroups.com] On Behalf Of Donald Sanders
Sent: Tuesday, January 02, 2007 11:51 PM
To: SkyWires@yahoogroups.com
Subject: Re: [SkyWires] Ladderline vs Coax

It's a matter of what you are needing or intending to do.
If only 80 meters, keep the coax. Loss is low for 100 foot at 80 meters.
If multiband, use 450 ohm line and tuner.
If it has a long feed line, over 100 feet, use 450 ohm line.
If over 300 watts, use 450 ohm line.

Healthfully yours,
Don W4BWS

----- Original Message -----
From: AD5VJ Bob <mailto:rtnmi@...>
To: SkyWires@yahoogroups. Com
Sent: Tuesday, January 02, 2007 10:14 PM
Subject: [SkyWires] Ladderline vs Coax

I am thinking of doing something I probably should have done from the beginning long ago and that is to use 400ohm ladderline as
feedline to my Homebrew 80 meter double bazooka instead of double shielded 75 ohm cable TV coax.

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notice a difference?
3. Is it worth the trouble at all for received low level signal strength or should I just stay with what I have?

73 fer nw es gud DX,
QSL VIA: BUR, LotW, e-QSL

Bob AD5VJ(AAR6VM)
Old calls: WY5L/KH3-KE5CTY-N5IET
http://www.ad5vj. <http://www.ad5vj.com/> com/

Member: CTDXCC, NTCC, STXDXCC
FISTS: # 12637, SKCC# 2369
10X# 37210, FP#-1141
SMIRK#-5177, RARS #-149

2087. Re: [SkyWires] Ladderline vs Coax

Yahoo group: SkyWires
Date: 2007-01-03 07:06:45 UTC
From: NØATH
Topic: 2084 Message: 2087

Bob,
I have read the other answers to your post and concur with them
100% except - How are you going to attach the ladder line to a
bazooka? I don't understand how that is going to connect.
Dave / NØATH

----- Original Message -----
From: AD5VJ Bob
To: SkyWires@yahoogroups. Com
Sent: Tuesday, January 02, 2007 10:14 PM
Subject: [SkyWires] Ladderline vs Coax

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SMIRK#-5177, RARS #-149

2088. RE: [SkyWires] Ladderline vs Coax

Yahoo group: SkyWires
Date: 2007-01-03 07:43:23 UTC
From: AD5VJ Bob
Topic: 2084 Message: 2088

I will make a Balun which will accept the coax and the ladder line on the respective ends.

_____

From: SkyWires@yahoogroups.com [mailto:SkyWires@yahoogroups.com] On Behalf Of NØATH
Sent: Wednesday, January 03, 2007 1:07 AM
To: SkyWires@yahoogroups.com
Subject: Re: [SkyWires] Ladderline vs Coax

Bob,
I have read the other answers to your post and concur with them
100% except - How are you going to attach the ladder line to a
bazooka? I don't understand how that is going to connect.
Dave / NØATH

----- Original Message -----
From: AD5VJ Bob <mailto:rtnmi@...>
To: SkyWires@yahoogroups. Com
Sent: Tuesday, January 02, 2007 10:14 PM
Subject: [SkyWires] Ladderline vs Coax

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2089. Any Thoughts on using Stainless welding wire

Yahoo group: SkyWires
Date: 2007-01-03 08:48:21 UTC
From: madatweak
Topic: 2089 Message: 2089

Has anyone ever tried Stainless weldng wire akin to copperweld. I've got a roll of copperweld & I find it only lasts a 6 months before going rusty - but then I could have a cheap & nasty copperweld as Im sure there must be differing qualities. I noticed at my large hardware store rolls of stainless welding wire about the same gauge as copperweld & sold by the spool. Apart from the termination of feedline I thought it might last for a long time - Any thoughts ?

2090. Re: [SkyWires] Any Thoughts on using Stainless welding wire

Yahoo group: SkyWires
Date: 2007-01-03 16:06:25 UTC
From: ken hutson (wb5uyj)
Topic: 2089 Message: 2090

hi
that is what you call mig welding wire
and yes i;ve use it in the past woth no probrlrm yu will need special sorder amd flux to make joint
was h and scrub joints after you mke them the flux is corrosive
cover joint with liquid tape
one of my loops at the beach have been up 6 yr atainleed with no problems
73s
ken wb5uyj

2091. Re: [SkyWires] Galvanized electric fence wire

Yahoo group: SkyWires
Date: 2007-01-03 16:11:44 UTC
From: Robert Ower
Topic: 2058 Message: 2091

Donald Sanders wrote:

> Fence wire is available at most farm supply stores and
> possibly Home Depot and Sears Farm catalog. The
> steel center makes it strong so it should stretch less
> than copper.

Pointing our the advantage of CopperWeld wire (copper coated steel) for antennas. With skin effect, your RF is in the copper coating, while the steel resists stretching. I haven't priced steel fence wire, so I assume that it's probably much cheaper than CopperWeld. I have used CopperWeld in a number of antennas with good results.

--

Bob Ower
Humboldt, AZ

Leather Craftsman
dba _The Leather Horseshoe_ <http://owerr.tripod.com/>
Member: International Internet Leathercrafters Guild <http://iilg.org/>

Amateur Radio Operator: WA7YUL WA7YUL Home Page
<http://geocities.com/rcowerpc/>
Life Member: ARRL ARRL <http://arrl.org/>
Member: Yavapai Amateur Radio Club YARC <www.w7yrc.org>
Member: Quarter Century Wireless Association
Member: FISTS 11282
QSL via ARRL's LOTW or eQSL.cc

2092. Re: [SkyWires] Any Thoughts on using Stainless welding wire

Yahoo group: SkyWires
Date: 2007-01-03 16:48:34 UTC
From: Robert Ower
Topic: 2089 Message: 2092

madatweak wrote:

>Has anyone ever tried Stainless weldng wire akin to copperweld. I've
>got a roll of copperweld & I find it only lasts a 6 months before
>going rusty - but then I could have a cheap & nasty copperweld as Im
>sure there must be differing qualities. I noticed at my large hardware
>store rolls of stainless welding wire about the same gauge as
>copperweld & sold by the spool. Apart from the termination of feedline
>I thought it might last for a long time - Any thoughts ?
>
As long as you don't nick the copper on the CopperWeld, it shouldn't
rust. The oxidation on copper isn't rust.

--

Bob Ower
Humboldt, AZ

Leather Craftsman
dba _The Leather Horseshoe_ <http://owerr.tripod.com/>
Member: International Internet Leathercrafters Guild <http://iilg.org/>

Amateur Radio Operator: WA7YUL WA7YUL Home Page
<http://geocities.com/rcowerpc/>
Life Member: ARRL ARRL <http://arrl.org/>
Member: Yavapai Amateur Radio Club YARC <www.w7yrc.org>
Member: Quarter Century Wireless Association
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QSL via ARRL's LOTW or eQSL.cc

2093. Re: [SkyWires] Ladderline vs Coax

Yahoo group: SkyWires
Date: 2007-01-03 17:23:17 UTC
From: Donald Sanders
Topic: 2084 Message: 2093

Well, the bazooka antenna is basically a one band antenna with coax feed.

Healthfully yours,
Don W4BWS
----- Original Message -----
From: AD5VJ Bob
To: SkyWires@yahoogroups.com
Sent: Wednesday, January 03, 2007 12:34 AM
Subject: RE: [SkyWires] Ladderline vs Coax

No multiband I have a Titan DX vertical for that this is only for 80 es 160

From: SkyWires@yahoogroups.com [mailto:SkyWires@yahoogroups.com] On Behalf Of Donald Sanders
Sent: Tuesday, January 02, 2007 11:51 PM
To: SkyWires@yahoogroups.com
Subject: Re: [SkyWires] Ladderline vs Coax

It's a matter of what you are needing or intending to do.
If only 80 meters, keep the coax. Loss is low for 100 foot at 80 meters.
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If it has a long feed line, over 100 feet, use 450 ohm line.
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----- Original Message -----
From: AD5VJ Bob
To: SkyWires@yahoogroups. Com
Sent: Tuesday, January 02, 2007 10:14 PM
Subject: [SkyWires] Ladderline vs Coax

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2094. Re: [SkyWires] Any Thoughts on using Stainless welding wire

Yahoo group: SkyWires
Date: 2007-01-03 18:18:51 UTC
From: adam
Topic: 2089 Message: 2094
Attachments: 2 described; binary payloads are missing from this source WARC

[Attachment content not displayed]

2095. Re: [SkyWires] Ladderline vs Coax

Yahoo group: SkyWires
Date: 2007-01-03 18:59:40 UTC
From: larry allen
Topic: 2084 Message: 2095

Greetings....
You didn't comment on whether you used any kind of matching device between the equipment and feedline....
Larry ve3fxq

----- Original Message -----
From: "AD5VJ Bob" <rtnmi@...>
To: "SkyWires@yahoogroups. Com" <SkyWires@yahoogroups.com>
Sent: Tuesday, January 02, 2007 11:14 PM
Subject: [SkyWires] Ladderline vs Coax

>I am thinking of doing something I probably should have done from the
>beginning long ago and that is to use 400ohm ladderline as
> feedline to my Homebrew 80 meter double bazooka instead of double
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> ladderline, is that it is "less lossy" to the point of being totally
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>
>
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>
>
>

2096. Re: [SkyWires] Any Thoughts on using Stainless welding wire

Yahoo group: SkyWires
Date: 2007-01-03 19:41:25 UTC
From: ken hutson (wb5uyj)
Topic: 2089 Message: 2096

yep
forgot
use .045 or .052 wire or larger
ken

2097. Re: [SkyWires] Ladderline vs Coax

Yahoo group: SkyWires
Date: 2007-01-03 19:34:39 UTC
From: Jim Dunstan
Topic: 2084 Message: 2097

At 10:14 PM 1/2/2007 -0600, you wrote:

>I am thinking of doing something I probably should have done from the
>beginning long ago and that is to use 400ohm ladderline as
>feedline to my Homebrew 80 meter double bazooka instead of double shielded
>75 ohm cable TV coax.
>
>My goal is to end up with less incoming signal loss than with coax
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>or should I just stay with what I have?
>
>73 fer nw es gud DX,
>QSL VIA: BUR, LotW, e-QSL
>Bob AD5VJ(AAR6VM)
>Old calls: WY5L/KH3-KE5CTY-N5IET

Hi Bob,

Well it is not clear exactly what you intend to use the antenna for .....
eg: SW listening across HF band? Hamming .... on 80M or on more 'one
band? If so, QRP, barefoot, or QRO?

You mention using a Double Bazooka built for 80M and fed with TV coax
cable. The bazooka is a single band antenna coax fed. If you feed it with
balanced feedline it will not be a bazooka .... hi hi but simply a dipole
made partially of coax ... hi hi.

Let's try to answer your questions:

1. (does it make a difference) .... well coax and balanced line does not
easily match .... open wire line is 'balanced' and coax is 'unbalnced' ....
you need to take this into account .... especially if you are going to feed
power to the antenna. If you plan to use your dipole on a single band then
the best plan is to feed it with coax ... if you are going to use it for
multi-band operation then you will need to feed it with open wire line ...

usually coupling to your transceiver with an antenna tuner. If you are going single band .... then the impedance difference makes a difference. If you go mult-band then forget impedance and expect hi SWR and use low loss open wire feed line. If it is a receive only situation then it doesn't make a whole lot of differenced either way.

2. No

3. No, stay with what you have.

Jim, VE3CI

>

2098. RE: [SkyWires] Ladderline vs Coax

Yahoo group: SkyWires
Date: 2007-01-03 20:51:33 UTC
From: AD5VJ Bob
Topic: 2084 Message: 2098

Yes I do have a tuner which I use for 160 when I make the double bazooka a "T" Vertical with my adapter here in the shack, but other
than that no tuning.

The Bazooka is very broad banded and covers 80 es 75 for me.

I have worked a lot of DX from it just think I might be able to do better with the ladderline. Now some others have said open wire
600 ohm line might be an improvement as well.

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QSL VIA: BUR, LotW, e-QSL
Bob AD5VJ(AAR6VM)
Old calls: WY5L/KH3-KE5CTY-N5IET
http://www.ad5vj.com/

Member: CTDXCC, NTCC, STXDXCC
FISTS: # 12637, SKCC# 2369
10X# 37210, FP#-1141
SMIRK#-5177, RARS #-149

> -----Original Message-----
> From: SkyWires@yahoogroups.com
> [mailto:SkyWires@yahoogroups.com] On Behalf Of larry allen
> Sent: Wednesday, January 03, 2007 1:00 PM
> To: SkyWires@yahoogroups.com
> Subject: Re: [SkyWires] Ladderline vs Coax
>
> Greetings....
> You didn't comment on whether you used any kind of matching
> device between the equipment and feedline....
> Larry ve3fxq
>
> ----- Original Message -----
> From: "AD5VJ Bob" <rtnmi@...>
> To: "SkyWires@yahoogroups. Com" <SkyWires@yahoogroups.com>
> Sent: Tuesday, January 02, 2007 11:14 PM
> Subject: [SkyWires] Ladderline vs Coax
>
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> Yahoo! Groups Links
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2099. tuner at loop feedpoint

Yahoo group: SkyWires
Date: 2007-01-03 21:55:39 UTC
From: n4lcd
Topic: 2099 Message: 2099

Has anyone ever used an unbalanced tuner, such as the Icom AH-4 or the SGC-230 or any of the other tuners like these, directly at the feed point of a loop skywire?

2100. RE: [SkyWires] tuner at loop feedpoint

Yahoo group: SkyWires
Date: 2007-01-03 23:26:38 UTC
From: Paul MW0CDO
Topic: 2099 Message: 2100

Yes, I do.. almost!

I have a 60m loop up and the feeder is simply a continuation of the same wire that the loop is made with.

This "feeder stub" of two wires about 2m / 6ft long is driven by a SGC-239 and works all bands 160 - 10m.

See my simple web page for further info.

Paul MW0CDO.
HYPERLINK "http://homepage.ntlworld.com/paultom/"http://homepage.ntlworld.com/paultom/

Happy New Year!
Blwyddyn Newydd Dda

From: SkyWires@yahoogroups.com [mailto:SkyWires@yahoogroups.com] On Behalf Of n4lcd
Sent: 03 January 2007 21:56
To: SkyWires@yahoogroups.com
Subject: [SkyWires] tuner at loop feedpoint

Has anyone ever used an unbalanced tuner, such as the Icom AH-4 or the SGC-230 or any of the other tuners like these, directly at the feed point of a loop skywire?

--
No virus found in this incoming message.
Checked by AVG Free Edition.
Version: 7.5.432 / Virus Database: 268.16.3/614 - Release Date: 02/01/2007 14:58

--
No virus found in this outgoing message.
Checked by AVG Free Edition.
Version: 7.5.432 / Virus Database: 268.16.3/614 - Release Date: 02/01/2007 14:58

2101. and for ground radials?

Yahoo group: SkyWires
Date: 2007-01-03 23:50:35 UTC
From: Jeff
Topic: 2101 Message: 2101

Since we're on the topic of wire, what kind of wire for ground radials
is recommended? I've seen online all kinds - bare or insulated,
buried or laid on the ground, and that it really makes a difference
and that it really doesn't. What to do???

Thanks and 73,

Jeff, KF5KWO
Helotes, TX

2102. Re: [SkyWires] Any Thoughts on using Stainless welding wire

Yahoo group: SkyWires
Date: 2007-01-04 09:55:17 UTC
From: adam
Topic: 2089 Message: 2102
Attachments: 2 described; binary payloads are missing from this source WARC

[Attachment content not displayed]

2103. Re: [SkyWires] and for ground radials?

Yahoo group: SkyWires
Date: 2007-01-04 10:03:13 UTC
From: adam
Topic: 2101 Message: 2103
Attachments: 2 described; binary payloads are missing from this source WARC

[Attachment content not displayed]

2104. Re: Any Thoughts on using Stainless welding wire

Yahoo group: SkyWires
Date: 2007-01-04 10:20:07 UTC
From: Greg W:-)
Topic: 2089 Message: 2104

Mig welding wire will rust in the open.

The copper coating is very thin and not intended for lasting
protection from the elements.
The copper coatings main purpose on welding wire is for a low
resistance connection to the mig welding weld current.

gregW:-)

==========

--- In SkyWires@yahoogroups.com, adam <mada69@...> wrote:
>
> Hi Bob, I think most folk must be using decent copperweld as I have
a huge
> roll thats about 14inches in diameter & about 6 inches wide & its even
> rusting on the roll thats sitting in my garage. I've used this
copperweld
> several times for temp holding up masts & it starts to actually rust
- the
> wire is very usty after 6 months so I suppose I must have some
pretty poor
> wire. It came off our MIG welder that & it was the original roll.

2105. Re: Any Thoughts on using Stainless welding wire

Yahoo group: SkyWires
Date: 2007-01-04 10:41:50 UTC
From: Greg W:-)
Topic: 2089 Message: 2105

If anyone had done a search for it they would have found that
Copperweld wire ,is not mig welding wire.
It is specially made electrical wire , steel with a hard bonded thick
copper coating primarily for the telecomuniactions industry.

http://www.copperweld.com/cwwire/cladstel.html

Mig welding wire is not the same thing.

gregW:-)

http://www.swdxer.co.nr

==========

--- In SkyWires@yahoogroups.com, "Greg W:-)" <onegammyleg@...> wrote:
>
> Mig welding wire will rust in the open.
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> The copper coating is very thin and not intended for lasting
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>
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> pretty poor
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>

2106. Re: Any Thoughts on using Stainless welding wire

Yahoo group: SkyWires
Date: 2007-01-04 13:54:53 UTC
From: bambazonke01
Topic: 2089 Message: 2106

I used multi stranded stainless wire that I got from a fishing supply
store. It was intended for deep lake trout fishing in the great lakes.
The 19 strands overall diameter was about .020".
It worked well and I never had any problems except for it singing in
the wind.
Jim VE3DDY

2107. Re: [SkyWires] Any Thoughts on using Stainless welding wire

Yahoo group: SkyWires
Date: 2007-01-04 20:36:43 UTC
From: Robert Ower
Topic: 2089 Message: 2107

adam wrote:

> Hi Bob, I think most folk must be using decent copperweld as I have a
> huge roll thats about 14inches in diameter & about 6 inches wide & its
> even rusting on the roll thats sitting in my garage. I've used this
> copperweld several times for temp holding up masts & it starts to
> actually rust - the wire is very usty after 6 months so I suppose I
> must have some pretty poor wire. It came off our MIG welder that & it
> was the original roll.

All I can say is that it must be inferior material. The only time I've had it rust is when I've nicked the copper and exposed the steel.

--

Bob Ower
Humboldt, AZ

Leather Craftsman
dba _The Leather Horseshoe_ <http://owerr.tripod.com/>
Member: International Internet Leathercrafters Guild <http://iilg.org/>

Amateur Radio Operator: WA7YUL WA7YUL Home Page
<http://geocities.com/rcowerpc/>
Life Member: ARRL ARRL <http://arrl.org/>
Member: Yavapai Amateur Radio Club YARC <www.w7yrc.org>
Member: Quarter Century Wireless Association
Member: FISTS 11282
QSL via ARRL's LOTW or eQSL.cc

2108. Re: [SkyWires] Re: Any Thoughts on using Stainless welding wire

Yahoo group: SkyWires
Date: 2007-01-04 20:38:40 UTC
From: Robert Ower
Topic: 2089 Message: 2108

Greg W:-) wrote:

>Mig welding wire will rust in the open.
>
>The copper coating is very thin and not intended for lasting
>protection from the elements.
>The copper coatings main purpose on welding wire is for a low
>resistance connection to the mig welding weld current.
>
That explains a lot. Thank you.

--

Bob Ower
Humboldt, AZ

Leather Craftsman
dba _The Leather Horseshoe_ <http://owerr.tripod.com/>
Member: International Internet Leathercrafters Guild <http://iilg.org/>

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2109. Re: Any Thoughts on using Stainless welding wire

Yahoo group: SkyWires
Date: 2007-01-04 21:14:39 UTC
From: w7tea
Topic: 2089 Message: 2109

> All I can say is that it must be inferior material. The only time I've
> had it rust is when I've nicked the copper and exposed the steel.
>
> --
> --
>
> Bob Ower

I agree. I've had #16/18 copperclad up for 15 years without issue. It has withstand windstorms and pretty extreme icing. And it is nearly invisible in a CCand R neighborhood!

Gary W7TEA

2110. Re: [SkyWires] Any Thoughts on using Stainless welding wire

Yahoo group: SkyWires
Date: 2007-01-04 22:44:26 UTC
From: Harold Burton
Topic: 2089 Message: 2110

It would appear that there is a great deal of difference between
copperclad steel antenna wire
and copper coated steel welding wire. The welding stuff appears to have
a copper wash just thick enough to give good electrical contact as the
wire is fed thru the welder. The copper coating on copperclad antenna
wire is apparently a good deal heavier. I've got a small wire welder and
I've never used any of the copper coated wire and was surprised to hear
of it. I've never used anything other than the fluxed wire in my welder
and that stuff is much too brittle
to attempt wire antenna construction.

Harold
KD5SAK

----- Original Message -----
From: "Robert Ower" <groups@...>
To: <SkyWires@yahoogroups.com>
Sent: Thursday, January 04, 2007 2:36 PM
Subject: Re: [SkyWires] Any Thoughts on using Stainless welding wire

> adam wrote:
>
>> Hi Bob, I think most folk must be using decent copperweld as I have a
>> huge roll thats about 14inches in diameter & about 6 inches wide &
>> its
>> even rusting on the roll thats sitting in my garage. I've used this
>> copperweld several times for temp holding up masts & it starts to
>> actually rust - the wire is very usty after 6 months so I suppose I
>> must have some pretty poor wire. It came off our MIG welder that & it
>> was the original roll.
>
> All I can say is that it must be inferior material. The only time I've
> had it rust is when I've nicked the copper and exposed the steel.
>
> --
> --
>
> Bob Ower
> Humboldt, AZ
>
> --
>
> Leather Craftsman
> dba _The Leather Horseshoe_ <http://owerr.tripod.com/>
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>
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> Amateur Radio Operator: WA7YUL WA7YUL Home Page
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> Member: Yavapai Amateur Radio Club YARC <www.w7yrc.org>
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> QSL via ARRL's LOTW or eQSL.cc
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> Yahoo! Groups Links
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> --
> No virus found in this incoming message.
> Checked by AVG Free Edition.
> Version: 7.5.432 / Virus Database: 268.16.5/616 - Release Date:
> 1/4/2007 1:34 PM
>
>

2111. American Radio Operators

Yahoo group: SkyWires
Date: 2007-01-05 08:27:23 UTC
From: Rob
Topic: 2111 Message: 2111

Hello, my name is Rob. I am founder, and creator, of the "Amrican Radio Operators". It is absolutley free of charge to join. I love C.B's and that's why I created this site. Join and you get a free call sign! The site has plenty of interesting things about C.B Radios! Check it out! www.americanradiooperators.tk

2113. CF dipoles and Vees.

Yahoo group: SkyWires
Date: 2007-01-13 17:54:39 UTC
From: AD5VJ Bob
Topic: 2113 Message: 2113

I am about to rebuild my CF dipoles and Vees.

Before I start this project, however, I would like a concerted opinion as to the best type of wire and setup to use and the least
expensive supplier to use.

They will be strapped to the side of a 40' Rohn25 Tower at about the 35' level. Run will be around 100' into the shack. I would like
to feed it with ladder line this time and would also like for it to be at min good for 200W up to legal limit.

I am considering litz wire or stranded copper, but cant make up my mind.

All opinions and ideas are welcome.

73 fer nw es gud DX,
QSL VIA: BUR, LotW, e-QSL
Bob AD5VJ(AAR6VM)
Old calls: WY5L/KH3-KE5CTY-N5IET
http://www.ad5vj.com/

Member: CTDXCC, NTCC, STXDXCC
FISTS: # 12637, SKCC# 2369
10X# 37210, FP#-1141
SMIRK#-5177, RARS #-149

2114. Re: [SkyWires] CF dipoles and Vees.

Yahoo group: SkyWires
Date: 2007-01-14 18:58:19 UTC
From: Jim Dunstan
Topic: 2113 Message: 2114

At 11:54 AM 1/13/2007 -0600, you wrote:

>I am about to rebuild my CF dipoles and Vees.
>
>Before I start this project, however, I would like a concerted opinion as
>to the best type of wire and setup to use and the least
>expensive supplier to use.
>
>They will be strapped to the side of a 40' Rohn25 Tower at about the 35'
>level. Run will be around 100' into the shack. I would like
>to feed it with ladder line this time and would also like for it to be at
>min good for 200W up to legal limit.
>
>I am considering litz wire or stranded copper, but cant make up my mind.
>
>All opinions and ideas are welcome.
>
>73 fer nw es gud DX,
>QSL VIA: BUR, LotW, e-QSL
>Bob AD5VJ(AAR6VM)
>Old calls: WY5L/KH3-KE5CTY-N5IET
><http://www.ad5vj.com/>http://www.ad5vj.com/
>
>Member: CTDXCC, NTCC, STXDXCC
>FISTS: # 12637, SKCC# 2369
>10X# 37210, FP#-1141
>SMIRK#-5177, RARS #-149

Hi,

Not sure what your arrangement will be .... eg multi dipoles/Vee's .... each resonant in a particular band and fed with a single balanced feed line .... or a single dipole or Vee to be used all-band .... fed with a single balanced feed line. In either case the feed line will be attached and dressed along the tower length and back to the shack. I suggest you take care in dressing the ladder line as it goes along the length of the tower .... I would suggest it be dressed at least 6" from the tower and held in place with insulated stand-offs. Put a gentle twist in the ladder line which will help isolate it inductively from the tower. You will have no trouble feeding the antenna with 200 watts.

As far as the antenna wire is concerned .... make it copper ... and 14 tor 12 gauge. Stranded copper works well .... it is strong and will last forever .... hi hi .... However, from the point of view of ease with which it works I would go for the more modern 'flexible' copper wire. There are different kinds ... the more economical 'flex' wire is plastic covered and

has the flexibility of standard cab tire cable. It is almost impossible to 'kink'. If you use standard stranded copper #14 or #12 it is difficult to lay it out and get it up without kinks ..... while the plastic covered flex wire is a joy to use. It is especially good in my applications as I have a tilt over tower which means loose wire antennas when the tower is down. There is a newer flexible copper antenna wire available now that is uncovered. It is virtually like rope .... you can actually tie it off like rope. Great for portable operation .... much more expensive.

You mentioned litz wire .... I am unsure if it is readily available in sufficient wire gauge/strength to be used as antenna wire. The difference between antenna wire and Litz wire is that individual strands or bundles of strands are insulated. The reasoning is that by insulating the strands the actual surface area of the wire will be increased. This is advantagous when winding physically small inductors. From the point of view of antenna applications the advantage disappears.

In summary .... a ladder feed line, antenna tuner, and single multiband dipole or Vee is an excellent antenna. However, If you are going to use a number of resonant dipoles all fed with the same feed line ... eg the SWR would be reasonable for each band .... I would go for coax. The difference in line loss between 100' of ladder line and coax when the swr is low hardly justifies the added complications of feeding with ladder line. Even if the SWR goes up to 3:1 .... if you use one of the readily available and economical ATU's your radio will be happy .... you will have quick QSY facility and the difference in the amount of RF you radiate will be negligible.

Jim, VE3CI

2115. hanging wire

Yahoo group: SkyWires
Date: 2007-01-14 22:19:57 UTC
From: Mike
Topic: 2115 Message: 2115

I know the best would be to run the wire through pulleys and ropes attached to trees but what about stringing insulated wire straight through the tree limbs with no ropes,pulleys etc with one corner of the loop being a mast with weighted rope and pulley to allow slack if needed? What about the insulation wearing through and direct contact between the wire and tree?

2116. Re: [SkyWires] hanging wire

Yahoo group: SkyWires
Date: 2007-01-14 23:47:30 UTC
From: David Shrum
Topic: 2115 Message: 2116

Mike,
I have mine in and around the trees, around trunks, over limbs, you get the idea. Mine worked good for about the first couple of years, I used 12 gage romex, I bought a couple of spools from a local home improvement center. I used to be able to use my tuner to adjust it so I could use it from 160 to 10 Meter. Now I can't tune it for 160, I suspect the covering has worn off of the copper wire and is just too much for my tuner to handle. I would say if it is going to be a temporary set up,go for it, BUT if you plan on it being long term, I would suggest you not do it the way I did.
Dave N8PU

Mike wrote:
> I know the best would be to run the wire through pulleys and ropes
> attached to trees but what about stringing insulated wire straight
> through the tree limbs with no ropes,pulleys etc with one corner of the
> loop being a mast with weighted rope and pulley to allow slack if
> needed? What about the insulation wearing through and direct contact
> between the wire and tree?

2117. Re: [SkyWires] hanging wire

Yahoo group: SkyWires
Date: 2007-01-15 00:05:28 UTC
From: Ken Burchfield
Topic: 2115 Message: 2117

Mike,
Some have a real disagreement, but that is the way I have run My large loop full wave on 80 meters, for about 5 years now, I sometimes use Green Plastic trimmer line over tree limbs for support.(Line will last a couple of years) it does come down (Breaks from time to time) Myself Never run over 100 watts SSB, 2nd I feed it with 300 twinlead and interface with MFJ-941, My loop works that way for Me. it is insulated #12 wire.
I NEVER run high power. and always set tuner for best match .
Good Luck
73 Ken

Mike <KD5VHF@...> wrote: I know the best would be to run the wire through pulleys and ropes attached to trees but what about stringing insulated wire straight
through the tree limbs with no ropes,pulleys etc with one corner of the
loop being a mast with weighted rope and pulley to allow slack if
needed? What about the insulation wearing through and direct contact
between the wire and tree?

Give Packet Radio a try ....Mississippi.......145.010

Need Mail bonding?
Go to the Yahoo! Mail Q&A for great tips from Yahoo! Answers users.

2118. Re: hanging wire

Yahoo group: SkyWires
Date: 2007-01-15 01:16:49 UTC
From: Mike
Topic: 2115 Message: 2118

Thanks Dave & Ken. I think I will just go ahead and string it up this way then. At least it will give me a chance to see how much I like the loop then I can either re do it or try something else or both ;-) 73 , Mike

2119. Re: hanging wire

Yahoo group: SkyWires
Date: 2007-01-15 02:00:28 UTC
From: Don Keith
Topic: 2115 Message: 2119

Mike:

I'd be afraid I would constantly be having to re-hang the wire, or that it would get all tangled up in those doggone tree limbs and I would have to cut and splice it to get it back up there.

For my 480-foot horizontal loop, I use some of the relatively cheap but remarkably strong rope sold by The Wire Man or by Radioworks. I've found lots of other uses for the stuff, too. I used 45-degree elbows for small PVC, drilled a hole in the crook of the elbow, and ran short pieces of the rope through those holes, tying them tightly. Then I used a slingshot and cheap fishing reel to shoot a fishing weight over tree limbs. Then I used the fishing line to pull up the ends of the ropes, connecting one end to the rope loops on the PVC elbows and the opposite end to a couple of nails in the tree trunks, low enough for me to reach but high enough the neighborhood kids can't reach it. The insulated copper wire of the antenna is then run through the PVC elbows, which allows some give.

I also used a couple of bungee cords between the rope and the rope loops on two corners to give it some spring in wind. It really sounds a lot more complicated than it is. The antenna has been up for six months now and came through some pretty good storms just fine.

My loop is tied off at eight trees around the backyard. It's not as high as I would like but it's the best I could do. It also runs through some tree limbs too high for me to do anything about it. I know rubbing against the limbs will eventually wear through the insulation but so far so good. The thing works wonderfully...probably the best antenna I've ever had.

Catch me on the air and I'll tell you more. Good luck with yours!

73,

Don N4KC
www.donkeith.com

--- In SkyWires@yahoogroups.com, "Mike" <KD5VHF@...> wrote:
>
> I know the best would be to run the wire through pulleys and ropes
> attached to trees but what about stringing insulated wire straight
> through the tree limbs with no ropes,pulleys etc with one corner of
the
> loop being a mast with weighted rope and pulley to allow slack if
> needed? What about the insulation wearing through and direct contact
> between the wire and tree?

>

2120. Re: hanging wire

Yahoo group: SkyWires
Date: 2007-01-15 02:29:25 UTC
From: Mike
Topic: 2115 Message: 2120

If using rope and pulleys in the trees, How would I pull the wire up without hanging on all the limbs on the way up? There is probably a easy way but I just can't picture it shy of using a bucket truck.

2121. Loop Skywire around my house

Yahoo group: SkyWires
Date: 2007-01-15 20:06:51 UTC
From: n4lcd
Topic: 2121 Message: 2121

Does anyone know if there's a problem putting up a loop skywire, held up by several trees, that are around my house, so that my house ends up inside, but below the loop? (Shack is inside my house.)

2122. Re: Loop Skywire around my house

Yahoo group: SkyWires
Date: 2007-01-15 20:19:38 UTC
From: w7tea
Topic: 2121 Message: 2122

--- In SkyWires@yahoogroups.com, "n4lcd" <Paul@...> wrote:
>
> Does anyone know if there's a problem putting up a loop skywire, held
> up by several trees, that are around my house, so that my house ends
> up inside, but below the loop? (Shack is inside my house.)
>

I have a sloping delta loop over my house now without difficulty. On rare occasion I'll run 500 watts without RF problems in the shack--and I'm on the second floor. I have a bundle of cut counterpoise wires attached to the rig and another set for the tuner. DC ground is rod just below the shack.

73, Gary W7TEA

2123. Re: [SkyWires] Loop Skywire around my house

Yahoo group: SkyWires
Date: 2007-01-15 21:28:49 UTC
From: Donald Sanders
Topic: 2121 Message: 2123

I've used similar 80 M loop for over 30 years.
No problems I know of- except, I'm a ham.
My wife tolerates me and ham radio and
even got her license so we can chat on
two meters.

Healthfully yours,
Don W4BWS
----- Original Message -----
From: n4lcd
To: SkyWires@yahoogroups.com
Sent: Monday, January 15, 2007 2:06 PM
Subject: [SkyWires] Loop Skywire around my house

Does anyone know if there's a problem putting up a loop skywire, held
up by several trees, that are around my house, so that my house ends
up inside, but below the loop? (Shack is inside my house.)

2124. Loop Skywire around my house

Yahoo group: SkyWires
Date: 2007-01-16 15:45:38 UTC
From: charles Allison
Topic: 2121 Message: 2124

There are always possibilities of problems with nearby antennas where one can get zapped by induction or by other equipment having trouble or causing noise.

We helped a friend in need of a stealth 80m antenna by putting up a loop under the eaves of his house. It's about the right length but only about 7-8 ft off the ground and it runs near lots of rain gutters. At 100 Watts, it works, he gets out (NVIS mode) fairly well and doesn't have lots of noise on receive. As I understand it neither he nor his wife nor their cat have been electrocuted nor has the tv set blown up - and so far no gestapo from the neighborhood deed enforcment cabal have stopped by to threaten or complain.

In a word - success!

best regards,

Charles
wb5izd

1a. Loop Skywire around my house
Posted by: "n4lcd" Paul@... n4lcd
Date: Mon Jan 15, 2007 12:10 pm ((PST))

Does anyone know if there's a problem putting up a loop skywire, held
up by several trees, that are around my house, so that my house ends
up inside, but below the loop? (Shack is inside my house.)

2125. Re: [SkyWires] Loop Skywire around my house

Yahoo group: SkyWires
Date: 2007-01-16 16:03:12 UTC
From: ChuckSchultz
Topic: 2121 Message: 2125

On the other hand , about 28 years ago as a novice , I built an antenna simalar to the one described in this text. Since that time , my hair has turned white , I have suffered three heart attachs and two strokes , I have lost and regained my eyesight , had two back surgeries, lost a kidney and lung to cancer , my wife left with a prune picker, my children have all left me and gone else and reproduced . The antenna seemed to work well and has grown over the years . If I had it all to do again , I would have started sooner , build the antenna . Chuck Wq5B
From: charles Allison
To: SkyWires@yahoogroups.com
Sent: Tuesday, January 16, 2007 9:45 AM
Subject: [SkyWires] Loop Skywire around my house

There are always possibilities of problems with nearby antennas where one can get zapped by induction or by other equipment having trouble or causing noise.

We helped a friend in need of a stealth 80m antenna by putting up a loop under the eaves of his house. It's about the right length but only about 7-8 ft off the ground and it runs near lots of rain gutters. At 100 Watts, it works, he gets out (NVIS mode) fairly well and doesn't have lots of noise on receive. As I understand it neither he nor his wife nor their cat have been electrocuted nor has the tv set blown up - and so far no gestapo from the neighborhood deed enforcment cabal have stopped by to threaten or complain.

In a word - success!

best regards,

Charles
wb5izd

1a. Loop Skywire around my house
Posted by: "n4lcd" Paul@... n4lcd
Date: Mon Jan 15, 2007 12:10 pm ((PST))

Does anyone know if there's a problem putting up a loop skywire, held
up by several trees, that are around my house, so that my house ends
up inside, but below the loop? (Shack is inside my house.)

2126. Re: Loop Skywire around my house

Yahoo group: SkyWires
Date: 2007-01-16 23:01:45 UTC
From: kc0rsy
Topic: 2121 Message: 2126

--- In SkyWires@yahoogroups.com, "n4lcd" <Paul@...> wrote:
>
> Does anyone know if there's a problem putting up a loop skywire, held
> up by several trees, that are around my house, so that my house ends
> up inside, but below the loop? (Shack is inside my house.)
>

I don't have cable and when I transmit on 10m with 100w I overload the receiver in my TVs. The TV antenna is in the attic and at least 25ft from any point of the antenna. My loop is 300' and goes around my house and backyard. I've tried low pass filters on the radio and high pass filters on the TVs with no luck. Solution is that I don't transmit on 10m when the wife is home. I also had to get rid of the touch lamp in the basement. HF turns it off and on and it's noisy.

2127. Re: Loop Skywire around my house

Yahoo group: SkyWires
Date: 2007-01-17 02:02:44 UTC
From: cewyattjr
Topic: 2121 Message: 2127

--- In SkyWires@yahoogroups.com, "n4lcd" <Paul@...> wrote:
>
> Does anyone know if there's a problem putting up a loop skywire, held
> up by several trees, that are around my house, so that my house ends
> up inside, but below the loop? (Shack is inside my house.)
>

That's pretty much my set up here. I've got a 160 meter loop strung up and down around and about at weird angles -- up as high as 50 feet and down at maybe as low as 15 feet where it is caught in branches. I just worked Burkina Faso on 75 meters tonight. It all wraps around my house, and no RF problems on 75 or 40. When I run the Clipperton amp I have RFI problems on 20 meters. Weird things happen like the GFI plugs in our upstairs bathroom will trip! One day the smoke alarms started going off.

I find that the performance of the loop is really good on 20 meters so don't need the amp so much anyway.

It will be interesting to see how that all compares to the Butternut vertical I'm setting up.

73,

-Chuck
W1CEW

2128. RE: [SkyWires] CF dipoles and Vees.

Yahoo group: SkyWires
Date: 2007-01-17 03:48:48 UTC
From: AD5VJ Bob
Topic: 2113 Message: 2128

Thanks to everyone for all your input. I am very appreciative of your time.

73 fer nw es gud DX,
QSL VIA: BUR, LotW, e-QSL
Bob AD5VJ(AAR6VM)
Old calls: WY5L/KH3-KE5CTY-N5IET
http://www.ad5vj.com/

Member: CTDXCC, NTCC, STXDXCC
FISTS: # 12637, SKCC# 2369
10X# 37210, FP#-1141
SMIRK#-5177, RARS #-149

From: SkyWires@yahoogroups.com [mailto:SkyWires@yahoogroups.com] On Behalf Of Jim Dunstan
Sent: Sunday, January 14, 2007 12:58 PM
To: SkyWires@yahoogroups.com
Subject: Re: [SkyWires] CF dipoles and Vees.

At 11:54 AM 1/13/2007 -0600, you wrote:

I am about to rebuild my CF dipoles and Vees.

Before I start this project, however, I would like a concerted opinion as to the best type of wire and setup to use and the least
expensive supplier to use.

They will be strapped to the side of a 40' Rohn25 Tower at about the 35' level. Run will be around 100' into the shack. I would like
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I am considering litz wire or stranded copper, but cant make up my mind.

All opinions and ideas are welcome.

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QSL VIA: BUR, LotW, e-QSL
Bob AD5VJ(AAR6VM)
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Member: CTDXCC, NTCC, STXDXCC
FISTS: # 12637, SKCC# 2369
10X# 37210, FP#-1141
SMIRK#-5177, RARS #-149

Hi,

Not sure what your arrangement will be .... eg multi dipoles/Vee's .... each resonant in a particular band and fed with a single
balanced feed line .... or a single dipole or Vee to be used all-band .... fed with a single balanced feed line. In either case the
feed line will be attached and dressed along the tower length and back to the shack. I suggest you take care in dressing the
ladder line as it goes along the length of the tower .... I would suggest it be dressed at least 6" from the tower and held in place
with insulated stand-offs. Put a gentle twist in the ladder line which will help isolate it inductively from the tower. You will
have no trouble feeding the antenna with 200 watts.

As far as the antenna wire is concerned .... make it copper ... and 14 tor 12 gauge. Stranded copper works well .... it is strong
and will last forever .... hi hi .... However, from the point of view of ease with which it works I would go for the more modern
'flexible' copper wire. There are different kinds ... the more economical 'flex' wire is plastic covered and has the flexibility of
standard cab tire cable. It is almost impossible to 'kink'. If you use standard stranded copper #14 or #12 it is difficult to lay
it out and get it up without kinks ..... while the plastic covered flex wire is a joy to use. It is especially good in my
applications as I have a tilt over tower which means loose wire antennas when the tower is down. There is a newer flexible copper
antenna wire available now that is uncovered. It is virtually like rope .... you can actually tie it off like rope. Great for
portable operation .... much more expensive.

You mentioned litz wire .... I am unsure if it is readily available in sufficient wire gauge/strength to be used as antenna wire.
The difference between antenna wire and Litz wire is that individual strands or bundles of strands are insulated. The reasoning is
that by insulating the strands the actual surface area of the wire will be increased. This is advantagous when winding physically
small inductors. From the point of view of antenna applications the advantage disappears.

In summary .... a ladder feed line, antenna tuner, and single multiband dipole or Vee is an excellent antenna. However, If you are
going to use a number of resonant dipoles all fed with the same feed line ... eg the SWR would be reasonable for each band I
would go for coax. The difference in line loss between 100' of ladder line and coax when the swr is low hardly justifies the added
complications of feeding with ladder line. Even if the SWR goes up to 3:1 .... if you use one of the readily available and
economical ATU's your radio will be happy .... you will have quick QSY facility and the difference in the amount of RF you radiate
will be negligible.

Jim, VE3CI

2129. Re: [SkyWires] Re: Loop Skywire around my house

Yahoo group: SkyWires
Date: 2007-01-17 10:02:14 UTC
From: Richards
Topic: 2121 Message: 2129

Less Expensive Alternate solution: get her to listen to a
radio program when you are hamming it up...

More Expensive Alternate Solution: get a new spouse...

(Yup... that is just the kind of advice you might expect from a
seasoned divorce attorney...)
Sorry this is not as helpful as you might like... ;-)

////////////// Richards ////////////
==========

kc0rsy wrote:

> tried pass filters on the TVs with no luck. Solution is that I don't
> transmit on 10m when the wife is home.

2130. Re: Loop Skywire around my house

Yahoo group: SkyWires
Date: 2007-01-18 05:02:20 UTC
From: Mike
Topic: 2121 Message: 2130

Just don't turn the TV on. I've only turned mine on maybe 6 or 7 times in the last 8 years. It quickly reminds me why I don't turn it on. What a waste of time and brain cells. Spend that time with family and friends,reading or even amateur radio instead of sitting there starring at a propaganda box. Stay away from TV completely for 2 weeks and you will clearly see how I feel.

2132. SWR help needed on unconventional skywire

Yahoo group: SkyWires
Date: 2007-01-21 02:49:04 UTC
From: Kyle
Topic: 2132 Message: 2132

Hello guys. I am trying to do some activity on 6 meters before the weekend is out, since this is a 6 meter contest weekend. Pressed for time, I was trying to decide on a dipole, j-pole, moxon, or 1/4 wave radial. While weighing the benefits, I thought, why not use a skywire, and just scale it down? So that's what I did.

Since in HF you can use multiple wavelengths, I chose to make mine out of a 40' length of stranded wire 16 gauge wire. 40' makes the loop 2WL long for 6 meters based on 1005/f. I used nylon rope to suspend nylon spacers from wooden poles that hang the wire approximately 6' in the air (4.5' is 1/4wl). The rectangular loop is about 10' outside my house, so I just used a short piece of RG-58 to get from my rig to the loop. I transitioned from the feedline to the loop by soldering the loop to a SO-239 connector. My VSWR is 4:1 across the entire 6m band!

I thought perhaps there were feedline radiation problems, so I wrapped 4 turns about 4" in diameter to make a "balun" right at the feedpoint to the loop. Still 4:1 SWR.

Just to rule out the feedline, I took my dummyload outside and connected it, right after the 4 turn "balun", and the SWR is a flat 1:1 into the dummyload.

Any ideas on what might be messing me up? There are no metal objects anywhere near the loop at all. I'm hoping there might be an easy fix or that I made some stupid newbie mistake that can be fixed quickly/easily so I can get on the air with this loop tomorrow. Any ideas/suggestions?

Thanks,
Kyle
W4KDA

2133. Re: [SkyWires] SWR help needed on unconventional skywire

Yahoo group: SkyWires
Date: 2007-01-21 03:59:20 UTC
From: Sarge
Topic: 2132 Message: 2133

using a tuner? I think the 2WL and 6' above ground is killing you.

> Hello guys. I am trying to do some activity on 6 meters before the
> weekend is out, since this is a 6 meter contest weekend. Pressed for
> time, I was trying to decide on a dipole, j-pole, moxon, or 1/4 wave
> radial. While weighing the benefits, I thought, why not use a skywire,
> and just scale it down? So that's what I did.
>
> Since in HF you can use multiple wavelengths, I chose to make mine out
> of a 40' length of stranded wire 16 gauge wire. 40' makes the loop 2WL
> long for 6 meters based on 1005/f. I used nylon rope to suspend nylon
> spacers from wooden poles that hang the wire approximately 6' in the air
> (4.5' is 1/4wl). The rectangular loop is about 10' outside my house, so
> I just used a short piece of RG-58 to get from my rig to the loop. I
> transitioned from the feedline to the loop by soldering the loop to a
> SO-239 connector. My VSWR is 4:1 across the entire 6m band!
>
> I thought perhaps there were feedline radiation problems, so I wrapped 4
> turns about 4" in diameter to make a "balun" right at the feedpoint to
> the loop. Still 4:1 SWR.
>
> Just to rule out the feedline, I took my dummyload outside and connected
> it, right after the 4 turn "balun", and the SWR is a flat 1:1 into the
> dummyload.
>
> Any ideas on what might be messing me up? There are no metal objects
> anywhere near the loop at all. I'm hoping there might be an easy fix or
> that I made some stupid newbie mistake that can be fixed quickly/easily
> so I can get on the air with this loop tomorrow. Any ideas/suggestions?
>
> Thanks,
> Kyle
> W4KDA
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> Yahoo! Groups Links
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> No virus found in this incoming message.
> Checked by AVG Free Edition.

> Version: 7.5.432 / Virus Database: 268.17.2/641 - Release Date: 1/20/2007
> 10:24 AM
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2134. RE: [SkyWires] SWR help needed on unconventional skywire

Yahoo group: SkyWires
Date: 2007-01-21 04:02:07 UTC
From: D. Scott MacKenzie
Topic: 2132 Message: 2134

You might try a single wavelength - about 20' and turn it vertical, and feed it so it is horizontal polarized - make the cross pieces aout of 1/2 pvc....it will work fine

-----Original Message-----
From: SkyWires@yahoogroups.com [mailto:SkyWires@yahoogroups.com]On Behalf Of Sarge
Sent: Saturday, January 20, 2007 10:59 PM
To: SkyWires@yahoogroups.com
Subject: Re: [SkyWires] SWR help needed on unconventional skywire

using a tuner? I think the 2WL and 6' above ground is killing you.

> Hello guys. I am trying to do some activity on 6 meters before the
> weekend is out, since this is a 6 meter contest weekend. Pressed for
> time, I was trying to decide on a dipole, j-pole, moxon, or 1/4 wave
> radial. While weighing the benefits, I thought, why not use a skywire,
> and just scale it down? So that's what I did.
>
> Since in HF you can use multiple wavelengths, I chose to make mine out
> of a 40' length of stranded wire 16 gauge wire. 40' makes the loop 2WL
> long for 6 meters based on 1005/f. I used nylon rope to suspend nylon
> spacers from wooden poles that hang the wire approximately 6' in the air
> (4.5' is 1/4wl). The rectangular loop is about 10' outside my house, so
> I just used a short piece of RG-58 to get from my rig to the loop. I
> transitioned from the feedline to the loop by soldering the loop to a
> SO-239 connector. My VSWR is 4:1 across the entire 6m band!
>
> I thought perhaps there were feedline radiation problems, so I wrapped 4
> turns about 4" in diameter to make a "balun" right at the feedpoint to
> the loop. Still 4:1 SWR.
>
> Just to rule out the feedline, I took my dummyload outside and connected
> it, right after the 4 turn "balun", and the SWR is a flat 1:1 into the
> dummyload.
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> Any ideas on what might be messing me up? There are no metal objects
> anywhere near the loop at all. I'm hoping there might be an easy fix or
> that I made some stupid newbie mistake that can be fixed quickly/easily
> so I can get on the air with this loop tomorrow. Any ideas/suggestions?
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> Thanks,
> Kyle
> W4KDA
>
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> Yahoo! Groups Links
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1/20/2007
> 10:24 AM
>
>

2135. Re: [SkyWires] SWR help needed on unconventional skywire

Yahoo group: SkyWires
Date: 2007-01-21 04:14:18 UTC
From: ChuckSchultz
Topic: 2132 Message: 2135

When pushed for time the diopole or inverted may have been a more
predictable project. I think that I would look hard at your make shift
balun . That design also would have probably worked well on the diopole ,
but for the loop I believe you could get alot closer match with at least a
4/1 balun and then do not expect a 1/1 match . How complete is your
junk box ? Insert a piece of 300ohm TV twinlead 1/4 wave length long
between the loop and your feed line and check the results. You may miss
this weekends contest , but it is all about fun isn't it and you will be
ready for the next one . Good Luck Kyle Chuck Wq5B
----- Original Message -----
From: "Sarge" <sarge@...>
To: <SkyWires@yahoogroups.com>
Sent: Saturday, January 20, 2007 9:59 PM
Subject: Re: [SkyWires] SWR help needed on unconventional skywire

> using a tuner? I think the 2WL and 6' above ground is killing you.
>
>
>> Hello guys. I am trying to do some activity on 6 meters before the
>> weekend is out, since this is a 6 meter contest weekend. Pressed for
>> time, I was trying to decide on a dipole, j-pole, moxon, or 1/4 wave
>> radial. While weighing the benefits, I thought, why not use a skywire,
>> and just scale it down? So that's what I did.
>>
>> Since in HF you can use multiple wavelengths, I chose to make mine out
>> of a 40' length of stranded wire 16 gauge wire. 40' makes the loop 2WL
>> long for 6 meters based on 1005/f. I used nylon rope to suspend nylon
>> spacers from wooden poles that hang the wire approximately 6' in the air
>> (4.5' is 1/4wl). The rectangular loop is about 10' outside my house, so
>> I just used a short piece of RG-58 to get from my rig to the loop. I
>> transitioned from the feedline to the loop by soldering the loop to a
>> SO-239 connector. My VSWR is 4:1 across the entire 6m band!
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>> I thought perhaps there were feedline radiation problems, so I wrapped 4
>> turns about 4" in diameter to make a "balun" right at the feedpoint to
>> the loop. Still 4:1 SWR.
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>> Just to rule out the feedline, I took my dummyload outside and connected
>> it, right after the 4 turn "balun", and the SWR is a flat 1:1 into the
>> dummyload.
>>
>> Any ideas on what might be messing me up? There are no metal objects
>> anywhere near the loop at all. I'm hoping there might be an easy fix or
>> that I made some stupid newbie mistake that can be fixed quickly/easily
>> so I can get on the air with this loop tomorrow. Any ideas/suggestions?

>>
>> Thanks,
>> Kyle
>> W4KDA
>>
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>> Yahoo! Groups Links
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> Yahoo! Groups Links
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2136. Re: [SkyWires] SWR help needed on unconventional skywire

Yahoo group: SkyWires
Date: 2007-01-21 13:47:09 UTC
From: Kyle
Topic: 2132 Message: 2136

Let me reply to all three replies in one here:

> using a tuner? I think the 2WL and 6' above ground is killing you.
Hmm, I thought I read a loop of even harmonic wavelengths horizontal greater than 1/4wl above ground didn't need a tuner? Isn't that the basis for the loop skywire? No, I don't own a tuner yet. :(

> You might try a single wavelength - about 20' and turn it vertical,
> and feed it so it is horizontal polarized - make the cross pieces
> out of 1/2 pvc....it will work fine
Please forgive my ignorance, but I thought a horizontal loop was horizontally polarized and vice versa. I REALLY want to know this: How do I feed a vertical loop to make it horizontally polarized? Wouldn't that tend to be very directional? I was hoping to have an omni directional signal (this is one reason I gave up on the dipole and moxon for this weekend's project).

> Insert a piece of 300ohm TV twinlead 1/4 wave length long between
> the loop and your feed line and check the results.
I *might* have a piece of twinlead. If I do, I can try this pretty easily. Aparently, I was completely wet behind the ears about the impedance of a loop.

> but it is all about fun isn't it
No, it's just frustrating. I thought I knew *exactly* what I needed to do... LOL

Thanks guys for your quick replies! I guess this one weekend per year opportunity might be shot. I'd like to think that I could at least learn something from this mini-project before my wife makes me take it down.

Thanks,
Kyle
W4KDA

Kyle wrote:
>
>
> Hello guys. I am trying to do some activity on 6 meters before the
> weekend is out, since this is a 6 meter contest weekend. Pressed for
> time, I was trying to decide on a dipole, j-pole, moxon, or 1/4 wave
> radial. While weighing the benefits, I thought, why not use a skywire,
> and just scale it down? So that's what I did.
>
> Since in HF you can use multiple wavelengths, I chose to make mine out
> of a 40' length of stranded wire 16 gauge wire. 40' makes the loop 2WL
> long for 6 meters based on 1005/f. I used nylon rope to suspend nylon

> spacers from wooden poles that hang the wire approximately 6' in the air
> (4.5' is 1/4wl). The rectangular loop is about 10' outside my house, so
> I just used a short piece of RG-58 to get from my rig to the loop. I
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> SO-239 connector. My VSWR is 4:1 across the entire 6m band!
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> Just to rule out the feedline, I took my dummyload outside and connected
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> dummyload.
>
> Any ideas on what might be messing me up? There are no metal objects
> anywhere near the loop at all. I'm hoping there might be an easy fix or
> that I made some stupid newbie mistake that can be fixed quickly/easily
> so I can get on the air with this loop tomorrow. Any ideas/suggestions?
>
> Thanks,
> Kyle
> W4KDA
>
>

2137. Re: [SkyWires] SWR help needed on unconventional skywire

Yahoo group: SkyWires
Date: 2007-01-21 16:36:08 UTC
From: Dr.Ace Ratliff
Topic: 2132 Message: 2137

Hi Kyle,
I will be blunt.
#1 The loop will have a lower SWR if it is an odd multiple of
wavelengths ie 1, 3, 5, etc. Not 2 wavelengths.

#2 On the higher frequency bands a full wave loop antenna can be
oriented as a vertical diamond or vertical cube. Fed at the top or
bottom corner of a diamond this antenna has horizontal polarization. Fed
at a side corner this antenna has vertical polarization.
Let me clearly state this Fact."A vertically oriented horizontally
polarized one wavelength loop antenna with the bottom of the loop 1/2
wave length above ground is a FINE antenna".*

*

*Do NOT put the bottom of the vertically oriented loop more than 1/2
wave length above ground. *

*

*Good Luck and 73, Ace - WH2T 8-)

Kyle wrote:
>
> Let me reply to all three replies in one here:
>
> > using a tuner? I think the 2WL and 6' above ground is killing you.
> Hmm, I thought I read a loop of even harmonic wavelengths horizontal
> greater than 1/4wl above ground didn't need a tuner? Isn't that the
> basis for the loop skywire? No, I don't own a tuner yet. :(
>
> > You might try a single wavelength - about 20' and turn it vertical,
> > and feed it so it is horizontal polarized - make the cross pieces
> > out of 1/2 pvc....it will work fine
> Please forgive my ignorance, but I thought a horizontal loop was
> horizontally polarized and vice versa. I REALLY want to know this: How
> do I feed a vertical loop to make it horizontally polarized? Wouldn't
> that tend to be very directional? I was hoping to have an omni
> directional signal (this is one reason I gave up on the dipole and moxon
> for this weekend's project).
>
> > Insert a piece of 300ohm TV twinlead 1/4 wave length long between
> > the loop and your feed line and check the results.
> I *might* have a piece of twinlead. If I do, I can try this pretty
> easily. Aparently, I was completely wet behind the ears about the

> impedance of a loop.
>
> > but it is all about fun isn't it
> No, it's just frustrating. I thought I knew *exactly* what I needed to
> do... LOL
>
> Thanks guys for your quick replies! I guess this one weekend per year
> opportunity might be shot. I'd like to think that I could at least
> learn something from this mini-project before my wife makes me take it
> down.
>
> Thanks,
> Kyle
> W4KDA
>
> Kyle wrote:
> >
> >
> > Hello guys. I am trying to do some activity on 6 meters before the
> > weekend is out, since this is a 6 meter contest weekend. Pressed for
> > time, I was trying to decide on a dipole, j-pole, moxon, or 1/4 wave
> > radial. While weighing the benefits, I thought, why not use a skywire,
> > and just scale it down? So that's what I did.
> >
> > Since in HF you can use multiple wavelengths, I chose to make mine out
> > of a 40' length of stranded wire 16 gauge wire. 40' makes the loop 2WL
> > long for 6 meters based on 1005/f. I used nylon rope to suspend nylon
> > spacers from wooden poles that hang the wire approximately 6' in the air
> > (4.5' is 1/4wl). The rectangular loop is about 10' outside my house, so
> > I just used a short piece of RG-58 to get from my rig to the loop. I
> > transitioned from the feedline to the loop by soldering the loop to a
> > SO-239 connector. My VSWR is 4:1 across the entire 6m band!
> >
> > I thought perhaps there were feedline radiation problems, so I wrapped 4
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> > the loop. Still 4:1 SWR.
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> > Just to rule out the feedline, I took my dummyload outside and connected
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> > dummyload.
> >
> > Any ideas on what might be messing me up? There are no metal objects
> > anywhere near the loop at all. I'm hoping there might be an easy fix or
> > that I made some stupid newbie mistake that can be fixed quickly/easily
> > so I can get on the air with this loop tomorrow. Any ideas/suggestions?
> >
> > Thanks,
> > Kyle
> > W4KDA
> >

> >
>
>

2138. Re: [SkyWires] SWR help needed on unconventional skywire

Yahoo group: SkyWires
Date: 2007-01-22 12:16:45 UTC
From: Kyle
Topic: 2132 Message: 2138

Thanks for the information to all involved. Albeit somewhat frustrating, it was a good learning experience. Even at 4:1 mismatch, the loop was absolutely outstanding at receiving on several bands. The 300 ohm twinlead 1/4 wave stub got the loop's SWR down to 1.7. I left it at 2wl all weekend before I took it down. At 1.7 I tried to work 6m, but the competition was done by then and the band had gone silent. So I called a friend (I am his Elmer believe it or not) 45 miles away, helped him build a dipole on the phone while I built one too. It was raining in Atlanta on Sunday, so my dipole was in my house and his was outside at about 8'. At about 70W from him, I could hear him with the 2wl loop, but not my dipole. At 100W from me, he could hear my dipole, but not my loop. :)

Based on advice from the forum, next time I'll try it higher up, with an odd harmonic. Will I need a matching stub then, and if so, how do I figure out it's length for myself? Is there a calculation for a matching stub, or was that suggestion based on experience?

Thanks for the info on the vertical loops. Are they directional? I know a cubical quad is, so I'm assuming a vertical loop is directional with a 0dB front/back ratio, much like a dipole.

73,
Kyle
W4KDA

icra@... wrote:
>> I thought perhaps there were feedline radiation problems, so I wrapped 4
>> turns about 4" in diameter to make a "balun" right at the feedpoint to
>> the loop. Still 4:1 SWR.
>>
> The 'coax balun' is not really a balun....it is just a choke to keep the RF off the coax...does
> not change the impedance or SWR at all...a 4:1 SWR will remain a 4:1 SWR unless it is
> due to RF on the coax.....
>
> I think the issue is more the 2wl loop......
>
> I have had lots of problems getting an 80mtr loop (1wl) to match on 40mtrs (2wl)....
>
> I know lots of guys have no problems at all, but I know I did and know several others that
> did...
>
> I would change the size of the loop....3wl if you can.....or even larger if able....
>

> I would also get it up higher.....it will work pretty good at 6 feet, but it will work much, much
> better for DX if you get it up at 15-20 feet.....or more if you can.....
>
> Mel
> N7OKL

2139. Again... Can a tuner be used at feedpoint?

Yahoo group: SkyWires
Date: 2007-01-23 11:49:13 UTC
From: kenwood_480sat
Topic: 2139 Message: 2139

Hello...

I noticed a post a ways back, that nobody bothered to answer. It is something that I have been wondering about myself, so I'll ask it again.

Can an automatic antenna tuner (such as the Array Solutions AS-200 tuner) be used at the feedpoint of a loop? I want to run a 50 ohm coax from the shack, approximately 50 feet (give or take a few feet) to the feedpoint of an 80 meter loop so that I can run the loop on more than one band, which is why I want to use a tuner at the FEEDPOINT instead of at the radio end. I want to avoid using twinlead if at all possible, for several reasons.

Will the tuner being at the FEEDPOINT (instead of at the radio) remove any possibiity of heat being generated along the coax, when tuned to bands other than the fundamental resonant frequency of the loop (80 meters)? As far as I know, it should, but at the same time, I also realize that there will be a loss of power between the coax and the antenna, via the tuner box.

If this would work, just how much power should I expect to lose because of the mismatch at 40, 20, and 10 meters, through the tuner? Basically, I guess I'm just trying to determine if I could still expect to have a decent usable amount of power on the bands other than 80 meters.

Any help with this is appreciated. Thanks...

2140. Re: Again... Can a tuner be used at feedpoint?

Yahoo group: SkyWires
Date: 2007-01-23 14:30:33 UTC
From: cbacba3
Topic: 2139 Message: 2140

Hi,

Some tuners are designed to be located at the antenna. I think these all come in outdoor rated enclosures. I do not know about the specific model you're referring to. Also, I don't know the tuning range over which any will operate. It might be necesssary to create a balun to bring the impedances into the range the tuner will work.

There is always frequency dependent loss in coax which will become heat, even if tuning is perfect. There will be some power loss in the tuner. However, things will work much better than no tuner and a tuner at the antenna should work a bit better than one in the shack. Compared to the complexity of an antenna that adjusts to the particular wavelength, there is probably not enough significant improvement to justify the added complexity over what is achievable with just the tuner.

Hopefully others can ellaborate more on your questions.

Charles
wb5izd

--- In SkyWires@yahoogroups.com, "kenwood_480sat" <djmaxx@...> wrote:
>
> Hello...
>
> I noticed a post a ways back, that nobody bothered to answer. It is something that I have been wondering about myself, so I'll ask it again.
>
> Can an automatic antenna tuner (such as the Array Solutions AS-200 tuner) be used at the feedpoint of a loop? I want to run a 50 ohm coax from the shack, approximately 50 feet (give or take a few feet) to the feedpoint of an 80 meter loop so that I can run the loop on more than one band, which is why I want to use a tuner at the FEEDPOINT instead of at the radio end. I want to avoid using twinlead if at all possible, for several reasons.
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> Will the tuner being at the FEEDPOINT (instead of at the radio) remove any possibiity of heat being generated along the coax, when tuned to bands other than the fundamental resonant frequency of the loop (80 meters)? As far as I know, it should, but at the same time, I also realize that there will be a loss of power between the coax and the antenna, via the tuner box.
>
> If this would work, just how much power should I expect to lose

because of the mismatch at 40, 20, and 10 meters, through the tuner? Basically, I guess I'm just trying to determine if I could still expect to have a decent usable amount of power on the bands other than 80 meters.
>
> Any help with this is appreciated. Thanks...
>

2141. Re:Again... Can a tuner be used at feedpoint?

Yahoo group: SkyWires
Date: 2007-01-23 14:41:27 UTC
From: Paul@N4LCD.com
Topic: 2139 Message: 2141

Excellent question and one that also interests me.

I am seriously considering a horizontal loop and
would like to put my SGC-230
http://www.sgcworld.com/230ProductPage.html
at the feed point of the loop.

This is an unbalanced tuner and is functionally
the same as the Icom AH-4 and many others.

Here's a ham using an AH-4 and he prefers
balanced horizontal loops to unbalanced
long wire antennas with the AH-4.
http://home.comcast.net/~hamlakemn/ah4/ah4.htm

An interesting comment on loops with the AH-4:
http://home.comcast.net/~hamlakemn/ah4/ah-4faq.htm
Q:
How do I connect the AH-4 with its single-ended output to a balanced antenna?
A:
You can use a balun, but make sure you use a type that can work with
a wide range of impedances. Some current mode baluns are really only
designed to work at a specified impedance, such as 50 ohms. Also note
that not all baluns work at 160 or 6 meters. You may be better off
building your own. You will note that my flat top does not use a
balun. I've been told that this won't work. My log book says
otherwise and I enjoy full coverage of the 160-6 meter bands with one
antenna! At some point in the future, I hope to provide construction
information for a balun that will work well with the AH-4 and
balanced antennas with a wide impedance range.

Does anyone have any experience doing this?

73,

Paul

2142. Re: [SkyWires] Re: Again... Can a tuner be used at feedpoint?

Yahoo group: SkyWires
Date: 2007-01-23 16:28:22 UTC
From: Harold Burton
Topic: 2139 Message: 2142

----- Original Message -----
From: "cbacba3" <charles@...>
To: <SkyWires@yahoogroups.com>
Sent: Tuesday, January 23, 2007 8:30 AM
Subject: [SkyWires] Re: Again... Can a tuner be used at feedpoint?

> Hi,
>
> Some tuners are designed to be located at the antenna. I think these
> all come in outdoor rated enclosures. I do not know about the
> specific model you're referring to. Also, I don't know the tuning
> range over which any will operate. It might be necesssary to create
> a balun to bring the impedances into the range the tuner will work.
> improvement to justify the added complexity over what is achievable
> with just the tuner.
>
>
>
>As I recall, there was a lot of discussion on this a year or so back. I
>think at that time the users were looking for weatherproof plastic
>boxes to put them in. That makes me think the auto tuners were not so
>weatherproof. Perhaps the newer models have improved. This is outside
>my personal experience, as I'm too cheap to purchase a remote auto
>tuner. (Not only frugal to the bone, being a Scot, but also poor, being
>a fixed income retiree.(G))

Harold
KD5SAK

2143. Re: [SkyWires] Again... Can a tuner be used at feedpoint?

Yahoo group: SkyWires
Date: 2007-01-23 16:49:53 UTC
From: erik@n0ew.org
Topic: 2139 Message: 2143

> I noticed a post a ways back, that nobody bothered to answer. It is
> something that I have been wondering about myself, so I'll ask it
> again.
>
> Can an automatic antenna tuner (such as the Array Solutions AS-200
> tuner) be used at the feedpoint of a loop? I want to run a 50 ohm
> coax from the shack, approximately 50 feet (give or take a few feet)
> to the feedpoint of an 80 meter loop so that I can run the loop on
> more than one band, which is why I want to use a tuner at the
> FEEDPOINT instead of at the radio end. I want to avoid using
> twinlead if at all possible, for several reasons.

I don't know anything about that particular ATU. I'd certainly contact the manufacturer and find out the range of impedance and voltage for which is it rated.

The upper and lower limits of both impedance and voltage will be needed to be known for any transmatch you use, and you should likewise get a theoretical pair of ranges for the loop itself.

Once you know what the max/min impedance (Z)/voltage (E) is for your loop, find transmatches that can operate beyond that range. If you cannont then you will either need not operate outside those ranges, or otherwise alter the Z and E to be within the transmatches range. Otherwise it may become damaged.

Other than the Z and E considerations, weatherproofing and mechanically supporting the transmatch at the loop feedpoint, and supporting the transmission line, are the remaining issues with placing the transmatch at the antenna feedpoint. This is true of any antenna, loop or otherwise.

> Will the tuner being at the FEEDPOINT (instead of at the radio)
> remove any possibiity of heat being generated along the coax, when
> tuned to bands other than the fundamental resonant frequency of the
> loop (80 meters)? As far as I know, it should, but at the same time,
> I also realize that there will be a loss of power between the coax
> and the antenna, via the tuner box.

Well, it depends upon the swr between the transmatch and the transceiver. Even with the best match there is some coax loss but provided you are usng a coax rated for the power you are transmitting at you should be fine so long as the swr on the coax is low; swr of 1.5 to one; maybe as much as 2:1.

You still need to be aware of the swr on the coax.

Just because the transmatch is at the feedpoint doesn't mean the swr is always 1:1 rather it depends upon the setting of the transmatch and how successful the impedance match was for each frequency.

The "Antenna Book" and other sources show losses when using a specific coax loss and at a given swr loss. You just cross the lines and you see the actual swr loss in the transmission line. In fact in the past few months there was a good QST article on the subject.

Using one of these tables and inserting your coax and expected (or measured once it is all up and running) you will be able to determine the actual loss in the coax, and from that calculate the power lost/heat generated.

> If this would work, just how much power should I expect to lose
> because of the mismatch at 40, 20, and 10 meters, through the tuner?

If the transmatch ("tuner") is well build losses will be quite low. Even using MFJ transmatches, which are not known to have the best materials, I measured some losses a few years ago and they were in agreement with other figures I've read others discovered. Usually less than 1 dB of loss. Much of the time quite lower. I have never measured a 2 dB loss through any of my transmatches, but to be fair I don't normally meansure their loss.

I'm sure there are programs out there to estimate such losses. It seems to me the newer "Antenna Book" volumes has a CD-ROM with such a program (I could be wrong about that - it is a dim memory, but I -think- is is correct).

> Basically, I guess I'm just trying to determine if I could still
> expect to have a decent usable amount of power on the bands other
> than 80 meters.

I would expect the answer to be yes. The further the Z and E range (both min/max) the more trouble you'l find, so there may be a number of frequency ranges for which you have some difficulty matching.

If so, investigate methods of altering the Z and E.

Altering transmission line length may be a problem in this case. The antenna is at the feed point and to do so you'd have to have loops of transmission line up there (coax I'd assume due to interactive issues) and a means of remotely switching each in/out of the circuit.

A balun of some type is a possibility. Select carefully. Too much power may cause damage. Also as you range farther from the designed frequency of the balun many become less and less efficient. It can be tricky designing a balun for very wide frequency ranges, and an all-band balun is certainly that. But it can be done. Here is one of the best discussions I've seen on the subject, but read the entire PDF:

http://audiosystemsgroup.com/RFI-Ham.pdf

Another consideration is your operating convenience. When you have troubles with your transmach (you will, it is a mechanical device after all) you will have to go up to the loop feed point to investigate (or bring the feed pooint to you). This, along with weatherproofing, are the main reasons most people I know use a transmatch at their operating position (of those that do so).

Neither location for a transmatch is right or wrong. It is a combination of the variables for your operating location and your preferences.

So the short answer is "yes" but there are caveat, as always.

73-Erik n0ew

2144. Re: [SkyWires] Re:Again... Can a tuner be used at feedpoint?

Yahoo group: SkyWires
Date: 2007-01-23 17:04:47 UTC
From: erik@n0ew.org
Topic: 2139 Message: 2144

> Q:
> How do I connect the AH-4 with its single-ended output to a balanced antenna?
> A:
> You can use a balun, but make sure you use a type that can work with
> a wide range of impedances. Some current mode baluns are really only
> designed to work at a specified impedance, such as 50 ohms. Also note
> that not all baluns work at 160 or 6 meters. You may be better off
> building your own. You will note that my flat top does not use a
> balun. I've been told that this won't work. My log book says
> otherwise and I enjoy full coverage of the 160-6 meter bands with one
> antenna! At some point in the future, I hope to provide construction
> information for a balun that will work well with the AH-4 and
> balanced antennas with a wide impedance range.

When I used a SGC-237 (which I gave up due to poor construction and poor tech support) it had a SO-239 as the output connector. The supporting plate upon which the entire thing was built served as the ground plane for the device, and therefore also as the shield/ground side of the feed point. With that unit you had a number of predrilled holes along the perimeter of the plate. And or all of these could be used for the 'other side' of the feed point.

When used on a loop you just connected one end to the SO-239 and the other to the plate. Alternately you could modify soimething to connect to the SO-239 and break-out that connection to two appropriate wire connections.

If you use a SGC every instruction booklet I've seen recommends placing a bucket over their weatherproof box. Then again, I just read one of their instruction manuals at the local OEM and it repeatedly stated a transmatch "must" be located at the antenna feed point. This is wrong. It is so obviously wrong most hams with less than one years experiece know it is wrong. I find it difficult to trust companies after they hold to such obviously wrong beliefs. Caveat emptor say I.

In any event, jerry-rigging a connection point for a loop antenna to an auto-tuner like the AH-4 or various SGC coupers ought not be very difficult. If nothing else mount a PL-259 in one end of a short piece of PVC (with a cap on each end, sealed, and painted black) and provide wing-nuts or nuts and bolts as terminals for your antenna wire on the other end.

Use a little wire as is reasonable, make sure they don't get shorted together, solder the connections, and make them mechanically strong (solder won't do that, it only provides electrical conduction, not physical strength). Any 'break out box' that does all that will be fine.

If you find you need a balun it too could be enclosed in your break out box. Or not. It is your choice.

73-Erik n0ew

2145. Re: [SkyWires] Again... Can a tuner be used at feedpoint?

Yahoo group: SkyWires
Date: 2007-01-23 17:07:18 UTC
From: Andy
Topic: 2139 Message: 2145

> Can an automatic antenna tuner (such as the Array Solutions AS-200 tuner)
> be used at the feedpoint of a loop?

Someone will correct me if I'm wrong ... but I think the two main characteristics of tuners meant to go outside at the feedpoint, are (a) weatherproofing, and (b) automatic with no human intervention required. You could take most any autotuner and put it in an appropriate box, if you want to save some $ and have the time.

Otherwise, there's no inherent electrical difference ... though some models might be better suited for tuning particular impedance ranges than others.

Antenna matching/'tuning' devices are always best put at the antenna; but for convenience sake many of them go indoors.

Andy

2146. Re: [SkyWires] Again... Can a tuner be used at feedpoint?

Yahoo group: SkyWires
Date: 2007-01-23 20:18:43 UTC
From: Frank
Topic: 2139 Message: 2146

Hi

I´ll give a short run of my setup.
Had the problem of bringing my 450Ohms feedline into the house and when I did I just couldn´`d get
rid of the RFI.
So I made an L-match in a plastic box (waterproof and located remote about 30 feet from the shack). From there coax to the shack.
Then a control box inside the shack with a microchip (picaxe) and a picaxe in the L-match. Between I use a RS232 line to talk to
each other.The control box have a switch giving command for each band to the L-match to go to predetermined taps on the inductor and
set the capacitor to the required capacitance.
The system is more like a remote antenna tuner for open-wire feedline.I have tried it up to 500W with no problems.
I am refining the system to RS-485 to avoid any disturbence on the system when transmitting. Also adding LCD display
in the control box to be able to read certain parameters.Maybe autotuning in the future.
The loop is a 80M loop up abt 50 feet feedline 450 Ohm open abt 20M long to the L-match/box works on all bands , best on the higher bands

I guess You could make it more simple by just having relay's switching for each band if You want to avoid microchip's

73
Frank

----- Original Message -----
From: kenwood_480sat
To: SkyWires@yahoogroups.com
Sent: Tuesday, January 23, 2007 12:49 PM
Subject: [SkyWires] Again... Can a tuner be used at feedpoint?

Hello...

I noticed a post a ways back, that nobody bothered to answer. It is something that I have been wondering about myself, so I'll ask it again.

Can an automatic antenna tuner (such as the Array Solutions AS-200 tuner) be used at the feedpoint of a loop? I want to run a 50 ohm coax from the shack, approximately 50 feet (give or take a few feet) to the feedpoint of an 80 meter loop so that I can run the loop on more than one band, which is why I want to use a tuner at the FEEDPOINT instead of at the radio end. I want to avoid using twinlead if at all possible, for several reasons.

Will the tuner being at the FEEDPOINT (instead of at the radio) remove any possibiity of heat being generated along the coax, when tuned to bands other than the fundamental resonant frequency of the loop (80 meters)? As far as I know, it should, but at the same

time, I also realize that there will be a loss of power between the coax and the antenna, via the tuner box.

If this would work, just how much power should I expect to lose because of the mismatch at 40, 20, and 10 meters, through the tuner? Basically, I guess I'm just trying to determine if I could still expect to have a decent usable amount of power on the bands other than 80 meters.

Any help with this is appreciated. Thanks...

2147. Re: [SkyWires] Again... Can a tuner be used at feedpoint?

Yahoo group: SkyWires
Date: 2007-01-23 21:24:39 UTC
From: erik@n0ew.org
Topic: 2139 Message: 2147

> Someone will correct me if I'm wrong ... but I think the two main
> characteristics of tuners meant to go outside at the feedpoint, are (a)
> weatherproofing, and (b) automatic with no human intervention required. You
> could take most any autotuner and put it in an appropriate box, if you want
> to save some $ and have the time.
>
> Otherwise, there's no inherent electrical difference ... though some models
> might be better suited for tuning particular impedance ranges than others.

I would generally agree with this point of view. I would add that you must also account for user control. Not all auto-tuners are 100% automatic, and some have optional settings, for example to lock a tuned setting. This can be a very nice feature, otherwise you sometimes find yourself in situations where a minor flutuation causes a re-tune to take place, which you from an operational stand point know isn't required.

Other times just the opposite takes place, and while you may have a tuning solution you wish to force a new tuning solution to be attempted.

Just remember the control wires for such things.

> Antenna matching/'tuning' devices are always best put at the antenna; but
> for convenience sake many of them go indoors.

Here the path begins to get rocky. I try not to make 100% statemtents as there are far too many exceptions.

I will certainly agree the strongest reason to bring the transmatch indoors at the transceiver is convenience. I will not agree the transmatch is always best placed at the antenna [feed point].

1) The two statements already are in opposition; They can't both be true.

2) You are assuming the antenna [feed point] is the best place for the tuner, I _assume_ due to transmission line loss considerations. There are many cases where such loses along the transmission line are so tiny as to not be significant. The ham on the other end of the skywave will never hear the difference and in many case we amateurs don't even have equipment accurate/precise enough to measure the loss.

Now I am biased. Lets get that out in the open.

I _like_ the transmatch sitting right on / beside my XCVR. If I am experiencing less than a 1- or 2-dB loss that is far too little power loss for me to go through the additional pain of having a transmatch out of sight. If you are going to place it far out of reach where it

requires ladders, good weather, and such concerns to fix it, or just remove the malfunctioning transmatch, I am not interested. Not even 0.00001% interested.

For me, a loss so small no one can hear, and many can't measure, does not come even close to making up for such concerns resulting from removing the transmatch from my operating position.

But others want that last 0.1-dB if they can get it and they don't care if that puts their transmatch 50-feet up a tower they can't themselves climb. Both points of view are OK and both are correct from their point of view.

As I say, beware 100% unchanging statements. There are usually multiple 'right' points of view.

73-Erik n0ew

2148. Re: Again... Can a tuner be used at feedpoint?

Yahoo group: SkyWires
Date: 2007-01-23 23:41:08 UTC
From: kenwood_480sat
Topic: 2139 Message: 2148

Hello again... Original poster here...

It seems I made a mistake regarding the actual unit that I was wondering about, the Array Solutions AS-200 tuner. It is not a tuner itself, but a 4:1 balun that is merely made to be used in unison with a tuner. It has an SO-239 for coaxial input from the radio end, and then two stubs for feeding the dipole, loop, vertical, whatever.

Can someone take a look at this unit, and tell me if it could be used in my specific situation?

I have a Kenwood TS-480SAT, which has the built in auto-tuner. Can I run about 50 feet (give or take) of 50 ohm coax from the output of my radio, to the Array Solutions AS-200T (which has an SO-239), and then attach the ends of the 80 meter loop to the two stubs on the AS-200T?

Would it be possible to use the 80 meter loop on multible bands using this baun and my radio's tuner?

Please take a look at the AS-200T and tell me what you think, before answering. It can be found at:

arraysolutions.com/products/baluns.htm

Here's the deal...

I am trying to put up an 80 meter loop that I can use on more than one band, BUT using my radio's existing built-in antenna tuner. Obviously, this presents a problem if I wanted to use twinlead AT the radio, since the tuner is not EXTERNAL, but INTERNAL.

So, would it be possible to take run a 50 foot (give or take) coax from the output of my radio, all the way to the feedpoint of the antenna, using one of these AS-200-tuner baluns AT the feedpoint of the loop?

Please follow the link I posted and take a look at the AS-200 line. The AS-200(T) says that it's designed to be used with dipoles, zepps, and verticals. Since it mentins dipoles, I figured why no a loop? Take a look at the construction and get back to me with your opinion.

arraysolutions.com/products/baluns.htm

2149. Re: [SkyWires] Re: Again... Can a tuner be used at feedpoint?

Yahoo group: SkyWires
Date: 2007-01-24 03:35:49 UTC
From: Erik Weaver
Topic: 2139 Message: 2149

>
>I have a Kenwood TS-480SAT, which has the built in auto-tuner. Can I run
>about 50 feet (give or take) of 50 ohm coax from the output of my radio,
>to the Array Solutions AS-200T (which has an SO-239), and then attach the
>ends of the 80 meter loop to the two stubs on the AS-200T?

Yes. Should likely be fine. So long as you are using low power to tune-up (does that Kenwood automatically drop power when you use the internal tuner?) I'd expect the worse case scenario is it just doesn't find a tuning solution. Hook it up and try it out. Keep a little cheap sheet as to mode and frequency.

>Would it be possible to use the 80 meter loop on multible bands using this
>baun and my radio's tuner?
>
>Please take a look at the AS-200T and tell me what you think, before
>answering. It can be found at:
>
>arraysolutions.com/products/baluns.htm

That balun is expecting a 200-Ohm load on the antenna side and reducing that to 50-Ohms on the XCVR side of the balun. In many places the loop will be quite far from that ideal 200-Ohms. On the other hand, depending upon the range of the internal tuner in the Kenwood, you should be able to match outside that ideal range. You will know how far after you try it.

Whatever the antenna's impedance is will be reduce by 1/4 going through the balun. As you get farther from that ideal impedance the balun will do this with less efficiency.

>Here's the deal...
>
>I am trying to put up an 80 meter loop that I can use on more than one
>band, BUT using my radio's existing built-in antenna tuner. Obviously,
>this presents a problem if I wanted to use twinlead AT the radio, since
>the tuner is not EXTERNAL, but INTERNAL.

Yes.

>So, would it be possible to take run a 50 foot (give or take) coax from
>the output of my radio, all the way to the feedpoint of the antenna, using
>one of these AS-200-tuner baluns AT the feedpoint of the loop?

Yes.

>Please follow the link I posted and take a look at the AS-200 line. The
>AS-200(T) says that it's designed to be used with dipoles, zepps, and

>verticals. Since it mentins dipoles, I figured why no a loop? Take a look
>at the construction and get back to me with your opinion.

I suspect you are correct. Fire it up Flo!

73-Erik n0ew

2150. Re: Again... Can a tuner be used at feedpoint?

Yahoo group: SkyWires
Date: 2007-01-24 05:50:48 UTC
From: w7tea
Topic: 2139 Message: 2150

--- In SkyWires@yahoogroups.com, "kenwood_480sat" <djmaxx@...> wrote:
>
> Hello again... Original poster here...

I use an 80m loop with a 4:1 current balun and 40 ft of coax to the shack. My internal tuner
matched all bands without problem although it struggled on 17m.

I'd go for it.

73, Gary W7TEA

2151. Re: [SkyWires] Again... Can a tuner be used at feedpoint?

Yahoo group: SkyWires
Date: 2007-01-24 18:04:51 UTC
From: Jim Dunstan
Topic: 2139 Message: 2151

At 11:49 AM 1/23/2007 +0000, you wrote:

>Hello...
>
>I noticed a post a ways back, that nobody bothered to answer. It is
>something that I have been wondering about myself, so I'll ask it again.
>
>Can an automatic antenna tuner (such as the Array Solutions AS-200 tuner)
>be used at the feedpoint of a loop? I want to run a 50 ohm coax from the
>shack, approximately 50 feet (give or take a few feet) to the feedpoint of
>an 80 meter loop so that I can run the loop on more than one band, which
>is why I want to use a tuner at the FEEDPOINT instead of at the radio end.
>I want to avoid using twinlead if at all possible, for several reasons.
>
>Will the tuner being at the FEEDPOINT (instead of at the radio) remove any
>possibiity of heat being generated along the coax, when tuned to bands
>other than the fundamental resonant frequency of the loop (80 meters)? As
>far as I know, it should, but at the same time, I also realize that there
>will be a loss of power between the coax and the antenna, via the tuner box.
>
>If this would work, just how much power should I expect to lose because of
>the mismatch at 40, 20, and 10 meters, through the tuner? Basically, I
>guess I'm just trying to determine if I could still expect to have a
>decent usable amount of power on the bands other than 80 meters.
>
>Any help with this is appreciated. Thanks...

The answer is yes. The strategy of placing an ATU at the feed point of an antenna is a fundamental one at SGC. You can check out their site for all kinds of information along these lines. Personally I have not used this approach since I have never owned an ATU. However I have fed different kinds of loops on multiple bands using an antenna tuner at the shack and feeding with open wire line. I can appreciate the convenience of feeding the antenna with coax.

The best loop I ever used was a 70' foot loop (20M) which I fed a number of different ways; coax, 70 ohm balanced line, and 300 ohm balanced line (with a tuner). This loop was vertically oriented (using bamboo spreaders) and mounted 30-40 ft in the air. It was a dynamite antenna on 20M ..... and worked equally well when fed the different ways as mentioned. However, I did notice that it also worked surprisingly well on other frequencies when fed with 300 ohm balanced line with antenna tuner. It worked on 40M as well as higher frequencies.

I notice that SGC markets what they call a 'Stealth Antenna' which is an 80' loop (just a bit longer than a 20M resonant loop) and feed it with an

ATU mounted at the loop. I think 80' is significant .... in that it is not resonant at any Amateur frequency. They claim it will work effectively 80-10M .... depending how high you can put it. Given my experience with a 70' loop I believe the claim. I know for certain that such an antenna will run rings around portable 'screwdriver type verticals' on all bands.

Jim

2152. Using coax for loop wire

Yahoo group: SkyWires
Date: 2007-01-24 20:51:58 UTC
From: Mike
Topic: 2152 Message: 2152

Hi,

I've read that some have used coax instead of wire to makeup the loop antenna. I may have some rg/58 left over and was considering using to make a loop. Should I tie the shield and center together or just use the shield?

Tnx,

Mike

2153. Re: [SkyWires] Using coax for loop wire

Yahoo group: SkyWires
Date: 2007-01-24 21:41:51 UTC
From: Myamiphil
Topic: 2152 Message: 2153

its doable.... I was just reading about nmaking a
ground antenna made up from coiled rg-59.. A big flat
coil buried in the ground.

For what your thinking Id think you would have to
sever the shield somewhere to allow for an air gap
into the core.

http://www.hard-core-dx.com/nordicdx/antenna/loop/index.html

Phil

--- Mike <ion_op@...> wrote:

> Hi,
>
> I've read that some have used coax instead of wire
> to makeup the loop
> antenna. I may have some rg/58 left over and was
> considering using to
> make a loop. Should I tie the shield and center
> together or just use
> the shield?
>
> Tnx,
>
> Mike
>
>

The fish are biting.
Get more visitors on your site using Yahoo! Search Marketing.
http://searchmarketing.yahoo.com/arp/sponsoredsearch_v2.php

2154. Re: [SkyWires] Using coax for loop wire

Yahoo group: SkyWires
Date: 2007-01-24 22:37:04 UTC
From: chasm@texas.net
Topic: 2152 Message: 2154

On Wed, 24 Jan 2007 20:51:58 -0000, "Mike" <ion_op@...> wrote:
>I've read that some have used coax instead of wire to makeup the loop
>antenna. I may have some rg/58 left over and was considering using to
>make a loop. Should I tie the shield and center together or just use
>the shield?

google bazooka antennas

73/chas
--
K5DAM Houston EL29fu AAR6TU
http://tinyurl.com/df55x (BPL Presentation)
Happy New Year!

2155. Re: [SkyWires] Using coax for loop wire

Yahoo group: SkyWires
Date: 2007-01-24 23:08:40 UTC
From: Sarge
Topic: 2152 Message: 2155

Yes, I can see coax for a double bazooka but to use coax for a big loop
seems like a huge waste.

> On Wed, 24 Jan 2007 20:51:58 -0000, "Mike" <ion_op@...> wrote:
>>I've read that some have used coax instead of wire to makeup the loop
>>antenna. I may have some rg/58 left over and was considering using to
>>make a loop. Should I tie the shield and center together or just use
>>the shield?
>
> google bazooka antennas
>
> 73/chas
> --
> K5DAM Houston EL29fu AAR6TU
> http://tinyurl.com/df55x (BPL Presentation)
> Happy New Year!
>
>
>
> Yahoo! Groups Links
>
>
>
>
>
>
> --
> No virus found in this incoming message.
> Checked by AVG Free Edition.
> Version: 7.5.432 / Virus Database: 268.17.8/649 - Release Date: 1/23/2007
> 8:40 PM
>
>

2156. Re: [SkyWires] Using coax for loop wire

Yahoo group: SkyWires
Date: 2007-01-24 21:38:21 UTC
From: W1GOR
Topic: 2152 Message: 2156

Mike,

It seems to be a helluva way to waste all of that coax, but, it's yours to do whatever... Just use the shield and leave the center conductor alone...

The effect will be the same as solid copper of the same diameter as the coax shield (not the jacket)... I use # 12 COPPERWELD for the iron core strength... A 160 meter loop is more than 500 feet long... That's a lot of RG58...<big grin>

73, Larry - W1GOR

----- Original Message -----
From: Mike
To: SkyWires@yahoogroups.com
Sent: Wednesday, January 24, 2007 3:51 PM
Subject: [SkyWires] Using coax for loop wire

Hi,

I've read that some have used coax instead of wire to makeup the loop antenna. I may have some rg/58 left over and was considering using to make a loop. Should I tie the shield and center together or just use the shield?

Tnx,

Mike

2157. Re: [SkyWires] Using coax for loop wire

Yahoo group: SkyWires
Date: 2007-01-25 00:35:48 UTC
From: Dave Marling
Topic: 2152 Message: 2157

Sarge wrote:
>
>
> Yes, I can see coax for a double bazooka but to use coax for a big loop
> seems like a huge waste.

And a lot of weight!

2158. Re: [SkyWires] Using coax for loop wire

Yahoo group: SkyWires
Date: 2007-01-25 05:42:16 UTC
From: chasm@texas.net
Topic: 2152 Message: 2158

On Wed, 24 Jan 2007 17:08:40 -0600, "Sarge" <sarge@...> wrote:

>Yes, I can see coax for a double bazooka but to use coax for a big loop
>seems like a huge waste.

no kidding!!! but, it _could_ be done!!

73/chas
--
K5DAM Houston EL29fu AAR6TU
http://tinyurl.com/df55x (BPL Presentation)
Happy New Year!

2159. Shorting the feedline for 160m Operation

Yahoo group: SkyWires
Date: 2007-01-25 15:25:14 UTC
From: Marty Bluhm
Topic: 2159 Message: 2159

Good Morning,
I need some help. I've been looking a way to short the 450 ladder line from my loop into the SGC239 for 160m operation. (Want to play in the contest this weekend). I dont want to permanently ruin the ladder line. How does I do this?

Thanks
73
Marty
W8AKS

2160. Re: Using coax for loop wire

Yahoo group: SkyWires
Date: 2007-01-25 16:13:27 UTC
From: Mike
Topic: 2152 Message: 2160

I have a couple of spools of rg58 that used to be used for Thin
Ethernet which no one uses anymore. No cost to me. I may have to
splice the two together to get 160m 2wl length.

Mike

--- In SkyWires@yahoogroups.com, "Sarge" <sarge@...> wrote:
>
> Yes, I can see coax for a double bazooka but to use coax for a big loop
> seems like a huge waste.
>
>
> > On Wed, 24 Jan 2007 20:51:58 -0000, "Mike" <ion_op@...> wrote:
> >>I've read that some have used coax instead of wire to makeup the loop
> >>antenna. I may have some rg/58 left over and was considering using to
> >>make a loop. Should I tie the shield and center together or just use
> >>the shield?
> >
> > google bazooka antennas
> >
> > 73/chas
> > --
> > K5DAM Houston EL29fu AAR6TU
> > http://tinyurl.com/df55x (BPL Presentation)
> > Happy New Year!
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> > Yahoo! Groups Links
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> > --
> > No virus found in this incoming message.
> > Checked by AVG Free Edition.
> > Version: 7.5.432 / Virus Database: 268.17.8/649 - Release Date:
1/23/2007
> > 8:40 PM
> >
> >
>

2161. Re: [SkyWires] Using coax for loop wire

Yahoo group: SkyWires
Date: 2007-01-25 17:31:06 UTC
From: Andy
Topic: 2152 Message: 2161

There are different ways to use coax to make a loop.

(1) You could treat it as one fat wire (just the shield) and make it into a loop. The center conductor could be shorted to the shield too but it's not doing much used this way. I guess the advantage of coax is that it is like a very fat wire.

(2) You can make a "shielded loop" by connecting your balanced feed to only the center conductors on both ends of the loop, and then ground the shield, but you need to NOT make the shield into a complete loop but keep it open at one place, so that it doesn't make a faraday shield. These shielded loops are often used as small receiving antennas, with good directionality and noise rejection capability. Some say the principle is to shield the electric field and respond only to the magnetic field, but I've also read that isn't really how they work.

The above are two very different ways of doing it and I expect they behave quite differently.

Andy

2162. Re: [SkyWires] Using coax for loop wire

Yahoo group: SkyWires
Date: 2007-01-25 18:42:03 UTC
From: Donald Sanders
Topic: 2152 Message: 2162

You can also make your loop by first making a Bazooka antenna and adding a half wave of wire to complete the loop. This gives a broader bandwidth and the loops lower noise.

Healthfully yours,
Don W4BWS
----- Original Message -----
From: chasm@...
To: SkyWires@yahoogroups.com
Sent: Wednesday, January 24, 2007 4:37 PM
Subject: Re: [SkyWires] Using coax for loop wire

On Wed, 24 Jan 2007 20:51:58 -0000, "Mike" <ion_op@...> wrote:
>I've read that some have used coax instead of wire to makeup the loop
>antenna. I may have some rg/58 left over and was considering using to
>make a loop. Should I tie the shield and center together or just use
>the shield?

google bazooka antennas

73/chas
--
K5DAM Houston EL29fu AAR6TU
http://tinyurl.com/df55x (BPL Presentation)
Happy New Year!

2163. Re: [SkyWires] Using coax for loop wire

Yahoo group: SkyWires
Date: 2007-01-26 02:48:44 UTC
From: NØATH
Topic: 2152 Message: 2163

Now there is an interesting concept - I think
I may have to try this - Thanks Don, NØATH
----- Original Message -----
From: Donald Sanders
To: SkyWires@yahoogroups.com
Sent: Thursday, January 25, 2007 12:42 PM
Subject: Re: [SkyWires] Using coax for loop wire

You can also make your loop by first making a Bazooka antenna and adding a half wave of wire to complete the loop. This gives a broader bandwidth and the loops lower noise.

Healthfully yours,
Don W4BWS
----- Original Message -----
From: chasm@...
To: SkyWires@yahoogroups.com
Sent: Wednesday, January 24, 2007 4:37 PM
Subject: Re: [SkyWires] Using coax for loop wire

On Wed, 24 Jan 2007 20:51:58 -0000, "Mike" <ion_op@...> wrote:
>I've read that some have used coax instead of wire to makeup the loop
>antenna. I may have some rg/58 left over and was considering using to
>make a loop. Should I tie the shield and center together or just use
>the shield?

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73/chas
--
K5DAM Houston EL29fu AAR6TU
http://tinyurl.com/df55x (BPL Presentation)
Happy New Year!

2164. Re: [SkyWires] Using coax for loop wire

Yahoo group: SkyWires
Date: 2007-01-26 03:13:55 UTC
From: icra@galaxynet.com
Topic: 2152 Message: 2164

> You can also make your loop by first making a Bazooka antenna and adding a half wave of wire to complete the loop. This gives a broader bandwidth and the loops lower noise.
>
But doesn't that basically make it useable on just one band?

Mel
N7OKL

2165. Re: [SkyWires] Using coax for loop wire

Yahoo group: SkyWires
Date: 2007-01-26 02:42:49 UTC
From: Sarge
Topic: 2152 Message: 2165

Really?? Now that's interesting!

You can also make your loop by first making a Bazooka antenna and adding a half wave of wire to complete the loop. This gives a broader bandwidth and the loops lower noise.

Healthfully yours,
Don W4BWS
----- Original Message -----
From: chasm@...
To: SkyWires@yahoogroups.com
Sent: Wednesday, January 24, 2007 4:37 PM
Subject: Re: [SkyWires] Using coax for loop wire

On Wed, 24 Jan 2007 20:51:58 -0000, "Mike" <ion_op@yahoo.com> wrote:
>I've read that some have used coax instead of wire to makeup the loop
>antenna. I may have some rg/58 left over and was considering using to
>make a loop. Should I tie the shield and center together or just use
>the shield?

google bazooka antennas

73/chas
--
K5DAM Houston EL29fu AAR6TU
http://tinyurl.com/df55x (BPL Presentation)
Happy New Year!

No virus found in this incoming message.
Checked by AVG Free Edition.
Version: 7.5.432 / Virus Database: 268.17.10/651 - Release Date: 1/24/2007 6:48 PM

2166. Re: [SkyWires] Using coax for loop wire

Yahoo group: SkyWires
Date: 2007-01-26 05:06:11 UTC
From: Donald Sanders
Topic: 2152 Message: 2166

Yes , but that is what you have with any loop and coax feed.
You can use a tuner and get other bands probably. I haven't
tried it as I use my loop dedicated just for 40 meters CW and AM.

Healthfully yours,
Don W4BWS
----- Original Message -----
From: icra@galaxynet.com
To: SkyWires@yahoogroups.com
Sent: Thursday, January 25, 2007 9:13 PM
Subject: Re: [SkyWires] Using coax for loop wire

> You can also make your loop by first making a Bazooka antenna and adding a half wave of wire to complete the loop. This gives a broader bandwidth and the loops lower noise.
>
But doesn't that basically make it useable on just one band?

Mel
N7OKL

2167. RE: [SkyWires] Using coax for loop wire

Yahoo group: SkyWires
Date: 2007-01-26 08:20:35 UTC
From: AD5VJ Bob
Topic: 2152 Message: 2167

I already have a home made 80 Meter Double Bazooka in an inverted V configuration and it works quiet well as it is with 200W. Thirty
feet at the apex, 20 feet at each end.

Where do you feed the bazooka once you make the half wave to complete the loop.

It is being fed at the center of the apex right now.

73 fer nw es gud DX,
QSL VIA: BUR, LotW, e-QSL
Bob AD5VJ
Old calls: WY5L/KH3-KE5CTY-N5IET
http://www.ad5vj.com/

Member: CTDXCC, NTCC, STXDXCC
FISTS: # 12637, SKCC# 2369
10X# 37210, FP#-1141
SMIRK#-5177, RARS #-149

From: SkyWires@yahoogroups.com [mailto:SkyWires@yahoogroups.com] On Behalf Of Sarge
Sent: Thursday, January 25, 2007 8:43 PM
To: SkyWires@yahoogroups.com
Subject: Re: [SkyWires] Using coax for loop wire

Really?? Now that's interesting!

You can also make your loop by first making a Bazooka antenna and adding a half wave of wire to complete the loop. This gives a
broader bandwidth and the loops lower noise.

Healthfully yours,
Don W4BWS

----- Original Message -----
From: chasm@...
To: SkyWires@yahoogroups.com
Sent: Wednesday, January 24, 2007 4:37 PM
Subject: Re: [SkyWires] Using coax for loop wire

On Wed, 24 Jan 2007 20:51:58 -0000, "Mike" <ion_op@yahoo. <mailto:ion_op@...> com> wrote:
>I've read that some have used coax instead of wire to makeup the loop
>antenna. I may have some rg/58 left over and was considering using to
>make a loop. Should I tie the shield and center together or just use
>the shield?

google bazooka antennas

73/chas
--
K5DAM Houston EL29fu AAR6TU
http://tinyurl. <http://tinyurl.com/df55x> com/df55x (BPL Presentation)
Happy New Year!

No virus found in this incoming message.
Checked by AVG Free Edition.
Version: 7.5.432 / Virus Database: 268.17.10/651 - Release Date: 1/24/2007 6:48 PM

2168. multi ladder line switch ?

Yahoo group: SkyWires
Date: 2007-01-26 07:14:00 UTC
From: Mike
Topic: 2168 Message: 2168

Is there such a beast that allows switching from one antenna fed with 600 ohm ladder line to another antenna also fed with 600 ohm ladder line? I would like to be able to switch between the loop and a 160M dipole without having to un-attach / attach feed line from the tuner.

2169. Re: multi ladder line switch ?

Yahoo group: SkyWires
Date: 2007-01-26 15:24:09 UTC
From: Mike
Topic: 2168 Message: 2169

The only switch I could find is the MFJ-1706 at $100 OUCH! Would a DPDT knife switch work? Would two DPST swithches spaced 4" apart(Same spacing as my feedline) be better?

2170. 2-turn loop

Yahoo group: SkyWires
Date: 2007-01-27 02:40:13 UTC
From: icra@galaxynet.com
Topic: 2170 Message: 2170

Recall questions being asked about a 2-turn loop...

Can not recall if it was on this list or another, but know it did not get a good answer because
I had the same questions.......

Well, here is the answer......

In the Feb issue of World Radio is an article by Thomas Kocourek, N4FWD on the Zipcord Loop.

He came up with the empirical formula 887/frequency in Mhz=length in feet.

He does suggest cutting it a little longer for cut and try final tuning.

Mark the 'A' wire and the 'B' wire...put it up as you would a normal loop and connect one end
of wire A to the opposite end of wire B to form a 2-turn loop.

Put it up as a vertical loop or horizontal loop.

He does state it can be used asa multi-band antenna with a tuner and gives a table of data on freq, SWR, R, and X.

He does not give comparisions to other antennas, but does seem to suggest it would give a 3db gain over a single turn loop....

Mel
N7OKL

2171. Re: [SkyWires] Re: multi ladder line switch ?

Yahoo group: SkyWires
Date: 2007-01-26 17:57:31 UTC
From: erik@n0ew.org
Topic: 2168 Message: 2171

> The only switch I could find is the MFJ-1706 at $100 OUCH! Would a DPDT
> knife switch work? Would two DPST swithches spaced 4" apart(Same
> spacing as my feedline) be better?

This is a question I've asked off and on of various people for years.
The basic reply I get is two-fold....

On the one hand any 'breakout boxes' or 'switches' we are going to use
on HF are so small when compared to a full wavelength that the tiny
fraction of discontinueity our homebrew item constitues will not
result in an appreciable impedance bump.

One way to test this should be just as with a balun. Send a low power
RF signal through it (into a dummy load) and measure the swr and/or
impedance coming out of the unknown device. Obviously, if the
transmitted signal is ~50-ohms, as is the dummy load, and the swr
remains very close to 1:1, then the device under test is not creating
any significant impedance bump (test at a range of frequencies for
which you plan to use the device).

The second point is RFI may occur. This is more likely in an
unbalanced situation. It may be the metal shielding around the
enclosure needs to provide better RF isolation. (Or to be present at
all, if the breakout/switch was built in plastic or open-air.)

In the first case, that of the balanced transmission line, the
currents are equal-and-opposite so naturally they don't radiate much
at all.

In the second case, and only if RFI is a problem, do you need to take
a close look at shielding (unbalanced situations).

None of which answers your question directly! Hehehe....

I personally think you'll be fine.

If you have a small flourescent bulb around you could test it. I've
heard (but not tried) using the small replacement bulbs for the 12-v
rechargeable Coleman latern-look-a-likes. Run the bulb along the
length of the balanced line and see if there is a significant change
at your knife switches.

Some others may be able to expand on this, as I've only read about it
and never actually done it myself.

Let us know what you find out!
73-Erik n0ew

2172. Re: [SkyWires] multi ladder line switch ?

Yahoo group: SkyWires
Date: 2007-01-26 13:25:00 UTC
From: Dan KB6NU
Topic: 2168 Message: 2172

Take a look at this:

http://www.universal-radio.com/catalog/switch/1432.html

73!

Dan KB6NU

CW Geek and MI Affiliated Club Coordinator
Read my ham radio blog at www.kb6nu.com
LET'S GET MORE KIDS INTO HAM RADIO!

On Jan 26, 2007, at 2:14 AM, Mike wrote:
> Is there such a beast that allows switching from one antenna fed with
> 600 ohm ladder line to another antenna also fed with 600 ohm ladder
> line? I would like to be able to switch between the loop and a 160M
> dipole without having to un-attach / attach feed line from the tuner.

2173. Re: [SkyWires] multi ladder line switch ?

Yahoo group: SkyWires
Date: 2007-01-28 15:37:31 UTC
From: Kyle
Topic: 2168 Message: 2173

Only good for 15 Watts RMS (AVG).

-Kyle

Dan KB6NU wrote:
>
>
> Take a look at this:
>
> http://www.universal-radio.com/catalog/switch/1432.html
> <http://www.universal-radio.com/catalog/switch/1432.html>
>
> 73!

2174. Re: [SkyWires] multi ladder line switch ?

Yahoo group: SkyWires
Date: 2007-01-28 16:00:00 UTC
From: Robert Ower
Topic: 2168 Message: 2174

Dan KB6NU wrote:

>Take a look at this:
>
> http://www.universal-radio.com/catalog/switch/1432.html
>
That looks exactly like what we were using in 1952 when we were feeding
a dipole with tv leadin and switching between the homebrew qrp xmtr and
the Hallicrafters S38. Not much more money either. I would think that
would work nicely for switching between antennas.
73
--

Bob Ower
Humboldt, AZ

Leather Craftsman
Member: International Internet Leathercrafters Guild <http://iilg.org/>

Amateur Radio Operator: WA7YUL WA7YUL Home Page
<http://geocities.com/rcowerpc/>
Life Member: ARRL ARRL <http://arrl.org/>
Member: Yavapai Amateur Radio Club YARC <www.w7yrc.org>
Member: Quarter Century Wireless Association
Member: FISTS 11282

Member: MARAC

Member: YLISSB Inc.
QSL via ARRL's LOTW or eQSL.cc

2175. Re: [SkyWires] multi ladder line switch ?

Yahoo group: SkyWires
Date: 2007-01-28 16:17:30 UTC
From: Robert Ower
Topic: 2168 Message: 2175

Kyle wrote:

> Only good for 15 Watts RMS (AVG).

Well, that explains why we could use it back then. The homebrew was only about 5 w. I did notice that they're still selling the same brand that we used back then.
-

Bob Ower
Humboldt, AZ

Leather Craftsman
Member: International Internet Leathercrafters Guild <http://iilg.org/>

Amateur Radio Operator: WA7YUL WA7YUL Home Page
<http://geocities.com/rcowerpc/>
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Member: YLISSB Inc.
QSL via ARRL's LOTW or eQSL.cc

2176. Re: [SkyWires] multi ladder line switch ?

Yahoo group: SkyWires
Date: 2007-01-28 18:48:29 UTC
From: Dr.Ace Ratliff
Topic: 2168 Message: 2176

I think Lowe's sells these DPDT switches.
Ace - WH2T

----- Original Message -----
From: Dan KB6NU
To: SkyWires@yahoogroups.com
Sent: Friday, January 26, 2007 8:25 AM
Subject: Re: [SkyWires] multi ladder line switch ?

Take a look at this:

http://www.universal-radio.com/catalog/switch/1432.html

73!

Dan KB6NU

CW Geek and MI Affiliated Club Coordinator
Read my ham radio blog at www.kb6nu.com
LET'S GET MORE KIDS INTO HAM RADIO!

On Jan 26, 2007, at 2:14 AM, Mike wrote:
> Is there such a beast that allows switching from one antenna fed with
> 600 ohm ladder line to another antenna also fed with 600 ohm ladder
> line? I would like to be able to switch between the loop and a 160M
> dipole without having to un-attach / attach feed line from the tuner.
–’–·–––

.

2177. Re: [SkyWires] multi ladder line switch ?

Yahoo group: SkyWires
Date: 2007-01-26 15:42:46 UTC
From: Robert Ower
Topic: 2168 Message: 2177

Mike wrote:

>Is there such a beast that allows switching from one antenna fed with
>600 ohm ladder line to another antenna also fed with 600 ohm ladder
>line? I would like to be able to switch between the loop and a 160M
>dipole without having to un-attach / attach feed line from the tuner.
>
A dpdt knife switch would work.

--

Bob Ower
Humboldt, AZ

Leather Craftsman
Member: International Internet Leathercrafters Guild <http://iilg.org/>

Amateur Radio Operator: WA7YUL WA7YUL Home Page
<http://geocities.com/rcowerpc/>
Life Member: ARRL ARRL <http://arrl.org/>
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Member: Quarter Century Wireless Association
Member: FISTS 11282

Member: MARAC

Member: YLISSB Inc.
QSL via ARRL's LOTW or eQSL.cc

2178. Re: [SkyWires] multi ladder line switch ?

Yahoo group: SkyWires
Date: 2007-01-26 17:04:20 UTC
From: Dr.Ace Ratliff
Topic: 2168 Message: 2178

Get a double pole double throw "DPDT" knife switch . Connect the tuner to the center connections.
Ace - WH2T

----- Original Message -----
From: Mike
To: SkyWires@yahoogroups.com
Sent: Friday, January 26, 2007 2:14 AM
Subject: [SkyWires] multi ladder line switch ?

Is there such a beast that allows switching from one antenna fed with 600 ohm ladder line to another antenna also fed with 600 ohm ladder line? I would like to be able to switch between the loop and a 160M dipole without having to un-attach / attach feed line from the tuner.

2179. Re: [SkyWires] Using coax for loop wire

Yahoo group: SkyWires
Date: 2007-01-26 17:24:47 UTC
From: Donald Sanders
Topic: 2152 Message: 2179

You feed the antenna just the same as you would with out completing the loop. You may have to adjust the feedline length to see 50 ohms if you don't use a tuner. Personally I like my 80 meter loop best with the 450 ohm ladder line fees and the Johnson matchbox for all band operation. At 60 feet it does great. I am planning to make the vertical antenna in the new QST and feed it with my SGC auto tuner. It should operate 160 thru 15 meters. I have a vertical for 12 and 10.

Healthfully yours,
Don W4BWS
----- Original Message -----
From: AD5VJ Bob
To: SkyWires@yahoogroups.com
Sent: Friday, January 26, 2007 2:20 AM
Subject: RE: [SkyWires] Using coax for loop wire

I already have a home made 80 Meter Double Bazooka in an inverted V configuration and it works quiet well as it is with 200W. Thirty feet at the apex, 20 feet at each end.

Where do you feed the bazooka once you make the half wave to complete the loop.

It is being fed at the center of the apex right now.

73 fer nw es gud DX,
QSL VIA: BUR, LotW, e-QSL
Bob AD5VJ
Old calls: WY5L/KH3-KE5CTY-N5IET
http://www.ad5vj.com/

Member: CTDXCC, NTCC, STXDXCC
FISTS: # 12637, SKCC# 2369
10X# 37210, FP#-1141
SMIRK#-5177, RARS #-149

From: SkyWires@yahoogroups.com [mailto:SkyWires@yahoogroups.com] On Behalf Of Sarge
Sent: Thursday, January 25, 2007 8:43 PM
To: SkyWires@yahoogroups.com
Subject: Re: [SkyWires] Using coax for loop wire

Really?? Now that's interesting!

You can also make your loop by first making a Bazooka antenna and adding a half wave of wire to complete the loop. This gives a broader bandwidth and the loops lower noise.

Healthfully yours,
Don W4BWS
----- Original Message -----

From: chasm@...
To: SkyWires@yahoogroups.com
Sent: Wednesday, January 24, 2007 4:37 PM
Subject: Re: [SkyWires] Using coax for loop wire

On Wed, 24 Jan 2007 20:51:58 -0000, "Mike" <ion_op@...> wrote:
>I've read that some have used coax instead of wire to makeup the loop
>antenna. I may have some rg/58 left over and was considering using to
>make a loop. Should I tie the shield and center together or just use
>the shield?

google bazooka antennas

73/chas
--
K5DAM Houston EL29fu AAR6TU
http://tinyurl.com/df55x (BPL Presentation)
Happy New Year!

No virus found in this incoming message.
Checked by AVG Free Edition.
Version: 7.5.432 / Virus Database: 268.17.10/651 - Release Date: 1/24/2007 6:48 PM

2180. Re: [SkyWires] multi ladder line switch ?

Yahoo group: SkyWires
Date: 2007-01-29 08:35:19 UTC
From: Jim Dunstan
Topic: 2168 Message: 2180

At 07:14 AM 1/26/2007 +0000, you wrote:

>Is there such a beast that allows switching from one antenna fed with
>600 ohm ladder line to another antenna also fed with 600 ohm ladder
>line? I would like to be able to switch between the loop and a 160M
>dipole without having to un-attach / attach feed line from the tuner.

I use a double pole double throw knife switch.

Jim

2181. Re: [SkyWires] Re: multi ladder line switch ?

Yahoo group: SkyWires
Date: 2007-01-29 08:51:07 UTC
From: Jim Dunstan
Topic: 2168 Message: 2181

At 03:24 PM 1/26/2007 +0000, you wrote:

>The only switch I could find is the MFJ-1706 at $100 OUCH! Would a DPDT
>knife switch work? Would two DPST swithches spaced 4" apart(Same
>spacing as my feedline) be better?

The standard knife switch available as 'Philmore' .... also sold by RadioShack .... will easily handle 200 watts and perhaps more. If you are running QRO .... eg a KW .... I would look for something more robust.

Another trick ..... which I have used is to use KW Ezee match which is a balanced antenna tuner (link coupling) with two active connectors .... one connector for antennas in the 80-40M range and the other in the 20-10 M range ....

Jim

2183. Re: [SkyWires] multi ladder line switch ?

Yahoo group: SkyWires
Date: 2007-01-29 18:09:01 UTC
From: Andy
Topic: 2168 Message: 2183

> Only good for 15 Watts RMS (AVG).

Actually, not even that much!

Assuming that the antenna and ladder line impedance really is 600 ohms
(that the SWR is low):

0.3 amps allows up to 54 Watts. BUT ...

50 VAC allows only 4.17 Watts.

Run 5 watts into a 600 ohm transmission line, and the voltage exceeds the 50
V rms voltage rating of the switch. At 15 watts, it's up to 95 V rms.

Make the impedance less than 600 ohms and you can approach as much as
15 Watts with this switch (when Z = 167 ohms). The impedance that matters
is the actual impedance where the switch is, not the antenna impedance alone
nor the ladder line design (or surge or characteristic) impedance.

Now on the other hand, it might not be so horrible to exceed the switch
manufacturer's ratings. The ratings might be based on throwing the switch
while voltage is present and current is flowing, which you won't be doing
(right??). Anyway, if it smokes, you're only out $4.

I'll bet the older knife switches were ceramic and could handle a lot more
than 50 V without chance of damage.

Another option, not as clean and elegant, is to use banana plugs.

Andy

2184. Re: multi ladder line switch ?

Yahoo group: SkyWires
Date: 2007-01-29 19:00:15 UTC
From: Mike
Topic: 2168 Message: 2184

Hmmmm, good point. Especially if you consider it's OK for 1500w to run through the little 16ga wire and the wire is much smaller than the material in the switch.73 , Mike

>
>
>
>
>
> Now on the other hand, it might not be so horrible to exceed the switch manufacturer's ratings. The ratings might be based on throwing the switch while voltage is present and current is flowing, which you won't be doing(right??). Anyway, if it smokes, you're only out $4.

Andy

2186. How to get a line over the top of tall trees to secure antenna

Yahoo group: SkyWires
Date: 2007-01-30 15:53:29 UTC
From: k5fsp
Topic: 2186 Message: 2186

I an new to this group, and this is my first posting... I just installed my first loop antenna, and I'm really pleased with the results so far.

I've been faced with the problem of how to use the 60'- 70' tall pine trees around my home to secure an antenna. I'm 63 years young, and my tree climbing days are over. Someone may have posted such a solution as the following, but I've never seen it.

I was reading in some publication about how to construct a spud/potato gun or cannon. I decided I may be able to use such a device to get a nylon string over the pine trees. In the past, I've used the sling shot/spinning reel device, and various other methods with very limited success. I built the spud gun using a piece of 2" and 4" schedule 40 pvc pipe. You can find a ton to plans by choosing your favorite search engine and searching for spud or potato gun.

I built the cannon, and cut a short length of 2" pvc to use as a jig to pre-cut the potato to size. I then cut a square piece of cheese cloth, placed the pre-cut potato on the cloth and folded the four corners up and tied the nylon string to it. Make sure you secure the other end on the line to the bucket, as I learned the hard way when the first shot took all of my line. I had already spooled off the proper length into a bucket in a figure 8 so it would not tangle. I put the potato wrapped in the cheese cloth into the barrel of the spud gun and pushed it to the proper depth with a dowel ramrod. I charged the spud gun with Brute aerosol deodorant. I stood at a 45 degree angle to the top of the tree and fired the cannon. It completely cleared the top of the 70" tree, and came down on the other side. I was able to pull up the 1/4" nylon rope without a problem.

The total investment was about $40.00. I will share my construction details if someone is interested.

73,
Phil, K5FSP

2187. Re: [SkyWires] How to get a line over the top of tall trees to secure antenna

Yahoo group: SkyWires
Date: 2007-01-30 16:54:48 UTC
From: Myamiphil
Topic: 2186 Message: 2187

Spud gun huh! Hope your neighbors arent too close!!
lol...

http://www.mshamash.com/spud/spudgun1.html

http://www.worldwidedepartmentstore.com/inc/sdetail/1340?gclid=CMWl5-PJiIoCFRMWFQodrGuuQQ
Sling shot or Bow and arrow didnt work??? (and other
useless toys)

http://www.spudgun.com/home.htm

http://www.makezine.com/blog/archive/2006/10/make_a_spud_gun_1.html

http://downloads.oreilly.com/make/wp_spudgun.pdf
(Heres HOW !!)

This is the mother of all sites.. well tamed down
these days. It usesd to have a link to an A bomb
contruction page! lol

http://users.frii.com/bsimon/backyard.html

Hope ur out in the country!!

Phil

--- k5fsp <k5fsp@...> wrote:

> I an new to this group, and this is my first
> posting... I just
> installed my first loop antenna, and I'm really
> pleased with the
> results so far.
>
> I've been faced with the problem of how to use the
> 60'- 70' tall pine
> trees around my home to secure an antenna. I'm 63
> years young, and my
> tree climbing days are over. Someone may have
> posted such a solution
> as the following, but I've never seen it.
>
> I was reading in some publication about how to
> construct a
> spud/potato gun or cannon. I decided I may be able
> to use such a

> device to get a nylon string over the pine trees.
> In the past, I've
> used the sling shot/spinning reel device, and
> various other methods
> with very limited success. I built the spud gun
> using a piece of 2"
> and 4" schedule 40 pvc pipe. You can find a ton to
> plans by choosing
> your favorite search engine and searching for spud
> or potato gun.
>
> I built the cannon, and cut a short length of 2" pvc
> to use as a jig
> to pre-cut the potato to size. I then cut a square
> piece of cheese
> cloth, placed the pre-cut potato on the cloth and
> folded the four
> corners up and tied the nylon string to it. Make
> sure you secure the
> other end on the line to the bucket, as I learned
> the hard way when
> the first shot took all of my line. I had already
> spooled off the
> proper length into a bucket in a figure 8 so it
> would not tangle. I
> put the potato wrapped in the cheese cloth into the
> barrel of the
> spud gun and pushed it to the proper depth with a
> dowel ramrod. I
> charged the spud gun with Brute aerosol deodorant. I
> stood at a 45
> degree angle to the top of the tree and fired the
> cannon. It
> completely cleared the top of the 70" tree, and came
> down on the
> other side. I was able to pull up the 1/4" nylon
> rope without a
> problem.
>
> The total investment was about $40.00. I will share
> my construction
> details if someone is interested.
>
> 73,
> Phil, K5FSP
>
>

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2188. Re: [SkyWires] How to get a line over the top of tall trees to secure antenna

Yahoo group: SkyWires
Date: 2007-01-30 20:39:01 UTC
From: Ken Burchfield
Topic: 2186 Message: 2188

Hi Phil,
I m alway interested in how you constructed your Spud Gun and any details you wish to offer,, seems to work for you.
Thanks
73 Ken
k5jxl@...

k5fsp <k5fsp@...> wrote: I an new to this group, and this is my first posting... I just installed my first loop antenna, and I'm really pleased with the
results so far

The total investment was about $40.00. I will share my construction
details if someone is interested.

73,
Phil, K5FSP

Give Packet Radio a try ....Mississippi.......145.010

No need to miss a message. Get email on-the-go
with Yahoo! Mail for Mobile. Get started.

2189. Re: [SkyWires] How to get a line over the top of tall trees to secure antenna

Yahoo group: SkyWires
Date: 2007-01-30 22:17:38 UTC
From: Myamiphil
Topic: 2186 Message: 2189

Sorry , I never used a spud gun, at the time I needed to I had a 55# bow.. it worked great.

Id have to be careful around my neighborhood, I can see my backdoor neighbor's eyelashes while she is at her sink. ID have the cops in my backyard in a second! lol... And Id probably shoot it over her house and land a block away with all my luck!!!

For me it was easy, the limbs on my beech trees are very open and broad. Get a line over and add an old window weight. Works great.

I actually at one point was constructing a water bottle rocket assembly, I found on similar sites. They seems safer. But aiming is a bit harder!

Phil

--- Ken Burchfield <k5jxl@...> wrote:

> Hi Phil,
> I m alway interested in how you constructed your
> Spud Gun and any details you wish to offer,, seems
> to work for you.
> Thanks
> 73 Ken
> k5jxl@...
>
> k5fsp <k5fsp@...> wrote: I an new to this
> group, and this is my first posting... I just
> installed my first loop antenna, and I'm really
> pleased with the
> results so far
>
> The total investment was about $40.00. I will share
> my construction
> details if someone is interested.
>
> 73,
> Phil, K5FSP
>
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>
> Give Packet Radio a try
> ....Mississippi.......145.010
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http://advision.webevents.yahoo.com/mailbeta/features_spam.html

2191. Clossed loop, all band HF dipole swapout....

Yahoo group: SkyWires
Date: 2007-01-31 07:44:05 UTC
From: chasm@texas.net
Topic: 1615 Message: 2191

not trying to beat B&W out of their dollars, just trying to do it for less.....

I have a BWD90 which we all know, handles 1kw plus but the SWR is greater than 2:1 in certain places. calling B&W, I was told that if the antenna has any age on it at all, odds are that the BAlun is soaked (wet) and needs to be removed from the wire set along with the resistor coil and put in a stove for a few hours under low heat until it dries out.

again, I know that we are not violating patent since this sucker has been on the market well in excess of 20yrs -- does anyone know what the values of these two items - the balun and the resistor coil -- are and where I could get less expensive replacements?

also, I bought one of the wannabee B&W 82 foot grey insulated wire closed loop antennas off ebay but which is only good for ~200W. Apparently, in a moment of total dumb ass, I popped about 500W thru it and now it likes about 3:1 to 8:1 SWR. Could I take the coil and resistor off my BWD90 and put them on this lighter, more flexible antenna and thus, raise the PEP input to this shorter antenna ???

IF it would work, I think that I would have the best of both worlds by taking the balun and coil off my B&W and putting them on the 82' wannabee.

thanks
73/chas
--
K5DAM Houston EL29fu AAR6TU
http://tinyurl.com/df55x (BPL Presentation)
Happy New Year!

2192. Re: [SkyWires] How to get a line over the top of tall trees to secure antenna

Yahoo group: SkyWires
Date: 2007-01-31 16:59:29 UTC
From: Bill Grimwood
Topic: 2186 Message: 2192

I used to train retrievers so I have a device that throws retriever dummies that is fired with a 22 blank cartridge. I tape monofilament line to it and hold my spinning rod close by and I could throw the dummy 500 yards if necessary.

Bill

W4WEG
----- Original Message -----
From: Myamiphil
To: SkyWires@yahoogroups.com
Sent: Tuesday, January 30, 2007 4:17 PM
Subject: Re: [SkyWires] How to get a line over the top of tall trees to secure antenna

Sorry , I never used a spud gun, at the time I needed
to I had a 55# bow.. it worked great.

Id have to be careful around my neighborhood, I can
see my backdoor neighbor's eyelashes while she is at
her sink. ID have the cops in my backyard in a second!
lol... And Id probably shoot it over her house and
land a block away with all my luck!!!

For me it was easy, the limbs on my beech trees are
very open and broad. Get a line over and add an old
window weight. Works great.

I actually at one point was constructing a water
bottle rocket assembly, I found on similar sites. They
seems safer. But aiming is a bit harder!

Phil

--- Ken Burchfield <k5jxl@...> wrote:

> Hi Phil,
> I m alway interested in how you constructed your
> Spud Gun and any details you wish to offer,, seems
> to work for you.
> Thanks
> 73 Ken
> k5jxl@...
>
> k5fsp <k5fsp@...> wrote: I an new to this
> group, and this is my first posting... I just
> installed my first loop antenna, and I'm really
> pleased with the

> results so far
>
> The total investment was about $40.00. I will share
> my construction
> details if someone is interested.
>
> 73,
> Phil, K5FSP
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> Give Packet Radio a try
> ....Mississippi.......145.010
>
>
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http://advision.webevents.yahoo.com/mailbeta/features_spam.html

2193. Re: [SkyWires] Closed loop, all band HF dipole swapout....

Yahoo group: SkyWires
Date: 2007-01-31 16:52:58 UTC
From: Donald Sanders
Topic: 1615 Message: 2193

Chas, If i remember correctly, the B&W is a version of the T2FD antenna and the feed impedance can be 300 to 450 ohms depending on the load resistance opposite the feed. I have a home brew model that has 390 ohms 100 watt resistor load and 300 ohm feed. I have a balun to feed the 50 ohm coax to the 300 ohm feed impedance. I also have used 300 ohm TV leadin to feed the antenna from the Johnson matchbox.
I believe that with a 600 ohm load you will have about 450 ohm feed impedance. So you can make your own balun and load or use their load and make your own balun.
Healthfully yours,
Don W4BWS
----- Original Message -----
From: chasm@texas.net
To: SkyWires@yahoogroups.com
Sent: Wednesday, January 31, 2007 1:44 AM
Subject: [SkyWires] Closed loop, all band HF dipole swapout....

not trying to beat B&W out of their dollars, just trying to do it for less.....

I have a BWD90 which we all know, handles 1kw plus but the SWR is greater than 2:1 in certain places. calling B&W, I was told that if the antenna has any age on it at all, odds are that the BAlun is soaked (wet) and needs to be removed from the wire set along with the resistor coil and put in a stove for a few hours under low heat until it dries out.

again, I know that we are not violating patent since this sucker has been on the market well in excess of 20yrs -- does anyone know what the values of these two items - the balun and the resistor coil -- are and where I could get less expensive replacements?

also, I bought one of the wannabee B&W 82 foot grey insulated wire closed loop antennas off ebay but which is only good for ~200W. Apparently, in a moment of total dumb ass, I popped about 500W thru it and now it likes about 3:1 to 8:1 SWR. Could I take the coil and resistor off my BWD90 and put them on this lighter, more flexible antenna and thus, raise the PEP input to this shorter antenna ???

IF it would work, I think that I would have the best of both worlds by taking the balun and coil off my B&W and putting them on the 82' wannabee.

thanks
73/chas
--
K5DAM Houston EL29fu AAR6TU
http://tinyurl.com/df55x (BPL Presentation)
Happy New Year!

2194. Re: [SkyWires] Closed loop, all band HF dipole swapout....

Yahoo group: SkyWires
Date: 2007-02-01 05:33:28 UTC
From: chasm@texas.net
Topic: 1615 Message: 2194

On Wed, 31 Jan 2007 10:52:58 -0600, "Donald Sanders" <w4bws@...>
wrote:
>Chas, If i remember correctly, the B&W is a version of the T2FD antenna and the feed impedance can be 300 to 450 ohms depending on the load resistance opposite the feed. I have a home brew model that has 390 ohms 100 watt resistor load and 300 ohm feed. I have a balun to feed the 50 ohm coax to the 300 ohm feed impedance. I also have used 300 ohm TV leadin to feed the antenna from the Johnson matchbox.
>I believe that with a 600 ohm load you will have about 450 ohm feed impedance. So you can make your own balun and load or use their load and make your own balun.
>Healthfully yours,
> Don W4BWS

thanks Don, will go see what I can find.. I want to run this off an unbalanced load so, I should think that I am obviously looking for a 50ohm impedance. just not sure what resistor/balun will give me that with the LRM and the wire of the dipole. do not really want to have to tune this unless I am going to 6m or whatever. also, would like to see it down close to 1.5:1 or less at 75m and nearly that at 40m. certainly under 2:1 at any point on the bands. guess I need an antenna analyzer more immediately than I thought.

cheers
73/chas
--
K5DAM Houston EL29fu AAR6TU
http://tinyurl.com/df55x (BPL Presentation)
Happy New Year!

2195. 2 Turn Full Wave Loop

Yahoo group: SkyWires
Date: 2007-02-01 13:51:49 UTC
From: Dr.Ace
Topic: 2195 Message: 2195

Hi All,
FYI, The Feb 2007 issue of Worldradio page 16 has an informative
article on a zip cord
2 Turn Full Wave Loop. The article by N4FWD claims the antenna has gain
over a 1 Turn Full Wave Loop.
Ace - WH2T

2196. FS: "Reflections II" Book by Maxwell

Yahoo group: SkyWires
Date: 2007-02-05 22:46:45 UTC
From: oldlongbeard
Topic: 2196 Message: 2196

Dear list memebers.... I have for sale one Soft Cover copy of W2DU, Walter Maxwell's book "Reflections II- Transmission Lines and Antennas". It is in VERY good shape. No off odors, or ripped pages. One small tear at top of spine on back cover. If you only ever read one book on the subject, I suggest this one.
I will ship, boxed, and insured for $80 to lower 48 only. (About 1/2 the going rate on Bookfinder.com). PAYPAL is preferred, but I will accept USPS Money Order.

Thanks!

Greg Schippers, KC8HXO

2201. Re: [SkyWires] Block the Spammer

Yahoo group: SkyWires
Date: 2007-02-07 23:13:40 UTC
From: David Shrum
Topic: 2200 Message: 2201

They are banned.
Dave N8PU

Louis Upton wrote:
> I am new to this list, and interested in Ham Radio and Building
> Antenna's and the only messages I have gotten are from this spammer.
> Moderators please block this person.
>
> Thanks,
>
> Louis
>
>
> --- In SkyWires@yahoogroups.com, "junelle-coyne709@..." <junelle-
> coyne709@...> wrote:
>

2210. Cobra Balanced antenna

Yahoo group: SkyWires
Date: 2007-02-26 18:38:02 UTC
From: chasm@texas.net
Topic: 2200 Message: 2210

re Cobra Senior Balanced Antennas http://www.k1jek.com/

is anyone running one of these or a shorter version who could tell me what
sort of SWR you are getting at 7mhz?

thanks
73/chas
--
K5DAM Houston EL29fu AAR6TU
http://tinyurl.com/df55x (BPL Presentation)
call your state critters about no radios in motion.

2212. Pole Question

Yahoo group: SkyWires
Date: 2007-03-01 13:06:33 UTC
From: Kyle
Topic: 2212 Message: 2212

Good morning group. My wife and I upgraded to General over the weekend. Now we want to put up our 80m or 160m skywire. I have several questions. Here is the first.

If I need to put up a pole for my home installation, or if I try to use a skywire during field day, can I suspend the loop from grounded aluminum poles?

To do this, I was planning on using thin poly rope to hang plastic insulators from the pole(s), and then run the wire through the other hole in the plastic insulator. But my concern is that the grounded, vertical, conductive pole in close proximity would detune the loop. What do you guys think?

73,
Kyle
W4KDA(/AG!)

2213. HC 104

Yahoo group: SkyWires
Date: 2007-03-02 01:04:50 UTC
From: K.Currie
Topic: 2213 Message: 2213

Have any of you guys had any experience with a Heil conversion kit in a D104 Mic? We got two and neither one sounds good at all, very thin and cheap audio. I sent a note to heil but gues they dont care as they never answered me as to what I might try.
VE5HKC

2214. Re: Pole Question

Yahoo group: SkyWires
Date: 2007-03-02 00:59:35 UTC
From: w7tea
Topic: 2212 Message: 2214

Kyle, those more experienced than I will give you a definitive answer. If you keep the loop a couple feet from the pole, I would bet it shouldn't present too much of a problem. At least I would try it. Loops are probably less troubled by nearby objects than most other types of antennas. (Low Q and all that from what I remember reading.)

Congrats to both you and your wife! Welcome aboard!

73, Gary W7TEA

--- In SkyWires@yahoogroups.com, Kyle <kyle@...> wrote:
>
> Good morning group. My wife and I upgraded to General over the weekend.
> Now we want to put up our 80m or 160m skywire. I have several
> questions. Here is the first.
>
> If I need to put up a pole for my home installation, or if I try to use
> a skywire during field day, can I suspend the loop from grounded
> aluminum poles?
>
> To do this, I was planning on using thin poly rope to hang plastic
> insulators from the pole(s), and then run the wire through the other
> hole in the plastic insulator. But my concern is that the grounded,
> vertical, conductive pole in close proximity would detune the loop.
> What do you guys think?
>
> 73,
> Kyle
> W4KDA(/AG!)
>

2216. Metal Roof Question

Yahoo group: SkyWires
Date: 2007-03-02 13:34:41 UTC
From: Kyle
Topic: 2216 Message: 2216

Thanks to Gary, W7TEA for giving me some guidance on yesterday's metal pole question. My second question is about metal roofing. One GREAT place to suspend my loop from is the peak of the barn in my horse pasture. The roof is a 12&12 pitch (very steep) and at the point is is just the right height for attaching the loop. If I attach a non conductive "stick" at the peak and use that to support the wire in that position of the loop, will the steeply pitched metal roofing underneath the loop significantly affect the antenna? I do not think the roof is grounded. Is this another, "I'd try it" situation, or should I just stay away from the barn roof altogether?

Thanks,
Kyle
W4KDA

2217. Re: [SkyWires] Metal Roof Question

Yahoo group: SkyWires
Date: 2007-03-02 15:41:23 UTC
From: Jim Dunstan
Topic: 2216 Message: 2217

At 08:34 AM 3/2/2007 -0500, you wrote:

>Thanks to Gary, W7TEA for giving me some guidance on yesterday's metal
>pole question. My second question is about metal roofing. One GREAT
>place to suspend my loop from is the peak of the barn in my horse
>pasture. The roof is a 12&12 pitch (very steep) and at the point is is
>just the right height for attaching the loop. If I attach a non
>conductive "stick" at the peak and use that to support the wire in that
>position of the loop, will the steeply pitched metal roofing underneath
>the loop significantly affect the antenna? I do not think the roof is
>grounded. Is this another, "I'd try it" situation, or should I just
>stay away from the barn roof altogether?
>
>Thanks,
>Kyle

Hi,

All antennas work better over good ground conditions. A large metal roof (such as a barn) serves very well as a ground plane .... I have seen several installations of vertical antennas mounted over such metal roofs and they work very well. I am not talking about making any direct electrical connection to the roof. Dipoles also seem to be enhanced. A low horizontal loop may or may not be enhanced ... i do not know.

If you put a vertical over the roof you will have a dynamite antenna.

Jim, VE3CI

2218. Re: [SkyWires] Metal Roof Question

Yahoo group: SkyWires
Date: 2007-03-02 17:02:07 UTC
From: Robert Mozulay
Topic: 2216 Message: 2218

Hi Kyle.

Let me send you to a reference to get you started:

http://focus-webapps.ti.com/general/docs/sitesearch/searchsite.tsp?selectedTopic=1653260327&numRecords=25&searchTerm=swra046a&statusCode=null

This is a paper on the Texas Instruments web site
called "ISM-Band and Short Range Device Antennas".

On page 3, the concept of near reactive fields and far
field regions is briefly discussed, the impact of
proximity of objects to antenna feedpoint impedance,
etc.

I would not call this leisure reading, however. It
may leave you with more questions than answers.

But, it is a fine review of fundamental concepts,
definitions, etc, and several antenna types (dipoles,
small loops, etc) are discussed.

In the end you may have to be willing to experiment,
take some measurements, etc.

Bob
WB2UFE

--- Kyle <kyle@...> wrote:

> Thanks to Gary, W7TEA for giving me some guidance on
> yesterday's metal
> pole question. My second question is about metal
> roofing. One GREAT
> place to suspend my loop from is the peak of the
> barn in my horse
> pasture. The roof is a 12&12 pitch (very steep) and
> at the point is is
> just the right height for attaching the loop. If I
> attach a non
> conductive "stick" at the peak and use that to
> support the wire in that
> position of the loop, will the steeply pitched metal
> roofing underneath
> the loop significantly affect the antenna? I do not
> think the roof is
> grounded. Is this another, "I'd try it" situation,

> or should I just
> stay away from the barn roof altogether?
>
> Thanks,
> Kyle
> W4KDA
>

2219. Re: [SkyWires] Metal Roof Question

Yahoo group: SkyWires
Date: 2007-03-02 18:18:53 UTC
From: Andy
Topic: 2216 Message: 2219

If I understand correctly, the metal roof would not be under the loop, it would be next to it. So you wouldn't get the benefits Jim Dunstan talks about.

I'd guess the roof is likely to offset the loop's pattern, making it somewhat more directional than it might otherwise be, but not significantly so (perhaps unless the roof is comparable to the size of the loop). It should work just the same. It can't hurt to try it!

Whether or not the roof is grounded makes little difference.

Regards,
Andy

2220. [SkyWires] Metal Roof Question

Yahoo group: SkyWires
Date: 2007-03-03 04:14:47 UTC
From: Thomas Wade
Topic: 2216 Message: 2220

running a dipole OVER a metal roof worked real good fer me. it was easy to match, seemed to reach out better.
was over a 65 ft long trlr, about 10 feet above the roof. worked a hole lot better than if i had it from trees above ground....
thomas

Andy <Andy.groups@...> wrote:
If I understand correctly, the metal roof would not be under the loop, it would be next to it. So you wouldn't get the benefits Jim Dunstan talks about.

I'd guess the roof is likely to offset the loop's pattern, making it somewhat more directional than it might otherwise be, but not significantly so (perhaps unless the roof is comparable to the size of the loop). It should work just the same. It can't hurt to try it!

Whether or not the roof is grounded makes little difference.

Regards,
Andy

Need a quick answer? Get one in minutes from people who know. Ask your question on Yahoo! Answers.

2221. Re: 2 Turn Full Wave Loop

Yahoo group: SkyWires
Date: 2007-03-05 00:20:29 UTC
From: ki4syx
Topic: 2195 Message: 2221

--- In SkyWires@yahoogroups.com, "Dr.Ace" <wh2t@...> wrote:
>
> Hi All,
> FYI, The Feb 2007 issue of Worldradio page 16 has an informative
> article on a zip cord
> 2 Turn Full Wave Loop. The article by N4FWD claims the antenna has gain
> over a 1 Turn Full Wave Loop.
> Ace - WH2T
>

I wish I could read the article. Was this experimentally determined or
just simulated? I ran a simulation of this through MMANA and it didn't
appear to add any gain.

2222. Rhombic vs Traingular

Yahoo group: SkyWires
Date: 2007-03-05 14:36:17 UTC
From: Kyle
Topic: 2216 Message: 2222

Thanks for the replies on the metal roof question. We laid the 160m (529') loop out on the ground Sunday. As it turns out, the loop isn't big enough to get to the trees I wanted to use as support structures. I'm crossing my horse pasture and I have to work with the structure locations given. We tried several other different patterns. Two patterns work very well with the trees we have. The first is a rhombic, diamond shape. It is *very* elongated away from square; I'm estimating the acute angles were around 30 degrees. It would be located on the downward sloping hill, over ground the entire way.

The other option is a nearly equilateral triangle. The triangle would cross a gully, then turn back across my pond that's about 1/4 acre. The ground under this one would go up and down over its path, and about 100' of it would be over water.

Both loops would be 30-50' up in the air. Dr. Ace's web page states that a circle is about 1dB over a square and a square is about 1dB over a triangle. That makes me think the rhombus might work better with respect to gain. But I want as omni directional pattern as possible, so I am thinking the triangle might be a better choice, even though I might give up some gain.

What are the thoughts & experiences of the group on this? Keep in mind, I want as omni directional of a pattern from the loop as possible.

Many thanks,
Kyle
W4KDA

P.S. the barn roof was part of the original path that I underestimated the distance on, so that isn't going to come into effect on these two design considerations. We will have to save the practical study of the "barn roof effect" for another day. :)

2223. New file uploaded to SkyWires

Yahoo group: SkyWires
Date: 2007-03-06 00:15:49 UTC
From: SkyWires@yahoogroups.com
Topic: 434 Message: 2223

Hello,

This email message is a notification to let you know that
a file has been uploaded to the Files area of the SkyWires
group.

File : /2_Turn_Loop_1.jpg
Uploaded by : dr_ace1 <wh2t@...>
Description : A 2 Turn Loop_Page 1

You can access this file at the URL:
http://groups.yahoo.com/group/SkyWires/files/2_Turn_Loop_1.jpg

To learn more about file sharing for your group, please visit:
http://help.yahoo.com/help/us/groups/files

Regards,

dr_ace1 <wh2t@...>

2224. New file uploaded to SkyWires

Yahoo group: SkyWires
Date: 2007-03-06 00:17:31 UTC
From: SkyWires@yahoogroups.com
Topic: 434 Message: 2224

Hello,

This email message is a notification to let you know that
a file has been uploaded to the Files area of the SkyWires
group.

File : /2_Turn_Loop_2.jpg
Uploaded by : dr_ace1 <wh2t@...>
Description : A 2 Turn Loop_Page 2

You can access this file at the URL:
http://groups.yahoo.com/group/SkyWires/files/2_Turn_Loop_2.jpg

To learn more about file sharing for your group, please visit:
http://help.yahoo.com/help/us/groups/files

Regards,

dr_ace1 <wh2t@...>

2225. Re: [SkyWires] Re: 2 Turn Full Wave Loop

Yahoo group: SkyWires
Date: 2007-03-06 00:26:11 UTC
From: Dr.Ace Ratliff
Topic: 2195 Message: 2225

Hi ,
See these files I uploaded today !

You can access these file at the URLs:
http://groups.yahoo.com/group/SkyWires/files/2_Turn_Loop_1.jpg

AND

http://groups.yahoo.com/group/SkyWires/files/2_Turn_Loop_2.jpg

73, Ace - WH2T.com

----- Original Message -----
From: ki4syx
To: SkyWires@yahoogroups.com
Sent: Sunday, March 04, 2007 7:20 PM
Subject: [SkyWires] Re: 2 Turn Full Wave Loop

--- In SkyWires@yahoogroups.com, "Dr.Ace" <wh2t@...> wrote:
>
> Hi All,
> FYI, The Feb 2007 issue of Worldradio page 16 has an informative
> article on a zip cord
> 2 Turn Full Wave Loop. The article by N4FWD claims the antenna has gain
> over a 1 Turn Full Wave Loop.
> Ace - WH2T
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I wish I could read the article. Was this experimentally determined or
just simulated? I ran a simulation of this through MMANA and it didn't
appear to add any gain.

2226. [SkyWires] Elecraft QSO Party this weekend

Yahoo group: SkyWires
Date: 2007-03-06 15:34:11 UTC
From: Robert Mozulay
Topic: 2216 Message: 2226

See:

www.elecraft.com

Click on QSO Party info button.

Also click on NEWS to see the preview of the Elecraft
solid state linear amp.

Cool stuff.

73s,
Bob/WB2UFE

2227. Re: [SkyWires] Rhombic vs Traingular and some measurements

Yahoo group: SkyWires
Date: 2007-03-06 16:11:00 UTC
From: Robert Mozulay
Topic: 2216 Message: 2227

Hay Kyle,

Take some measurements for us and let us know how you
make out.

Consider the following RF wattmeter/Vector Network
Analyzer kit, the LPA 100.

See:
http://www.telepostinc.com/lp100.html

Cool stuff.

73s,
Bob/WB2UFE

>
>
>

2228. Re: [SkyWires] Rhombic vs Traingular

Yahoo group: SkyWires
Date: 2007-03-06 18:12:34 UTC
From: Dr.Ace Ratliff
Topic: 2216 Message: 2228

Hi Kyle,

I would go with the nearly equilateral triangle. The larger the area or aperture inside the loop the better. It should be more nearly unidirectional than the *very* elongated rhombic, diamond shape.
Ace - WH2T

----- Original Message -----
From: Kyle
To: SkyWires@yahoogroups.com
Sent: Monday, March 05, 2007 9:36 AM
Subject: [SkyWires] Rhombic vs Traingular

Thanks for the replies on the metal roof question. We laid the 160m (529') loop out on the ground Sunday. As it turns out, the loop isn't big enough to get to the trees I wanted to use as support structures. I'm crossing my horse pasture and I have to work with the structure locations given. We tried several other different patterns. Two patterns work very well with the trees we have. The first is a rhombic, diamond shape. It is *very* elongated away from square; I'm estimating the acute angles were around 30 degrees. It would be located on the downward sloping hill, over ground the entire way.

The other option is a nearly equilateral triangle. The triangle would cross a gully, then turn back across my pond that's about 1/4 acre. The ground under this one would go up and down over its path, and about 100' of it would be over water.

Both loops would be 30-50' up in the air. Dr. Ace's web page states that a circle is about 1dB over a square and a square is about 1dB over a triangle. That makes me think the rhombus might work better with respect to gain. But I want as omni directional pattern as possible, so I am thinking the triangle might be a better choice, even though I might give up some gain.

What are the thoughts & experiences of the group on this? Keep in mind, I want as omni directional of a pattern from the loop as possible.

Many thanks,
Kyle
W4KDA

P.S. the barn roof was part of the original path that I underestimated the distance on, so that isn't going to come into effect on these two design considerations. We will have to save the practical study of the "barn roof effect" for another day. :)

2229. Skywire/No Joy

Yahoo group: SkyWires
Date: 2007-03-12 11:52:29 UTC
From: Kyle
Topic: 2229 Message: 2229

Good morning wire antenna enthusiasts. I thought I'd give you a short note on the skywire project. Several of us met yesterday at my house at noon. My dad was a bow fisher in Florida for many decades, so I got him to come over and shoot an arrow with a string into the trees (with mind blowing precision!). In each case, we used the arrow's string to pull the rope up into place. That got our ropes up about 45'-50' from the base of each tree, exactly where I wanted them. I thought the ropes would be the hard part, but no such luck. Putting up the ropes probably took around an hour or so.

We spent the next 4-5 hours trying to get the wire up where we wanted it. The pond really wasn't a problem (used my hand-made boat to get the wire across), but limbs were. I never imagined it would be so hard to get a wire into a tree! We had 4 adults trying to coax the wires while pulling the insulators up. The wires kept getting tangled around lower limbs and branches. It's amazing how a wire can get stuck and held fast by a tiny twig 1/3 the diameter of a pencil! Equally amazing is how a wire can wrap itself around a limb nearly 360 degrees when being pulled in a direction almost parallel to the limb.

There was one tree that looked like it would not be in the way, but it was - so I fell that ~60' tree. The XYL, KI4HPP, said she didn't care if I dropped the tree, and I didn't care, so KI4SRB advised that in those cases the wire decides. Is this a wire antenna rule?

All said and done, the wire is hanging from insulators way up in trees, but the wire is slack and is still on the ground (and on the bottom of the pond). I already used my chainsaw from an extension ladder to drop several limbs. Now I have to borrow a telescoping saw to get even higher above the ladder to trim some other limbs. Then we should be able to finish pulling the wire into the air. I need to finish it quickly because the trees are all about to leaf out at our QTH.

Overall, it was fun, it was a lot of work, and it was frustrating not to finish it in one day.

-Kyle W4KDA

2230. Re: [SkyWires] Skywire/No Joy

Yahoo group: SkyWires
Date: 2007-03-12 12:35:10 UTC
From: Dave Marling
Topic: 2229 Message: 2230

Kyle wrote:
>
>
> Overall, it was fun, it was a lot of work, and it was frustrating not to
> finish it in one day.

Trees: 1
W4KDA: 0

:)

Good luck, Kyle!

Dave
VE1VQ

2231. Re: [SkyWires] Skywire/No Joy

Yahoo group: SkyWires
Date: 2007-03-13 13:25:43 UTC
From: jsb@digistar.com
Topic: 2229 Message: 2231

On Mon, 12 Mar 2007, Kyle wrote:

> All said and done, the wire is hanging from insulators way up in trees,
> but the wire is slack and is still on the ground (and on the bottom of
> the pond). I already used my chainsaw from an extension ladder to drop
> several limbs.

I cut all the trees down that were along the path of where my loop runs. That was the only practical way for one person to put it up in one day. There's enough trees in the woods around my house that no one would ever know it.

The other option is to shoot rope through the trees, tie an insulator to one end, thread the wire through the insulator and pull up each section 10 feet at a time and tie off the rope at the base of each tree, etc.

Once you get it up in the air, consider swapping the polarity at the tuner from time to time. The pattern changes - when the band conditions are bad you may see improvements by changing the polarity. I do this all the time.

--
73 Jason N1SU
http://n1su.com/

2232. Skywire loop page updated

Yahoo group: SkyWires
Date: 2007-03-13 14:33:47 UTC
From: jsb@digistar.com
Topic: 2232 Message: 2232

hi,

I made some updates to my skywire loop page.

http://n1su.com/loop.html

I hadn't really touched it since I put the antenna in the air last
November so figured it was time to add some of my experiences and update
the page a little.

thanks

--
73 Jason N1SU
http://n1su.com/

2234. Balanced line tuner questions

Yahoo group: SkyWires
Date: 2007-03-16 17:12:32 UTC
From: Bruce Conner
Topic: 2234 Message: 2234

Hi,

New to the group, and I'm excited about setting up a horizontal loop for 80-10 meters. Of course, I've got questions!

I'll need a tuner, and I came across this one by Richard L. Measures, AG6K at http://www.somis.org/bbat.html - It's a balanced L-Network that looks good to me. Anybody have opinions on it either way?

For the following proposal, please keep in mind that I'm not planning on running more than about 25 watts, if that. I could live with 10 watts max if it kept the design simpler. I'll be using ladder line, either home made or commercial window line - haven't decided yet.

Assuming the AG6K is a good design, I'm a bit low on nice roller inductors around here at the moment. Some could be obtained (for a price) but I had an idea, and was hoping some of the more expert members here would be able say if it is feasible or not. Would it be possible to make a large slug tuned inductor to do the job of the roller inductor? One of the advantages I see is that the two coils could be put on the same form (well spaced) and the drive could be a single shaft moving both cores in synch. Once adjusted, it should do a good job of keeping things balanced.

My problem is I don't know what I might use for the cores, nor how big the whole setup would need to be. I'm imagining something like 1.5 inch PVC pipe with a core made of balun donuts, driven by a threaded rod. Maybe stack a few of the cores to get length? Could I use a plain brass core to make a gigantic permeability tuner? I've got NO idea how to do the math for that, so any help would be appreciated. I can see that saturation might be a limiting factor, but otherwise it seems like an alternative.

I realize it's sort of a nutty idea, but where's the fun if you can't build something Frankensteinish once in a while? :')

Bruce
WB8OGK

2235. DL31sa German Quad antenna

Yahoo group: SkyWires
Date: 2007-03-17 00:22:09 UTC
From: kc0lwn
Topic: 2235 Message: 2235

Does anyone have a link for the original article?

2236. Re: [SkyWires] Balanced line tuner questions

Yahoo group: SkyWires
Date: 2007-03-17 01:43:50 UTC
From: Jim Dunstan
Topic: 2234 Message: 2236

At 05:12 PM 3/16/2007 +0000, you wrote:

>Hi,
>
>New to the group, and I'm excited about setting up a horizontal loop
>for 80-10 meters. Of course, I've got questions!
>
>I'll need a tuner, and I came across this one by Richard L. Measures,
>AG6K at <http://www.somis.org/bbat.html>http://www.somis.org/bbat.html -
>It's a balanced L-Network
>that looks good to me. Anybody have opinions on it either way?
>
>For the following proposal, please keep in mind that I'm not planning
>on running more than about 25 watts, if that. I could live with 10
>watts max if it kept the design simpler. I'll be using ladder line,
>either home made or commercial window line - haven't decided yet.
>
>Assuming the AG6K is a good design, I'm a bit low on nice roller
>inductors around here at the moment. Some could be obtained (for a
>price) but I had an idea, and was hoping some of the more expert
>members here would be able say if it is feasible or not. Would it be
>possible to make a large slug tuned inductor to do the job of the
>roller inductor? One of the advantages I see is that the two coils
>could be put on the same form (well spaced) and the drive could be a
>single shaft moving both cores in synch. Once adjusted, it should do
>a good job of keeping things balanced.
>
>My problem is I don't know what I might use for the cores, nor how big
>the whole setup would need to be. I'm imagining something like 1.5
>inch PVC pipe with a core made of balun donuts, driven by a threaded
>rod. Maybe stack a few of the cores to get length? Could I use a
>plain brass core to make a gigantic permeability tuner? I've got NO
>idea how to do the math for that, so any help would be appreciated. I
>can see that saturation might be a limiting factor, but otherwise it
>seems like an alternative.
>
>I realize it's sort of a nutty idea, but where's the fun if you can't
>build something Frankensteinish once in a while? :')
>
>Bruce
>WB8OGK

Hi Bruce,

The main idea behind one kind of balanced antenna tuner is to stay with the
concept of a 'Balun', but to put it in the low impedance part of the tuner

circuit... eg next to the 50 ohm coax cable. The article you quote explains very well why baluns don't work well at high impedances where they are inefficient and downright dangerous at high power. The tuner in the article is quite ambitious and not absolutely necessary ... eg using a pair of inductors either switched or roller. It is possible to use a simple L network .... like the small one MFJ sells for end fed wire antennas. It would be modified by isolating the L network from ground ... The balanced line would be connected across the either the capacitor or the inductor and the coax would be fed to the L network via a simple coax choke/balun.

Another very simple but elegant balanced tuner is the venerable Z-match. It is also an L network but with a twist. It does not use a balun, it uses an inductive link coil wound over the inductor. It uses another very interesting 'trick'. It uses a second variable capacitor which is placed in parallel with the inductor. The effect of adjusting the second capacitor is that it alters the effective inductance ! A cheap and easy way to make a variable inductor. By proper selection of component values it is possible to tune a balanced antenna system across 80/40 or 20/10 without switching or actually changing the value of your inductor.

I know it works as I use a commercial version called the KW EZee match. I have very seldom found a frequency/antenna combination it will not tune ... it is fast and effective. There are some articles on the intenet for building one for either high (1000) or low (100W) which are a duplicate of the the KW tuner. There are also some articles on building a QRP version .... same concept.

Google around and I am sure you will find them.

Jim, VE3CI

2237. Re: Balanced line tuner questions

Yahoo group: SkyWires
Date: 2007-03-17 15:02:04 UTC
From: Bruce Conner
Topic: 2234 Message: 2237

--- In SkyWires@yahoogroups.com, Jim Dunstan <jdunstan@...> wrote:

> Another very simple but elegant balanced tuner is the venerable
> Z-match. It is also an L network but with a twist. It does not use a
> balun, it uses an inductive link coil wound over the inductor. It uses
> another very interesting 'trick'. It uses a second variable capacitor
> which is placed in parallel with the inductor. The effect of
adjusting the
> second capacitor is that it alters the effective inductance ! A
cheap and
> easy way to make a variable inductor.

Thanks Jim,

That sounds like it is a torroid version of the Viking Matchbox with the differential capacitor setup. After thinking about it some, I suppose that really is the way to go here, since it will be going on a big loop with balanced line, the "limited" Z that people sometimes complain about isn't much of a factor here. If I'm mistaken, please let me know!

Any particular mods to the Z match that are useful and desirable? Might as well build it right the first time, and I see that people do change them around a bit. 80-20 is probably fine for my needs.

Time to start digging through the junkbox...

Bruce
WB8OGK

2238. Re: Balanced line tuner questions

Yahoo group: SkyWires
Date: 2007-03-17 17:25:45 UTC
From: n6vl
Topic: 2234 Message: 2238

Bruce,

The Measures design is a good design. It is far better than the "balun at the output" designs. I have an MFJ-974H which is a balanced T network, while I think the Measures tuner is a balanced L. Both have a choke balun at the input.

Sorry I can't help you with the balun design.

My balanced tuner of choice is the Johnson Matchbox. But it does have its limitations. The tuning range is limited. I had to move the tap to the input coil a turn closer to the grounded end to get it to match my open wire fed loop, which has low impedances.

One problem with the with the Measures design and similar ones like my MFJ-974H, is that they will not choke off common mode currents on the feed line. I have noticed this on 40 meters. With the Matchbox, I don't get RF into my LCD monitor like I do with the MFJ-974H. My understanding is that the link coupling isolates these currents. I don't remember where I read this. I do remember W8JI stating something to this effect.

I still think the Measures tuner is a good design and I use the MFJ-974H on a 44 foot dipole fed with ladder line, simply because my Matchbox won't tune it.

If you are an ARRL member, check out the article at http://www.arrl.org/members-only/prodrev/pdf/pr0409.pdf on balanced tuners. It was in the September, 2004 QST and a very good article on the subject.

Good luck with your tuner project!

73,

Steve N6VL

2239. Return of the loop

Yahoo group: SkyWires
Date: 2007-03-17 18:30:10 UTC
From: Graham Cooke
Topic: 2239 Message: 2239

Hi,

When I first moved to my new address (7 years ago) I needed a quick to erect all band antenna. Looking through the ARRL handbook I found the loop skywire and with a few old tent poles, a tree and a fishing pole I erected the antenna.

The garden was just about perfect for a 40m loop. I got great signal reports but didn't believe that the antenna could be that good so after 12 months I bought a Hustler 5 band vertical and used a few elevated radials. I made a solid job of mounting it using coax running in a conduit in across the lawn. I was not happy at the performance. Next I tried homebrew single band verticals, then shortened vertical dipoles, then dipoles and finally a delta loop.

Well, I have now gone full circle (actually square!) and rebiult the skywire. Instantly the difference is notable, across all bands I tried! This is a fantastic antenna and I will put a note on the wall not to take it down. If anyone hears me on air contemplating replacing it then please remind me of this post. I feel that I have returned from the rf wilderness.

The loop is 40m perimeter at about 25 feet supported by three fibreglass fishing poles (originally 10m ones but without the floppy top sections) and the wire is 1 mm enamelled copper. Feed is 450ohm ladder line to a Z match tuner.

73
Graham M0CUQ / G6LFT

2241. Re:Balanced line tuner questions

Yahoo group: SkyWires
Date: 2007-03-18 12:15:00 UTC
From: Greg S
Topic: 2234 Message: 2241

http://www.angelfire.com/electronic2/qrp/Zmatch.html

Rick's tuner should suit your needs. I built one, and it works great.
Parts might be in your junk box!!

Gud luck.

Greg, KC8HXO

Don't pick lemons.
See all the new 2007 cars at Yahoo! Autos.
http://autos.yahoo.com/new_cars.html

2243. skywire with 75 ohm coax

Yahoo group: SkyWires
Date: 2007-03-18 16:21:47 UTC
From: kc0lwn
Topic: 2243 Message: 2243

Is there an optimum length or just use any length as the feed line.

Also I have 2 thousand feet of this stuff, so is it possible to make the antenna by connecting to the outer braid? Or will this be just too heavy and stick with 12 g copper wire?

I will be putting up my first antenna is why I am asking.

2244. Re: [SkyWires] skywire with 75 ohm coax

Yahoo group: SkyWires
Date: 2007-03-18 16:42:36 UTC
From: Sarge
Topic: 2243 Message: 2244

would weigh a ton! But think of all the double bazookas you can make.

> Is there an optimum length or just use any length as the feed line.
>
> Also I have 2 thousand feet of this stuff, so is it possible to make
> the antenna by connecting to the outer braid? Or will this be just too
> heavy and stick with 12 g copper wire?
>
> I will be putting up my first antenna is why I am asking.
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> Yahoo! Groups Links
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> --
> No virus found in this incoming message.
> Checked by AVG Free Edition.
> Version: 7.5.446 / Virus Database: 268.18.13/725 - Release Date: 3/17/2007
> 12:33 PM
>
>

2245. Re: [SkyWires] skywire with 75 ohm coax

Yahoo group: SkyWires
Date: 2007-03-18 18:12:54 UTC
From: Donald Sanders
Topic: 2243 Message: 2245

I'm sure there are several whom would like to help you. However, you don't give any criteria that is beneficial,i.e.., what frequency/bands, what style antenna(dipole,inv vee, loop), how far is the antenna from your equipment, how much power do you intend to run, is it rg59/rg6 or rg11?.
That being said, you can make a half wave dipole for 80 and 40 and use one coax run. Wire length 136 feet for 80/ 66 feet for 40 meters, run at right angles from center insulator. Coax up to 100 foot of rg59 for 250 watts or less will be good. Put center up as high as possible and ends likewise.
As to optimum length, a halfwave X VF or a even multiple will give you a reflection of the antenna impedance at the feed end. A quarterwave will give you a impedance step-up of down. Anything else is a crap shoot, Though if you desire, you can get an antenna handbook and learn about antennas and then make intelligent decisions as to what you want and desire.

Healthfully yours,
Don W4BWS
----- Original Message -----
From: kc0lwn
To: SkyWires@yahoogroups.com
Sent: Sunday, March 18, 2007 10:21 AM
Subject: [SkyWires] skywire with 75 ohm coax

Is there an optimum length or just use any length as the feed line.

Also I have 2 thousand feet of this stuff, so is it possible to make
the antenna by connecting to the outer braid? Or will this be just too
heavy and stick with 12 g copper wire?

I will be putting up my first antenna is why I am asking.

2246. skywire with 75 ohm coax updated

Yahoo group: SkyWires
Date: 2007-03-18 18:25:05 UTC
From: kc0lwn
Topic: 2243 Message: 2246

Told you I am new to this. Ok 12 g wire it will be because of the weight issue. The coax is very low loss rg8. I read the article about the German Quad Cloud warmer and they did not specify a feed line length but connected the antenna to 75 ohm coax directly.

40 meter band skywire type of loop is the desired antenna since I want to work 20 meters too. I read that making it 160 or 80 meters would show rapid deterioration at 20 meters. 200 watts power.

It will be about 20-25 feet in height. and the the transmitter will be about 40-50 feet from the antenna. I have an underground conduit to run the feed line cable since the area between the antenna and radio room is mowed frequently and my wife does not want unsightly wires. not to mention my neighbors are already upset about a new ham living next door though they are 500 yards away. The antenna is going to be placed in a windbreak/shelter break that measures about 60x140 feet so it will be somewhat rectangular rather than square mostly. I have very little say in the orientation of the corners. the main restriction is that it must be kept hidden in the shelter belt.

--- In SkyWires@yahoogroups.com, "Donald Sanders" <w4bws@...> wrote:
>
> I'm sure there are several whom would like to help you. However, you don't give any criteria that is beneficial,i.e.., what frequency/bands, what style antenna(dipole,inv vee, loop), how far is the antenna from your equipment, how much power do you intend to run, is it rg59/rg6 or rg11?.
> That being said, you can make a half wave dipole for 80 and 40 and use one coax run. Wire length 136 feet for 80/ 66 feet for 40 meters, run at right angles from center insulator. Coax up to 100 foot of rg59 for 250 watts or less will be good. Put center up as high as possible and ends likewise.
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>
> Healthfully yours,
> Don W4BWS
> ----- Original Message -----
> From: kc0lwn
> To: SkyWires@yahoogroups.com
> Sent: Sunday, March 18, 2007 10:21 AM
> Subject: [SkyWires] skywire with 75 ohm coax

>
>
> Is there an optimum length or just use any length as the feed line.
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> the antenna by connecting to the outer braid? Or will this be just too
> heavy and stick with 12 g copper wire?
>
> I will be putting up my first antenna is why I am asking.
>

2247. Re: [SkyWires] skywire with 75 ohm coax updated

Yahoo group: SkyWires
Date: 2007-03-18 20:28:36 UTC
From: Donald Sanders
Topic: 2243 Message: 2247

Great. Well, i have a German Cloud Warmer myself. It is a 1 wave length (about 137 feet) loop up about 30 feet on one side and 20 feet n the other side. I use a 25 foot length of rg 6 and then 20 foot of rg58 into the matchbox. I work 40 , 30 ,20 and 15 meters with it using the matchbox.
It is for a second backup rig as my promary antenna is a Carolina Windom at 65 feet and also a GAP vertical. You should have no big problem with 100 watts and the No. 12 wire will be fine for your antenna. I use No. 12 plastic covered house wire for many of my antennas. The RG8X or RG8 will do fine at 50 to 100 watts. Even with the matchbox and non-resonant on all bands i expect 70 to 80 % radiation. Put it up and give it a try. As the old saying goes: anything is better than nothing.

Healthfully yours,
Don W4BWS
----- Original Message -----
From: kc0lwn
To: SkyWires@yahoogroups.com
Sent: Sunday, March 18, 2007 12:25 PM
Subject: [SkyWires] skywire with 75 ohm coax updated

Told you I am new to this. Ok 12 g wire it will be because of the weight issue. The coax is very low loss rg8. I read the article about the German Quad Cloud warmer and they did not specify a feed line length but connected the antenna to 75 ohm coax directly.

40 meter band skywire type of loop is the desired antenna since I want to work 20 meters too. I read that making it 160 or 80 meters would show rapid deterioration at 20 meters. 200 watts power.

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--- In SkyWires@yahoogroups.com, "Donald Sanders" <w4bws@...> wrote:
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>
> Healthfully yours,
> Don W4BWS
> ----- Original Message -----
> From: kc0lwn
> To: SkyWires@yahoogroups.com
> Sent: Sunday, March 18, 2007 10:21 AM
> Subject: [SkyWires] skywire with 75 ohm coax
>
>
> Is there an optimum length or just use any length as the feed line.
>
> Also I have 2 thousand feet of this stuff, so is it possible to make
> the antenna by connecting to the outer braid? Or will this be just too
> heavy and stick with 12 g copper wire?
>
> I will be putting up my first antenna is why I am asking.
>

2248. Re: [SkyWires] skywire with 75 ohm coax updated

Yahoo group: SkyWires
Date: 2007-03-22 15:00:56 UTC
From: jsb@digistar.com
Topic: 2243 Message: 2248

On Sun, 18 Mar 2007, kc0lwn wrote:

> I read that making it 160 or 80 meters would show rapid deterioration at
> 20 meters. 200 watts power.

80 good, 160 not so good. A loop resonant at 1.850MHz is resonant at
14.800MHz.

Just calculate the antenna length based on the lowest and highest
frequency you plan to use (it's better to be longer than shorter).

If you run CW on 80, 3.500MHz isn't a bad place to start. 3.500 would
optimally require a loop 287.14 feet long. This length is perfectly
within range for any tuner at 20 meters (14.000MHz). 1005/f = full
wavelength loop length.

The problem kicks in when you cut the loop for 3.700MHz (271.62 feet) and
try to push 20 meters into it. 271.62 feet is optimally resonant for
14.800MHz which becomes a tougher job for your average tuner.

So if you are wanting to put up a loop that is happily tuned on 20 meters
and comfy on 80, divide 1005 / 14.150 and multiply that length by 4.
That comes out to be 284.09 feet.

You can do tricks with lengthening or shortening the ladder line but my
experiences with this is the feedline starts to radiate into things.
Your mileage will vary. There's nothing better than a resonant (or
multiple wavelength harmonic of) antenna.

> It will be about 20-25 feet in height. and the the transmitter will be
> about 40-50 feet from the antenna. I have an underground conduit to run
> the feed line cable since the area between the antenna and radio room is
> mowed frequently and my wife does not want unsightly wires. not to
> mention my neighbors are already upset about a new ham living next door
> though they are 500 yards away.

I've got a 160 meter loop around my property and you can't see it in the
trees. The shiny copper wire is visible when the sun hits it just right.
I used insulated wire - I chose clear but in hindsight I should have
chosen black but I like seeing it.

I would definitely try to cut the wire to a length that is near resonance.
Weird stuff is going to find its way into phones and stereos if there is
swr in the antenna.

that's my 2 cents...

--
73 Jason N1SU
http://n1su.com/

2249. Re: [SkyWires] skywire with 75 ohm coax updated

Yahoo group: SkyWires
Date: 2007-03-22 15:04:34 UTC
From: jsb@digistar.com
Topic: 2243 Message: 2249

On Sun, 18 Mar 2007, Donald Sanders wrote:

> Great. Well, i have a German Cloud Warmer myself. It is a 1 wave length
> (about 137 feet) loop up about 30 feet on one side and 20 feet n the
> other side.

For what it's worth, my loop is up around 30 feet except for one corner that is 15 feet... it handily outperforms my 20m dipole at 38 feet except on the side where the loop is fed. My loop is fed in the middle of the south side and it is a little deaf in that direction. Next fall I will probably move the feedpoint to the north side and see how the DX to the south improves.

--
73 Jason N1SU
http://n1su.com/

2250. Angel

Yahoo group: SkyWires
Date: 2007-03-22 22:25:20 UTC
From: Angelina
Topic: 2250 Message: 2250

Could someone help me with my police scanner?
I would like to set it for weather and fire
reports. I have some code numbers but I
don't know how to set it. What buttons do I
push before putting the numbers in and what
do I push afterwards?
Angelina_dragon@...

2251. Re: [SkyWires] Angel

Yahoo group: SkyWires
Date: 2007-03-22 22:44:20 UTC
From: David Shrum
Topic: 2250 Message: 2251

I would suggest trying a different list for that kind of help, there are groups on Yahoo that could be of more help.
Dave N8PU Co-Moderator

Angelina wrote:
> Could someone help me with my police scanner?
> I would like to set it for weather and fire
> reports. I have some code numbers but I
> don't know how to set it. What buttons do I
> push before putting the numbers in and what
> do I push afterwards?
> Angelina_dragon@...
>

2252. Angel

Yahoo group: SkyWires
Date: 2007-03-22 22:53:32 UTC
From: Angelina
Topic: 2250 Message: 2252

I'll try yahoo.

2254. Scanner

Yahoo group: SkyWires
Date: 2007-03-29 08:19:12 UTC
From: burrppp
Topic: 2254 Message: 2254

Greetings,
Will the ShyWires system work with my scanners"

Burr

2256. 80 Meter loop

Yahoo group: SkyWires
Date: 2007-03-30 14:46:17 UTC
From: Mike Schwendeman
Topic: 2256 Message: 2256

I just put up a 75/80 Meter loop, as a temporary trial for a new radio in my basement. (My main shack is on the ground floor.) My DESIRE is to have the loop usable from 80 through 15 or 10 Meters.

The loop is low, due to the limitations of the lack of towers, etc. It is supported in a three-sided shape at only 15 feet off the ground. It is fed with about 18 feet of 450 Ohm ladder-line (slotted 14 Ga.) that runs to a brand new MFJ-919 4:1 current balun.

The radio is hooked to the balun via coax, through an SWR/power meter.

While the radio's built-in auto antenna tuner is able to achieve a "tune" indication, I am seeing 2.5 to as much as (lots more!) on the VSWR meter.

[1] Should I have NOT chosen a 4:1 current balun? (1:1 is better?)
[2] Should I have located the balun at the feed point, instead of employing the 450 Ohm ladder-line?
[3] Would a 120 foot G5RV be a better choice for this installation? (I could use a pole to support the G5RV at 30 feet.)

Thanks for your help!
-Mike-

2257. Re: [SkyWires] 80 Meter loop

Yahoo group: SkyWires
Date: 2007-03-30 16:33:09 UTC
From: Jim Dunstan
Topic: 2256 Message: 2257

At 09:46 AM 3/30/2007 -0500, you wrote:

>I just put up a 75/80 Meter loop, as a temporary trial for a new radio
>in my basement. (My main shack is on the ground floor.) My DESIRE is
>to have the loop usable from 80 through 15 or 10 Meters.
>
>The loop is low, due to the limitations of the lack of towers, etc. It
>is supported in a three-sided shape at only 15 feet off the ground. It
>is fed with about 18 feet of 450 Ohm ladder-line (slotted 14 Ga.) that
>runs to a brand new MFJ-919 4:1 current balun.
>
>The radio is hooked to the balun via coax, through an SWR/power meter.
>
>While the radio's built-in auto antenna tuner is able to achieve a
>"tune" indication, I am seeing 2.5 to as much as (lots more!) on the
>VSWR meter.
>
>[1] Should I have NOT chosen a 4:1 current balun? (1:1 is better?)

Either one is probably okay .... either kind of balun doesn't like to work
at high impedances as you no doubt will experience when feeding the
loop 80/10m ....

>[2] Should I have located the balun at the feed point, instead of
>employing the 450 Ohm ladder-line?

No, you are better off keeping the low loss 450 ohm line ... it has much
less power loss ... especially when dealing with a high SWR.

>[3] Would a 120 foot G5RV be a better choice for this installation? (I
>could use a pole to support the G5RV at 30 feet.)

yes, almost anything at 30 ft will work better than almost anything at 15
ft hi hi .... the advantage of a dipole (G5RV) is that it is very effective
in an inverted Vee configuration, which only requires a single support. I
always prefer feeding such an antenna with balanced line, 450 ohm or 300
twin lead and a balanced antenna tuner ... I find it more effective than
the G5RV configuration ... just my preference.

>Thanks for your help!
>-Mike

2258. Re: 80 Meter loop

Yahoo group: SkyWires
Date: 2007-03-30 18:21:12 UTC
From: Don Keith
Topic: 2256 Message: 2258

Mike:

I'm still learning about these "loopy" antennas, but find them to be not only fascinating but very effective as multi-band antennas. My own opinions on your queries:

1) A 1:1 CURRENT balun would have been a better choice if you can't hook balanced line directly to your tuner/matching device. With any large multi-band antenna, you will see a wide range of feedpoint impedances, most of which will be higher than or close to 450 ohms. A 4:1 balun may actually create at some frequencies a very low impedance at the input to your tuner and that's much more difficult to match.

2) There is no reason to put the balun at the feedpoint if you plan to use the loop anywhere it is not resonant...which is an almost infinite number of frequencies! Same thing if you feed the antenna with ladder line. You certainly don't want to use coax to the feedpoint unless the entire run from antenna to tuner/rig is considerably less than 20 feet...or you only intend to use the antenna where it is resonant. I doubt that is the case. The loss in the coax in high SWR conditions will be a problem, even if your tuner seems perfectly happy.

3) You are right that having the loop so low to the ground will make it less than a good performer for DX on 80/75, 40, and probably 30. Even 20 may not be stellar. Having the G5RV at 30 feet might be a better choice for DX on some of those bands. But the G5RV is not an all-band antenna. Depending on design, it will typically perform relatively well on 40, 20, and 17. A longer version might give you some duty on 80/75 and even 160. One advantage of the G5RV is the convenience of having coax as the lower part of the feedline, but that is also a disadvantage. If you are able to tune away a high mismatch on some bands and think you are putting out most of your power, you will be mistaken. The coax is lossy and much of the reflected power is lost as it travels up and down the coax, burned up as heat instead of by the highly desireable radiation resistance.

If you have not been there already, I recommend W4RNL's excellent website: www.cebik.com. I have a diagram and construction details on my own loop at the web site below. I'm still learning on it!

If you could find some way to get that loop up 20 or 30 more feet and feed it to as close to the tuner/rig as you can with ladder line, I think you will be very pleased with its multi-band performance. But try it where it is now. You may be pleasantly surprised or you may

be disappointed, but you will be on the air!

73,

Don N4KC
www.donkeith.com/n4kc.htm

--- In SkyWires@yahoogroups.com, Mike Schwendeman <mike@...> wrote:
>
> I just put up a 75/80 Meter loop, as a temporary trial for a new
radio
> in my basement. (My main shack is on the ground floor.) My DESIRE
is
> to have the loop usable from 80 through 15 or 10 Meters.
>
> The loop is low, due to the limitations of the lack of towers,
etc. It
> is supported in a three-sided shape at only 15 feet off the
ground. It
> is fed with about 18 feet of 450 Ohm ladder-line (slotted 14 Ga.)
that
> runs to a brand new MFJ-919 4:1 current balun.
>
> The radio is hooked to the balun via coax, through an SWR/power
meter.
>
> While the radio's built-in auto antenna tuner is able to achieve a
> "tune" indication, I am seeing 2.5 to as much as (lots more!) on
the
> VSWR meter.
>
> [1] Should I have NOT chosen a 4:1 current balun? (1:1 is better?)
> [2] Should I have located the balun at the feed point, instead of
> employing the 450 Ohm ladder-line?
> [3] Would a 120 foot G5RV be a better choice for this
installation? (I
> could use a pole to support the G5RV at 30 feet.)
>
> Thanks for your help!
> -Mike-
>

2259. Re: [SkyWires] 80 Meter loop

Yahoo group: SkyWires
Date: 2007-03-31 01:27:39 UTC
From: Dr.Ace Ratliff
Topic: 2256 Message: 2259

Hi Mike ,
Does the radio have a built in SWR meter ?
You say "The radio is hooked to the balun via coax, through an SWR/power meter."
I say the greater the distance via the coax between the radio and the SWR/power meter the greater the disparity of the 2 "SWR readings". If the radio has a built in SWR meter, go by that reading. The disparity of the 2 SWR readings will vary with the freq.

If the radio doesn't have a built in SWR meter , it is very likely that the VSWR measured at the radio
is less "maybe much less" than at the point of the SWR/power meter.
I'm not a big DX'er but I did have a full wave 160 mtr loop up at 15' feet high and it kicked butt locally.
RF ground isn't always at the ground surface.
Keep in mind that 1/4 ~ at 80 mtrs is about 66' .

73 Ace - www.WH2T.com

----- Original Message -----
From: Mike Schwendeman
To: SkyWires@yahoogroups.com
Sent: Friday, March 30, 2007 9:46 AM
Subject: [SkyWires] 80 Meter loop

I just put up a 75/80 Meter loop, as a temporary trial for a new radio in my basement. (My main shack is on the ground floor.) My DESIRE is to have the loop usable from 80 through 15 or 10 Meters.

The loop is low, due to the limitations of the lack of towers, etc. It is supported in a three-sided shape at only 15 feet off the ground. It is fed with about 18 feet of 450 Ohm ladder-line (slotted 14 Ga.) that runs to a brand new MFJ-919 4:1 current balun.

The radio is hooked to the balun via coax, through an SWR/power meter.

While the radio's built-in auto antenna tuner is able to achieve a "tune" indication, I am seeing 2.5 to as much as (lots more!) on the VSWR meter.

[1] Should I have NOT chosen a 4:1 current balun? (1:1 is better?)
[2] Should I have located the balun at the feed point, instead of employing the 450 Ohm ladder-line?
[3] Would a 120 foot G5RV be a better choice for this installation? (I could use a pole to support the G5RV at 30 feet.)

Thanks for your help!
-Mike-

2260. Re: 80 Meter loop

Yahoo group: SkyWires
Date: 2007-03-31 16:51:04 UTC
From: oldlongbeard
Topic: 2256 Message: 2260

Mike- your feed set up sounds optimal for your situation. I would take the 2nd SWR meter out of line. All you care is that the rig tuner can tune it. (be sure it IS in fact bringing the SWR down, not just trying, and giving up!). My guess is that the low loop would outperform the aforementioned G5RV, but try it, and let us know what you find!!

gud luck.

Greg, KC8HXO

--- In SkyWires@yahoogroups.com, Mike Schwendeman <mike@...> wrote:
>
> I just put up a 75/80 Meter loop, as a temporary trial for a new radio
> in my basement. (My main shack is on the ground floor.) My DESIRE is
> to have the loop usable from 80 through 15 or 10 Meters.
>
> The loop is low, due to the limitations of the lack of towers, etc. It
> is supported in a three-sided shape at only 15 feet off the ground. It
> is fed with about 18 feet of 450 Ohm ladder-line (slotted 14 Ga.) that
> runs to a brand new MFJ-919 4:1 current balun.
>
> The radio is hooked to the balun via coax, through an SWR/power meter.
>
> While the radio's built-in auto antenna tuner is able to achieve a
> "tune" indication, I am seeing 2.5 to as much as (lots more!) on the
> VSWR meter.
>
> [1] Should I have NOT chosen a 4:1 current balun? (1:1 is better?)
> [2] Should I have located the balun at the feed point, instead of
> employing the 450 Ohm ladder-line?
> [3] Would a 120 foot G5RV be a better choice for this installation? (I
> could use a pole to support the G5RV at 30 feet.)
>
> Thanks for your help!
> -Mike-
>

2261. D-104

Yahoo group: SkyWires
Date: 2007-04-03 17:40:56 UTC
From: K.Currie
Topic: 2261 Message: 2261

Has any one in the groop had any experience with the HC104 Kit for the Astatic D104 from Heil?
Looking for help with it . Using it on a TS 940 and a very large loop antenna.
Thanks
Keith VE5HKC

2262. Re: 80 Meter loop

Yahoo group: SkyWires
Date: 2007-04-03 20:05:37 UTC
From: Mike Schwendeman
Topic: 2256 Message: 2262

" I just put up a 75/80 Meter loop, as a temporary trial for a new radio
in my basement. (My main shack is on the ground floor.) My DESIRE is
to have the loop usable from 80 through 15 or 10 Meters....."

Replies to "Jim Dunstan" with my responses:
>[1] Should I have NOT chosen a 4:1 current balun? (1:1 is better?)
Either one is probably okay .... either kind of balun doesn't like to work
at high impedances as you no doubt will experience when feeding the
loop 80/10m ....
=====> OK on this; It is now in place, so this is highly acceptable!

>[2] Should I have located the balun at the feed point, instead of
>employing the 450 Ohm ladder-line?
No, you are better off keeping the low loss 450 ohm line ... it has much
less power loss ... especially when dealing with a high SWR.
=====> Again, OK on this; It is now in place, so this is highly acceptable!

>[3] Would a 120 foot G5RV be a better choice for this installation? (I
>could use a pole to support the G5RV at 30 feet.)
yes, almost anything at 30 ft will work better than almost anything at 15
ft hi hi .... the advantage of a dipole (G5RV) is that it is very effective
in an inverted Vee configuration, which only requires a single support. I
always prefer feeding such an antenna with balanced line, 450 ohm or 300
twin lead and a balanced antenna tuner ... I find it more effective than
the G5RV configuration ... just my preference.
=====> I still have the LOOP in place, as the weather is just too cold
to do any major changing, etc. I HAVE PURCHASED A G5RV antenna. I do
believe I will put this up in place of the loop. Mainly, as the means
of supporting the G5RV will result in a cleaner installation, as the
trees that I now employ as supports are LOW and the wire has to go
around other trees to be even as good (poor?) as it now is.

Replies to "Don Keith" with my responses:
1) A 1:1 CURRENT balun would have been a better choice ...
=====> What I now have will have to do, at least for the time being.
(See above.)

2) There is no reason to put the balun at the feed point ....
=====> OK on this! (Good!) In my case, I have under five feet of
RG-58 coax total, including the SWR meter that is in the coax feed.
(See below for more info on the SWR meter.)

3) You are right that having the loop so low to the ground will make
it less than a good performer for DX on 80/75, 40.... But the G5RV is
not an
all-band antenna. Depending on design......The coax is lossy and much of

the
reflected power is lost as it travels up and down the coax, burned up
as heat instead of by the highly desirable radiation resistance.
=====> Yes to all. Point taken! In my case, the coax is very SMALL,
but it is short, so the loss is at least minimized.

Replies to "Dr.Ace Ratliff" with my responses:
>Does the radio have a built in SWR meter ?
=====> Yes.

>You say "The radio is hooked to the balun via coax, through an
SWR/power meter."
=====> The setup is as follows: The RF output of the FlexRadio feeds a
short (under one foot) coax with PL-259 connectors, to an MFJ (giant
6-inch!) SWR-power meter. The output of the SWR meter feeds a 3 foot
coax made with RG-58 with PL-259 connectors; This 3 foot cable is
directly attached to the MFJ high-power current balun. The 15 foot run
of 450 Ohm ladder line feeds the 1-wavelength loop antenna.

>I say the greater the distance via the coax between the radio and the
SWR/power meter the greater the disparity of the 2 "SWR readings". If
the radio has a built in SWR meter, go by that reading. The disparity of
the 2 SWR readings will vary with the freq.
=====> The SWR indication is accessible in two forms: The radio has a
built-in meter, and I have an MFJ (the new 6 inch peak-reading model)
SWR-power meter.
=====> I am now becoming more "relaxed" at the high SWR indication that
I had described in my initial post. The radio is showing a good match,
as it has a built in auto tuner. The "scary" SWR indications were sen
only on the outboard SWR device. (This is midway between the radio's RF
output and the balun's input.)

>If the radio doesn't have a built in SWR meter , it is very likely
that the VSWR measured at the radio
is less "maybe much less" than at the point of the SWR/power meter.
=====> Yes, for this reason, as well as the fact that the radio's SWR
indication is perfect, due to the built-in auto-antenna tuner.

>I'm not a big DX'er but I did have a full wave 160 mtr loop up at 15'
feet high and it kicked butt locally.
RF ground isn't always at the ground surface. Keep in mind that 1/4 ~
at 80 mtrs is about 66' .
=====> This would be GREAT, but it "ain't gonna' happen" due to my
limited supports that are available.

Replies to "oldlongbeard" with my responses:
> Mike- your feed set up sounds optimal for your situation. I would take
the 2nd SWR meter out of line. All you care is that the rig tuner can
tune it. (be sure it IS in fact bringing the SWR down, not just
trying, and giving up!). My guess is that the low loop would
outperform the aforementioned G5RV, but try it, and let us know what
you find!!

=====> Thank you for your thoughts. Yes, I am now tending to agree with you and the rest of the group that offered their inputs on the matter. I shall remove the outboard SWR meter. What I cannot SEE is OK, as long as the radio is happy! I see normal and full power out of the radio.

=====> As an added FYI, I will tell you that I have a 540 foot loop on the North side of the house; It is at 45 or so feet, and is fed with about 50 feet of 450 Ohm ladder line via an Icom AH-4 auto-antenna tuner. This beast works very well for me! This is one hell of an antenna! (From 160 through 6 meters, it appears.) Now, in this case, I have NO SWR meter in the 12 foot coax line that connects the radio to the AH-4 tuner! (On the SWR indications: What I cannot see, or do not know about is just fine. But, with this antenna, I am not using any balun; The AH-4 serves as the ONLY coupling device, and it is able to tune the loop with ease. The radio's reflected power is zero.)

=====> Also, in view of the fact that I have weak and LOW trees, the NEW 80-meter loop antenna that I have erected is low to the ground, and very sloppy. For this reason, I have purchased an MFJ (groan...) version of the G5RV antenna. I will erect ONE mast made of 2-to-3 inch electrical conduit, telescoped to allow at least a 1.5 inch third, or top section. I will erect the G5RV with this mast. I will disassemble the feed-point's 450 Ohm ladderline to SO-239 adapter, so I can feed the G5RV's ladderline into the house via a hole which is now being used for the soon-to-be-removed 80 meter loop. It is my "plan" to feed about 4 feet of the ladderline into the basement, which is where the present loop's ladderline is terminated with the 4:1 balun. I will add supports to keep the ladderline away from the mast, of course.

=====> Does this sound like a workable alternative? (And, YES; I will retire the external SWR meter...) Thank you, all!! -Mike-

2263. Re: [SkyWires] D-104

Yahoo group: SkyWires
Date: 2007-04-03 19:24:58 UTC
From: Donald Sanders
Topic: 2261 Message: 2263

No on that mike replacement, but the one from K9STH Glen Zook works very well. Comments below are from Glen.

The output impedance is 25K ohms. Sensitivity is
rated at -55 dB @ 1000 Hz (1 KHz). Response is 50 Hz
to 8000 Hz (8 KHz).

I am using the element on my boat anchor transmitters
which include Collins 32S-1, 32S-3, Heath SB-401,
SB-110A, DX-100, TX-1 Apache, WRL Globe Champion 350A,
and Hammarlund HX-50A (among others). When compared
with my D-104 that has one of the last D-104
replacement cartridges sold by Astatic before they
discontinued the D-104 the on-the-air reports are at
least as "good as" and often "better than" the
original D-104 element.

Glen, K9STH
Website: http://k9sth.com

Healthfully yours,
Don W4BWS
----- Original Message -----
From: K.Currie
To: SkyWires@yahoogroups.com
Sent: Tuesday, April 03, 2007 12:40 PM
Subject: [SkyWires] D-104

Has any one in the groop had any experience with the HC104 Kit for the Astatic D104 from Heil?
Looking for help with it . Using it on a TS 940 and a very large loop antenna.
Thanks
Keith VE5HKC

2271. Bungee cord size?

Yahoo group: SkyWires
Date: 2007-04-14 00:04:15 UTC
From: Bruce Conner
Topic: 2271 Message: 2271

I'm getting ready to put up my fullwave horizontal 80 meter loop, and I'm planning on using bungee cord for some give as the trees sway. These trees are pretty tall, but they are a little thin, so they do have some movement when the wind blows. I can buy the bungee material off a roll at the sporting goods store, but I don't know what size to get or how much stretch I should allow for on each corner. Any suggestions? This antenna will be up about 30 feet, using #14 wire, and the ususal pulley arrangement.

I'm trying out a new method of getting my lines up in the trees and will report on the success/failure when I've tried it. The initial test went quite well. It's only good for about 35 feet max, but may be good for those of us who can't be running around with bows and arrows, slingshots, or pneumo-canonen. :') And it is super-accurate. The line goes exactly where you want.

BTW, for those of you who want a really good pneumatic launcher design, check this one out: http://users.frii.com/bsimon/pngun.htm I've seen one of these in action, and the internal valving mechanism is FAR superior to using a solenoid or ball valve. Looks pretty easy to make too. Rigged with a tennis ball sized barrel, I could see this being a nice unit in the field.

2272. Re: Bungee cord size?

Yahoo group: SkyWires
Date: 2007-04-18 01:58:24 UTC
From: Mike
Topic: 2271 Message: 2272

I'm not sure about bungee cord and I dont have my loop up yet but I do use pulleys,cord and 8 lb weights on each end of a 160M dipole. Last week we had wind gust of 60 MPH+ and the dipole survived fine.My dipole runs through 6 trees so there was lots of swaying going on. I watched one end insulator (the one I could see from the window)move back and forth about 12-15ft. It was a pain to string the dipole through all the trees and I'm glad I took the extra effort to put weights at each end or I'm sure the trees would have ripped the wire apart.

2274. Find your "Radio Grid Square" using your GPS

Yahoo group: SkyWires
Date: 2007-04-21 22:17:33 UTC
From: hastingsji
Topic: 2274 Message: 2274

If you have a GPS unit and need to find your DX "Radio Grid" location there is no need for lat and long conversions, grid maps, etc.

Just go to you're the page of your GPS setup screen, where you choose position format. This is usually something like going to the setup screen, then to units setup, then to position format. Under position format you will change your format form the lat and long format, which may look something like "hadd mn' ss.s" to the "Maidenhead Grid." Now just step outside your house with your GPS and read your "Radio Grid Square" directly from your GPS.

2277. Help on mini loop antenna

Yahoo group: SkyWires
Date: 2007-04-27 11:22:19 UTC
From: bambazonke01
Topic: 2277 Message: 2277

Does anyone know of a delta loop antenna design for 40 M that has two arms that resonate it to 80 M as well?
Jim VE3DDY

2279. 1:1 or 4:1

Yahoo group: SkyWires
Date: 2007-04-29 04:16:47 UTC
From: Paul
Topic: 2279 Message: 2279

I've been ready many - maybe too many - posts on the Horizontal loop in preperation for my summer antenna project. Some say use a 1:1 balun, some say use a 4:1. I plan on a full wave length 40M loop, 1/4 wave length per side and I'd feed it with 450 ohm window line. I'd hope to use the loop on all other higher frequencies up to 10M. I don't need to use it on 80M though that would be nice. I plan to take the coax from the 4:1 LDG Voltage Balun to an LDG autotuner.

Can anyone see any major problem with that - or a simple change that would result in big improvement?

Thank you and 73,
Paul

2280. RE: [SkyWires] 1:1 or 4:1

Yahoo group: SkyWires
Date: 2007-04-29 07:22:23 UTC
From: John Farmer
Topic: 2279 Message: 2280

Hello Paul,

I love my loop. I have played around with a number of different arrangements, including various combinations of baluns and feedline configurations.

All I can contribute to your thinking is my own experience.

I have an 80m full wave loop, in the form of a "lazy" rectangle, about 10m above ground.

The final feed configuration for my loop has in fact turned out to be the simplest:

heavy duty, low loss window line from the loop, converting to about 2m of RG213 coax at the entry to my shack. At the transition I have

a choke balun (1:1 ferrite sleeve balun, after W2DU). I connect the coax to the unbalanced input on my autotuner. The tuner can provide a 1:1 match from 80m to 10m.

Perhaps the "ideal" arrangement is running the ladderline directly to a truly balanced tuner, but I don't have one, so this option was out.

With the help of my antenna analyser, I discovered that the impedence at the end of the ladder line at some frequencies was actually already quite low and a 4:1 balun at the coax/ladderline transition did nothing to help this; it just converted an already low impedance to some other (unpredictable) impedance. It certainly did nothing to help the tuner find a better match on any frequency, and I was also concerned about the losses in the 4:1 balun, given that the SWR on the ladder line is quite high on some bands (up to 5:1) and that voltage baluns, especially, are not very efficient as load SWR rises. So I changed to a simple RF choke balun to keep the common mode current off the coax and left it at that.

With this simple arrangement I have had great success with my loop on all bands from 80 to 10m, including WARC bands.

I have no trouble with 80m contacts from Tasmania into the NE of the US and I now have empirical evidence to dispute the often quoted remark that these loops are "cloud warmers" on the low bands at such low heights. The loop also performs well on 20m and have worked 56 countries from Tasmania in 9 months. I've had 10m contacts over 2000km. I run just 100W. If I can hear stations, I can work them and my signal reports are very rarely less than 56. Tuner works fine and I've no trouble with RFI/TVI. Perhaps I'm easily pleased, but I couldn't want for more.

Play with your loop and see what works for you. My only suggestion is to keep the feedline arrangement simple and look to minimize unmatched losses - be careful with your choice of feedline and select a balun which has minimal loss at highish SWR. Perhaps a 4:1 voltage balun isn't the best choice here.

Hope that helps.

73,

John

VK7JBR

-----Original Message-----
From: SkyWires@yahoogroups.com [mailto:SkyWires@yahoogroups.com] On Behalf Of Paul
Sent: Sunday, 29 April 2007 2:17 PM
To: SkyWires@yahoogroups.com
Subject: [SkyWires] 1:1 or 4:1

I've been ready many - maybe too many - posts on the Horizontal loop in preperation for my summer antenna project. Some say use a 1:1 balun, some say use a 4:1. I plan on a full wave length 40M loop, 1/4 wave length per side and I'd feed it with 450 ohm window line. I'd hope to use the loop on all other higher frequencies up to 10M. I don't need to use it on 80M though that would be nice. I plan to take the coax from the 4:1 LDG Voltage Balun to an LDG autotuner.

Can anyone see any major problem with that - or a simple change that would result in big improvement?

Thank you and 73,
Paul

2281. Re: 1:1 or 4:1

Yahoo group: SkyWires
Date: 2007-04-29 14:05:24 UTC
From: Don Keith
Topic: 2279 Message: 2281

Paul:

I've probably read most of those same posts! There is a good discussion of this topic on the DX Engineering site (http://www.dxengineering.com/Products.asp?ID=50&SecID=10&DeptID=9), written by W8JI ("Choose the correct balun"). Granted they want to sell you a balun, but the reasoning behind choosing the correct one makes imminent good sense to me.

Don N4KC
www.n4kc.com
www.donkeith.com

--- In SkyWires@yahoogroups.com, "Paul" <k7nhb@...> wrote:
>
> I've been ready many - maybe too many - posts on the Horizontal loop
> in preperation for my summer antenna project. Some say use a 1:1
> balun, some say use a 4:1. I plan on a full wave length 40M loop,
1/4
> wave length per side and I'd feed it with 450 ohm window line. I'd
> hope to use the loop on all other higher frequencies up to 10M. I
> don't need to use it on 80M though that would be nice. I plan to
take
> the coax from the 4:1 LDG Voltage Balun to an LDG autotuner.
>
> Can anyone see any major problem with that - or a simple change that
> would result in big improvement?
>
> Thank you and 73,
> Paul
>

2282. Re: [SkyWires] 1:1 or 4:1

Yahoo group: SkyWires
Date: 2007-04-29 16:42:55 UTC
From: Jim Dunstan
Topic: 2279 Message: 2282

At 04:16 AM 4/29/2007 +0000, you wrote:

>I've been ready many - maybe too many - posts on the Horizontal loop
>in preperation for my summer antenna project. Some say use a 1:1
>balun, some say use a 4:1. I plan on a full wave length 40M loop, 1/4
>wave length per side and I'd feed it with 450 ohm window line. I'd
>hope to use the loop on all other higher frequencies up to 10M. I
>don't need to use it on 80M though that would be nice. I plan to take
>the coax from the 4:1 LDG Voltage Balun to an LDG autotuner.
>
>Can anyone see any major problem with that - or a simple change that
>would result in big improvement?
>
>Thank you and 73,
>Paul

Hi Paul,

The weak point in any antenna feed system that uses a balanced feed line is the transition to the input of an unbalanced antenna tuner (manual or automatic). These ATU's usually come with a ferrite core balun either 1:1 or 4:1. They are satisfactory as long as the impedance of the balanced line (at the frequency of operation) is close to the required impedance of the balun (200-400 ohm for the 4:1 and 50-100 ohm for the 1:1) otherwise the performance (efficiency) of the balun is suspect; this will become immediately evident when you run high power and it goes up in smoke!

Check out VK7JBR's post ... just after yours ... he has made some interesting observations.

So, what to do? Well VK7JBR's recommendation of using an antenna analyzer to actually look at the impedance at the end of the balanced feed line at the point it is to make it's transition is really important ... you will then know what you are up against. Sometimes changing the length of the feed line can bring about a satisfactory compromise on the frequencies you operate. I don't own such an analyzer ... but our Ham Club does and I can borrow it for such occasions.

Another approach which eliminates the finicky ferrite core balun is to use a balanced antenna tuner .... there are a few on the market ... and they are not all that difficult to build .... I personally like the Z-match design.

Another approach .... which I almost never see .... which works perfectly under most conditions ... is to use a standard unbalanced ATU and to keep the frame above ground .... eg .... one side of the balanced line goes directly to the "long wire input" and the other side of the balanced line connects to ground or frame of the tuner. The frame is not grounded in any

other way except via the coax feed line .... and the coax is then formed into a simple choke balun. Such an ATU would be best located outside the operating position and would have to be weather protected. Any of the SGC ATU's work perfectly under these conditions. This approach usually limits power to 100w.

Being a cheap skate at heart .... I have used an MFJ L-network 'long wire' tuner to match a balanced feed line coming into my shack (portable operation).... one side goes to the 'long wire' terminal ... the other side goes directly to the aluminium case, which in turn is screwed to the wood wall. I place a current balun in the coax .... it works perfectly on all frequencies ... I just have to be careful tuning as the small aluminium case is RF hot hi hi!! I have also used unbalanced 'T-match' tuners this way for portable all band operation (greater tuning flexibility than the simple L-match tuner).

In summary, the weak point is the ferrite balun which doesn't like working outside the 50 to 50 ohm or 50 to 200 ohm ranges. Solution ... don't use them except for conditions falling into these ranges ... check it out with an antenna analyzer. If you find one or two problem points ... changing the feed line length (adding in a piece of feedline) may be the solution. If you are going to use a manual TU then go for a one designed for balanced feed line. If you want to use an unbalanced ATU ... then isolate its frame from ground and put in a current choke/balun on the coax.

Jim, VE3CI

2283. Re: [SkyWires] 1:1 or 4:1

Yahoo group: SkyWires
Date: 2007-04-30 13:01:51 UTC
From: Kyle
Topic: 2279 Message: 2283

Paul,

I have just recently gotten my loop working, and I have to say it is great! But I did have some obstacles to overcome which perhaps may be useful here.

I'll skip all the parts that did not work, and try to get straight to the point of what actually works for me. My loop is 160m, is level, and is 30-50 feet up in the air as the land goes up and down under it. There were many combinations that were suggested that simply did not work. I was considering changing to 450 ohm window line, when a friend loaned me his antenna analyzer. I got up on a ladder and connected it directly to the loop. I WAS AMAZED! Instead of checking SWR, I checked for resonance points (using the Z/Theta method). As predicted, they occurred near 160, 80, 40, 20, *12*, and 10. I don't know where the 12 came from, but I was ignoring the bands and just going for the resonance locations. I looked at the impedance at each of these resonant points. The loop's impedance at resonance varied from 8 ohms (10m) to 129 ohms (80m). It was actually lower at 160m, but I don't have the impedance information with me right now. 8-129 ohms! Obviously, there was no way to match a feedline. The previously poor performance was explained by the fact that no single balun, feedline, or stub can match the loop impedance correctly unless I give up and use it on only ONE band - no way!

I believe a balun is useful to isolate the RF currents and transition between the balanced loop, and the unbalanced feedline, so I went ahead and put a very well built balun at the loop transition. Next I bought an LDG Z-11 Pro smart auto tuner and put it right at the feed to the balun. Then I ran a 145 foot garbage coax back to my rig, where I run as much as 100W. I chose the Z-11 Pro because it has excellent reviews on eham, is very cost effective, requires no extra wires - it simply detects a high SWR, corrects it, and stores the result in memory even if I tune up using SSB.

I've only had it up a few weeks and have checked into a regional SSB net on 80m a few times. I'm in Atlanta, Georgia, USA. During the regional net I can hear every single station that checks into the net from Texas, Mississippi, Missouri, Ohio, Arkansas, Kentucky, Alabama, Virginia, Florida, the Carolinas, and Tennessee where net control is located. Most stations peg my S meter (>S9+60), and all are over S7. Net control informs me I am "loud and clear". In my few weeks of tinkering with it, I have made a contact in Wyoming on 40m SSB. He reported a "clear strong signal" to me, I think he said S6, but I neglected to write it in my log - hopefully I'll get a QSL card. That's a distance of 2539 km or 1578 miles.

Here is why I believe my loop works so effectively in a somewhat different configuration than is commonly recommended. First of all, at HF frequencies, even garbage coax doesn't have a great deal of loss, as evidenced by the consistent pegging of my S meter with crystal clear signal with my preamp off. It WILL have a great deal of loss if there is an impedance mismatch between the coax and the load (like when the tuner is in the shack). In general, the more mismatch you have between your coax and your antenna, the more loss you will have in the coax. Second, most importantly of all, the tuner needs to be at the load (the antenna) or it will do nothing but match the poor system to the output impedance of your rig or amplifier. When you use a 4:1 balun to connect an 8 ohm load to a 450 ohm feedline which goes all the way back to an antenna tuner in your shack, you have nothing but losses, reflections, and an inefficient setup. Sure the tuner will get your SWR down so you can output full power from your rig, but you are most certainly not getting the power into your loop effectively. Many people have gotten this to work and I attribute that to the wonderful characteristics of the loop itself. And finally, use a balun at the transition. I feel like a "real" transformer balun is better at matching the loop to the tuner than beads around the coax or loops of coax, but that's just an opinion.

Anyway, going from the loop to the rig, the loop has some given impedance at some frequency, it goes from balanced to unbalanced with a slight loss, then immediately into the tuner (really more of a transmatch here I suppose), and then travels happily matched along the 50 ohm feedline back to the rig. I always have 1:1 SWR at the rig. The system works so well that I tuned it up on 6m and made some local (no skip) SSB contact with it on 6! I have even used it to check into a 6m FM net where the repeater is about 20-30 miles away - that's just all wrong, but it worked! I have used it on 10m and 20m successfully too.

I really want to make some contacts on 160m, but the band has been so hot and cluttered lately, that I haven't been able to find room to call CQ. On 160, I literally cannot move my tuning dial without hearing another conversation and the meter stays pegged from end to end. I have even listened on 160 with the rig's attenuator on, which is something I NEVER thought I'd have to do with a 145', crappy, coax feedline.

Just for one last note, with all else being the same, when I use a tuner at the rig, I can match the feedline to the rig, but I get worse receive performance, and nobody can hear me. Strong stations are more like S5-S7 at most.

Are there other ways to do it? Certainly! I do not mean to say that other advice is not good, or that there are not other ways to successfully install a loop skywire. I am just elated about how mine works now that I have worked out the kinds, and felt I should share my recent success with the group.

Hope to work you all on the air!

73,
Kyle
W4KDA

Paul wrote:
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> Can anyone see any major problem with that - or a simple change that
> would result in big improvement?
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> Thank you and 73,
> Paul

2284. Re: [SkyWires] 1:1 or 4:1

Yahoo group: SkyWires
Date: 2007-04-30 14:38:25 UTC
From: Bill Graham
Topic: 2279 Message: 2284

Kyle,

You didn't mention what type of balun you used ... voltage or current;
4:1 or 1:1; manufacturer (or home brew)?

'73
Bill
AG4SI

Kyle wrote:
>
> Paul,
>
> I have just recently gotten my loop working, and I have to say it is
> great! But I did have some obstacles to overcome which perhaps may be
> useful here.
>
> I'll skip all the parts that did not work, and try to get straight to
> the point of what actually works for me. My loop is 160m, is level, and
> is 30-50 feet up in the air as the land goes up and down under it.
> There were many combinations that were suggested that simply did not
> work. I was considering changing to 450 ohm window line, when a friend
> loaned me his antenna analyzer. I got up on a ladder and connected it
> directly to the loop. I WAS AMAZED! Instead of checking SWR, I checked
> for resonance points (using the Z/Theta method). As predicted, they
> occurred near 160, 80, 40, 20, *12*, and 10. I don't know where the 12
> came from, but I was ignoring the bands and just going for the resonance
> locations. I looked at the impedance at each of these resonant points.
> The loop's impedance at resonance varied from 8 ohms (10m) to 129 ohms
> (80m). It was actually lower at 160m, but I don't have the impedance
> information with me right now. 8-129 ohms! Obviously, there was no way
> to match a feedline. The previously poor performance was explained by
> the fact that no single balun, feedline, or stub can match the loop
> impedance correctly unless I give up and use it on only ONE band - no way!
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> I believe a balun is useful to isolate the RF currents and transition
> between the balanced loop, and the unbalanced feedline, so I went ahead
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> I tune up using SSB.
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> I've only had it up a few weeks and have checked into a regional SSB net

> on 80m a few times. I'm in Atlanta, Georgia, USA. During the regional
> net I can hear every single station that checks into the net from Texas,
> Mississippi, Missouri, Ohio, Arkansas, Kentucky, Alabama, Virginia,
> Florida, the Carolinas, and Tennessee where net control is located.
> Most stations peg my S meter (>S9+60), and all are over S7. Net control
> informs me I am "loud and clear". In my few weeks of tinkering with it,
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> my log - hopefully I'll get a QSL card. That's a distance of 2539 km or
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> Here is why I believe my loop works so effectively in a somewhat
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> signal with my preamp off. It WILL have a great deal of loss if there
> is an impedance mismatch between the coax and the load (like when the
> tuner is in the shack). In general, the more mismatch you have between
> your coax and your antenna, the more loss you will have in the coax.
> Second, most importantly of all, the tuner needs to be at the load (the
> antenna) or it will do nothing but match the poor system to the output
> impedance of your rig or amplifier. When you use a 4:1 balun to connect
> an 8 ohm load to a 450 ohm feedline which goes all the way back to an
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> opinion.
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> Anyway, going from the loop to the rig, the loop has some given
> impedance at some frequency, it goes from balanced to unbalanced with a
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> system works so well that I tuned it up on 6m and made some local (no
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> wrong, but it worked! I have used it on 10m and 20m successfully too.
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> hot and cluttered lately, that I haven't been able to find room to call
> CQ. On 160, I literally cannot move my tuning dial without hearing
> another conversation and the meter stays pegged from end to end. I have
> even listened on 160 with the rig's attenuator on, which is something I
> NEVER thought I'd have to do with a 145', crappy, coax feedline.
>

> Just for one last note, with all else being the same, when I use a tuner
> at the rig, I can match the feedline to the rig, but I get worse receive
> performance, and nobody can hear me. Strong stations are more like
> S5-S7 at most.
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> Are there other ways to do it? Certainly! I do not mean to say that
> other advice is not good, or that there are not other ways to
> successfully install a loop skywire. I am just elated about how mine
> works now that I have worked out the kinds, and felt I should share my
> recent success with the group.
>
> Hope to work you all on the air!
>
> 73,
> Kyle
> W4KDA
>
> Paul wrote:
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> > I've been ready many - maybe too many - posts on the Horizontal loop
> > in preperation for my summer antenna project. Some say use a 1:1
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> > wave length per side and I'd feed it with 450 ohm window line. I'd
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> > don't need to use it on 80M though that would be nice. I plan to take
> > the coax from the 4:1 LDG Voltage Balun to an LDG autotuner.
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> > Can anyone see any major problem with that - or a simple change that
> > would result in big improvement?
> >
> > Thank you and 73,
> > Paul
>
>
>
>

-

2285. Re: [SkyWires] 1:1 or 4:1

Yahoo group: SkyWires
Date: 2007-04-30 14:50:06 UTC
From: list email filter
Topic: 2279 Message: 2285

Kyle,

Very interesting and encouraging, I've had similar plans here. If you
don't mind my asking, what steps did you take to weatherproof your Z-11 Pro?

--
73,

Erik
N7HMS (I'm an ex 4 call, I took my Tech exam at Ga Tech, and lived on
the boarder between Cobb and Cherokee counties.)
IRLP Node 3805 445.975 Simp PL103.5

Emails sent directly to this address instead of going through a yahoo
group are automatically processed as junk mail, so I never see them. If
you want to email me directly, try 'mycall' at 12bars dot com, thanks.

Kyle wrote:
>
> I have just recently gotten my loop working, and I have to say it is
> great! But I did have some obstacles to overcome which perhaps may be
> useful here.

<Snip>

> I believe a balun is useful to isolate the RF currents and transition
> between the balanced loop, and the unbalanced feedline, so I went ahead
> and put a very well built balun at the loop transition. Next I bought
> an LDG Z-11 Pro smart auto tuner and put it right at the feed to the
> balun.

<Snip>

> Hope to work you all on the air!
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> 73,
> Kyle
> W4KDA
>

2286. Re: [SkyWires] 1:1 or 4:1

Yahoo group: SkyWires
Date: 2007-04-30 15:17:47 UTC
From: Kyle
Topic: 2279 Message: 2286

I purchased it, but I am at work now and do not remember from whom or
what the part number was. I'll get the information for the group tonight.

Kyle
W4KDA

Bill Graham wrote:
>
>
> Kyle,
>
> You didn't mention what type of balun you used ... voltage or current;
> 4:1 or 1:1; manufacturer (or home brew)?
>
> '73
> Bill
> AG4SI
>
> Kyle wrote:
>
>> Paul,
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>> I have just recently gotten my loop working, and I have to say it is
>> great! But I did have some obstacles to overcome which perhaps may be
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>> > balun, some say use a 4:1. I plan on a full wave length 40M loop, 1/4
>> > wave length per side and I'd feed it with 450 ohm window line. I'd
>> > hope to use the loop on all other higher frequencies up to 10M. I
>> > don't need to use it on 80M though that would be nice. I plan to take
>> > the coax from the 4:1 LDG Voltage Balun to an LDG autotuner.
>> >
>> > Can anyone see any major problem with that - or a simple change that
>> > would result in big improvement?
>> >
>> > Thank you and 73,
>> > Paul
>>
>
> -
>
>

2287. Re: [SkyWires] 1:1 or 4:1

Yahoo group: SkyWires
Date: 2007-04-30 15:28:19 UTC
From: Kyle
Topic: 2279 Message: 2287

Erik,

I am running the Z-11 Pro off a battery pack that connects to the external connector. I didn't put the batteries inside the case like the manual says you can. Let me say, this has been an evolving project with a great deal of learning involved on my part. Right now the tuner is just out there and I go up and down the ladder to get it out of the weather (not great).

It is a tiny tuner, so this weekend's project will be to put it in an "ammo box". They are sealed, hardy, and cheap here. I'm going to put the battery pack and the tuner in there, and have two SO-239 "bulkhead" connectors for the feedlines. According to the manual, the batteries should last a long time, so perhaps I'll have to go up there about once per year to change them. I can live with that.

The corner of the loop is attached to the roof of the side of the second story of my house, and I plan to attach the ammo box to the wall. I have not decided which method I want to mount it with, but I will paint it to match the house when I'm done so it won't be such an eyesore.

Kyle
W4KDA
(Gwinnett county)

list email filter wrote:
>
>
> Kyle,
>
> Very interesting and encouraging, I've had similar plans here. If you
> don't mind my asking, what steps did you take to weatherproof your Z-11 Pro?
>
> --
> 73,
>
> Erik
> N7HMS (I'm an ex 4 call, I took my Tech exam at Ga Tech, and lived on
> the boarder between Cobb and Cherokee counties.)
> IRLP Node 3805 445.975 Simp PL103.5

2288. Re: [SkyWires] 1:1 or 4:1

Yahoo group: SkyWires
Date: 2007-05-01 12:05:20 UTC
From: Kyle
Topic: 2279 Message: 2288

Bill,

The balun I used is a Unadilla W2AU. Here is where I purchased mine,
although I'm sure it available elsewhere:
http://www.universal-radio.com/catalog/antsup/1888.html

73,
Kyle
W4KDA

Bill Graham wrote:
>
>
> Kyle,
>
> You didn't mention what type of balun you used ... voltage or current;
> 4:1 or 1:1; manufacturer (or home brew)?
>
> '73
> Bill
> AG4SI

2289. Radio gear gotta go!

Yahoo group: SkyWires
Date: 2007-05-08 01:12:58 UTC
From: Les
Topic: 2289 Message: 2289

Need to sell my linears, antennas, radios, meters, etc, going thru divorce and moving!

Click here <http://search.ebay.com/_W0QQsassZmusicminerQQhtZ-1> to view info.

2291. Re: [SkyWires] Yahoo! Groups-Karen have added you to her favorite list

Yahoo group: SkyWires
Date: 2007-05-11 01:23:55 UTC
From: David Shrum
Topic: 2291 Message: 2291

Well she may have added us to her list, BUT I un-added her from our list.
Dave N8PU

karenpassion0105 wrote:
> Karen have added you to her favorite list,

2293. Re: [SkyWires] huge

Yahoo group: SkyWires
Date: 2007-05-11 01:55:28 UTC
From: David Shrum
Topic: 2293 Message: 2293

This one is history too.
Dave N8PU

josalyne-overfelt686@... wrote:
> People judge

2294. Re: [SkyWires] Yahoo! Groups-Karen have added you to her favorite list

Yahoo group: SkyWires
Date: 2007-05-11 03:10:27 UTC
From: NØATH
Topic: 2291 Message: 2294

Hey - Good job Dave
NØATH / Dave
----- Original Message -----
From: David Shrum
To: SkyWires@yahoogroups.com
Sent: Thursday, May 10, 2007 8:23 PM
Subject: Re: [SkyWires] Yahoo! Groups-Karen have added you to her favorite list

Well she may have added us to her list, BUT I un-added her from our list.
Dave N8PU

karenpassion0105 wrote:
> Karen have added you to her favorite list,

2295. Multiple wave Loop

Yahoo group: SkyWires
Date: 2007-05-11 03:33:31 UTC
From: n7cal
Topic: 2295 Message: 2295

I am putting up a 4 or 5 wave length loop and wanted to run some stuff by the group.

First the wire: I am using seven strand aluminum power line. It's about 3/8" in diameter.

I will be putting it at an average of about 60 to 80 feet up using trees and power poles.

I will be using 450 ohm ladder line from the antenna to a polyphaser and balun just outside the shack, then about 10' of coax to the tuner.

Any concerns or input? I did see where the use of a 1:1 balun is preferable to the 4:1. I will be running a single 3-500z amp so I dont want to risk a hot spot. I live on a 25,000 ranch and dont get to town for supplies very often, I have a 4:1 balun, will this work ok?

Has anyone ever put up a multiple wave length loop? should I worry about cutting it to a multiple of my favorite 75 meter frequency? Has anyone ever had a multiple wavelength loop that didn't require a tuner?

Thanks
N7CAL

2296. Re: [SkyWires] Yahoo! Groups-Karen have added you to her favorite list

Yahoo group: SkyWires
Date: 2007-05-11 05:26:09 UTC
From: Dr.Ace Ratliff
Topic: 2291 Message: 2296

Thanks Dave.
Ace

----- Original Message -----
From: David Shrum
To: SkyWires@yahoogroups.com
Sent: Thursday, May 10, 2007 8:23 PM
Subject: Re: [SkyWires] Yahoo! Groups-Karen have added you to her favorite list

Well she may have added us to her list, BUT I un-added her from our list.
Dave N8PU

karenpassion0105 wrote:
> Karen have added you to her favorite list,

2297. Re: [SkyWires] Yahoo! Groups-Karen have added you to her favorite list

Yahoo group: SkyWires
Date: 2007-05-11 10:38:44 UTC
From: Nathan Emily and Quincy Watts
Topic: 2291 Message: 2297

To
Dave
thanks she or who ever is going through yahoogroups doing this.
I just got a -mail from another group.
Thanks
Nathan
KD5BLZ

> ----- Original Message -----
> *From:* David Shrum <mailto:aq392@...>
> *To:* SkyWires@yahoogroups.com <mailto:SkyWires@yahoogroups.com>
> *Sent:* Thursday, May 10, 2007 8:23 PM
> *Subject:* Re: [SkyWires] Yahoo! Groups-Karen have added you to
> her favorite list
>
> Well she may have added us to her list, BUT I un-added her from
> our list.
> Dave N8PU
>
> karenpassion0105 wrote:
> > Karen have added you to her favorite list,
>
>

2298. RE: [SkyWires] Multiple wave Loop

Yahoo group: SkyWires
Date: 2007-05-11 10:00:28 UTC
From: Buck
Topic: 2295 Message: 2298

> -----Original Message-----
> From: SkyWires@yahoogroups.com [mailto:SkyWires@yahoogroups.com] On Behalf
> Of n7cal
> Sent: Thursday, May 10, 2007 11:34 PM
> To: SkyWires@yahoogroups.com
> Subject: [SkyWires] Multiple wave Loop
>
> I am putting up a 4 or 5 wave length loop and wanted to run some
> stuff by the group.
>
> First the wire: I am using seven strand aluminum power line. It's
> about 3/8" in diameter.
>
> I will be putting it at an average of about 60 to 80 feet up using
> trees and power poles.
>
> I will be using 450 ohm ladder line from the antenna to a polyphaser
> and balun just outside the shack, then about 10' of coax to the tuner.
>
> Any concerns or input? I did see where the use of a 1:1 balun is
> preferable to the 4:1. I will be running a single 3-500z amp so I
> dont want to risk a hot spot. I live on a 25,000 ranch and dont get
> to town for supplies very often, I have a 4:1 balun, will this work
> ok?
>
> Has anyone ever put up a multiple wave length loop? should I worry
> about cutting it to a multiple of my favorite 75 meter frequency? Has
> anyone ever had a multiple wavelength loop that didn't require a
> tuner?
>
A friend of mine, AL7KT, threw a loop of wire over the roof of his apartment. I was there to help and to see the test of the resonance. It was either an 80 or 160 meter loop, but I believe it was 80 meters. He used copper wire laying on the shingles of the roof and fed it with 300 ohm window-line. Two stories below at ground level, he tapped it with a 1:1 balun and fed the radio with about three feet of RG-8. His first layout produced a low SWR on 80 meters and it was a little out of the bands for several HF bands. However, he trimmed it a little and wound up with an antenna that worked five or six bands without a tuner and the rest of the HF bands with it. (I don't specifically remember the 160 meter band, but I remember his great interest in it.)

Al worked with very many loop antennas and rather than measure with a measuring tape, he estimated it's length in the beginning. Once he got resonant frequencies, he fine tuned it by trimming what he needed to make up

the frequency so the exact length of the wire is not known. He is a little illusive, but you may be able to contact him with information on QRZ for more details.

I think to answer your question, if his (80 meter) loop worked on several bands, your multi-wavelength should work as well.

I have heard chatter on the antenna groups to the effect that multi-wave loops do not perform as well as full-wave loops. You will have to look into that on your own.

I wish you well and hope it works.

Hope to see you on the air.

Buck
N4PGW

> Thanks
> N7CAL
>

2299. RE: [SkyWires] Yahoo! Groups-Karen have added you to her favorite list

Yahoo group: SkyWires
Date: 2007-05-11 19:15:06 UTC
From: rattray
Topic: 2291 Message: 2299

Mni tnx Dave - 73 Bruce.

72/73 - Bruce ve5rc/ve5qrp - QRP-C#1, QRP-L#886, A1 Operator
QRP-Canada - http://www.qrp-canada.com

-----Original Message-----
From: SkyWires@yahoogroups.com [mailto:SkyWires@yahoogroups.com] On Behalf Of Dr.Ace Ratliff
Sent: Thursday, May 10, 2007 11:26 PM
To: SkyWires@yahoogroups.com
Subject: Re: [SkyWires] Yahoo! Groups-Karen have added you to her favorite list

Thanks Dave.
Ace

----- Original Message -----
From: David Shrum
To: SkyWires@yahoogroups.com
Sent: Thursday, May 10, 2007 8:23 PM
Subject: Re: [SkyWires] Yahoo! Groups-Karen have added you to her favorite list

Well she may have added us to her list, BUT I un-added her from our list.
Dave N8PU

karenpassion0105 wrote:
> Karen have added you to her favorite list,

--
I am using the free version of SPAMfighter for private users.
It has removed 7951 spam emails to date.
Paying users do not have this message in their emails.
Get the free SPAMfighter here: http://www.spamfighter.com/len

2300. Re: Multiple wave Loop

Yahoo group: SkyWires
Date: 2007-05-13 20:10:53 UTC
From: n44si
Topic: 2295 Message: 2300

-----Original Message-----
> From: SkyWires@yahoogroups.com [mailto:SkyWires@yahoogroups.com]
> On Behalf Of n7cal
> Sent: Thursday, May 10, 2007 11:34 PM
> To: SkyWires@yahoogroups.com
> Subject: [SkyWires] Multiple wave Loop
>
> I am putting up a 4 or 5 wave length loop and wanted to run some
> stuff by the group.

Multi wavelength for what design freq? Of course it will be multi wave for any higher freq. A multi wave loop begins to sound like a shorted rombic without termination. I guess it depends on the shape and where you feed it.

My one caution is to be sure that you take into consideration the build up of a static charge on the antenna. This is especially important in dusty or semi-desert areas. An antenna that large is also subject to precipitation static. One way to bleed the DC charge off is to run a high ohmage resistor(s) to ground. These were built into the TMC RAC termination and coupler boxes used by the military at their HF receiving sites. (TMC = Technical Material Corp, Mamaroneck, NY / RAC = Receiving Antenna Coupler) This is not lightning protection. Lightning will destroy the resistors. My antennamen took daily resistance checks to make sure they were still good. The resistors will have no appreciable effect on the impedance, gain, or pattern of the antenna.

http://www.geocities.com/tmcvintage/

Neil, N4SI

2301. Re: Multiple wave Loop

Yahoo group: SkyWires
Date: 2007-05-13 20:42:42 UTC
From: n7cal
Topic: 2295 Message: 2301

It will be 4 or 5 WL at 3947.5, and I have considered static dissipation, though not in the method you described, I have considered Polyphaser commercial products. Which would be more efficient? Am I right to assume that the method you describe would be continuous dissipation where as the commercial gas tube types would only "spark" dissipate upon a certain ammount of build up? I am brand new at this and need "brail" type diagrams, so please feel free to elaborate as if to a child. I dont want to miss or over look any details

THanks
Craig
N7CAL

2302. Re: [SkyWires] Re: Multiple wave Loop

Yahoo group: SkyWires
Date: 2007-05-13 23:13:38 UTC
From: Dr.Ace Ratliff
Topic: 2295 Message: 2302

Craig,
End fed wire and/or loop antennas can develop very high static voltages on them.
This static voltage can easily be high enough to knock the front end out of sensitive receivers.
One method to overcome this problem is to connect a resistor from the coax center to shield (if you use coax) where the antenna wire connects to the coax or across a parallel feedline.
Only use a non-inductive resistor, carbon resistors work fine.
Don't use wire wound or metal film resistors.
The resistance value is not critical. The resistor can be left in the circuit at all times and will have no measurable effect on VSWR , power loss , etc.
I suggest about a 56K ohm 1/2 watt resistor for receive only or if transmitting with up to 100 watts.
If you will be transmitting with high power "QRO", I suggest using about a 1 Meg ohm 1/2 watt resistor.
Ace - www.WH2T.com

----- Original Message -----
From: n7cal
To: SkyWires@yahoogroups.com
Sent: Sunday, May 13, 2007 3:42 PM
Subject: [SkyWires] Re: Multiple wave Loop

It will be 4 or 5 WL at 3947.5, and I have considered static dissipation, though not in the method you described, I have considered Polyphaser commercial products. Which would be more efficient? Am I right to assume that the method you describe would be continuous dissipation where as the commercial gas tube types would only "spark" dissipate upon a certain ammount of build up? I am brand new at this and need "brail" type diagrams, so please feel free to elaborate as if to a child. I dont want to miss or over look any details

THanks
Craig
N7CAL

2303. Re: [SkyWires] Re: Multiple wave Loop

Yahoo group: SkyWires
Date: 2007-05-14 16:01:21 UTC
From: Jim Dunstan
Topic: 2295 Message: 2303

At 06:13 PM 5/13/2007 -0500, you wrote:

>Craig,
>End fed wire and/or loop antennas can develop very high static voltages on
>them.
>This static voltage can easily be high enough to knock the front end out
>of sensitive receivers.
>One method to overcome this problem is to connect a resistor from the coax
>center to shield (if you use coax) where the antenna wire connects to the
>coax or across a parallel feedline.
>Only use a non-inductive resistor, carbon resistors work fine.
>Don't use wire wound or metal film resistors.
>The resistance value is not critical. The resistor can be left in the
>circuit at all times and will have no measurable effect on VSWR , power
>loss , etc.
>I suggest about a 56K ohm 1/2 watt resistor for receive only or if
>transmitting with up to 100 watts.
>If you will be transmitting with high power "QRO", I suggest using about a
>1 Meg ohm 1/2 watt resistor.
> Ace - <http://www.WH2T.com>www.WH2T.com
> upon a certain ammount of build up? I am brand new at this
>>and need "brail" type diagrams, so please feel free to elaborate as if
>>to a child. I dont want to miss or over look any details
>>
>>THanks
>>Craig
>>N7CAL

Hi Ace,

Just some further comments on your suggestions for high static voltage prevention:

I agree with the resistor across the gap between the coax shield and center conductor for mono pole type antennas such as long wire and vertical antennas as well as directly fed dipoles .... this will provide a DC route for static to drain away to ground from all parts of the antenna.

Any loop antenna that is directly fed with coax already provides a DC route for static currents from all parts of the antenna .... placing a resistor across the coax in this situation is redundant. If the loop is fed with a balanced feed line then there are several different possible situations. At some point the balanced feed line must connect either to a coax line or an antenna tuner. If it connects directly to a coax line followed by a simple current balun (coiled up coax) then the situation is identical to the direct connection mentioned above (no problem). If it is

connected to coax or an antenna tuner via a balun wound on a ferrite core, either 1:1 or 4:1 again there will be direct DC connection to the coax shield and a resistor would be redundant.

Twin coil balanced antenna tuners (double L netork) also provide a DC connection to ground for the whole antenna (if it is a loop). The only situation I can think of that will leave a loop antenna above DC ground is when the balanced line goes directly to a link coil as is the case with the Z-match antenna tuner circuit. Placing a resistor across the feed line will not drain the static voltage to ground and it will be possible to draw a static arc across gaps to the receiver input.

In this case the only way to drain static DC voltage buildup to ground is to either provide a center tap to ground on the link .... or provide a pair of high value resistors to ground on either side of the link (in the interest of balance). The old style antenna tuners usually used the DC center tap technique.

Under certain circumstances it is certainly worth the effort to provide a DC connection to ground. I have seen conditions with wind and either rain, snow, or blowing dust where long wire antennas will draw an arc at least 4 to 6 inches !! I have seen 2" arcs from a 20M quad loop (only 70 ft in circumference) fed with 72 ohm balanced line. You wouldn't want that at the input to your receiver!

Jim, VE3CI

2304. Re: [SkyWires] Re: Multiple wave Loop

Yahoo group: SkyWires
Date: 2007-05-14 16:26:50 UTC
From: Bill Graham
Topic: 2295 Message: 2304

All,

I think that connecting a static charge bleed-resistor _across_ the
feed-line will not solve the problem, since the loop itself is already a
direct 'short' to the DC static charge that's building up on the lines.

We actually want a high ohmage bleed resistor wired from either leg of
the loop to earth ground, to bleed off the static charge, no?

Bill, AG4SI

Jim Dunstan wrote:
>
> At 06:13 PM 5/13/2007 -0500, you wrote:
>
>> Craig,
>> End fed wire and/or loop antennas can develop very high static
>> voltages on them.
>> This static voltage can easily be high enough to knock the front end
>> out of sensitive receivers.
>> One method to overcome this problem is to connect a resistor from the
>> coax center to shield (if you use coax) where the antenna wire
>> connects to the coax or across a parallel feedline.
>> Only use a non-inductive resistor, carbon resistors work fine.
>> Don't use wire wound or metal film resistors.
>> The resistance value is not critical. The resistor can be left in the
>> circuit at all times and will have no measurable effect on VSWR ,
>> power loss , etc.
>> I suggest about a 56K ohm 1/2 watt resistor for receive only or if
>> transmitting with up to 100 watts.
>> If you will be transmitting with high power "QRO", I suggest using
>> about a 1 Meg ohm 1/2 watt resistor.
>> Ace - www.WH2T.com <http://www.WH2T.com>
>> upon a certain ammount of build up? I am brand new at this
>>> and need "brail" type diagrams, so please feel free to elaborate as if
>>> to a child. I dont want to miss or over look any details
>>>
>>> THanks
>>> Craig
>>> N7CAL
>
> Hi Ace,
>
> Just some further comments on your suggestions for high static voltage
> prevention:
>

> I agree with the resistor across the gap between the coax shield and
> center conductor for mono pole type antennas such as long wire and
> vertical antennas as well as directly fed dipoles .... this will
> provide a DC route for static to drain away to ground from all parts
> of the antenna.
>
> Any loop antenna that is directly fed with coax already provides a DC
> route for static currents from all parts of the antenna .... placing a
> resistor across the coax in this situation is redundant. If the loop
> is fed with a balanced feed line then there are several different
> possible situations. At some point the balanced feed line must
> connect either to a coax line or an antenna tuner. If it connects
> directly to a coax line followed by a simple current balun (coiled up
> coax) then the situation is identical to the direct connection
> mentioned above (no problem). If it is connected to coax or an
> antenna tuner via a balun wound on a ferrite core, either 1:1 or 4:1
> again there will be direct DC connection to the coax shield and a
> resistor would be redundant.
>
> Twin coil balanced antenna tuners (double L netork) also provide a DC
> connection to ground for the whole antenna (if it is a loop). The
> only situation I can think of that will leave a loop antenna above DC
> ground is when the balanced line goes directly to a link coil as is
> the case with the Z-match antenna tuner circuit. Placing a resistor
> across the feed line will not drain the static voltage to ground and
> it will be possible to draw a static arc across gaps to the receiver
> input.
>
> In this case the only way to drain static DC voltage buildup to ground
> is to either provide a center tap to ground on the link .... or
> provide a pair of high value resistors to ground on either side of the
> link (in the interest of balance). The old style antenna tuners
> usually used the DC center tap technique.
>
> Under certain circumstances it is certainly worth the effort to
> provide a DC connection to ground. I have seen conditions with wind
> and either rain, snow, or blowing dust where long wire antennas will
> draw an arc at least 4 to 6 inches !! I have seen 2" arcs from a 20M
> quad loop (only 70 ft in circumference) fed with 72 ohm balanced
> line. You wouldn't want that at the input to your receiver!
>
> Jim, VE3CI
>

2305. Re: [SkyWires] Re: Multiple wave Loop

Yahoo group: SkyWires
Date: 2007-05-14 16:26:33 UTC
From: Bill Graham
Topic: 2295 Message: 2305

All,

I think that connecting a static charge bleed-resistor _across_ the
feed-line will not solve the problem, since the loop itself is already a
direct 'short' to the DC static charge that's building up on the lines.

We actually want a high ohmage bleed resistor wired from either leg of
the loop to earth ground, to bleed off the static charge, no?

Bill, AG4SI

Jim Dunstan wrote:
>
> At 06:13 PM 5/13/2007 -0500, you wrote:
>
>> Craig,
>> End fed wire and/or loop antennas can develop very high static
>> voltages on them.
>> This static voltage can easily be high enough to knock the front end
>> out of sensitive receivers.
>> One method to overcome this problem is to connect a resistor from the
>> coax center to shield (if you use coax) where the antenna wire
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>> Only use a non-inductive resistor, carbon resistors work fine.
>> Don't use wire wound or metal film resistors.
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>> power loss , etc.
>> I suggest about a 56K ohm 1/2 watt resistor for receive only or if
>> transmitting with up to 100 watts.
>> If you will be transmitting with high power "QRO", I suggest using
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>> upon a certain ammount of build up? I am brand new at this
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>>> Craig
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> Hi Ace,
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> Just some further comments on your suggestions for high static voltage
> prevention:
>

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> center conductor for mono pole type antennas such as long wire and
> vertical antennas as well as directly fed dipoles .... this will
> provide a DC route for static to drain away to ground from all parts
> of the antenna.
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> Any loop antenna that is directly fed with coax already provides a DC
> route for static currents from all parts of the antenna .... placing a
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> is fed with a balanced feed line then there are several different
> possible situations. At some point the balanced feed line must
> connect either to a coax line or an antenna tuner. If it connects
> directly to a coax line followed by a simple current balun (coiled up
> coax) then the situation is identical to the direct connection
> mentioned above (no problem). If it is connected to coax or an
> antenna tuner via a balun wound on a ferrite core, either 1:1 or 4:1
> again there will be direct DC connection to the coax shield and a
> resistor would be redundant.
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> Twin coil balanced antenna tuners (double L netork) also provide a DC
> connection to ground for the whole antenna (if it is a loop). The
> only situation I can think of that will leave a loop antenna above DC
> ground is when the balanced line goes directly to a link coil as is
> the case with the Z-match antenna tuner circuit. Placing a resistor
> across the feed line will not drain the static voltage to ground and
> it will be possible to draw a static arc across gaps to the receiver
> input.
>
> In this case the only way to drain static DC voltage buildup to ground
> is to either provide a center tap to ground on the link .... or
> provide a pair of high value resistors to ground on either side of the
> link (in the interest of balance). The old style antenna tuners
> usually used the DC center tap technique.
>
> Under certain circumstances it is certainly worth the effort to
> provide a DC connection to ground. I have seen conditions with wind
> and either rain, snow, or blowing dust where long wire antennas will
> draw an arc at least 4 to 6 inches !! I have seen 2" arcs from a 20M
> quad loop (only 70 ft in circumference) fed with 72 ohm balanced
> line. You wouldn't want that at the input to your receiver!
>
> Jim, VE3CI
>
>
>
>
>

--

Bill Graham

Principal Software Engineer
Assurance Technology Corp
Florida Operation
Suite 300 / 3rd Floor
315 Brevard Avenue
Cocoa, FL 32922

Voice ... : 321.639.1699
Fax .....: 321.639.7427

2306. Re: Multiple wave Loop

Yahoo group: SkyWires
Date: 2007-05-14 17:33:03 UTC
From: neil277@juno.com
Topic: 2295 Message: 2306

Craig,
Yes the resistor is there always, and is continually draining off any static buildup. The antenna couplers did include an air spark gap in addition to the resistor. This was in the 60's & 70's (maybe before polyphasers) and all our receivers had tube front ends (R-390's and such). Our rombics were designed for low HF (3-6 or 4-8 MHz), were 3 or 4 WL, and were usually at 90 or 120 feet and would work up into mid HF. Some were tilted. I think the resistor in one model of the coupler was 1 Meg Ohm.

The ARRL Handbook (antenna chapter) and their Antenna Book are good references. http://www.arrl.org/catalog/ Most of their other antenna books are a subset of the above or may include more examples of specific types.

> Re: Multiple wave Loop
> Posted by: "n7cal" n7cal@... n7cal
> Date: Sun May 13, 2007 1:42 pm ((PDT))
>
> It will be 4 or 5 WL at 3947.5, and I have considered static
> dissipation, though not in the method you described, I have
> considered Polyphaser commercial products. Which would be more
> efficient? Am I right to assume that the method you describe would
> be continuous dissipation where as the commercial gas tube types
> would only "spark" dissipate upon a certain amount of build up? I
> am brand new at this and need "brail" type diagrams, so please feel
> free to elaborate as if to a child. I don't want to miss or over
> look any details.
>
> Thanks Craig N7CAL

Neil, N4SI

2307. Re: [SkyWires] Re: Multiple wave Loop

Yahoo group: SkyWires
Date: 2007-05-14 19:42:03 UTC
From: Dr.Ace Ratliff
Topic: 2295 Message: 2307

Jim ,
I agree with everything you said. A resistor across the feedline should make no difference on most loop antenna installations. Very high static voltages can build up on large antennas. Also very high pulse voltages can be induced by lightning strikes within a few mile range.
Very 73, Ace - WH2T

----- Original Message -----
From: Jim Dunstan
To: SkyWires@yahoogroups.com
Sent: Monday, May 14, 2007 11:01 AM
Subject: Re: [SkyWires] Re: Multiple wave Loop

At 06:13 PM 5/13/2007 -0500, you wrote:

Craig,
End fed wire and/or loop antennas can develop very high static voltages on them.
This static voltage can easily be high enough to knock the front end out of sensitive receivers.
One method to overcome this problem is to connect a resistor from the coax center to shield (if you use coax) where the antenna wire connects to the coax or across a parallel feedline.
Only use a non-inductive resistor, carbon resistors work fine.
Don't use wire wound or metal film resistors.
The resistance value is not critical. The resistor can be left in the circuit at all times and will have no measurable effect on VSWR , power loss , etc.
I suggest about a 56K ohm 1/2 watt resistor for receive only or if transmitting with up to 100 watts.
If you will be transmitting with high power "QRO", I suggest using about a 1 Meg ohm 1/2 watt resistor.
Ace - www.WH2T.com
upon a certain ammount of build up? I am brand new at this

and need "brail" type diagrams, so please feel free to elaborate as if
to a child. I dont want to miss or over look any details

THanks
Craig
N7CAL

Hi Ace,

Just some further comments on your suggestions for high static voltage prevention:

I agree with the resistor across the gap between the coax shield and center conductor for mono pole type antennas such as long wire and vertical antennas as well as directly fed dipoles .... this will provide a DC route for static to drain away to ground from all parts

of the antenna.

Any loop antenna that is directly fed with coax already provides a DC route for static currents from all parts of the antenna .... placing a resistor across the coax in this situation is redundant. If the loop is fed with a balanced feed line then there are several different possible situations. At some point the balanced feed line must connect either to a coax line or an antenna tuner. If it connects directly to a coax line followed by a simple current balun (coiled up coax) then the situation is identical to the direct connection mentioned above (no problem). If it is connected to coax or an antenna tuner via a balun wound on a ferrite core, either 1:1 or 4:1 again there will be direct DC connection to the coax shield and a resistor would be redundant.

Twin coil balanced antenna tuners (double L netork) also provide a DC connection to ground for the whole antenna (if it is a loop). The only situation I can think of that will leave a loop antenna above DC ground is when the balanced line goes directly to a link coil as is the case with the Z-match antenna tuner circuit. Placing a resistor across the feed line will not drain the static voltage to ground and it will be possible to draw a static arc across gaps to the receiver input.

In this case the only way to drain static DC voltage buildup to ground is to either provide a center tap to ground on the link .... or provide a pair of high value resistors to ground on either side of the link (in the interest of balance). The old style antenna tuners usually used the DC center tap technique.

Under certain circumstances it is certainly worth the effort to provide a DC connection to ground. I have seen conditions with wind and either rain, snow, or blowing dust where long wire antennas will draw an arc at least 4 to 6 inches !! I have seen 2" arcs from a 20M quad loop (only 70 ft in circumference) fed with 72 ohm balanced line. You wouldn't want that at the input to your receiver!

Jim, VE3CI

2308. Re: [SkyWires] Re: Multiple wave Loop

Yahoo group: SkyWires
Date: 2007-05-14 19:52:40 UTC
From: Jim Dunstan
Topic: 2295 Message: 2308

At 12:26 PM 5/14/2007 -0400, you wrote:

>All,
>
>I think that connecting a static charge bleed-resistor across the
>feed-line will not solve the problem, since the loop itself is already a
>direct 'short' to the DC static charge that's building up on the lines.
>
>We actually want a high ohmage bleed resistor wired from either leg of the
>loop to earth ground, to bleed off the static charge, no?
>
>Bill, AG4SI

Hi Bill,

You are correct, I think I was trying to say that placing a resistor across the feed line does not provide a DC short to ground to drain off static charge. I was also trying to say that almost all methods of coupling to a loop ... whether it is direct coax connection or via a ferrite balun will automatically provide a DC connection to ground. The only way a loop will become isolated from DC ground is to couple a balanced feed line to an RF transformer link as in a Z-match antenna tuner. That problem is solved by either grounding the centre of the link coil or placing high value resistors from the feed line (one on each side to maintain balance) to ground.

Jim, VE3CI

>

2309. Re: [SkyWires] Re: Multiple wave Loop

Yahoo group: SkyWires
Date: 2007-05-15 00:01:35 UTC
From: Dr.Ace Ratliff
Topic: 2295 Message: 2309

It seems to me that if a loop antenna was connected via coax (no balun) directly to an ungrounded radio, that the only way any static build up could bleed off would be thru the receivers front end.
73, Ace - WH2T

----- Original Message -----
From: Jim Dunstan
To: SkyWires@yahoogroups.com
Sent: Monday, May 14, 2007 2:52 PM
Subject: Re: [SkyWires] Re: Multiple wave Loop

At 12:26 PM 5/14/2007 -0400, you wrote:

All,

I think that connecting a static charge bleed-resistor across the feed-line will not solve the problem, since the loop itself is already a direct 'short' to the DC static charge that's building up on the lines.

We actually want a high ohmage bleed resistor wired from either leg of the loop to earth ground, to bleed off the static charge, no?

Bill, AG4SI

Hi Bill,

You are correct, I think I was trying to say that placing a resistor across the feed line does not provide a DC short to ground to drain off static charge. I was also trying to say that almost all methods of coupling to a loop ... whether it is direct coax connection or via a ferrite balun will automatically provide a DC connection to ground. The only way a loop will become isolated from DC ground is to couple a balanced feed line to an RF transformer link as in a Z-match antenna tuner. That problem is solved by either grounding the centre of the link coil or placing high value resistors from the feed line (one on each side to maintain balance) to ground.

Jim, VE3CI

2310. Re: [SkyWires] Re: Multiple wave Loop

Yahoo group: SkyWires
Date: 2007-05-15 00:08:06 UTC
From: Jim Dunstan
Topic: 2295 Message: 2310

At 07:01 PM 5/14/2007 -0500, you wrote:

> It seems to me that if a loop antenna was connected via coax (no
> balun) directly to an ungrounded radio, that the only way any static
> build up could bleed off would be thru the receivers front end.
> 73, Ace - WH2T

Hi,

Well if the coax shield is DC connected directly or indirectly to a loop, the front end components would be at about the same DC potential as the coax shield/radio case. If there is no DC connection between the radio case and Earth ground (either through the electrical system or a specific ground wire attached to the radio case) the radio case/components will rise to the same static potential as the wire antenna. The front end components would not be in danger as the route to ground would more likely be through the power supply route ..... or through the operator!

Jim, VE3CI

2311. Re: Multiple wave Loop

Yahoo group: SkyWires
Date: 2007-05-15 01:24:09 UTC
From: n7cal
Topic: 2295 Message: 2311

Here is the rundown on how I am going to set up my loop. If there is anything objectionable here then let me know.

1: 4 wave lengths of the seven strand aluminum power line wire
2: 450 ohm twin lead, 65 foot or so
3: 1:1 balun
4: spark arrestor (polyphaser or MFJ 272) grounded to independant ground from radio
5: 10' RG-8 into the shack to the tuner

I'll tell you, opinion begat opinion.

I appreciate the input guys, I should have asked for the simplist form of getting the job done.

One other question, on a true loop, would not a resistor grounded off one leg of twin lead effectively be connected to the other as well?

2312. zepp instead of a skywire

Yahoo group: SkyWires
Date: 2007-05-15 01:32:53 UTC
From: Clinton Stockton
Topic: 2312 Message: 2312

I just moved into a Manse at Andrews Presbyterian Church in Andrews, SC.
I was hoping to put a large skywire, but once I got here and considered
all my options I could not put up a 280 foot loop.

I don't have a modeling program, and I think I worked out what might
work on 80-10.

An end fed 1/2 wire for 180, 135 feet and fed with 65 feet or 450 ohm
ladder line. If my memory serves me well I should have a low impedance
match on 80, and on 40 it should match and keep low.

Had anyone fed a 135 foot wire from the end with 65 feet of ladder line.

My tuner is an MFJ 974HB.

Thanks for the help

73's and God Bless
AG0K
Wm. Clinton Stockton

2313. Re: zepp instead of a skywire

Yahoo group: SkyWires
Date: 2007-05-15 10:38:20 UTC
From: Clinton Stockton
Topic: 2312 Message: 2313

In my post I see I had some typos

both are in the same line so I will give the corrected text here.
An end fed 1/2 wavelength wire for 80, 135 feet and end fed with 65
feet of 450 ohm ladder line.

Sorry, I should have proofed my post before posting

73's Clint

--- In SkyWires@yahoogroups.com, "Clinton Stockton" <ag0k@...> wrote:
>
> I just moved into a Manse at Andrews Presbyterian Church in
Andrews, SC.
> I was hoping to put a large skywire, but once I got here and
considered
> all my options I could not put up a 280 foot loop.
>
> I don't have a modeling program, and I think I worked out what
might
> work on 80-10.
>
> An end fed 1/2 wire for 180, 135 feet and fed with 65 feet or 450
ohm
> ladder line. If my memory serves me well I should have a low
impedance
> match on 80, and on 40 it should match and keep low.
>
> Had anyone fed a 135 foot wire from the end with 65 feet of ladder
line.
>
> My tuner is an MFJ 974HB.
>
> Thanks for the help
>
> 73's and God Bless
> AG0K
> Wm. Clinton Stockton
>

2314. Re: [SkyWires] zepp instead of a skywire

Yahoo group: SkyWires
Date: 2007-05-15 13:59:21 UTC
From: Jim Dunstan
Topic: 2312 Message: 2314

At 01:32 AM 5/15/2007 +0000, you wrote:

>I just moved into a Manse at Andrews Presbyterian Church in Andrews, SC.
>I was hoping to put a large skywire, but once I got here and considered
>all my options I could not put up a 280 foot loop.
>
>I don't have a modeling program, and I think I worked out what might
>work on 80-10.
>
>An end fed 1/2 wire for 180, 135 feet and fed with 65 feet or 450 ohm
>ladder line. If my memory serves me well I should have a low impedance
>match on 80, and on 40 it should match and keep low.
>
>Had anyone fed a 135 foot wire from the end with 65 feet of ladder line.
>
>My tuner is an MFJ 974HB.
>
>Thanks for the help
>
>73's and God Bless
>AG0K
>Wm. Clinton Stockton

Hi Clinton,

What you are describing is a 'Zepp' antenna. I have used one once for 40M, configured as you described .... 1/2 wave wire fed from the end of a 1/4 wave 450 ohm (actually I used 300 twin lead) balanced line. It indeed presents a relatively low impedance at the feed point. I used a simple balanced antenna tuner between the radio and the feed line. However the antenna does not behave the same way on harmonics ... eg 40-20 or 80-40.

In your example of an 80M Zepp the 135' top wire does represent a high impedance at the ends on 40 as well as 80. However, the 65' feed line represents a low impedance at the feed point end for 80M but a very high impedance at 40M .... it could be tricky matching it .... especially at higher power.

Jim, VE3CI

2315. Re: Multiple wave Loop

Yahoo group: SkyWires
Date: 2007-05-15 14:07:37 UTC
From: s3hampton
Topic: 2295 Message: 2315

--- In SkyWires@yahoogroups.com, "n7cal" <n7cal@...> wrote:
>
> Here is the rundown on how I am going to set up my loop.
>
> 1: 4 wave lengths of the seven strand aluminum power line wire
> 2: 450 ohm twin lead, 65 foot or so
> 3: 1:1 balun
> 4: spark arrestor (polyphaser or MFJ 272) grounded to independant
> ground from radio
> 5: 10' RG-8 into the shack to the tuner
>
This all 'looks good' per my floundering. (I have erected loops with no POSITIVE way to do a task, such as the choice between coax and ladder-line (ladder-line seems to be the most popular).

In my case, I feed my present loop with ladder-line directly attached to my Icom AH-4 tuner; This seems to do a tremendous job in overall performance. (I must say that I have found NONE better; I have tried a LOT of tuners, tried the balun/no balun issue, feedline choices etc.)

On your four-wavelength antenna: I had more than 2000 feet of #14 THHN copper wire in the air. (-Tried steel electric fencing, before that...) -The old guys said I'd wind up with a 1-wavelength as the BEST size, but 'I knew better...') Well, I kept trimming this thing back, more and more; I now have a 1-wavelength loop that does it all WELL. So, in MY CASE, I endorse the 1-wavelength loop, but your installation may allow a better signal than mine did. -Just offering my findings, not anything close to the absolute 'way thou shalt erect a loop' rule.

>
> One other question, on a true loop, would not a resistor grounded off
> one leg of twin lead effectively be connected to the other as well?
>
This (and all of the other comments that effectively agree on this point) is good, and is correct. However... If one leg OPENS at the feed-point, the DC path is no longer in place this feature is no longer in place. (The ladder-line can and does open, in some installations!) So, a token 100K resistor-to-ground on both legs of the ladder-line is an easy and low-cost piece of insurance that guards against the possible static buildup.

-Mike-
K0JTA

2316. Re: Multiple wave Loop

Yahoo group: SkyWires
Date: 2007-05-15 17:59:55 UTC
From: n7cal
Topic: 2295 Message: 2316

Mike,,, well put and simple, thank you
Craig
N7CAL

2317. Re: [SkyWires] zepp instead of a skywire

Yahoo group: SkyWires
Date: 2007-05-15 19:28:51 UTC
From: Donald Sanders
Topic: 2312 Message: 2317

Clinton, you should be able to use the endfed 135 foot on
160, 80 ,40,and 30 with good results. 20 and above will be
directional off the end of the wire. You may have to add a
length of feed line to get reasonable match on 40 meters
as the impedance should be high. I have a similar antenna
178 feet long with 70 feet of 450 ladder line and it works well.

Healthfully yours,
Rev. Don W4BWS
----- Original Message -----
From: Clinton Stockton
To: SkyWires@yahoogroups.com
Sent: Monday, May 14, 2007 8:32 PM
Subject: [SkyWires] zepp instead of a skywire

I just moved into a Manse at Andrews Presbyterian Church in Andrews, SC.
I was hoping to put a large skywire, but once I got here and considered
all my options I could not put up a 280 foot loop.

I don't have a modeling program, and I think I worked out what might
work on 80-10.

An end fed 1/2 wire for 180, 135 feet and fed with 65 feet or 450 ohm
ladder line. If my memory serves me well I should have a low impedance
match on 80, and on 40 it should match and keep low.

Had anyone fed a 135 foot wire from the end with 65 feet of ladder line.

My tuner is an MFJ 974HB.

Thanks for the help

73's and God Bless
AG0K
Wm. Clinton Stockton

2318. Re: [SkyWires] Re: Multiple wave Loop

Yahoo group: SkyWires
Date: 2007-05-17 19:41:40 UTC
From: erik@n0ew.org
Topic: 2295 Message: 2318

Sounds logical to me.
Erik n0ew

> I think that connecting a static charge bleed-resistor _across_ the
> feed-line will not solve the problem, since the loop itself is already
> a direct 'short' to the DC static charge that's building up on the
> lines.
>
> We actually want a high ohmage bleed resistor wired from either leg of
> the loop to earth ground, to bleed off the static charge, no?

2319. Re: [SkyWires] Digest Number 731

Yahoo group: SkyWires
Date: 2007-05-18 12:38:47 UTC
From: charles allison
Topic: 2319 Message: 2319

Hi,

You're right - got a direct connect around the loop.

Dr. Ace's web page also has a cool easy to make 4/1 balun that is intended to be grounded and offers the low resistance approach to keeping wind generated static down. It's made from pvc pipe and electrical wire. I've made one for a portable loop where it goes from 50 ohm coax to a 30 ft section of 450 ohm window line up to the loop.

Charles

> 1a. Re: Multiple wave Loop
> Posted by: "erik@..." erik@... n0ew
> Date: Thu May 17, 2007 12:36 pm ((PDT))
>
> Sounds logical to me.
> Erik n0ew
>
> > I think that connecting a static charge bleed-resistor _across_ the
> > feed-line will not solve the problem, since the loop itself is already
> > a direct 'short' to the DC static charge that's building up on the
> > lines.
> >
> > We actually want a high ohmage bleed resistor wired from either leg of
> > the loop to earth ground, to bleed off the static charge, no?
>
>

2320. Re: Multiple wave Loop

Yahoo group: SkyWires
Date: 2007-05-18 13:12:07 UTC
From: Bruce Conner
Topic: 2295 Message: 2320

If you hook a little neon bulb between the antenna and ground, it will discharge static, AND you'll be able to see how much static tends to build up in the antenna. It's quite something to see. Distant thunder and your little bulb blinks away at you.

Someone here may have more insight on how effective this is at draining the charge - I could see that some amount of voltage would have to be built up to get the bulb to fire, as opposed to using a resistor which would drain all the time. I've never had a problem with this setup, but maybe I've been lucky.

Bruce
WB8OGK

2321. Over 350 Billion dollars every year free grant

Yahoo group: SkyWires
Date: 2007-05-18 13:12:04 UTC
From: adm sapre
Topic: 2321 Message: 2321

You've heard there are grants out there. Over 350 Billion dollars every year. Every one has the right to apply for this money. So, what's stopping you? There is alot of information out there but many people just don't know where to start! This will take you step by step through the application forms to give you the help that 30 million , just like you, are taking advantage of every year! Our Grant Specialists have done the work for you. The tips, the secrets, the forms- everything you need to get started!!!!

http://www.cesw.org/free_grant_software.htm

Need a vacation? Get great deals to amazing places on Yahoo! Travel.

2322. Re: [SkyWires] Re: Multiple wave Loop

Yahoo group: SkyWires
Date: 2007-05-18 14:25:19 UTC
From: Bill Graham
Topic: 2295 Message: 2322

Bruce,

How much power are you running? And, any idea what's the worst-case SWR
at max power? (of course, this is frequency dependent ... do you have a
reasonably accurate SWR meter on the line?).

Depending on the power/SWR combination, you may be building up some
very high voltages during TX, which may fire the neon bulb.

Or, do you disconnect the neon bulb while transmitting (didn't sound
like it from your writeup).

'73
Bill
AG4SI

Bruce Conner wrote:
>
> If you hook a little neon bulb between the antenna and ground, it will
> discharge static, AND you'll be able to see how much static tends to
> build up in the antenna. It's quite something to see. Distant thunder
> and your little bulb blinks away at you.
>
> Someone here may have more insight on how effective this is at draining
> the charge - I could see that some amount of voltage would have to be
> built up to get the bulb to fire, as opposed to using a resistor which
> would drain all the time. I've never had a problem with this setup, but
> maybe I've been lucky.
>
> Bruce
> WB8OGK
>
>

2323. Genuine Lifetime Income!! Earn 5000 US Dollars per month without Investment.

Yahoo group: SkyWires
Date: 2007-05-18 16:48:56 UTC
From: money2csh
Topic: 2323 Message: 2323

You Have Finally Found It Genuine Lifetime Income!!
www.moreinfo247.com/9509568/CB <http://www.moreinfo247.com/9509568/CB>
Earn!! à 5000 US Dollars per month without Investment By working
only one hour per day from the cyber café or PC Guaranteed
Earnings for Lifetime!! 100% Legal 100% No Investment 100% No Scam
100% Free Training Support 100% No Door to Door Selling Products For
more details visit : www.moreinfo247.com/9509568/CB
<http://www.moreinfo247.com/9509568/CB> Check Your Mail ID - Inbox
Immediately after logging in Note : If u want to make genuine and
handsome Income, please login immediately otherwise please ignore.
Notice; u r receiving this message b'coz u r the member of yahoo
groups Thank You

2324. Re: Multiple wave Loop

Yahoo group: SkyWires
Date: 2007-05-18 22:24:08 UTC
From: n7cal
Topic: 2295 Message: 2324

OK, heres the setup.

After I get the wire up, which should be this weekend I will put one K-ohm 1/2 watt per leg to a ground away from my radio, amp and tuner ground. this will come off my ladder line prior to a balun that will allow me to connect my coax that will get me into my shack which is in the basement.

Now my setup: TS 930, AL80A Amp, ATR15 Tuner, approx 1KW out

Recap:

1: 4 Wavelength #4 aluminum 7 strand power line wire
2: 65' 450 ohm ladderline with twin resistors to independant ground
3: Balun
4: 10' RG-8 into shack

Thanks to all
Craig
N7CAL

2325. Re: Multiple wave Loop

Yahoo group: SkyWires
Date: 2007-05-18 22:25:18 UTC
From: n7cal
Topic: 2295 Message: 2325

Loop will be cut 4 wave length at 3950.00

2326. Unbalanced tuner at loop feedpoint

Yahoo group: SkyWires
Date: 2007-05-19 14:57:19 UTC
From: Paul@N4LCD.com
Topic: 2326 Message: 2326

Has anyone had any experience putting an
upbalanced tuner such as the SGC-230
http://www.sgcworld.com/230ProductPage.html
or the ICOM AH-4
http://home.comcast.net/~hamlakemn/ah4/ah4.htm
directly at the feedpoint of a horizontal loop?

If so, would you ground the tuner or ground the rig or ground both,
if they were about 6' apart, with the rig inside the house and the
tuner just outside the house?

If ground both, what would the topology be? Two home runs to the ground rod?

2327. Neon bulb

Yahoo group: SkyWires
Date: 2007-05-19 15:22:24 UTC
From: Bruce Conner
Topic: 2327 Message: 2327

> Depending on the power/SWR combination, you may be building up some
> _very_ high voltages during TX, which may fire the neon bulb.

Bill,

Yes, sorry, Rx only or in "safe" mode with the neon bulb, otherwise you may have a very short, but well lit transmitting antenna! I mainly use it to get an idea of how much stray charge is floating around out there on the wire. It's a good indicator, and it also impresses the non-technical folks.

Bruce

2328. Re: [SkyWires] Neon bulb

Yahoo group: SkyWires
Date: 2007-05-19 16:27:15 UTC
From: larry allen
Topic: 2327 Message: 2328

You brought back some memories for me... When I was new ham, could not afford the luxeries of things like swr bridges, my uncle put a neon bulb on my insulated random wire antenna... I used that bulb to 'help' me tune up my antenna...
Besides using the dip, plate current, and, increase loading control, method...
Larry ve3fxq

----- Original Message -----
From: "Bruce Conner" <bruce.conner@...>
To: <SkyWires@yahoogroups.com>
Sent: Saturday, May 19, 2007 11:22 AM
Subject: [SkyWires] Neon bulb

>> Depending on the power/SWR combination, you may be building up some
>> _very_ high voltages during TX, which may fire the neon bulb.
>
>
>
> Bill,
>
> Yes, sorry, Rx only or in "safe" mode with the neon bulb, otherwise you
> may have a very short, but well lit transmitting antenna! I mainly use
> it to get an idea of how much stray charge is floating around out there
> on the wire. It's a good indicator, and it also impresses the
> non-technical folks.
>
> Bruce
>
>

2329. Re: [SkyWires] Unbalanced tuner at loop feedpoint

Yahoo group: SkyWires
Date: 2007-05-19 17:56:51 UTC
From: Jim Dunstan
Topic: 2326 Message: 2329

At 10:57 AM 5/19/2007 -0400, you wrote:

>Has anyone had any experience putting an
>upbalanced tuner such as the SGC-230
><http://www.sgcworld.com/230ProductPage.html>http://www.sgcworld.com/230ProductPage.html
>or the ICOM AH-4
><http://home.comcast.net/~hamlakemn/ah4/ah4.htm>http://home.comcast.net/~hamlakemn/ah4/ah4.htm
>directly at the feedpoint of a horizontal loop?
>
>If so, would you ground the tuner or ground the rig or ground both,
>if they were about 6' apart, with the rig inside the house and the
>tuner just outside the house?
>
>If ground both, what would the topology be? Two home runs to the ground rod?

Hi,

You seem to have 2 questions ... the first being: is it possible to put an unbalanced tuner directly at the feed point of a loop (balanced antenna). Yes, it is certainly possible. The second question relates to how you should ground the tuner/coax/rig. The second part is confusing since you mention the tuner and rig being 6' apart ... i assume this is a different arrangement having nothing to do with the first question.... where the tuner is at the antenna feed point.

If you put an unbalanced tuner (automatic tuner is the rule) at the antenna feed point .... it will be connected to a coax feed line which will provide a DC connection to ground via the shield. However, it will also provide an RF connection to ground via the shield .... which is not what you want; you don't want the feed line to be part of the antenna and you can do without having RF in the shack. To prevent RF on the outside of the shield it will be necessary to place an RF 'choke' on the shield as close to the ATU as possible. The choke can be made from ferrite beads threaded on to the coax (commercial versions are available) or simply winding about 20 feet of the coax into a tight coil as close the the ATU as possible. This will work with any antenna fed with coax.

In a properly designed antenna/feed line system that uses coax .... the ground at the rig should ideally be for DC ground for safety of both the rig and the operator. There should be little or no RF on the outside of the shield.

Jim, VE3CI

2330. Static Build-up - ouch!

Yahoo group: SkyWires
Date: 2007-05-19 17:58:30 UTC
From: Graham Cooke
Topic: 2330 Message: 2330

Hi all,

After reading the thread on static build-up I had personal and rather frightening experience of it this afternoon. I have a 40m full wave loop at about 25 feet, supported by fibreglass poles. The feed is 450ohm twin to a Z match tuner (no dc path to earth).

The rig has been monitoring for low level QRSS signals all day and I was aware of a clicking sound coming from the tuner. It sounded like the tuner was arcing over and so stupidly I disconnected the feeder - BAM! I got one hell of a belt from it! I reconnected it and looked round for something safe to ground it to, disconnecting the rig to protect the front end. At that point sparks flew all over the desk, the cmos keyer started up, the computer rebooted and the rig flicked to TX. All very frightening.

I looked at a web page that shows lightning storm distribution and nothing was showing.

http://www.meteorologica.info/UK6lightning.htm

A quick look out of the window revealed a dark cloud. Once the cloud had passed the static stopped. Needless to say the loop is now tied hard down to ground!

What do others do to prevent this kind of event? I was thinking of winding a large inductor but there are high voltages present during transmit and so it would require substantial insulation on the turns.

When I fly my kite antenna I always take static very seriously, but now I will be taking it seriously at home.

73 graham

2331. Re: [SkyWires] Static Build-up - ouch!

Yahoo group: SkyWires
Date: 2007-05-19 18:19:39 UTC
From: Jim Dunstan
Topic: 2330 Message: 2331

At 05:58 PM 5/19/2007 +0000, you wrote:

>Hi all,
>
>After reading the thread on static build-up I had personal and rather
>frightening experience of it this afternoon. I have a 40m full wave
>loop at about 25 feet, supported by fibreglass poles. The feed is
>450ohm twin to a Z match tuner (no dc path to earth).
>
>The rig has been monitoring for low level QRSS signals all day and I
>was aware of a clicking sound coming from the tuner. It sounded like
>the tuner was arcing over and so stupidly I disconnected the feeder -
>BAM! I got one hell of a belt from it! I reconnected it and looked
>round for something safe to ground it to, disconnecting the rig to
>protect the front end. At that point sparks flew all over the desk,
>the cmos keyer started up, the computer rebooted and the rig flicked
>to TX. All very frightening.
>
>I looked at a web page that shows lightning storm distribution and
>nothing was showing.
>
><http://www.meteorologica.info/UK6lightning.htm>http://www.meteorologica.info/UK6lightnin
g.htm
>
>A quick look out of the window revealed a dark cloud. Once the cloud
>had passed the static stopped. Needless to say the loop is now tied
>hard down to ground!
>
>What do others do to prevent this kind of event? I was thinking of
>winding a large inductor but there are high voltages present during
>transmit and so it would require substantial insulation on the turns.
>
>When I fly my kite antenna I always take static very seriously, but
>now I will be taking it seriously at home.
>
>73 graham

Hi Graham,

In one of my recent posts concerning the build up of static voltages on a
balanced antenna I pointed out that almost all systems will provide a DC
path to the frame of the rig (everyone should have a simple ground
connected to the rig). This DC ground is via the shield on the coax and
the balanced feed line has DC connection to the coax via balun or
tuner. The exception are antenna tuners that use link coupling .... just
like yours .... a Z-match design ... (you probably use a KW-Ezee

tuner). The solution is to either provide a DC connection to ground at the center of the link coil .... or to provide high resistance carbon resistors connected from either side of the link coil to ground. I have never seen this in any of the many online articles on Z-match tuners. However I have them wired into my KW-EZEE match and they work just great, gently draining these static build up voltages to ground .... with no affect on operation.

However, I can't stress enough the need to shut down the station and provide an effective ground for all antennas and the rig front end when those big black clouds come into view.

Jim, VE3CI

>

2332. Re: [SkyWires] Neon bulb

Yahoo group: SkyWires
Date: 2007-05-19 19:07:10 UTC
From: Donald Sanders
Topic: 2327 Message: 2332

Back in College in 1959 I had a HRO 5 receiver and
600 watt Temco transmitter feeding a long wire about
300 foot long. I hung a 4 foot florescent lamp tube at
the end of the wire and at night I could tune for max
brightness. Campus police investigated the reports
of UFO sightings by neighbors. They were happy there
were no UFO's. And interested when they had opportunity
to participate in chatting from Southern Ohio to California
on 80 AM.

Healthfully yours,
Don W4BWS
----- Original Message -----
From: larry allen
To: SkyWires@yahoogroups.com
Sent: Saturday, May 19, 2007 11:27 AM
Subject: Re: [SkyWires] Neon bulb

You brought back some memories for me... When I was new ham, could not
afford the luxeries of things like swr bridges, my uncle put a neon bulb
on my insulated random wire antenna... I used that bulb to 'help' me tune
up my antenna...
Besides using the dip, plate current, and, increase loading control,
method...
Larry ve3fxq

----- Original Message -----
From: "Bruce Conner" <bruce.conner@...>
To: <SkyWires@yahoogroups.com>
Sent: Saturday, May 19, 2007 11:22 AM
Subject: [SkyWires] Neon bulb

>> Depending on the power/SWR combination, you may be building up some
>> _very_ high voltages during TX, which may fire the neon bulb.
>
>
>
> Bill,
>
> Yes, sorry, Rx only or in "safe" mode with the neon bulb, otherwise you
> may have a very short, but well lit transmitting antenna! I mainly use
> it to get an idea of how much stray charge is floating around out there
> on the wire. It's a good indicator, and it also impresses the
> non-technical folks.
>
> Bruce

>
>

2333. Re: [SkyWires] Neon bulb

Yahoo group: SkyWires
Date: 2007-05-19 18:48:01 UTC
From: Donald Sanders
Topic: 2327 Message: 2333

Bruce, the neon bulb at the receiver antenna terminals
is good for high levels of voltage such as with a long wire
into a high impedance antenna input. However the neon
requires from 45 to 60 volts to fire depending on the type.
Therefore, a lot of voltage can appear across the input
before the neon fires. Also if you are using a low
impedance antenna input, the neon may never fire.
Back to back diodes work much better on low impedance
antenna inputs.
Back in the 40's and 50's many used longwire receiving
antennas, thus the neon's worked well. During WW2 the
airborne radios used trailing wire or short endfed wire
antennas and the receivers had neon's across the
antenna inputs. Good for their time, but not so good now.

Healthfully yours,
Don W4BWS
----- Original Message -----
From: Bruce Conner
To: SkyWires@yahoogroups.com
Sent: Saturday, May 19, 2007 10:22 AM
Subject: [SkyWires] Neon bulb

> Depending on the power/SWR combination, you may be building up some
> _very_ high voltages during TX, which may fire the neon bulb.

Bill,

Yes, sorry, Rx only or in "safe" mode with the neon bulb, otherwise you
may have a very short, but well lit transmitting antenna! I mainly use
it to get an idea of how much stray charge is floating around out there
on the wire. It's a good indicator, and it also impresses the
non-technical folks.

Bruce

2334. Re: [SkyWires] Unbalanced tuner at loop feedpoint

Yahoo group: SkyWires
Date: 2007-05-19 18:37:24 UTC
From: Donald Sanders
Topic: 2326 Message: 2334

I used to run the SGC mounted under the eves of the house at the 2nd story peak and tied to a loop that ran around the house under the eves. I worked a lot of DX as well as state side stations on 80 thru 10. I worked lots of stateside on 160 out to about 1500 miles. This was when I lived in Florida- I moved to Alabama 3 years ago and have 70 foot pines now to hold the antennas. I grounded the coax at the entry to the house but the tuner was not grounded otherwise.

Healthfully yours,
Don W4BWS
----- Original Message -----
From: Paul@...
To: SkyWires@yahoogroups.com
Sent: Saturday, May 19, 2007 9:57 AM
Subject: [SkyWires] Unbalanced tuner at loop feedpoint

Has anyone had any experience putting an
upbalanced tuner such as the SGC-230
http://www.sgcworld.com/230ProductPage.html
or the ICOM AH-4
http://home.comcast.net/~hamlakemn/ah4/ah4.htm
directly at the feedpoint of a horizontal loop?

If so, would you ground the tuner or ground the rig or ground both,
if they were about 6' apart, with the rig inside the house and the
tuner just outside the house?

If ground both, what would the topology be? Two home runs to the ground rod?

2335. Re: zepp instead of a skywire

Yahoo group: SkyWires
Date: 2007-05-19 19:37:00 UTC
From: Clinton Stockton
Topic: 2312 Message: 2335

Hi Pastor Don,

Was wondering if you tried a 40 meter loop. I believe I can put one up and use it for 30 and above, and occassionally on 40. I have seen several formulas for cutting the loop. 1005/f 984/f 120/f and even 130/f. I really would like to know what has worked best for others. My MFJ-974HB seems like it will tune almost anything, but I would rather have the Loop close to what it should be.

thanks and 73's
Pastor Clint AG0K

--- In SkyWires@yahoogroups.com, "Donald Sanders" <w4bws@...> wrote:
>
> Clinton, you should be able to use the endfed 135 foot on
> 160, 80 ,40,and 30 with good results. 20 and above will be
> directional off the end of the wire. You may have to add a
> length of feed line to get reasonable match on 40 meters
> as the impedance should be high. I have a similar antenna
> 178 feet long with 70 feet of 450 ladder line and it works well.
>
> Healthfully yours,
> Rev. Don W4BWS

2336. correction

Yahoo group: SkyWires
Date: 2007-05-19 20:03:47 UTC
From: Clinton Stockton
Topic: 2312 Message: 2336

I just typed to fast for my own good below shoud be 1020/f and
1030/f istead of the 120 and 130. Sorry

--- In SkyWires@yahoogroups.com, "Clinton Stockton" <ag0k@...> wrote:
>
> Hi Pastor Don,
>
>
> Was wondering if you tried a 40 meter loop. I believe I can put
one up
> and use it for 30 and above, and occassionally on 40. I have seen
> several formulas for cutting the loop. 1005/f 984/f 120/f and even
> 130/f. I really would like to know what has worked best for
others.
> My MFJ-974HB seems like it will tune almost anything, but I would
> rather have the Loop close to what it should be.
>
> thanks and 73's
> Pastor Clint AG0K
>
>
> --- In SkyWires@yahoogroups.com, "Donald Sanders" <w4bws@> wrote:
> >
> > Clinton, you should be able to use the endfed 135 foot on
> > 160, 80 ,40,and 30 with good results. 20 and above will be
> > directional off the end of the wire. You may have to add a
> > length of feed line to get reasonable match on 40 meters
> > as the impedance should be high. I have a similar antenna
> > 178 feet long with 70 feet of 450 ladder line and it works well.
> >
> > Healthfully yours,
> > Rev. Don W4BWS
>

2337. Re: zepp instead of a skywire

Yahoo group: SkyWires
Date: 2007-05-19 20:01:43 UTC
From: Clinton Stockton
Topic: 2312 Message: 2337

--- In SkyWires@yahoogroups.com, "Clinton Stockton" <ag0k@...> wrote:
>
> Hi Pastor Don,
>
>
> Was wondering if you tried a 40 meter loop. I believe I can put
one up
> and use it for 30 and above, and occassionally on 40. I have seen
> several formulas for cutting the loop. 1005/f 984/f 1020/f and even
> 1030/f. I really would like to know what has worked best for
others.
> My MFJ-974HB seems like it will tune almost anything, but I would
> rather have the Loop close to what it should be.
>
> thanks and 73's
> Pastor Clint AG0K
>
>
> --- In SkyWires@yahoogroups.com, "Donald Sanders" <w4bws@> wrote:
> >
> > Clinton, you should be able to use the endfed 135 foot on
> > 160, 80 ,40,and 30 with good results. 20 and above will be
> > directional off the end of the wire. You may have to add a
> > length of feed line to get reasonable match on 40 meters
> > as the impedance should be high. I have a similar antenna
> > 178 feet long with 70 feet of 450 ladder line and it works well.
> >
> > Healthfully yours,
> > Rev. Don W4BWS
>

2338. Re: [SkyWires] Re: zepp instead of a skywire

Yahoo group: SkyWires
Date: 2007-05-19 21:55:42 UTC
From: Donald Sanders
Topic: 2312 Message: 2338

HI, well, I currently have a 138 foot loop up about 30 feet and I use it on 40 thru 15 with the tuner. It is NVIS on 40 and 30 but I have worked some DX. The normal formula for a quad loop is 1005/f for 1 wave length. However I found that I had to shorten it slightly to get the best match. I used a quarter wave of RG6 then RG8X into the shack to the tuner. It does not do as good as the 80 meter Carolina Windom but does better on 40 AM for local and regional signals. So I would say try it and see. I use it for the second receiver when not being used for a QSO. I am fortunate to have the loop, a GAP Challenger vertical and Carolina Windom that I can switch between to get the best signal. Let me know how you do.

Healthfully yours,
Don W4BWS
----- Original Message -----
From: Clinton Stockton
To: SkyWires@yahoogroups.com
Sent: Saturday, May 19, 2007 2:37 PM
Subject: [SkyWires] Re: zepp instead of a skywire

Hi Pastor Don,

Was wondering if you tried a 40 meter loop. I believe I can put one up
and use it for 30 and above, and occassionally on 40. I have seen
several formulas for cutting the loop. 1005/f 984/f 120/f and even
130/f. I really would like to know what has worked best for others.
My MFJ-974HB seems like it will tune almost anything, but I would
rather have the Loop close to what it should be.

thanks and 73's
Pastor Clint AG0K

--- In SkyWires@yahoogroups.com, "Donald Sanders" <w4bws@...> wrote:
>
> Clinton, you should be able to use the endfed 135 foot on
> 160, 80 ,40,and 30 with good results. 20 and above will be
> directional off the end of the wire. You may have to add a
> length of feed line to get reasonable match on 40 meters
> as the impedance should be high. I have a similar antenna
> 178 feet long with 70 feet of 450 ladder line and it works well.
>
> Healthfully yours,
> Rev. Don W4BWS

2339. Re: skywire going in and a zepp already working..

Yahoo group: SkyWires
Date: 2007-05-20 01:57:47 UTC
From: Clinton Stockton
Topic: 2312 Message: 2339

I will try and put up a loop this week.
I basically walked off an area and found I can do it with an attachment on the chimney, and two trees.

Your 138 ft comes in at 7.1 mhz using the 984/f which I think is the cutting formulat that Cebik uses.

I can get my loop with three sides all being 46 ft each and I am going to feed it with 450 ohm ladder line. I will let you know how it works. The tuner here is a MFJ 974HB Balanced tuner.

73's
AG0K Clint

--- In SkyWires@yahoogroups.com, "Donald Sanders" <w4bws@...> wrote:
>
> HI, well, I currently have a 138 foot loop up about 30 feet and I use it on 40 thru 15 with the tuner. It is NVIS on 40 and 30 but I have worked some DX. The normal formula for a quad loop is 1005/f for 1 wave length. However I found that I had to shorten it slightly to get the best match. I used a quarter wave of RG6 then RG8X into the shack to the tuner. It does not do as good as the 80 meter Carolina Windom but does better on 40 AM for local and regional signals. So I would say try it and see. I use it for the second receiver when not being used for a QSO. I am fortunate to have the loop, a GAP Challenger vertical and Carolina Windom that I can switch between to get the best signal. Let me know how you do.
>
> Healthfully yours,
> Don W4BWS
> ----- Original Message -----
> From: Clinton Stockton
> To: SkyWires@yahoogroups.com
> Sent: Saturday, May 19, 2007 2:37 PM
> Subject: [SkyWires] Re: zepp instead of a skywire
>
>
> Hi Pastor Don,
>
> Was wondering if you tried a 40 meter loop. I believe I can put one up
> and use it for 30 and above, and occassionally on 40. I have seen
> several formulas for cutting the loop. 1005/f 984/f 120/f and even
> 130/f. I really would like to know what has worked best for others.

> My MFJ-974HB seems like it will tune almost anything, but I would
> rather have the Loop close to what it should be.
>
> thanks and 73's
> Pastor Clint AG0K
>
> --- In SkyWires@yahoogroups.com, "Donald Sanders" <w4bws@> wrote:
> >
> > Clinton, you should be able to use the endfed 135 foot on
> > 160, 80 ,40,and 30 with good results. 20 and above will be
> > directional off the end of the wire. You may have to add a
> > length of feed line to get reasonable match on 40 meters
> > as the impedance should be high. I have a similar antenna
> > 178 feet long with 70 feet of 450 ladder line and it works well.
> >
> > Healthfully yours,
> > Rev. Don W4BWS
>

2340. Re: Multiple wave Loop

Yahoo group: SkyWires
Date: 2007-05-21 02:50:09 UTC
From: n7cal
Topic: 2295 Message: 2340

Well, I have my poles set and my closest estimate is 1325' of wire or 5.1 wave lengths at 3.950. Highest point is going to be about 80' with the average being 60'

More as it comes.....

2341. Re: Multiple wave Loop

Yahoo group: SkyWires
Date: 2007-05-21 03:22:15 UTC
From: Clinton Stockton
Topic: 2295 Message: 2341

I am really waiting to see the results. I am impressed with the amount
of wire it will take. Sure hope it burns the ether for you.

I trust you will have no problem being heard.

73's
AG0K Clint

--- In SkyWires@yahoogroups.com, "n7cal" <n7cal@...> wrote:
>
> Well, I have my poles set and my closest estimate is 1325' of wire or
> 5.1 wave lengths at 3.950. Highest point is going to be about 80'
with
> the average being 60'
>
>
> More as it comes.....
>

2342. Re: [SkyWires] Static Build-up - ouch!

Yahoo group: SkyWires
Date: 2007-05-21 12:50:28 UTC
From: Clive Lorton
Topic: 2330 Message: 2342

Jim, VE3CI wrote,
"The solution is to either provide a DC connection to ground at the centre of the link coil .... or to provide high resistance carbon resistors connected from either side of the link coil to ground."

Jim, this is a new area for me. I have a SEM Transmatch which is a Z match with the LF and HF coils at right angles to each other and the link coils in parallel, i.e. only one set of output connectors. It would be easier to fit 2 high resistance resistors from the ends of the link coil to earth. What values would you advise and what current rating? I'm running a 100w TX

73 Clive G8POC. Oxford, UK.

2343. End Fed Zepp Question

Yahoo group: SkyWires
Date: 2007-05-21 14:10:15 UTC
From: Clinton Stockton
Topic: 2330 Message: 2343

I have a question concerning 135 foot end fed zepp with ladder line.

I am using about 67 feet of ladder line and I am able to tune it and get a low SWR on 75 and 40 meters. It basically does not tune on 80 meters or 3.8 to 4 mhz.

My manual that came with my MFJ-974HB says the best match occurs with Max capacitance on the TX and ANT adjustments and for minimum Inductance.

On 75 I am using a lot of inductance, Letter B on the tuner with the TX capacitor being mid range and Ant capacitor between 1 and 2.

On 40 my TX capcitor is moving towards minimum capactitance with a number of 8 or 9, the Antenna Capacitance is between 1 and 2 and the inductor on C.

Has anyone out there played with the end fed zepp of 135 feet and determined what the best feed line length is. My tuner is supposed to tune anything between 12 and 2000 ohms.

Thanks
73's AG0K
Clint

2344. Re: [SkyWires] Unbalanced tuner at loop feedpoint

Yahoo group: SkyWires
Date: 2007-05-21 14:38:23 UTC
From: Kyle
Topic: 2326 Message: 2344

Paul,

My 160 is fed with 145' of coax, to an LDG Z11 Pro and a true transformer balun, right at the feedpoint. Before choosing this arrangement, I put an analyzer on the feedpoint of my loop and found the impedance changes from 8 ohms to 129 ohms depending on the band. It only makes sense to put the tuner at the feedpoint once you know this, because there is no combination of baluns or tuning stubs that can make that range of impedance match any feedline (unless you only want to use it on a single band).

This setup works extremely well! :)

Right now, my tuner is not grounded except through the coax. Soon I plan to ground the tuner remotely and tie the loop to the same ground through a 1M resistor (electrically in parallel with the balun). This should bleed off wind induced static, but allow the RF to see the loop as a balanced antenna fed from an imbalanced tuner.

73,
Kyle
W4KDA

Paul@... wrote:
>
>
>
>
> Has anyone had any experience putting an
> upbalanced tuner such as the SGC-230
> http://www.sgcworld.com/230ProductPage.html
> <http://www.sgcworld.com/230ProductPage.html>
> or the ICOM AH-4
> http://home.comcast.net/~hamlakemn/ah4/ah4.htm
> <http://home.comcast.net/~hamlakemn/ah4/ah4.htm>
> directly at the feedpoint of a horizontal loop?
>
> If so, would you ground the tuner or ground the rig or ground both,
> if they were about 6' apart, with the rig inside the house and the
> tuner just outside the house?
>
> If ground both, what would the topology be? Two home runs to the ground rod?

2345. Re: [SkyWires] End Fed Zepp Question

Yahoo group: SkyWires
Date: 2007-05-21 15:06:35 UTC
From: larry allen
Topic: 2330 Message: 2345

A zepp antenna is mono-band... Your antenna length is 135 feet, which makes it an 80 meter antenna... The quarter wave stub, at the end of the antenna, changes the waveform from high voltage / virtally zero current, at the end of the antenna to high current / virtually zero voltage at the end of the 67 foot quarter wave transformer....

The zepp antenna, looks like a dipole antenna, at the non-antenna end of the quarter wave stubb...
So if you connect your coax to the quarter wave stubb and feed that to your radio, you should have a good match....
If you are connecting your ladderline directly to your coupler, then tune for best responce....
If you are tuning it onto, lets say, 40 then you are .. converting .. your antenna to a, essentially, random wire antenna....
Larrry ve3fxq

----- Original Message -----
From: "Clinton Stockton" <ag0k@...>
To: <SkyWires@yahoogroups.com>
Sent: Monday, May 21, 2007 10:10 AM
Subject: [SkyWires] End Fed Zepp Question

I have a question concerning 135 foot end fed zepp with ladder line.

I am using about 67 feet of ladder line and I am able to tune it and get a low SWR on 75 and 40 meters. It basically does not tune on 80 meters or 3.8 to 4 mhz.

My manual that came with my MFJ-974HB says the best match occurs with Max capacitance on the TX and ANT adjustments and for minimum Inductance.

On 75 I am using a lot of inductance, Letter B on the tuner with the TX capacitor being mid range and Ant capacitor between 1 and 2.

On 40 my TX capcitor is moving towards minimum capactitance with a number of 8 or 9, the Antenna Capacitance is between 1 and 2 and the inductor on C.

Has anyone out there played with the end fed zepp of 135 feet and determined what the best feed line length is. My tuner is supposed to tune anything between 12 and 2000 ohms.

Thanks
73's AG0K
Clint

2346. Re: [SkyWires] Static Build-up - ouch!

Yahoo group: SkyWires
Date: 2007-05-21 15:30:42 UTC
From: Jim Dunstan
Topic: 2330 Message: 2346

At 01:50 PM 5/21/2007 +0100, you wrote:

>Jim, VE3CI wrote,
>"The solution is to either provide a DC connection to ground at the centre
>of the link coil .... or to provide high resistance carbon resistors
>connected from either side of the link coil to ground."
>
>Jim, this is a new area for me. I have a SEM Transmatch which is a Z match
>with the LF and HF coils at right angles to each other and the link coils
>in parallel, i.e. only one set of output connectors. It would be easier
>to fit 2 high resistance resistors from the ends of the link coil to
>earth. What values would you advise and what current rating? I'm running a
>100w TX
>
>73 Clive G8POC. Oxford, UK.

Hi clive,

I don't have the SEM Transmatch circuit in front of me .... however, if it is a version of the Z-match circuit the antenna input connects to a link coil. If the input is unbalanced such as a long wire antenna or coax then one side of the link coil connects to ground .... in this arrangement there is no problem with build-up of static voltages as they are directed to ground via the link coil. However, if you feed a balanced line to the tuner then each side of the balanced line connects to each side of the link coil with no connection to ground. As the person posted on this list ... this can, under some environmental circumstances, lead to build up of a high voltage static charge with arcing in the tuner.

In the majority of cases when using a balanced feed line the objective is to feed the doublet or loop on multiple bands with the result the tuner will encounter a variety of impedance values from as low as 30 ohms to as high as 6000 ohms. The resistor or resistors should be a high value such as 100K to 1meg. It is possible to use a single resistor connected from either side of the link coil to ground .... and it will have little effect in interaction with the load impedance. If you use 2 resistors .... one on each side of the link, they should be the same value. As far as current rating simple 1/2 watt ratings should suffice, you can use 1 watt value to be sure ... but be sure the resistor is a carbon resistor and not wire-wound. In practice the resistor will provide a slow 'bleed' of high DC voltage to ground .... as long as the feed line provides a reasonable impedance .... eg 5K or less .... there should be little if any interaction with the transmitter power.

Jim, VE3CI

2347. Re: [SkyWires] End Fed Zepp Question

Yahoo group: SkyWires
Date: 2007-05-21 15:52:50 UTC
From: Jim Dunstan
Topic: 2330 Message: 2347

At 02:10 PM 5/21/2007 +0000, you wrote:

>I have a question concerning 135 foot end fed zepp with ladder line.
>
>I am using about 67 feet of ladder line and I am able to tune it and
>get a low SWR on 75 and 40 meters. It basically does not tune on 80
>meters or 3.8 to 4 mhz.
>
>My manual that came with my MFJ-974HB says the best match occurs with
>Max capacitance on the TX and ANT adjustments and for minimum
>Inductance.
>
>On 75 I am using a lot of inductance, Letter B on the tuner with the
>TX capacitor being mid range and Ant capacitor between 1 and 2.
>
>On 40 my TX capcitor is moving towards minimum capactitance with a
>number of 8 or 9, the Antenna Capacitance is between 1 and 2 and the
>inductor on C.
>
>Has anyone out there played with the end fed zepp of 135 feet and
>determined what the best feed line length is. My tuner is supposed
>to tune anything between 12 and 2000 ohms.
>
>Thanks
>73's AG0K
>Clint

Hi Clint,

The end fed Zepp antenna is a 'finicky' arrangement. Finding the 'sweet spot' even on the band for which it is designed is tricky at best. From what you posted, you hope to have 80/40M coverage, and so far you have 40m and 75m coverage. However, you tuner is unable to handle the impedance as you go lower in frequency ... eg 80m eg the impedance moves outside the capability of your tuner. The alternative is to adjust the length of either the 135' antenna or the 67' feed line.

Adjusting the feed line is the easiest option .... (you don't want to lose the 40M function) ... try increasing or decreasing the feed line length by 10'. By adding or subtracting a piece of feed line you may be able to get 80m. Once you find the solution you can devise an easy method of adjusting the feed line length ... with a plug or switch arrangement. If you are 'lucky' you may find a compromise feed line length that puts all of 80/75m and 40m band within the tuning range of your tuner.

Jim, VE3CI

2348. Re: End Fed Zepp Question

Yahoo group: SkyWires
Date: 2007-05-21 16:14:26 UTC
From: Clinton Stockton
Topic: 2330 Message: 2348

Thank You Jim, VE3CI

I do have a closet I can hide loops of ladder line in. Do you have
any guide lines on large to make loops and how far apart, or is that
just trial and error. The closet is 2' x 2' and about 4' high.
Once I get the right lenght, or end up having to do switching I can
close the door to cover the large loops of ladder line.

Thanks again Jim and 73's
AG0K Clint

--- In SkyWires@yahoogroups.com, Jim Dunstan <jdunstan@...> wrote:
>
> At 02:10 PM 5/21/2007 +0000, you wrote:
>
> >I have a question concerning 135 foot end fed zepp with ladder
line.
> >
> >I am using about 67 feet of ladder line and I am able to tune it
and
> >get a low SWR on 75 and 40 meters. It basically does not tune on 80
> >meters or 3.8 to 4 mhz.
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> >My manual that came with my MFJ-974HB says the best match occurs
with
> >Max capacitance on the TX and ANT adjustments and for minimum
> >Inductance.
> >
> >On 75 I am using a lot of inductance, Letter B on the tuner with
the
> >TX capacitor being mid range and Ant capacitor between 1 and 2.
> >
> >On 40 my TX capcitor is moving towards minimum capactitance with a
> >number of 8 or 9, the Antenna Capacitance is between 1 and 2 and
the
> >inductor on C.
> >
> >Has anyone out there played with the end fed zepp of 135 feet and
> >determined what the best feed line length is. My tuner is supposed
> >to tune anything between 12 and 2000 ohms.
> >
> >Thanks
> >73's AG0K
> >Clint
>
>

> Hi Clint,
>
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the 'sweet
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> 80m. Once you find the solution you can devise an easy method of
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> the feed line length ... with a plug or switch arrangement. If you
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> 'lucky' you may find a compromise feed line length that puts all of
80/75m
> and 40m band within the tuning range of your tuner.
>
> Jim, VE3CI
>

2349. Re: [SkyWires] Re: End Fed Zepp Question

Yahoo group: SkyWires
Date: 2007-05-21 17:41:08 UTC
From: Dr.Ace Ratliff
Topic: 2330 Message: 2349

Clint,
You might be interested in the design at:
http://www.w5dxp.com/notuner.htm

73, Ace - WH2T

----- Original Message -----
From: Clinton Stockton
To: SkyWires@yahoogroups.com
Sent: Monday, May 21, 2007 11:14 AM
Subject: [SkyWires] Re: End Fed Zepp Question

Thank You Jim, VE3CI

I do have a closet I can hide loops of ladder line in. Do you have
any guide lines on large to make loops and how far apart, or is that
just trial and error. The closet is 2' x 2' and about 4' high.
Once I get the right lenght, or end up having to do switching I can
close the door to cover the large loops of ladder line.

Thanks again Jim and 73's
AG0K Clint

--- In SkyWires@yahoogroups.com, Jim Dunstan <jdunstan@...> wrote:
>
> At 02:10 PM 5/21/2007 +0000, you wrote:
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> >inductor on C.
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> >Thanks
> >73's AG0K
> >Clint
>
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> you go lower in frequency ... eg 80m eg the impedance moves
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> capability of your tuner. The alternative is to adjust the length
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> either the 135' antenna or the 67' feed line.
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> the 40M function) ... try increasing or decreasing the feed line
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> 10'. By adding or subtracting a piece of feed line you may be able
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> 80m. Once you find the solution you can devise an easy method of
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> the feed line length ... with a plug or switch arrangement. If you
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> 'lucky' you may find a compromise feed line length that puts all of
80/75m
> and 40m band within the tuning range of your tuner.
>
> Jim, VE3CI
>

2350. Re: [SkyWires] Re: End Fed Zepp Question

Yahoo group: SkyWires
Date: 2007-05-21 16:47:00 UTC
From: larry allen
Topic: 2330 Message: 2350

Personally, I would not loop.. loop of ladder line in a closet...
The idea behind balanced feed line is to cancel out rf noise as it passes
by the feedline... By wrapping it up in a bundle, you are defeating it's
purpose...
Larry ve3fxq

----- Original Message -----
From: "Clinton Stockton" <ag0k@...>
To: <SkyWires@yahoogroups.com>
Sent: Monday, May 21, 2007 12:14 PM
Subject: [SkyWires] Re: End Fed Zepp Question

Thank You Jim, VE3CI

I do have a closet I can hide loops of ladder line in. Do you have
any guide lines on large to make loops and how far apart, or is that
just trial and error. The closet is 2' x 2' and about 4' high.
Once I get the right lenght, or end up having to do switching I can
close the door to cover the large loops of ladder line.

Thanks again Jim and 73's
AG0K Clint

--- In SkyWires@yahoogroups.com, Jim Dunstan <jdunstan@...> wrote:
>
> At 02:10 PM 5/21/2007 +0000, you wrote:
>
> >I have a question concerning 135 foot end fed zepp with ladder
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> >I am using about 67 feet of ladder line and I am able to tune it
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> >number of 8 or 9, the Antenna Capacitance is between 1 and 2 and

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> >inductor on C.
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> >determined what the best feed line length is. My tuner is supposed
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> >Thanks
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> >Clint
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> Hi Clint,
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> and 75m coverage. However, you tuner is unable to handle the
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> you go lower in frequency ... eg 80m eg the impedance moves
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to lose
> the 40M function) ... try increasing or decreasing the feed line
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> 10'. By adding or subtracting a piece of feed line you may be able
to get
> 80m. Once you find the solution you can devise an easy method of
adjusting
> the feed line length ... with a plug or switch arrangement. If you
are
> 'lucky' you may find a compromise feed line length that puts all of
80/75m
> and 40m band within the tuning range of your tuner.
>
> Jim, VE3CI
>

2351. Re: [SkyWires] Re: End Fed Zepp Question

Yahoo group: SkyWires
Date: 2007-05-21 16:52:34 UTC
From: Jim Dunstan
Topic: 2330 Message: 2351

At 04:14 PM 5/21/2007 +0000, you wrote:

>Thank You Jim, VE3CI
>
>I do have a closet I can hide loops of ladder line in. Do you have
>any guide lines on large to make loops and how far apart, or is that
>just trial and error. The closet is 2' x 2' and about 4' high.
>Once I get the right lenght, or end up having to do switching I can
>close the door to cover the large loops of ladder line.
>
>Thanks again Jim and 73's
>AG0K Clint

Hi Clint,

You are right ... it is mostly trial and error. I recall years ago making a feed line 'adjuster' in my Grandmother's basement .... I installed two pairs of 10' parallel copper wires from the basement rafters. I then used clips to adjust feed line length hi hi. The end fed Zepp is primarily a single band antenna and with dimensions you have used it will be most effective on 80/75m.. I suspect you won't need too great an adjustment to bring it range for 80m operation. Try a few feet at a time.

Jim, VE3CI

2352. Re: [SkyWires] Re: End Fed Zepp Question

Yahoo group: SkyWires
Date: 2007-05-21 17:04:41 UTC
From: Jim Dunstan
Topic: 2330 Message: 2352

At 12:41 PM 5/21/2007 -0500, you wrote:

>Clint,
> You might be interested in the design at:
><http://www.w5dxp.com/notuner.htm>http://www.w5dxp.com/notuner.htm
>
>73, Ace - WH2T

Hi Clint & Ace:

W5DXP's approach to tuning the line is similar to the way I used to tune parallel lines many years ago ... instead of connecting directly to coax and using an RF choke (the RF choke is a good idea in any event) I used a balun (made from air-dux coils) which could be switched from either 1:1 or 4:1 arrangements. Instead of knife switches I used simple banana jacks and plugs. Not exactly fast QSY ... but I used xtals in those days hi hi .

Jim, VE3CI

2353. Re: [SkyWires] Re: End Fed Zepp Question

Yahoo group: SkyWires
Date: 2007-05-21 17:06:32 UTC
From: Jim Dunstan
Topic: 2330 Message: 2353

At 12:41 PM 5/21/2007 -0500, you wrote:

>Clint,
> You might be interested in the design at:
><http://www.w5dxp.com/notuner.htm>http://www.w5dxp.com/notuner.htm
>
>73, Ace - WH2T

Hi Clint & Ace:

W5DXP's approach to tuning the line is similar to the way I used to tune parallel lines many years ago ... instead of connecting directly to coax and using an RF choke (the RF choke is a good idea in any event) I used a balun (made from air-dux coils) which could be switched from either 1:1 or 4:1 arrangements. Instead of knife switches I used simple banana jacks and plugs. Not exactly fast QSY ... but I used xtals in those days hi hi .

Jim, VE3CI

2354. Re: [SkyWires] End Fed Zepp Question

Yahoo group: SkyWires
Date: 2007-05-21 17:03:56 UTC
From: larry allen
Topic: 2330 Message: 2354

p.s. I just remembered...
With regard to the balanced ladder line... the side which connects to your antenna should be the side that you treat as the hot side.....
Larry ve3fxq

----- Original Message -----
From: "larry allen" <larya@...>
To: <SkyWires@yahoogroups.com>
Sent: Monday, May 21, 2007 11:06 AM
Subject: Re: [SkyWires] End Fed Zepp Question

>A zepp antenna is mono-band... Your antenna length is 135 feet, which
> makes it an 80 meter antenna... The quarter wave stub, at the end of the
> antenna, changes the waveform from high voltage / virtally zero current,
> at the end of the antenna to high current / virtually zero voltage at
> the
> end of the 67 foot quarter wave transformer....
>
> The zepp antenna, looks like a dipole antenna, at the non-antenna end of
> the quarter wave stubb...
> So if you connect your coax to the quarter wave stubb and feed that to
> your radio, you should have a good match....
> If you are connecting your ladderline directly to your coupler, then
> tune
> for best responce....
> If you are tuning it onto, lets say, 40 then you are .. converting ..
> your
> antenna to a, essentially, random wire antenna....
> Larrry ve3fxq
>
>
> ----- Original Message -----
> From: "Clinton Stockton" <ag0k@...>
> To: <SkyWires@yahoogroups.com>
> Sent: Monday, May 21, 2007 10:10 AM
> Subject: [SkyWires] End Fed Zepp Question
>
>
> I have a question concerning 135 foot end fed zepp with ladder line.
>
> I am using about 67 feet of ladder line and I am able to tune it and
> get a low SWR on 75 and 40 meters. It basically does not tune on 80
> meters or 3.8 to 4 mhz.
>
> My manual that came with my MFJ-974HB says the best match occurs with

> Max capacitance on the TX and ANT adjustments and for minimum
> Inductance.
>
> On 75 I am using a lot of inductance, Letter B on the tuner with the
> TX capacitor being mid range and Ant capacitor between 1 and 2.
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> On 40 my TX capcitor is moving towards minimum capactitance with a
> number of 8 or 9, the Antenna Capacitance is between 1 and 2 and the
> inductor on C.
>
> Has anyone out there played with the end fed zepp of 135 feet and
> determined what the best feed line length is. My tuner is supposed
> to tune anything between 12 and 2000 ohms.
>
> Thanks
> 73's AG0K
> Clint
>
>
>

2355. Re: [SkyWires] End Fed Zepp Question

Yahoo group: SkyWires
Date: 2007-05-21 17:31:27 UTC
From: Jim Dunstan
Topic: 2330 Message: 2355

At 01:03 PM 5/21/2007 -0400, you wrote:

>p.s. I just remembered...
>With regard to the balanced ladder line... the side which connects to your
>antenna should be the side that you treat as the hot side.....
>Larry ve3fxq

Hi Larry,

Yes, I agree with you ..... in that an end fed Zepp only performs like an end fed Zepp on the design frequency, in this case (135' wire fed by 65' feed line) 75/80M. If your antenna tuner loads on other bands the whole antenna/feed line is acting as a long wire antenna .... eg the feed line will radiate as well as the top wire. Getting an end fed Zepp to work across the whole band with stability is a bit finicky even on the design frequency. It is a lot less stable than feeding a doublet or loop.

Jim, VE3CI

2356. Re: End Fed Zepp Question

Yahoo group: SkyWires
Date: 2007-05-21 17:39:50 UTC
From: Clinton Stockton
Topic: 2330 Message: 2356

Thanks Ace,

I saved the article link in a folder I just made on feedline info.
I will probably still have to use the tuner because there is no
practical way I can center feet a wire from where the house is placed
on the lot in relation to the trees. A large Magnolia is just
outside and across the drive from the shack which makes end feeding
the only real option.

It is a great article and I will read it again and mull over doing
the same thing to a partial degree with the end fed wire.

Thanks again ACE and 73
AG0K Clint

--- In SkyWires@yahoogroups.com, "Dr.Ace Ratliff" <wh2t@...> wrote:
>
> Clint,
> You might be interested in the design at:
> http://www.w5dxp.com/notuner.htm
>
> 73, Ace - WH2T
>
>
> ----- Original Message -----
> From: Clinton Stockton
> To: SkyWires@yahoogroups.com
> Sent: Monday, May 21, 2007 11:14 AM
> Subject: [SkyWires] Re: End Fed Zepp Question
>
>
> Thank You Jim, VE3CI
>
> I do have a closet I can hide loops of ladder line in. Do you
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> Once I get the right lenght, or end up having to do switching I
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>
> Thanks again Jim and 73's
> AG0K Clint
>
> --- In SkyWires@yahoogroups.com, Jim Dunstan <jdunstan@> wrote:

> >
> > At 02:10 PM 5/21/2007 +0000, you wrote:
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> > you go lower in frequency ... eg 80m eg the impedance moves
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> 80/75m
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> >
>

2357. Re: End Fed Zepp Question

Yahoo group: SkyWires
Date: 2007-05-21 17:43:26 UTC
From: Clinton Stockton
Topic: 2330 Message: 2357

Hi Larry and thanks for your input.

When I meant loops I did not mean that I was wanting to coil it up
tight.
I was thinking large open gradual turns keeping the ends at least a
foot apart.

Thanks Again

73 ag0k Clint,

--- In SkyWires@yahoogroups.com, "larry allen" <larya@...> wrote:
>
> Personally, I would not loop.. loop of ladder line in a closet...
> The idea behind balanced feed line is to cancel out rf noise as it
passes
> by the feedline... By wrapping it up in a bundle, you are defeating
it's
> purpose...
> Larry ve3fxq
>
> ----- Original Message -----
> From: "Clinton Stockton" <ag0k@...>
> To: <SkyWires@yahoogroups.com>
> Sent: Monday, May 21, 2007 12:14 PM
> Subject: [SkyWires] Re: End Fed Zepp Question
>
>
> Thank You Jim, VE3CI
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> I do have a closet I can hide loops of ladder line in. Do you have
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> Thanks again Jim and 73's
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> --- In SkyWires@yahoogroups.com, Jim Dunstan <jdunstan@> wrote:
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> > At 02:10 PM 5/21/2007 +0000, you wrote:
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> > and 40m band within the tuning range of your tuner.
> >
> > Jim, VE3CI
> >
>

2358. Re: End Fed Zepp Question

Yahoo group: SkyWires
Date: 2007-05-21 17:48:40 UTC
From: Clinton Stockton
Topic: 2330 Message: 2358

Good input Jim

One thing I like about the MFJ974HB tuner is that the 50 ohm input
has a ferrite bead balun before the TX capacitors. I will keep
playing. Right now 75 and 40 work great as far as being heard.
Great signal reports. Just want to try and increase input capacity
and lower the inductance from where the tuner tunes now.

Have a great day
73's
Clint ag0k

--- In SkyWires@yahoogroups.com, Jim Dunstan <jdunstan@...> wrote:
>
> At 12:41 PM 5/21/2007 -0500, you wrote:
>
> >Clint,
> > You might be interested in the design at:
> ><http://www.w5dxp.com/notuner.htm>http://www.w5dxp.com/notuner.htm
> >
> >73, Ace - WH2T
>
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> Hi Clint & Ace:
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> W5DXP's approach to tuning the line is similar to the way I used to
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> and using an RF choke (the RF choke is a good idea in any event) I
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> balun (made from air-dux coils) which could be switched from either
1:1 or
> 4:1 arrangements. Instead of knife switches I used simple banana
jacks
> and plugs. Not exactly fast QSY ... but I used xtals in those days
hi hi .
>
> Jim, VE3CI
>

2359. Re: [SkyWires] Re: End Fed Zepp Question

Yahoo group: SkyWires
Date: 2007-05-21 18:16:34 UTC
From: larry allen
Topic: 2330 Message: 2359

You know what a dipole looks like.. and you know what feedline is suppost
to do...
If you take a balanced feedline and .. 'coil it up'... you distort the
purpose of balanced feedline... It should be run in a straight line, more
of less, to take advantage of it's reasons for existing...
If you want to coil up a feedline then switch to coax.. with coax you can
do just about anything... that is why they created coax....
Larry ve3fxq

----- Original Message -----
From: "Clinton Stockton" <ag0k@...>
To: <SkyWires@yahoogroups.com>
Sent: Monday, May 21, 2007 1:43 PM
Subject: [SkyWires] Re: End Fed Zepp Question

Hi Larry and thanks for your input.

When I meant loops I did not mean that I was wanting to coil it up
tight.
I was thinking large open gradual turns keeping the ends at least a
foot apart.

Thanks Again

73 ag0k Clint,

--- In SkyWires@yahoogroups.com, "larry allen" <larya@...> wrote:
>
> Personally, I would not loop.. loop of ladder line in a closet...
> The idea behind balanced feed line is to cancel out rf noise as it
passes
> by the feedline... By wrapping it up in a bundle, you are defeating
it's
> purpose...
> Larry ve3fxq
>
> ----- Original Message -----
> From: "Clinton Stockton" <ag0k@...>
> To: <SkyWires@yahoogroups.com>
> Sent: Monday, May 21, 2007 12:14 PM
> Subject: [SkyWires] Re: End Fed Zepp Question
>
>
> Thank You Jim, VE3CI
>
> I do have a closet I can hide loops of ladder line in. Do you have

> any guide lines on large to make loops and how far apart, or is that
> just trial and error. The closet is 2' x 2' and about 4' high.
> Once I get the right lenght, or end up having to do switching I can
> close the door to cover the large loops of ladder line.
>
> Thanks again Jim and 73's
> AG0K Clint
>
>
> --- In SkyWires@yahoogroups.com, Jim Dunstan <jdunstan@> wrote:
> >
> > At 02:10 PM 5/21/2007 +0000, you wrote:
> >
> > >I have a question concerning 135 foot end fed zepp with ladder
> line.
> > >
> > >I am using about 67 feet of ladder line and I am able to tune it
> and
> > >get a low SWR on 75 and 40 meters. It basically does not tune on
80
> > >meters or 3.8 to 4 mhz.
> > >
> > >My manual that came with my MFJ-974HB says the best match occurs
> with
> > >Max capacitance on the TX and ANT adjustments and for minimum
> > >Inductance.
> > >
> > >On 75 I am using a lot of inductance, Letter B on the tuner with
> the
> > >TX capacitor being mid range and Ant capacitor between 1 and 2.
> > >
> > >On 40 my TX capcitor is moving towards minimum capactitance with
a
> > >number of 8 or 9, the Antenna Capacitance is between 1 and 2 and
> the
> > >inductor on C.
> > >
> > >Has anyone out there played with the end fed zepp of 135 feet and
> > >determined what the best feed line length is. My tuner is
supposed
> > >to tune anything between 12 and 2000 ohms.
> > >
> > >Thanks
> > >73's AG0K
> > >Clint
> >
> >
> > Hi Clint,
> >
> > The end fed Zepp antenna is a 'finicky' arrangement. Finding

> the 'sweet
> > spot' even on the band for which it is designed is tricky at best.
> From
> > what you posted, you hope to have 80/40M coverage, and so far you
> have 40m
> > and 75m coverage. However, you tuner is unable to handle the
> impedance as
> > you go lower in frequency ... eg 80m eg the impedance moves
> outside the
> > capability of your tuner. The alternative is to adjust the length
> of
> > either the 135' antenna or the 67' feed line.
> >
> > Adjusting the feed line is the easiest option .... (you don't want
> to lose
> > the 40M function) ... try increasing or decreasing the feed line
> length by
> > 10'. By adding or subtracting a piece of feed line you may be
able
> to get
> > 80m. Once you find the solution you can devise an easy method of
> adjusting
> > the feed line length ... with a plug or switch arrangement. If
you
> are
> > 'lucky' you may find a compromise feed line length that puts all
of
> 80/75m
> > and 40m band within the tuning range of your tuner.
> >
> > Jim, VE3CI
> >
>

2360. Re: [SkyWires] Re: Multiple wave Loop

Yahoo group: SkyWires
Date: 2007-05-21 19:37:23 UTC
From: Bill Graham
Topic: 2295 Message: 2360

A couple of questions:

* What type of wire did you use?
* What type of feedline? Length?
* How much power do you intend to run?
* What did you use for the materials for your poles?

Thanks,
'73
Bill
AG4SI

n7cal wrote:
>
> Well, I have my poles set and my closest estimate is 1325' of wire or
> 5.1 wave lengths at 3.950. Highest point is going to be about 80' with
> the average being 60'
>
> More as it comes.....
>
>

2361. Re: [SkyWires] Unbalanced tuner at loop feedpoint

Yahoo group: SkyWires
Date: 2007-05-21 20:12:50 UTC
From: erik@n0ew.org
Topic: 2326 Message: 2361

> I put an analyzer on the feedpoint of my loop and found the
> impedance changes from 8 ohms to 129 ohms depending on the band. It
> only makes sense to put the tuner at the feedpoint once you know this,
> because there is no combination of baluns or tuning stubs that can make
> that range of impedance match any feedline (unless you only want to use
> it on a single band).

With respect, I disagree. Unless you dropped a couple zero's from
that, I don't think that is that far of an impedance difference
myself. Quite easily matched in fact. For a multi-band antenna I'd be
very happy with that small impedance range and not at all afraid of
keeping the transmatch in my shack.

Of course if one has a philosophical difference that precludes using a
transmatch --which is designed to match differences in impedance-- and
are willing to only use voltage baluns or tuning stubs, then it isn't
quite as simple.

But it is still far from 'impossible'! It will just require a series
of matching stubs that must be switched out at various times. (I'd
rather use a transmatch myself, but that is just me.)

73-Erik n0ew

2362. Re: Multiple wave Loop

Yahoo group: SkyWires
Date: 2007-05-22 03:33:48 UTC
From: n7cal
Topic: 2295 Message: 2362

I am using seven strand power line, typical power lines used for home service, I am sinking telephone poles, 50 footers and 35s on high points around the house here so as to span the coulee. The power poles are placed so there will be a minimum of ground effect. I am also using a couple of trees, one that is on a cliff above the house. that will provide about 80 feet of height right off to another tree providing about 60 feet. I have no shortage of power poles or space, I live on a 25,000 acre ranch.(Thousand, not hundred) I am feeding it with a short stretch of RG-8 out of the shack in the basement to a balun and then ladder line 450 Ohm to the antenna. I am running a single 3-500Z for output.

Craig
N7CAL

2363. Re: [SkyWires] Static Build-up - ouch!

Yahoo group: SkyWires
Date: 2007-05-22 05:02:43 UTC
From: Clive Lorton
Topic: 2330 Message: 2363

JIm, Thanks for your help. When I took the cover off a center tap was the obvious choice. I'll not use this tuner in un-ballanced mode.

Manny thanks for all your help.
73, Clive G8POC

2364. Unbalanced tuner at loop feedpoint ☐ balun?

Yahoo group: SkyWires
Date: 2007-05-22 14:38:52 UTC
From: K4THE
Topic: 2326 Message: 2364

>RE:Posted by: "Kyle" W4KDA Date: May 21,2007
>My 160m loop is fed with 145' of coax, to an LDG Z11 Pro
>and a true transformer balun, right at
>the feed point. /snip/

I just bought a Z11pro at Dayton Hamvention with plans to do the same. Please describe your balun in detail: turns ratio (1:1 ?), manufacturer, model number, etc. Please describe your plan to ground the tuner remotely. What is the height of your 160m loop? Best regards to Shoshone.
73s Dennis K4THE.

2365. Re: [SkyWires] Unbalanced tuner a t loop feedpoint – balun?

Yahoo group: SkyWires
Date: 2007-05-23 14:48:48 UTC
From: Kyle
Topic: 2326 Message: 2365

The balun I used is a Unadilla W2AU. Here is where I purchased mine, although I'm sure it available elsewhere:
http://www.universal-radio.com/catalog/antsup/1888.html

The earth goes up and down beneath the loop. Most of it is between 30-50 feet in the air in an equalateral triangle. Most of one leg is across a 1/4 acre pond, that may or may not improve performance.

My grounding plan is not really special. I am planning to put a ground rod in the earth below the feedpoint. The ground wire will run from there up to the ammo box I will store the tuner in. That will provide the common ground for the coax shields at the tuner and feedpoint, and for the static dissipating carbon resistor. Nothing really special. Right now, I don't have the ammo box up, and I disconnect the loop from the tuner whenever I'm not using it (YUCK!).

73,
Kyle
W4KDA

K4THE wrote:
>
>
> >RE:Posted by: "Kyle" W4KDA Date: May 21,2007
> >My 160m loop is fed with 145' of coax, to an LDG Z11 Pro
> >and a true transformer balun, right at
> >the feed point. /snip/
>
> I just bought a Z11pro at Dayton Hamvention with plans to
> do the same. Please describe your balun in detail: turns
> ratio (1:1 ?), manufacturer, model number, etc. Please
> describe your plan to ground the tuner remotely. What is
> the height of your 160m loop? Best regards to Shoshone.
> 73s Dennis K4THE.

2367. Skywire ?

Yahoo group: SkyWires
Date: 2007-05-27 14:22:20 UTC
From: hogwild2050
Topic: 2367 Message: 2367

Newbie with question. I would like to put up a horizontal loop for 80m and up this Fall. I am using a Yaesu 101e, LDG at200 pro. When I put this up do I run straight from the skywire to tuner with just coax or will I need some type balun. I should be able to get the wire up 50' or more in my trees. Thanks, Greg KI4VQP

2368. Re: [SkyWires] Skywire ?

Yahoo group: SkyWires
Date: 2007-05-27 17:10:31 UTC
From: Jim Dunstan
Topic: 2367 Message: 2368

At 02:22 PM 5/27/2007 +0000, you wrote:

>Newbie with question. I would like to put up a horizontal loop for 80m
>and up this Fall. I am using a Yaesu 101e, LDG at200 pro. When I put
>this up do I run straight from the skywire to tuner with just coax or
>will I need some type balun. I should be able to get the wire up 50'
>or more in my trees. Thanks, Greg KI4VQP

Hi Greg,

Since you will be using the loop on one band the best solution is to use coax as the feed line. You will be dealing with moderate SWR with reasonable power losses. Your LDG antenna tuner will look after keeping your radio happy. You can either connect the coax directly to the loop or use a balun of some sort at the antenna feed point. The purpose of the balun is to limit the antenna currents that flow on the outside of the coax shield .... you can use a 1:1 balun wound on a ferrite core (any number of commercial models available) or simply provide a balun in the form of a current choke on the coax (eg ferrite beads or simply wind 20 ft of coax into a tight coil).

Sometime it is an advantage to leave the choke/balun out of the arrangement and allow antenna currents to flow on the outside of the coax feed line which may give you some radiation advantage with some vertical polarization. In either case your tuner will have no problem giving you a 1:1 match.

Jim, VE3CI

2369. Re: [SkyWires] Skywire ?

Yahoo group: SkyWires
Date: 2007-05-27 21:22:54 UTC
From: Donald Sanders
Topic: 2367 Message: 2369

Use 450 ladder line feed and you will be able
to use it for all bands. If your tuner only has coax
feed then use a 4:1 balun at the end of the ladder
line and coax to your tuner.

Healthfully yours,
Don W4BWS
----- Original Message -----
From: hogwild2050
To: SkyWires@yahoogroups.com
Sent: Sunday, May 27, 2007 9:22 AM
Subject: [SkyWires] Skywire ?

Newbie with question. I would like to put up a horizontal loop for 80m
and up this Fall. I am using a Yaesu 101e, LDG at200 pro. When I put
this up do I run straight from the skywire to tuner with just coax or
will I need some type balun. I should be able to get the wire up 50'
or more in my trees. Thanks, Greg KI4VQP

2370. Re: [SkyWires] Skywire ?

Yahoo group: SkyWires
Date: 2007-05-27 22:50:15 UTC
From: Dr.Ace Ratliff
Topic: 2367 Message: 2370

Greg,
If you are installing the LDG at200 pro at the feed point of the loop. Coax will work fine for multi-band operations.
Ace - WH2T

----- Original Message -----
From: hogwild2050
To: SkyWires@yahoogroups.com
Sent: Sunday, May 27, 2007 9:22 AM
Subject: [SkyWires] Skywire ?

Newbie with question. I would like to put up a horizontal loop for 80m and up this Fall. I am using a Yaesu 101e, LDG at200 pro. When I put this up do I run straight from the skywire to tuner with just coax or will I need some type balun. I should be able to get the wire up 50' or more in my trees. Thanks, Greg KI4VQP

2372. Re: Skywire ?

Yahoo group: SkyWires
Date: 2007-05-31 14:51:41 UTC
From: hogwild2050
Topic: 2367 Message: 2372

I plan on running short coax from radio to tuner then long (75') run from tuner to the ends of sky loop about 50' in the air. I am hoping this fullwave horizontal loop will work efficiently on 80-10m bands. If this is incorrect please advise. Thanks Greg

2373. Re: [SkyWires] Re: Skywire ?

Yahoo group: SkyWires
Date: 2007-05-31 16:21:29 UTC
From: Dr.Ace Ratliff
Topic: 2367 Message: 2373

Greg,
What are you going to use for the long (75') run ???
Ace - WH2T

----- Original Message -----
From: hogwild2050
To: SkyWires@yahoogroups.com
Sent: Thursday, May 31, 2007 9:51 AM
Subject: [SkyWires] Re: Skywire ?

I plan on running short coax from radio to tuner then long (75') run
from tuner to the ends of sky loop about 50' in the air. I am ho
ping this fullwave horizontal loop will work efficiently on 80-10m
bands. If this is incorrect please advise. Thanks Greg

2374. RE: [SkyWires] Re: Skywire ?

Yahoo group: SkyWires
Date: 2007-05-31 15:48:52 UTC
From: Callum M0MCX
Topic: 2367 Message: 2374

Greg,

If you are doing this all with Coax then you will have a tough time in my opinion. The lowest frequency you will be able to get to with coax is the 20 meter band but using a tuner with ladder line up to the loop would get you lower down ☐ in fact with an SG230, you could tune all the way down to 160 meters. By all means go from the rig to the tuner with coax.

However, if you only wanted the 20 meter band (and upwards), you☐ll find that a sky loop will resonate and give you a close match to 50 ohms with a 4:1 balun (or nearly) on every harmonic of the lowest frequency. I have a 40 meter loop in the sky and it resonates on every harmonic: 7, 14, 21 and 28 Mhz. If you started life only with a 20 meter loop, you☐ll only naturally get 14 then 28 Mhz so as I started this paragraph, I was hopeful but then realised it would be a 2 band antenna. Better if you can squeeze in 40 meters of wire.

Dispensing with 50 ohms though ☐ it will work adequately if you feed it with something other than coax from the tuner

Hint, build a 20 meter loop *and* a 15 meter loop ☐ then feed them in a nested configuration with a balun (I normally find a 4:1 balun gets me close to where I want to be with a loop) ☐ you☐ll get probably everything from 20 meters upwards inc the Warc bands with a decent SWR.

(Sorry for the waffle!)

Callum McCormick
M0MCX
07976 631881
http://www.m0mcx.co.uk/

_____
From: SkyWires@yahoogroups.com [mailto:SkyWires@yahoogroups.com] On Behalf Of hogwild2050
Sent: 31 May 2007 15:52
To: SkyWires@yahoogroups.com
Subject: [SkyWires] Re: Skywire ?

I plan on running short coax from radio to tuner then long (75') run from tuner to the ends of sky loop about 50' in the air. I am ho ping this fullwave horizontal loop will work efficiently on 80-10m bands. If this is incorrect please advise. Thanks Greg

2376. Re: [SkyWires] Re: Skywire ?

Yahoo group: SkyWires
Date: 2007-05-31 16:17:39 UTC
From: larry allen
Topic: 2367 Message: 2376

Hi Greg
Depending on where you plan to run your coax, you could run the entire length of coax with the same wire as your antenna...
This will give you a long wire antenna...
This is a very simple antenna which did work for me, and my 'series tuned circuit antenna' coupler...
Larry ve3fxq

----- Original Message -----
From: "hogwild2050" <hoggreg@...>
To: <SkyWires@yahoogroups.com>
Sent: Thursday, May 31, 2007 10:51 AM
Subject: [SkyWires] Re: Skywire ?

I plan on running short coax from radio to tuner then long (75') run from tuner to the ends of sky loop about 50' in the air. I am ho
ping this fullwave horizontal loop will work efficiently on 80-10m bands. If this is incorrect please advise. Thanks Greg

2377. Re: [SkyWires] Re: Skywire ?

Yahoo group: SkyWires
Date: 2007-05-31 17:06:45 UTC
From: Jim Dunstan
Topic: 2367 Message: 2377

At 02:51 PM 5/31/2007 +0000, you wrote:

>I plan on running short coax from radio to tuner then long (75') run
>from tuner to the ends of sky loop about 50' in the air. I am ho
>ping this fullwave horizontal loop will work efficiently on 80-10m
>bands. If this is incorrect please advise. Thanks Greg

Hi Greg,

The system you describe will probably work in that your tuner will adjust the impedance it sees at the end of the 75' of coax to match the 50 ohms resistive impedance your transceiver likes to see. The key part of your question is 'efficiently', that is minimal loss in the feed line and maximum power transferred to the loop. The arrangement you describe will be most efficient at 80M .... assuming the loop is a wavelength at 80m.

When operating 80M the only additional consideration might be placing a current choke on the coax at the point it connects to the loop. The reason is that the loop is a 'balanced' antenna and the coax feed line is 'unbalanced' thus there will be antenna currents flowing on the outside of the coax shield as well as in the loop. A simple RF choke will do the job, eg ferrite beads strung on the coax at the feed point or simply coil 20' feet of coax into a tight coil, also at the feed point.

However, if you operate on other bands, all bets are off .... the impedance at the loop feed point could be anything from 150 ohms to 1000 ohms or greater. Your tuner may be able to keep your transceiver happy but the high SWR on the coax will first render the choke irrelevant and power losses will become considerable ... eg transmission power will be consumed as heat in the coax. Probably won't hurt anything (if you operate 100W or less) but you will be wasting a lot of communications power.

As soon as you operate the loop on bands other than 80m then feeding directly with coax becomes dramatically inefficient. There are basically 2 solutions to the efficient multi band operation problem .... either feed the loop with open wire line to a tuner at the shack or place an automatic antenna tuner at the loop feed point and then coax to the shack.

Sorry, nothing is simple hi hi

Jim, VE3CI

2378. RE: [SkyWires] Re: Skywire ?

Yahoo group: SkyWires
Date: 2007-05-31 18:18:47 UTC
From: Callum M0MCX
Topic: 2367 Message: 2378

Jim,

He said 70 feet in his original post (he used the ' sign for feet, like 70')

If he can actually go the distance to 80 meters then it's gonna work on all bands quite well, even with coax (I have one in my stable :) - hence the resonance on every harmonic.

Callum McCormick

M0MCX

07976 631881

http://www.m0mcx.co.uk/

From: SkyWires@yahoogroups.com [mailto:SkyWires@yahoogroups.com] On Behalf Of Jim Dunstan
Sent: 31 May 2007 18:07
To: SkyWires@yahoogroups.com
Subject: Re: [SkyWires] Re: Skywire ?

At 02:51 PM 5/31/2007 +0000, you wrote:

>I plan on running short coax from radio to tuner then long (75') run
>from tuner to the ends of sky loop about 50' in the air. I am ho
>ping this fullwave horizontal loop will work efficiently on 80-10m
>bands. If this is incorrect please advise. Thanks Greg

Hi Greg,

The system you describe will probably work in that your tuner will adjust the impedance it sees at the end of the 75' of coax to match the 50 ohms resistive impedance your transceiver likes to see. The key part of your question is 'efficiently', that is minimal loss in the feed line and maximum power transferred to the loop. The arrangement you describe will be most efficient at 80M .... assuming the loop is a wavelength at 80m.

When operating 80M the only additional consideration might be placing a current choke on the coax at the point it connects to the loop. The reason is that the loop is a 'balanced' antenna and the coax feed line is 'unbalanced' thus there will be antenna currents flowing on the outside of the coax shield as well as in the loop. A simple RF choke will do the job, eg ferrite beads strung on the coax at the feed point or simply coil 20' feet of coax into a tight coil, also at the feed point.

However, if you operate on other bands, all bets are off .... the impedance at the loop feed point could be anything from 150 ohms to 1000 ohms or greater. Your tuner may be able to keep your transceiver happy but the high SWR on the coax will first render the choke irrelevant and power losses will become considerable ... eg transmission power will be consumed as heat in the coax. Probably won't hurt anything (if you operate 100W or less) but you will be wasting a lot of communications power.

As soon as you operate the loop on bands other than 80m then feeding directly with coax becomes dramatically inefficient. There are basically 2 solutions to the efficient multi band operation problem .... either feed the loop with open wire line to a tuner at the shack or place an automatic antenna tuner at the loop feed point and then coax to the shack.

Sorry, nothing is simple hi hi

Jim, VE3CI

2379. RE: [SkyWires] Re: Skywire ?

Yahoo group: SkyWires
Date: 2007-05-31 19:04:03 UTC
From: Jim Dunstan
Topic: 2367 Message: 2379

At 07:18 PM 5/31/2007 +0100, you wrote:

>Jim,
>
>
>
>He said 70 feet in his original post (he used the ☐ sign for feet, like 70☐)
>
>

Yes, I understand what ' means.

>If he can actually go the distance to 80 meters then it☐s gonna work on
>all bands quite well, even with coax (I have one in my stable :) ☐ hence
>the resonance on every harmonic
>
>

I agreed that it was possible to feed an 80M, 1 wavelength loop, on all bands 80m-10m. using coax. I pointed out that there will be high SWR's on other bands whether they are harmonically related or not which will compromise efficiency. That is a fact. The SWR the tuner sees will be related to the missmatch at the feed point and the length of the coax. Regardless what the tuner sees there will be SWR at various points in the coax and this results in inefficiency ... eg power loss.

That does not mean the antenna won't work! Heh you can work the world with 2 watts .... so if you feed 100 watts into the system at a particular frequency with 10db loss due to SWR you will still radiate 10 watts which is still more than 6db (1 S unit) more than the 2 watt QRP station working into an efficient antenna system.

So if you are feeding a 1 wavelength loop all bands 80-10m with coax then your system efficiency varies considerably. Anecdotal evidence of contacts does not change this fact or make the system efficient.

Jim, VE3CI

>Callum McCormick
>
>M0MCX
>
>07976 631881
>
><http://www.m0mcx.co.uk/>http://www.m0mcx.co.uk/

2380. RE: [SkyWires] Re: Skywire ?

Yahoo group: SkyWires
Date: 2007-06-01 12:47:34 UTC
From: Callum M0MCX
Topic: 2367 Message: 2380

Re-reading his post, I see that he doesn□t actually specify the length of his loop which is critical if feeding with coax.

Greg, how long a loop were you thinking of feeding?

Callum McCormick
M0MCX
07976 631881
http://www.m0mcx.co.uk/

2381. Re: Skywire ?

Yahoo group: SkyWires
Date: 2007-06-01 15:36:29 UTC
From: hogwild2050
Topic: 2367 Message: 2381

Based on 1005/3.5mhz/4= roughly 72' per side. I have plenty of land with all the trees I could need around the perimeter. Heck I have the room for a 160m loop but my Yaesu ft-101 isn't equipped with the crystal for that and I don't feel a need at this time.

I have read a few articles on the skywire loop and it seems a decent cheap antenna. I appreciate the dialog on this group and any advice will be thoroughly considered. Thanks Greg

2382. Re: Skywire ?

Yahoo group: SkyWires
Date: 2007-06-01 23:01:10 UTC
From: Don Keith
Topic: 2367 Message: 2382

Heck, Greg! If I were blessed with all those trees and all that
room, I think I would go ahead and at least make it a full wavelength
long for 160. You'll want it someday and it would give you some more
gain on 75/80.

Good luck with the skywire!

73,

Don N4KC
www.n4kc.com

--- In SkyWires@yahoogroups.com, "hogwild2050" <hoggreg@...> wrote:
>
> Based on 1005/3.5mhz/4= roughly 72' per side. I have plenty of land
> with all the trees I could need around the perimeter. Heck I have
the
> room for a 160m loop but my Yaesu ft-101 isn't equipped with the
> crystal for that and I don't feel a need at this time.
>
> I have read a few articles on the skywire loop and it seems a decent
> cheap antenna. I appreciate the dialog on this group and any advice
> will be thoroughly considered. Thanks Greg
>

2384. Re: [SkyWires] Looking for something more?Here's a tip for you...

Yahoo group: SkyWires
Date: 2007-06-02 15:31:05 UTC
From: N0ATH
Topic: 2384 Message: 2384

I checked on this and sure enuff - I had met his
future wife here to - Why
does this have to always be on this group? N?ATH

----- Original Message -----
From: <josalyne-overfelt205@...>
To: <SkyWires@yahoogroups.com>
Sent: Saturday, June 02, 2007 9:46 AM
Subject: [SkyWires] Looking for something
more?Here's a tip for you...

I met my future wife here! hehe. And thought
I should share it with any other men who are
worried about ending up alone like I was. Check
it out if you like http://bringitallu.info

2385. Re: [SkyWires] Looking for something more?Here's a tip for you...

Yahoo group: SkyWires
Date: 2007-06-02 18:42:28 UTC
From: David Shrum
Topic: 2384 Message: 2385

Because they can and because we can't change how people sigh up. I am a co-moderator on a different group and any new member has to be approved; We DON'T have that option here.
Dave N8PU

N0ATH wrote:
> I checked on this and sure enuff - I had met his
> future wife here to - Why
> does this have to always be on this group? N?ATH
>
> ----- Original Message -----
> From: <josalyne-overfelt205@...>
> To: <SkyWires@yahoogroups.com>
> Sent: Saturday, June 02, 2007 9:46 AM
> Subject: [SkyWires] Looking for something
> more?Here's a tip for you...
>

2386. Re: Skywire ?

Yahoo group: SkyWires
Date: 2007-06-02 20:12:39 UTC
From: hogwild2050
Topic: 2367 Message: 2386

This brings up more questions.

How would a 160m full loop give more gain on 75/80m?

Would it matter that I do have a height limit? I can gain all the horizontal room I need but the trees only grow so high.

Would the 160 loop give even more gain on 60,40,20m?

If I just need to research this more elsewhere I will if the answers are too expansive for a reply here. Thanks for the info so far. Greg

2387. Re: Skywire ?

Yahoo group: SkyWires
Date: 2007-06-02 23:59:24 UTC
From: Don Keith
Topic: 2367 Message: 2387

Greg:

If you intend to use your loop on more than one band, you will most likely want to feed it with open wire/ladder line/window line and use a tuner. If so, a 160-meter one-wavelength-long loop used on 80 meters will have about 5.5 db gain at certain angles of radiation. That goes to about 10 db for 40 meters.

I'd suggest the article on horizontal loops at W4RNL's web site as a starting place: http://www.cebik.com/fdim/atl1.html.

But don't let us deter you. Put up a good loop and you'll never go back!

73,

Don N4KC
www.n4kc.com

--- In SkyWires@yahoogroups.com, "hogwild2050" <hoggreg@...> wrote:
>
> This brings up more questions.
>
> How would a 160m full loop give more gain on 75/80m?
>
> Would it matter that I do have a height limit? I can gain all the
> horizontal room I need but the trees only grow so high.
>
> Would the 160 loop give even more gain on 60,40,20m?
>
> If I just need to research this more elsewhere I will if the answers
> are too expansive for a reply here. Thanks for the info so far. Greg
>

2389. Coax to skywire

Yahoo group: SkyWires
Date: 2007-06-05 05:02:42 UTC
From: hogwild2050
Topic: 2389 Message: 2389

Most of the diagrams show coax from radio to skywire, including the diagram on this group home page. When is that ok versus using ladder line from tuner to skywire. If it will work multi-bands with coax wouldn't that be easier? Thanks for all the input so far. Greg KI4VQP

2390. Re: [SkyWires] Coax to skywire

Yahoo group: SkyWires
Date: 2007-06-05 06:14:25 UTC
From: Sarge
Topic: 2389 Message: 2390

if it's a one wave length skywire, 50 ohm coax will work. If you have to make a real long run to the skywire then use ladder line to prevent pwr loss.

> Most of the diagrams show coax from radio to skywire, including the
> diagram on this group home page. When is that ok versus using ladder
> line from tuner to skywire. If it will work multi-bands with coax
> wouldn't that be easier? Thanks for all the input so far. Greg KI4VQP
>
>
>
>
> Yahoo! Groups Links
>
>
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>
>
> --
> No virus found in this incoming message.
> Checked by AVG Free Edition.
> Version: 7.5.472 / Virus Database: 269.8.7/830 - Release Date: 6/3/2007
> 12:47 PM
>
>

2391. Corner or mid side fed - any difference

Yahoo group: SkyWires
Date: 2007-06-05 08:08:30 UTC
From: Paul
Topic: 2391 Message: 2391

My 40 meter full wave will have sligtly longer lines (from square) running E/W. I can feed it at the mast on a corner or I an feed it mid point on the 35 ft+ E/W leg. Would there be a difference in radiation pattern? I plan to use this n 40M and up. I'll see what the SWR is on 80. I plan to run 450 ladder line to a 4:1 balun and then to about 10 feet of coax to the shack.
Thank you,
Paul

2392. Re: [SkyWires] Coax to skywire

Yahoo group: SkyWires
Date: 2007-06-05 14:08:56 UTC
From: Jim Dunstan
Topic: 2389 Message: 2392

At 05:02 AM 6/5/2007 +0000, you wrote:

>Most of the diagrams show coax from radio to skywire, including the
>diagram on this group home page. When is that ok versus using ladder
>line from tuner to skywire. If it will work multi-bands with coax
>wouldn't that be easier? Thanks for all the input so far. Greg KI4VQP

Hi Greg,

It is simply a matter of efficiency. If you check out Cebik on large loop antennas his analyses indicate that the feed point impedance of a 1 wave length loop on 80m will represent various impedance Combinations from band to band that range from 100 to 2000 ohms .... depending on frequency and height etc. .... Average coax like RG8 ... will represent significantly larger power loss than ladder line when operating with high SWR. In a particular instance for example if you have a 16:1 SWR on 10M you could have 30watts output with 100 watts input with coax and 60 watts output with ladder line (with a 75' run). That is with top quality coax. If you were to use RG58 the ratio would be much worse.

So, yes it would probably be easier feeding a multi-band wire antenna with coax .... but it would not be efficient. Most operators are interested in squeezing out the most from their transmitters/antennas.

Jim, VE3CI

2393. High SWR 80/20 2WL 160

Yahoo group: SkyWires
Date: 2007-06-05 15:56:32 UTC
From: donkunst
Topic: 2393 Message: 2393

Newbie question.

I put up a 2WL 160 loop using .35 welding wire, about 1150 feet, in an elongated triangle at an average of 30 feet in height with some high points of 60 feet, on a pulley system. It is side fed with 75 feet of 300 ohm TV twin lead, direct to a MFJ tuner.

When I compared it to my HyGain vertical, 15,20,40, it didn't seem to hear as well on 2o as the vertical. Maybe it is just directional.

So here are some numbers from a MFJ analyzer.

Any ideas why the SWR is high on 80 and 20 and what I could do about it?

I got sort of carried away with the numbers, but is it reasonable that this would work all the way up to 2M? If that is the case wouldn't the gain be huge?

Don KB3HJS

2WL 160M Loop 160M 160M 160M OOB OOB 1.8 MHz 1.8 MHz
1.8 MHz Freq 1.8 1.9 2 2.056 2.0592 SWR 5..1 2.9 1.5 1.3
1.3 Resistance 47 46 55 65 66 Reactance 81 52 20 10 7
OOB OOB 80M 80M 80M 80M 80M 3.5 MHz 3.5 MHz 3.5 MHz 3.5 MHz 3.5
MHz Freq 2.3265 2.938 3.6 3.7 3.8 3.9 4 SWR 1.5 7.3 20.2 17.8
18.6 21.1 25 Resistance 73 114 291 338 338 395 Reactance 11
157 373 362 362 412 650 60M 60M 60M 60M 60M
5.3 MHz 5.3 MHz 5.3 MHz 5.3 MHz 5.3 MHz Freq 5.3305 5.3465 5.3665
5.3715 5.4035 SWR 13.5 14 13.5 13.5 13.5 Resistance 184
194 194 194 182 Reactance 272 270 270 270 259
OOB OOB 40M 40M 40M 7 MHz 7 MHz 7 MHz Freq 6.7447 6.987
7.125 7.2 7.3 SWR 1.6 2.9 3.2 4 6.6 Resistance 79 87 85 88
128 Reactance 14 63 72 90 145 30M 30M 30M
OOB OOB 10.1 MHZ 10.1 MHZ 10.1 MHZ Freq 10.1 10.15
10.687 11.184 14.082 SWR 9.4 9 3.5 1.6 23.2 Resistance 122
119 82 80 168 Reactance 180 170 79 14 348
20M 20M 20M 20M OOB 14 MHz 14 MHz 14 MHz 14 MHz Freq
14.15 14.2 14.3 14.35 15.658 SWR 15.2 14.9 17.2 16.5 1.8
Resistance 128 128 113 107 88 Reactance 284 273 247 235 22
17M 17M 17M 18 MHz 18 MHz 18 MHz Freq 18.068 18.1
18.168 SWR 14.9 14.9 14.9 Resistance 320 294 294
Reactance 322 320 320 OOB 15M 15M 15M 15M 15M
22 MHZ 21 MHz 21 MHz 21 MHz 21 MHz Freq 20.372 21 21.2 21.3 21.4
21.45 SWR 2 5.6 6.6 7.6 8.4 9.6 Resistance 98 175 206 227
276 304 Reactance 20 113 134 156 158 181 OOB
12M 12M 12M 12M OOB 24 MHz 24 MHz 24 MHz 24 MHz Freq
24.732 24.89 24.9 24.95 24.99 24.732 SWR 2.1 2.1 2.2 2.2 2.3 2.1

Resistance 95 102 103 104 108 95 Reactance 28 21 20 28 30 28
10M 10M 10M 10M 10M OOB 28 MHz 28 MHz 28 MHz 29 MHz 28 MHz 50 MHz
Freq 28 28.5 28.893 29 29.7 47.283 SWR 6.8 3.1 1.9 3 2 2.5
Resistance 100 78 87 79 124 95 Reactance 143 75 28 68 52 54
6M 6M 6M 6M 6M OOB 50 MHz 50 MHz 50 MHz 50 MHz 50 MHz 50 MHz
Freq 50 51 52 53 54 56.252 SWR 10.8 3.9 3.7 7.6 13.5 2.2
Resistance 99 80 167 290 118 100 Reactance 194 90 60 212 224 32
OOB 2M 2M 2M 2M 2M 2M 2M 2M 2M OOB 86 144MHz 144MHz 144MHz 144MHz
144MHz 144MHz 144MHz 144MHz 144MHz 144MHz Freq 142.17 144 144.5 145
145.5 146 146.5 147 147.5 148 151.28 SWR 3.2 5 4.8 3.9 3.3 3.5 4.7 3
2.7 3.6 3 Resistance 63 67 60 61 74 103 112 58 80 105 65 Reactance 71
104 98 85 77 83 114 65 63 85 66

2394. RE: [SkyWires] High SWR 80/20 2WL 160

Yahoo group: SkyWires
Date: 2007-06-05 18:04:35 UTC
From: Callum M0MCX
Topic: 2393 Message: 2394

I like your analysis. This is very much how I log data. This business about huge gain when building bigger than 1 wavelength loops though is bunkum in my humble opinion. Dedicated loops for each frequency will give you optimum gain - for instance a single wavelength loop, vertically polarised actually represents two phased quarter-wave verticals. This sort of gain could not be achieved with a double wavelength loop. There was a contest station in the UK that built a vertical loop for 160m and thought they'd wipe the floor in a "single antenna" contest. Apparently their result was abysmal. Sorry to douse your enthusiasm.

Loops do work on 2 meters though - I have a pair stacked one wavelength apart and they do good for omni-directional horizontal work. A small yagi beats them by miles though :)

Callum McCormick

M0MCX

07976 631881

http://www.m0mcx.co.uk/

From: SkyWires@yahoogroups.com [mailto:SkyWires@yahoogroups.com] On Behalf Of donkunst
Sent: 05 June 2007 16:57
To: SkyWires@yahoogroups.com
Subject: [SkyWires] High SWR 80/20 2WL 160

Newbie question.

I put up a 2WL 160 loop using .35 welding wire, about 1150 feet, in an elongated triangle at an average of 30 feet in height with some high points of 60 feet, on a pulley system. It is side fed with 75 feet of 300 ohm TV twin lead, direct to a MFJ tuner.

When I compared it to my HyGain vertical, 15,20,40, it didn't seem to hear as well on 2o as the vertical. Maybe it is just directional.

So here are some numbers from a MFJ analyzer.

Any ideas why the SWR is high on 80 and 20 and what I could do about it?

I got sort of carried away with the numbers, but is it reasonable that this would work all the way up to 2M? If that is the case wouldn't the gain be huge?

Don KB3HJS

2WL 160M Loop

160M

160M

160M

OOB

OOB

1.8 MHz

1.8 MHz

1.8 MHz

Freq

1.8

1.9

2

2.056

2.0592

SWR

5..1

2.9

1.5

1.3

1.3

Resistance

47

46

55

65

66

Reactance

81

52

20

10

7

OOB

OOB

80M

80M

80M

80M

80M

3.5 MHz

3.5 MHz

3.5 MHz

3.5 MHz

3.5 MHz

Freq

2.3265

2.938

3.6

3.7

3.8

3.9

4

SWR

1.5

7.3

20.2

17.8

18.6

21.1

25

Resistance

73

114

291

338

338

395

Reactance

11

157

373

362

362

412

650

60M

60M

60M

60M

60M

5.3 MHz

5.3 MHz

5.3 MHz

5.3 MHz

5.3 MHz

Freq

5.3305

5.3465

5.3665

5.3715

5.4035

SWR

13.5

14

13.5

13.5

13.5

Resistance

184

194

194

194

182

Reactance

272

270

270

270

259

OOB

OOB

40M

40M

40M

7 MHz

7 MHz

7 MHz

Freq

6.7447

6.987

7.125

7.2

7.3

SWR

1.6

2.9

3.2

4

6.6

Resistance

79

87

85

88

128

Reactance

14

63

72

90

145

30M

30M

30M

OOB

OOB

10.1 MHZ

10.1 MHZ

10.1 MHZ

Freq

10.1

10.15

10.687

11.184

14.082

SWR

9.4

9

3.5

1.6

23.2

Resistance

122

119

82

80

168

Reactance

180

170

79

14

348

20M

20M

20M

20M

OOB

14 MHz

14 MHz

14 MHz

14 MHz

Freq

14.15

14.2

14.3

14.35

15.658

SWR

15.2

14.9

17.2

16.5

1.8

Resistance

128

128

113

107

88

Reactance

284

273

247

235

22

17M

17M

17M

18 MHz

18 MHz

18 MHz

Freq

18.068

18.1

18.168

SWR

14.9

14.9

14.9

Resistance

320

294

294

Reactance

322

320

320

OOB

15M

15M

15M

15M

15M

22 MHZ

21 MHz

21 MHz

21 MHz

21 MHz

Freq

20.372

21

21.2

21.3

21.4

21.45

SWR

2

5.6

6.6

7.6

8.4

9.6

Resistance

98

175

206

227

276

304

Reactance

20

113

134

156

158

181

OOB

12M

12M

12M

12M

OOB

24 MHz

24 MHz

24 MHz

24 MHz

Freq

24.732

24.89

24.9

24.95

24.99

24.732

SWR

2.1

2.1

2.2

2.2

2.3

2.1

Resistance

95

102

103

104

108

95

Reactance

28

21

20

28

30

28

10M

10M

10M

10M

10M

OOB

28 MHz

28 MHz

28 MHz

29 MHz

28 MHz

50 MHz

Freq

28

28.5

28.893

29

29.7

47.283

SWR

6.8

3.1

1.9

3

2

2.5

Resistance

100

78

87

79

124

95

Reactance

143

75

28

68

52

54

6M

6M

6M

6M

6M

OOB

50 MHz

50 MHz

50 MHz

50 MHz

50 MHz

50 MHz

Freq

50

51

52

53

54

56.252

SWR

10.8

3.9

3.7

7.6

13.5

2.2

Resistance

99

80

167

290

118

100

Reactance

194

90

60

212

224

32

OOB

2M

2M

2M

2M

2M

2M

2M

2M

2M

OOB

86

144MHz

144MHz

144MHz

144MHz

144MHz

144MHz

144MHz

144MHz

144MHz

144MHz

Freq

142.17

144

144.5

145

145.5

146

146.5

147

147.5

148

151.28

SWR

3.2

5

4.8

3.9

3.3

3.5

4.7

3

2.7

3.6

3

Resistance

63

67

60

61

74

103

112

58

80

105

65

Reactance

71

104

98

85

77

83

114

65

63

85

66

2395. Re: [SkyWires] High SWR 80/20 2WL 160

Yahoo group: SkyWires
Date: 2007-06-05 18:33:21 UTC
From: Jim Dunstan
Topic: 2393 Message: 2395

At 03:56 PM 6/5/2007 +0000, you wrote:

>Newbie question.
>
>I put up a 2WL 160 loop using .35 welding wire, about 1150 feet, in an
>elongated triangle at an average of 30 feet in height with some high
>points of 60 feet, on a pulley system. It is side fed with 75 feet of 300
>ohm TV twin lead, direct to a MFJ tuner.
>
>When I compared it to my HyGain vertical, 15,20,40, it didn't seem to hear
>as well on 2o as the vertical. Maybe it is just directional.
>
>So here are some numbers from a MFJ analyzer.
>
>Any ideas why the SWR is high on 80 and 20 and what I could do about it?
>
> I got sort of carried away with the numbers, but is it reasonable that
> this would work all the way up to 2M? If that is the case wouldn't the
> gain be huge?
>
>Don KB3HJS

Hi Don,

You did indeed do a lot of work measuring and recording the numbers on the analyzer. You mentioned connecting 75 ft of 300 ohm twin lead to the loop (2 wl at 160m). You did not mention how you connected the analyzer to the feed line. No matter how you connected the analyzer the numbers do not mean a whole lot .... sorry, I don't mean to be facetious or rude. Measuring the impedance of an antenna such as the loop with the feed point 30 to 60 ft in the air is very complicated.

If you were interested in obtaining the feed point impedance of the antenna at a particular frequency the only way of doing that would be to attach the antenna analyzer directly to the antenna feed point ... not very practical. In this case the impedance may be measured by feeding it with a 1/2 wave length of coax feed line at the particular frequency of interest (taking into consideration the velocity factor of the coax). A reading can then be taken with the analyzer. If the reading obtained is 35 ohms +j50 for example then all that will tell you is that you need to adjust your transmitter output (modern transmitters are not adjustable) or a tuner to present an output at 35 ohms +j50. The SWR and power loss in the coax cable can then be calculated.

Wheww ... a lot of work!! And the measurement can only be taken at the particular frequency for which the coax is cut. The practical way to

approach the problem is to bring the balanced feed line to its termination point ... eg the balun in your tuner .... attach the analyzer to the other side of the tuner and start testing the frequencies of interest to see if the tuner will bring it's output impedance to 50 ohms resistive. If there are frequencies of interest that cannot be adjusted to 50 ohms then these need to be earmarked for problem solving.

Now the reason the coax feed line needed to be cut to a resonant 1/2 wavelength is that the impedance reading will be different for every other length !!! That is if the feed point is other than 50 ohm resistive !!

After you have checked the 'tuneability' of the antena/feedline/tuner system to frequencies of interest and you have created a list (hopefully a short list) ... then the easiest way of solving the problem is to add or subtract some feed line ... in your case the 300 ohm twin lead. This works since the impedance at the end will change with length. The second method is to adjust the length of the loop itself ... a lot more difficult to do.

The particular problem with 80/20 m ... is only a problem if you can't tune it to a resistive 50 ohms ... I don't know. If you can't ... even with different feed line lengths then you may be looking at loop size. There may be others with some recommendations on this count.

Jim, VE3CI

2396. Re: High SWR 80/20 2WL 160

Yahoo group: SkyWires
Date: 2007-06-05 19:21:38 UTC
From: donkunst
Topic: 2393 Message: 2396

Thanks for the feed back.

I connected the analyzer directly to the MFJ, a lead to a bananna plug
to the center of the coax input and the other lead to the stud.

Would you have connected it differently?

I understand that the numbers may not be accurate, but does that apply
to the SWR numbers also?

I am still trying to understand the rlationship between the
tuner/transmatch, radio and SWR. If the tuner is adjusting the antenna
to match the 50 Ohm of the radio, and the SWR on the antenna is high to
begin with, then this means although the SWR is made low by the tuner,
that very process lowers the amount of delievered power/RF to the
antenna or the efficency of the antnna. Am I thinking correctly?

What effect if any would shortening/leangthing the twin lead have?

Any comments on potential gain on the higher bands?

Don Kb3HJS

--- In SkyWires@yahoogroups.com, Jim Dunstan <jdunstan@...> wrote:
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> At 03:56 PM 6/5/2007 +0000, you wrote:
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>
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antenna
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with a
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> then be taken with the analyzer. If the reading obtained is 35 ohms
+j50
> for example then all that will tell you is that you need to adjust
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> termination point ... eg the balun in your tuner .... attach the
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> resistive. If there are frequencies of interest that cannot be
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>
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> system to frequencies of interest and you have created a list
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> short list) ... then the easiest way of solving the problem is to add
or
> subtract some feed line ... in your case the 300 ohm twin lead. This
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>
> The particular problem with 80/20 m ... is only a problem if you can't
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> it to a resistive 50 ohms ... I don't know. If you can't ... even with
> different feed line lengths then you may be looking at loop size.
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> may be others with some recommendations on this count.
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> Jim, VE3CI
>

2397. RE: [SkyWires] Re: High SWR 80/20 2WL 160

Yahoo group: SkyWires
Date: 2007-06-05 21:01:26 UTC
From: Callum M0MCX
Topic: 2393 Message: 2397

>>>then this means although the SWR is made low by the tuner,
that very process lowers the amount of delievered power/RF to the
antenna or the efficency of the antnna. Am I thinking correctly?

High SWR and Coax don□t mix very well. I hope someone else picks this up because I□m a bit busy for a couple of days but basically, aim for a good match (50 ohms) where the coax meets the balun (or another matching unit).

That's why many people feed loops with 4:1 baluns because in the mainl, you won't be far wrong. You won't be dead accurate either but the SWR will not normally be too far out.

On the other hand, some people are very keen to use twin feed (300 - 600 ohm feeder) which also works very well - but with 50 ohms required at the back of the rig, somewhere you need to transform your antenna impedance to 50 ohms to squirt the coax at it.

Need to go - good luck.

Callum McCormick
M0MCX
07976 631881
http://www.m0mcx.co.uk/

_____
From: SkyWires@yahoogroups.com [mailto:SkyWires@yahoogroups.com] On Behalf Of donkunst
Sent: 05 June 2007 20:22
To: SkyWires@yahoogroups.com
Subject: [SkyWires] Re: High SWR 80/20 2WL 160

Thanks for the feed back.

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I am still trying to understand the rlationship between the tuner/transmatch, radio and SWR. If the tuner is adjusting the antenna to match the 50 Ohm of the radio, and the SWR on the antenna is high to begin with, then this means although the SWR is made low by the tuner, that very process lowers the amount of delievered power/RF to the antenna or the efficency of the antnna. Am I thinking correctly?

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Don Kb3HJS

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> >points of 60 feet, on a pulley system. It is side fed with 75 feet of
300
> >ohm TV twin lead, direct to a MFJ tuner.
> >
> >When I compared it to my HyGain vertical, 15,20,40, it didn't seem to
hear
> >as well on 2o as the vertical. Maybe it is just directional.
> >
> >So here are some numbers from a MFJ analyzer.
> >
> >Any ideas why the SWR is high on 80 and 20 and what I could do about
it?
> >
> > I got sort of carried away with the numbers, but is it reasonable
that
> > this would work all the way up to 2M? If that is the case wouldn't
the
> > gain be huge?
> >
> >Don KB3HJS
>
> Hi Don,
>
> You did indeed do a lot of work measuring and recording the numbers on
the
> analyzer. You mentioned connecting 75 ft of 300 ohm twin lead to the
loop
> (2 wl at 160m). You did not mention how you connected the analyzer to
the
> feed line. No matter how you connected the analyzer the numbers do not
> mean a whole lot .... sorry, I don't mean to be facetious or
> rude. Measuring the impedance of an antenna such as the loop with the
> feed point 30 to 60 ft in the air is very complicated.
>
> If you were interested in obtaining the feed point impedance of the
antenna
> at a particular frequency the only way of doing that would be to

attach the
> antenna analyzer directly to the antenna feed point ... not very
> practical. In this case the impedance may be measured by feeding it
with a
> 1/2 wave length of coax feed line at the particular frequency of
interest
> (taking into consideration the velocity factor of the coax). A reading
can
> then be taken with the analyzer. If the reading obtained is 35 ohms
+j50
> for example then all that will tell you is that you need to adjust
your
> transmitter output (modern transmitters are not adjustable) or a tuner
to
> present an output at 35 ohms +j50. The SWR and power loss in the coax
> cable can then be calculated.
>
> Wheww ... a lot of work!! And the measurement can only be taken at the
> particular frequency for which the coax is cut. The practical way to
> approach the problem is to bring the balanced feed line to its
> termination point ... eg the balun in your tuner .... attach the
analyzer
> to the other side of the tuner and start testing the frequencies of
> interest to see if the tuner will bring it's output impedance to 50
ohms
> resistive. If there are frequencies of interest that cannot be
adjusted to
> 50 ohms then these need to be earmarked for problem solving.
>
> Now the reason the coax feed line needed to be cut to a resonant 1/2
> wavelength is that the impedance reading will be different for every
other
> length !!! That is if the feed point is other than 50 ohm resistive !!
>
> After you have checked the 'tuneability' of the antena/feedline/tuner
> system to frequencies of interest and you have created a list
(hopefully a
> short list) ... then the easiest way of solving the problem is to add
or
> subtract some feed line ... in your case the 300 ohm twin lead. This
works
> since the impedance at the end will change with length. The second
method
> is to adjust the length of the loop itself ... a lot more difficult to
do.
>
> The particular problem with 80/20 m ... is only a problem if you can't
tune
> it to a resistive 50 ohms ... I don't know. If you can't ... even with
> different feed line lengths then you may be looking at loop size.

There
> may be others with some recommendations on this count.
>
> Jim, VE3CI
>

2398. Re: [SkyWires] Coax to skywire

Yahoo group: SkyWires
Date: 2007-06-05 21:06:58 UTC
From: larry allen
Topic: 2389 Message: 2398

How do you figure that?...
Do you connect 50 ohm cable to the center of a one wavelength length of
wire?.
Larry ve3fxq

----- Original Message -----
From: "Sarge" <sarge@...>
To: <SkyWires@yahoogroups.com>
Sent: Tuesday, June 05, 2007 2:14 AM
Subject: Re: [SkyWires] Coax to skywire

> if it's a one wave length skywire, 50 ohm coax will work. If you have to
> make a real long run to the skywire then use ladder line to prevent pwr
> loss.
>
>
>> Most of the diagrams show coax from radio to skywire, including the
>> diagram on this group home page. When is that ok versus using ladder
>> line from tuner to skywire. If it will work multi-bands with coax
>> wouldn't that be easier? Thanks for all the input so far. Greg KI4VQP
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>> Yahoo! Groups Links
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>> --
>> No virus found in this incoming message.
>> Checked by AVG Free Edition.
>> Version: 7.5.472 / Virus Database: 269.8.7/830 - Release Date: 6/3/2007
>> 12:47 PM
>>
>>
>
>

2399. Re: [SkyWires] Re: High SWR 80/20 2WL 160

Yahoo group: SkyWires
Date: 2007-06-05 21:13:06 UTC
From: Jim Dunstan
Topic: 2393 Message: 2399

At 07:21 PM 6/5/2007 +0000, you wrote:

>Thanks for the feed back.
>
>I connected the analyzer directly to the MFJ, a lead to a bananna plug
>to the center of the coax input and the other lead to the stud.
>
>Would you have connected it differently?

The antenna analyzer is usually designed to be similar to a transmitter with 50 ohm unbalanced output. It should be connected to the input to the balun .... if the tuner is still connected, then the components in the tuner will become part of the whole smear you are analalyzing.

>I understand that the numbers may not be accurate, but does that apply
>to the SWR numbers also?

Yes, ... if you take a particular antenna, fed by a particular feed line, at a particular frequency and you analyze the impedance/SWR at the end of the feed line, you will find that the impedance and SWR readings will change as you either change frequencies and or feed line length, and or the antenna itself. The only time this is not true is when you design the antenna to be the same impedance as the feed line. For example, if the antenna is designed to be 50 ohms (resistive) at a particular frequency ... eg capacitive reactance is balanced by an equal amount of inductive reactance .... and you couple it to 50 coax .... the match will be 1:1 and there will be no standing waves on the feed linen no matter how long it is ... it will always read 50 ohms and 1:1 SWR. With this arrangement the only loss of power will be due to the characteristics of the coax ... which the manufacturer will provide .... eg in DB loss per 100 ft of coax.

As soon as you have a mismatch at the feed point .... for example say the antenna represents 100 ohms and the feed line 50 ohms then there will be a 2:1 SWR as a result of the mismatch. The loss will be much greater as the SWR loss is combined with the normal resistive loss of the coax. You will read 2:1 at the feed point ... but you will read a different SWR depending on the length of the feed line between the antenna and the analyser. When the feed line becomes a resonant 1/2 wavelength then the SWR will read correctly again ... eg 2:1

>I am still trying to understand the rlationship between the
>tuner/transmatch, radio and SWR. If the tuner is adjusting the antenna
>to match the 50 Ohm of the radio, and the SWR on the antenna is high to
>begin with, then this means although the SWR is made low by the tuner,
>that very process lowers the amount of delievered power/RF to the
>antenna or the efficency of the antnna. Am I thinking correctly?

Okay ... here goes ... a description of the relationship .... Start with a particular antenna which you want to operate on a particular frequency. And lets say that it represents an SWR of 6:1 at the feed point. You probably won't know this. Now you connect a feed line to the antenna of sufficient length to get to the operating position ... (could be balanced line like twin lead or coax) .... at the end of the line, where it joins the transmitter you want to convert the impedance at the end of the feed line (whatever it is) to 50 ohms resistive (eg no capacitive or inductive reactance). In order to do this the common method is to use an antenna tuner ... The purpose of the tuner is to convert the impedance from whatever it is to 50 ohms. That's it.

A common way to indicate the conversion is complete is to place an SWR meter between the tuner and the transceiver. When the match is correct the SWR at the point the short coax joins the tuner will be 50 ohms ... you already know the transmitter is 50 ohms .... a match! Now for all practical purposes you have all the transmitted power fed to the feed line, and the transmitter is happy. The tuner has a range of impedances it can handle .... often published by the manufacturer. If the impedance at the end at a particular frequency falls outside that range then you may not be able to create the 50 ohms your transmitter wants. Since the impedance varies with the length of the feed line then changing the length may bring the impedance within the tuning range of the tuner.

The power that leaves the tuner will now be divided between the feed line and the antenna, and hopefully most of it will go to the antenna where it is radiated. If you are using unbalanced line feeding a balanced antenna you will often find the feed line also radiates ... eg is also part of the antenna ... another story. If there is high swr between the feed line and antenna then the amount of loss will depend on the kind of feed line you use ... eg how efficient it is in dealing with high swr conditions (generally balanced line like twin lead and ladder line is better ... more efficient dealing with high SWR).

When treating a wire antenna as a mult-band antenna the rule is to accept that on some bands/frequencies there will be a high SWR and the best feed line to deal with high SWR ... eg has the least amount of loss due to high SWR .... is balanced line like twin lead, ladder line, open wire feed line.

>What effect if any would shortening/leangthing the twin lead have?

See above hi hi

>Any comments on potential gain on the higher bands?

A loop does not have gain in the normal sense of the word .... a horizontal loop displays different radiation characteristics with size and height which will increase effectiveness for certain purposes. Eg angle of radiation ... eg the lower it is the more effective the antenna over longer distances etc .... Gain can also be expressed in terms of efficiency over other kinds of antennas ... eg a resonant dipole or a 1/4 wave vertical ...

If you google a man called Cebic ... he has written a great article that describes the behavior of horizontal loops in relation to size and height.

>Don Kb3HJS

Jim, VE3CI

2400. Re: [SkyWires] Coax to skywire

Yahoo group: SkyWires
Date: 2007-06-05 22:29:22 UTC
From: Dr.Ace Ratliff
Topic: 2389 Message: 2400

Larry ,
You would form a loop from a 1 wavelength length of
wire then connect the center of the coax to one end and the coax shield to the other end.
73, Ace - WH2T

----- Original Message -----
From: larry allen
To: SkyWires@yahoogroups.com
Sent: Tuesday, June 05, 2007 4:06 PM
Subject: Re: [SkyWires] Coax to skywire

How do you figure that?...
Do you connect 50 ohm cable to the center of a one wavelength length of
wire?.
Larry ve3fxq

----- Original Message -----
From: "Sarge" <sarge@36db.com>
To: <SkyWires@yahoogroups.com>
Sent: Tuesday, June 05, 2007 2:14 AM
Subject: Re: [SkyWires] Coax to skywire

> if it's a one wave length skywire, 50 ohm coax will work. If you have to
> make a real long run to the skywire then use ladder line to prevent pwr
> loss.
>
>
>> Most of the diagrams show coax from radio to skywire, including the
>> diagram on this group home page. When is that ok versus using ladder
>> line from tuner to skywire. If it will work multi-bands with coax
>> wouldn't that be easier? Thanks for all the input so far. Greg KI4VQP
>>
>
.

2401. Re: Coax to skywire

Yahoo group: SkyWires
Date: 2007-06-05 21:37:47 UTC
From: gsf11
Topic: 2389 Message: 2401

Coax to a one wavelength length of wire will be fine for resonant frequencies. So if you are going to only use the wire which is resonant on, say 80 meters, for 80 meters, you should be fine. If, however, you are going to use the wire on multiple bands, you need to use ladder line because the ladder line is much less lossy than the coax and so, even with high SWR, your antenna system will be much more efficient.

Remember with every 3db of loss in the system, you are halving your power output.

I would run 450 ladder line to the shack and then into a balun (I would try 1:1 first and let the tuner handle the rest. If you use a 4:1, its possible you may have a very low impedance on some band which the tuner may not like. However, it is still worth trying a 4:1 given the number of variables that will effect the antenna system.

--- In SkyWires@yahoogroups.com, "larry allen" <larya@...> wrote:
>
> How do you figure that?...
> Do you connect 50 ohm cable to the center of a one wavelength length of
> wire?.
> Larry ve3fxq
>
> ----- Original Message -----
> From: "Sarge" <sarge@...>
> To: <SkyWires@yahoogroups.com>
> Sent: Tuesday, June 05, 2007 2:14 AM
> Subject: Re: [SkyWires] Coax to skywire
>
>
> > if it's a one wave length skywire, 50 ohm coax will work. If you
have to
> > make a real long run to the skywire then use ladder line to
prevent pwr
> > loss.
> >
> >
> >> Most of the diagrams show coax from radio to skywire, including the
> >> diagram on this group home page. When is that ok versus using ladder
> >> line from tuner to skywire. If it will work multi-bands with coax
> >> wouldn't that be easier? Thanks for all the input so far. Greg KI4VQP
> >>
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> >> Yahoo! Groups Links
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> >> Version: 7.5.472 / Virus Database: 269.8.7/830 - Release Date:
6/3/2007
> >> 12:47 PM
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> >
>

2402. Re: High SWR 80/20 2WL 160

Yahoo group: SkyWires
Date: 2007-06-05 22:00:23 UTC
From: Don Keith
Topic: 2393 Message: 2402

I would definitely play with feedline length before doing anything else...that is if you are not able to tune the system for a good match with your tuner. Don't worry about the VSWR at all if your tuner finds a match on 80 and 20.

I just put up a 130-foot doublet (so I could get something higher in the air than my beloved skywire loop) and it was balky on several bands. Then I realized my random length of 450-ohm feedline was 60 feet...a quarter-wavelength or thereabouts for the design length of the antenna. I re-routed, adding 40 feet of line, and she tunes like a champ on all bands from 80 through 10. My tuner isn't supposed to handle 6, but I'm tempted to give it a try...and likely do damage to TV pictures over a dozen city blocks!

73 and we'll be listening for that signal on the loop!

Don N4KC
www.n4kc.com

--- In SkyWires@yahoogroups.com, Jim Dunstan <jdunstan@...> wrote:
>
> At 03:56 PM 6/5/2007 +0000, you wrote:
>
> >Newbie question.
> >
> >I put up a 2WL 160 loop using .35 welding wire, about 1150 feet, in an
> >elongated triangle at an average of 30 feet in height with some high
> >points of 60 feet, on a pulley system. It is side fed with 75 feet of 300
> >ohm TV twin lead, direct to a MFJ tuner.
> >
> >When I compared it to my HyGain vertical, 15,20,40, it didn't seem to hear
> >as well on 2o as the vertical. Maybe it is just directional.
> >
> >So here are some numbers from a MFJ analyzer.
> >
> >Any ideas why the SWR is high on 80 and 20 and what I could do about it?
> >
> > I got sort of carried away with the numbers, but is it reasonable that
> > this would work all the way up to 2M? If that is the case wouldn't the

> > gain be huge?
> >
> >Don KB3HJS
>
> Hi Don,
>
> You did indeed do a lot of work measuring and recording the numbers on the
> analyzer. You mentioned connecting 75 ft of 300 ohm twin lead to the loop
> (2 wl at 160m). You did not mention how you connected the analyzer to the
> feed line. No matter how you connected the analyzer the numbers do not
> mean a whole lot .... sorry, I don't mean to be facetious or
> rude. Measuring the impedance of an antenna such as the loop with the
> feed point 30 to 60 ft in the air is very complicated.
>
> If you were interested in obtaining the feed point impedance of the antenna
> at a particular frequency the only way of doing that would be to attach the
> antenna analyzer directly to the antenna feed point ... not very
> practical. In this case the impedance may be measured by feeding it with a
> 1/2 wave length of coax feed line at the particular frequency of interest
> (taking into consideration the velocity factor of the coax). A reading can
> then be taken with the analyzer. If the reading obtained is 35 ohms +j50
> for example then all that will tell you is that you need to adjust your
> transmitter output (modern transmitters are not adjustable) or a tuner to
> present an output at 35 ohms +j50. The SWR and power loss in the coax
> cable can then be calculated.
>
> Wheww ... a lot of work!! And the measurement can only be taken at the
> particular frequency for which the coax is cut. The practical way to
> approach the problem is to bring the balanced feed line to its
> termination point ... eg the balun in your tuner .... attach the analyzer
> to the other side of the tuner and start testing the frequencies of
> interest to see if the tuner will bring it's output impedance to 50 ohms

> resistive. If there are frequencies of interest that cannot be
adjusted to
> 50 ohms then these need to be earmarked for problem solving.
>
> Now the reason the coax feed line needed to be cut to a resonant
1/2
> wavelength is that the impedance reading will be different for
every other
> length !!! That is if the feed point is other than 50 ohm
resistive !!
>
> After you have checked the 'tuneability' of the
antena/feedline/tuner
> system to frequencies of interest and you have created a list
(hopefully a
> short list) ... then the easiest way of solving the problem is to
add or
> subtract some feed line ... in your case the 300 ohm twin lead.
This works
> since the impedance at the end will change with length. The second
method
> is to adjust the length of the loop itself ... a lot more difficult
to do.
>
> The particular problem with 80/20 m ... is only a problem if you
can't tune
> it to a resistive 50 ohms ... I don't know. If you can't ... even
with
> different feed line lengths then you may be looking at loop size.
There
> may be others with some recommendations on this count.
>
> Jim, VE3CI
>

2403. Re: [SkyWires] Coax to skywire

Yahoo group: SkyWires
Date: 2007-06-05 23:20:27 UTC
From: larry allen
Topic: 2389 Message: 2403

Hi Ace.. Ratliff...
What impedance do you have where the coax connects.... just asking... do you need a coupler?...
Larry

----- Original Message -----
From: "Dr.Ace Ratliff" <wh2t@...>
To: <SkyWires@yahoogroups.com>
Sent: Tuesday, June 05, 2007 6:29 PM
Subject: Re: [SkyWires] Coax to skywire

Larry ,
You would form a loop from a 1 wavelength length of wire then connect the center of the coax to one end and the coax shield to the other end.
73, Ace - WH2T

----- Original Message -----
From: larry allen
To: SkyWires@yahoogroups.com
Sent: Tuesday, June 05, 2007 4:06 PM
Subject: Re: [SkyWires] Coax to skywire

How do you figure that?...
Do you connect 50 ohm cable to the center of a one wavelength length of wire?.
Larry ve3fxq

----- Original Message -----
From: "Sarge" <sarge@...>
To: <SkyWires@yahoogroups.com>
Sent: Tuesday, June 05, 2007 2:14 AM
Subject: Re: [SkyWires] Coax to skywire

> if it's a one wave length skywire, 50 ohm coax will work. If you have to
> make a real long run to the skywire then use ladder line to prevent pwr
> loss.
>
>
>> Most of the diagrams show coax from radio to skywire, including the
>> diagram on this group home page. When is that ok versus using ladder
>> line from tuner to skywire. If it will work multi-bands with coax
>> wouldn't that be easier? Thanks for all the input so far. Greg KI4VQP
>>

>

.

2404. Re: [SkyWires] Coax to skywire

Yahoo group: SkyWires
Date: 2007-06-06 00:59:03 UTC
From: Dr.Ace Ratliff
Topic: 2389 Message: 2404

Larry,
I have a 1 wavelength 80 meter delta shaped horizontal loop coax fed antenna that uses a 75 ohm coax Q section in the feedline. It works better than any of the 1, 2, or 3 wavelength 160 meter loop antennas I have tried on the 80 meter band. But, I am a rag chewer and very seldom attempt to work DX on the 160 or 75/80 meter bands, although I have worked several countries. I cut the loop for 3.875Mhz and it is a 1:1 SWR at that freq without a tuner. It goes up to about a 2:1 SWR at 3.750 and 4 Mhz without using a tuner. I do use antenna tuners on my antennas when needed.

I now use a 1 wavelength 80 meter delta shaped horizontal loop antenna and a 160 meter band 1/4 wave inverted L "vertical" wire antenna. Two loops are more than I want to maintain.
If I could only have one antenna it would be a 1 wavelength 160 meter horizontal loop !
Ace - www.WH2T.com

----- Original Message -----
From: "larry allen" <larya@...>
To: <SkyWires@yahoogroups.com>
Sent: Tuesday, June 05, 2007 6:20 PM
Subject: Re: [SkyWires] Coax to skywire

> Hi Ace..
> What impedance do you have where the coax connects.... just asking... do
> you need a coupler?...
> Larry
>

2405. super loop

Yahoo group: SkyWires
Date: 2007-06-06 19:31:22 UTC
From: gw02639
Topic: 1316 Message: 2405

hi all i am a new member pse can any one give me any
info on the super loop 40 made by radioworks in the usa
tnx alun gw0fjq 73

2406. Re: [SkyWires] super loop

Yahoo group: SkyWires
Date: 2007-06-06 21:14:14 UTC
From: Dr.Ace Ratliff
Topic: 1316 Message: 2406

Here's info on a Generic 80 mtr version. You would need to scale it down for 40 mtrs.
http://www.bloomington.in.us/~wh2t/Super%20Loop%20Antenna.htm
Ace - WH2T

----- Original Message -----
From: gw02639
To: SkyWires@yahoogroups.com
Sent: Wednesday, June 06, 2007 2:31 PM
Subject: [SkyWires] super loop

hi all i am a new member pse can any one give me any
info on the super loop 40 made by radioworks in the usa
tnx alun gw0fjq 73
.

2408. Re: [SkyWires] Logo Design - $99

Yahoo group: SkyWires
Date: 2007-06-07 22:37:43 UTC
From: David Shrum
Topic: 2408 Message: 2408

To the group, what do you think, is this spam or not?
Dave N8PU

carl_ratty wrote:
> Last week someone had mentioned they were in need of a Logo Design for
> their Company. I had my logo done by this company for only $99, what
> is great about this company is that they give you unlimited revisions
> to your selected logo. If you want to check them out here is the link:
> http://www.pwcwebmasters.com/
> They did a really good job and are very professional with a quick
> response to all my questions.
>

2409. Uhhh yes! Re: [SkyWires] Logo Design

Yahoo group: SkyWires
Date: 2007-06-07 22:48:04 UTC
From: list email filter
Topic: 2408 Message: 2409

Most definitely spam.

73,

Erik
N7HMS
IRLP Node 3804 445.975 Simp PL103.5

Emails sent directly to this address instead of going through a yahoo group are automatically processed as junk mail, so I never see them. If you want to email me directly, try 'mycall' at 12bars dot com, thanks.

David Shrum wrote:
> To the group, what do you think, is this spam or not?
> Dave N8PU

2410. Re: [SkyWires] Logo Design - $99

Yahoo group: SkyWires
Date: 2007-06-07 23:15:24 UTC
From: David Shrum
Topic: 2408 Message: 2410

They are now banned.
Dave N8PU

carl_ratty wrote:

2411. Re: [SkyWires] Logo Design - $99

Yahoo group: SkyWires
Date: 2007-06-08 02:29:56 UTC
From: Dr.Ace Ratliff
Topic: 2408 Message: 2411

Sure looks like spam to me.
Ace

----- Original Message -----
From: David Shrum
To: SkyWires@yahoogroups.com
Sent: Thursday, June 07, 2007 5:37 PM
Subject: Re: [SkyWires] Logo Design - $99

To the group, what do you think, is this spam or not?
Dave N8PU

carl_ratty wrote:
> Last week someone had mentioned they were in need of a Logo Design for
> their Company. I had my logo done by this company for only $99, what
> is great about this company is that they give you unlimited revisions
> to your selected logo. If you want to check them out here is the link:
> http://www.pwcwebmasters.com/
> They did a really good job and are very professional with a quick
> response to all my questions.
>

2412. Re: Logo Design - $99

Yahoo group: SkyWires
Date: 2007-06-08 19:51:58 UTC
From: hogwild2050
Topic: 2408 Message: 2412

where are those child hacker prodogies when you need them. I would like a spam virus program that would just load the spammers e-mail or web site with so much junk as to cripple it.

2413. Re: Logo Design - $99

Yahoo group: SkyWires
Date: 2007-06-09 01:35:02 UTC
From: Paul
Topic: 2408 Message: 2413

Just a note on received spam and "getting them back." unfortunately, the address you see in the email header - even the geeky full data view - are not necessarily where it came from - could be an innocent person...like me. Once week a year ago my email started filling up with undeliverable emails. turns out someone used my domain name in a spam mailing and every invalid email address in the list they used bounced back to me. And of course every delivered email had my return address on it. How can the spamee buy the product if they have my address? Because they are instructed to click on a link in the body of the email and that takes them to the spammer's site. Which in the case I'm describing was in China. We can make all the laws we want. But until our Congress grows a pair and tells Russia, China, etc. - those foreign locations from with 90% of the spams spews - that we will cut their internet access off, they will continue.
That's my story and I'm sticking to it.
73, Paul

--- In SkyWires@yahoogroups.com, "hogwild2050" <hoggreg@...> wrote:
>
> where are those child hacker prodogies when you need them. I would
> like a spam virus program that would just load the spammers e-mail or
> web site with so much junk as to cripple it.
>

2414. Re: [SkyWires] Re: Logo Design - $99

Yahoo group: SkyWires
Date: 2007-06-09 02:50:32 UTC
From: Vince Werber
Topic: 2408 Message: 2414

Hi Paul,

I'm having the same problem with my organization domain... I get tons
of 'returned' mail...

An earlier comment was made to spam the spmmers but... that is slightly
outside of the law no matter what the situation.... and it wouldn't work
anyway because they never use a correct address's anyway... I've had to put
filters on any incoming mail that is marked as returned...

As for Congress growing a pair... won't happen... remember the cat & dog food
from China? Now we are being told NOT to use and toothpaste from China...
the Government says to throw it out but you don't see them ordering it off
the shelves... Oh yeah! don't forget the lead in the toys from China...

It wasn't too long ago that I couldn't get English candy from our friends in
Britain I haven't checked lately but if China can send us poison food and
such I should be able to get my 'un-clean' candy from Europe...

same old same old...

73
vince
ka1iic

On Friday 08 June 2007 21:35, Paul wrote:
> Just a note on received spam and "getting them back." unfortunately,
> the address you see in the email header - even the geeky full data
> view - are not necessarily where it came from - could be an innocent
> person...like me. Once week a year ago my email started filling up
> with undeliverable emails. turns out someone used my domain name in a
> spam mailing and every invalid email address in the list they used
> bounced back to me. And of course every delivered email had my return
> address on it. How can the spamee buy the product if they have my
> address? Because they are instructed to click on a link in the body of
> the email and that takes them to the spammer's site. Which in the case
> I'm describing was in China. We can make all the laws we want. But
> until our Congress grows a pair and tells Russia, China, etc. - those
> foreign locations from with 90% of the spams spews - that we will cut
> their internet access off, they will continue.
> That's my story and I'm sticking to it.
> 73, Paul
>
> --- In SkyWires@yahoogroups.com, "hogwild2050" <hoggreg@...> wrote:
> > where are those child hacker prodogies when you need them. I would
> > like a spam virus program that would just load the spammers e-mail or
> > web site with so much junk as to cripple it.

>
> Yahoo! Groups Links
>
>
>

2415. super loop 40

Yahoo group: SkyWires
Date: 2007-06-09 16:44:51 UTC
From: gw02639
Topic: 2415 Message: 2415

hi all pse can any one give me the size to build a super loop 40 to 10/m has i have never made one before tnx all look foward to your reaply tnx alun gw0fjq

2416. Re: [SkyWires] super loop 40

Yahoo group: SkyWires
Date: 2007-06-09 19:17:13 UTC
From: Donald Sanders
Topic: 2415 Message: 2416

Here's info on a Generic 80 mtr version. You would need to scale it down for 40 mtrs.
http://www.bloomington.in.us/~wh2t/Super%20Loop%20Antenna.htm
Ace - WH2T

Healthfully yours,
Don W4BWS
----- Original Message -----
From: gw02639
To: SkyWires@yahoogroups.com
Sent: Saturday, June 09, 2007 11:44 AM
Subject: [SkyWires] super loop 40

hi all pse can any one give me the size to build a super
loop 40 to 10/m has i have never made one before tnx all
look foward to your reaply tnx alun gw0fjq

2417. Re: [SkyWires] Re: Logo Design - $99

Yahoo group: SkyWires
Date: 2007-06-10 05:29:10 UTC
From: WILLIAM STEFFEL
Topic: 2408 Message: 2417

I have a program called "Bounce Spam". It returns spam to the sender over a thousand times to jam their e mail but the a**holes use others comps as robots so you would just be punishing an innocent person.The guy they just arrested was one of the biggest spammers. He used others comps as robots . A question to any attorneys out there, could we get a class action suit against the company that we are directed to? After all, they paid the spammer & could be considered an accomplice.
----- Original Message -----
From: Paul
To: SkyWires@yahoogroups.com
Sent: Friday, June 08, 2007 8:35 PM
Subject: [SkyWires] Re: Logo Design - $99

Just a note on received spam and "getting them back." unfortunately, the address you see in the email header - even the geeky full data view - are not necessarily where it came from - could be an innocent person...like me. Once week a year ago my email started filling up with undeliverable emails. turns out someone used my domain name in a spam mailing and every invalid email address in the list they used bounced back to me. And of course every delivered email had my return address on it. How can the spamee buy the product if they have my address? Because they are instructed to click on a link in the body of the email and that takes them to the spammer's site. Which in the case I'm describing was in China. We can make all the laws we want. But until our Congress grows a pair and tells Russia, China, etc. - those foreign locations from with 90% of the spams spews - that we will cut their internet access off, they will continue.
That's my story and I'm sticking to it.
73, Paul

--- In SkyWires@yahoogroups.com, "hogwild2050" <hoggreg@...> wrote:
>
> where are those child hacker prodogies when you need them. I would
> like a spam virus program that would just load the spammers e-mail or
> web site with so much junk as to cripple it.
>

2418. Re: [SkyWires] super loop 40

Yahoo group: SkyWires
Date: 2007-06-10 09:00:42 UTC
From: GW0FJQ@AOL.COM
Topic: 2415 Message: 2418

hi ace tnx for the info abt the super loop 80 so i make the loop half the size of the 80/m one it will work on 40 to 10 tnx agn alun gw0fjq

2420. Re: you know i got it

Yahoo group: SkyWires
Date: 2007-06-10 15:41:58 UTC
From: hogwild2050
Topic: 2420 Message: 2420

Green spam and eggs

2421. RE: [SkyWires] Re: Logo Design - $99

Yahoo group: SkyWires
Date: 2007-06-10 17:09:47 UTC
From: Callum M0MCX
Topic: 2408 Message: 2421

>>>It returns spam to the sender over a thousand times to jam their e mail

William, almost exclusively the real sender is actually fabricated to look like someone else. You will be sending your thousand emails to the wrong person.

I'll bow out

Callum McCormick

M0MCX

07976 631881

http://www.m0mcx.co.uk/

From: SkyWires@yahoogroups.com [mailto:SkyWires@yahoogroups.com] On Behalf Of WILLIAM STEFFEL
Sent: 10 June 2007 06:29
To: SkyWires@yahoogroups.com
Subject: Re: [SkyWires] Re: Logo Design - $99

I have a program called "Bounce Spam". It returns spam to the sender over a thousand times to jam their e mail but the a**holes use others comps as robots so you would just be punishing an innocent person.The guy they just arrested was one of the biggest spammers. He used others comps as robots . A question to any attorneys out there, could we get a class action suit against the company that we are directed to? After all, they paid the spammer & could be considered an accomplice.

----- Original Message -----

From: Paul <mailto:k7nhb@...>

To: SkyWires@yahoogroup <mailto:SkyWires@yahoogroups.com> s.com

Sent: Friday, June 08, 2007 8:35 PM

Subject: [SkyWires] Re: Logo Design - $99

Just a note on received spam and "getting them back." unfortunately, the address you see in the email header - even the geeky full data view - are not necessarily where it came from - could be an innocent person...like me. Once week a year ago my email started filling up with undeliverable emails. turns out someone used my domain name in a spam mailing and every invalid email address in the list they used bounced back to me. And of course every delivered email had my return

address on it. How can the spamee buy the product if they have my address? Because they are instructed to click on a link in the body of the email and that takes them to the spammer's site. Which in the case I'm describing was in China. We can make all the laws we want. But until our Congress grows a pair and tells Russia, China, etc. - those foreign locations from with 90% of the spams spews - that we will cut their internet access off, they will continue.
That's my story and I'm sticking to it.
73, Paul

--- In SkyWires@yahoogroup <mailto:SkyWires%40yahoogroups.com> s.com, "hogwild2050" <hoggreg@...> wrote:
>
> where are those child hacker prodogies when you need them. I would
> like a spam virus program that would just load the spammers e-mail or
> web site with so much junk as to cripple it.
>

2422. Loop feed location

Yahoo group: SkyWires
Date: 2007-06-10 17:57:35 UTC
From: n7cal
Topic: 2422 Message: 2422

What is your prefered feed point location for loops over a wave length
on 75 meters?

What are the benfits of hinderences?

2423. Re: [SkyWires] Re: Logo Design - $99

Yahoo group: SkyWires
Date: 2007-06-11 02:44:39 UTC
From: WILLIAM STEFFEL
Topic: 2408 Message: 2423

Thats why I dont use it. But a program does exist if we could find the real spammer.A couple years ago I read about a spammer in Louisianathat was mad because his personal e mail was jammed because his addy was listed on the net.serves him right.
----- Original Message -----
From: Callum M0MCX
To: SkyWires@yahoogroups.com
Sent: Sunday, June 10, 2007 12:09 PM
Subject: RE: [SkyWires] Re: Logo Design - $99

>>>It returns spam to the sender over a thousand times to jam their e mail

William, almost exclusively the real sender is actually fabricated to look like someone else. You will be sending your thousand emails to the wrong person.

I'll bow out

Callum McCormick

M0MCX

07976 631881

http://www.m0mcx.co.uk/

From: SkyWires@yahoogroups.com [mailto:SkyWires@...m] On Behalf Of WILLIAM STEFFEL
Sent: 10 June 2007 06:29
To: SkyWires@yahoogroups.com
Subject: Re: [SkyWires] Re: Logo Design - $99

I have a program called "Bounce Spam". It returns spam to the sender over a thousand times to jam their e mail but the a**holes use others comps as robots so you would just be punishing an innocent person.The guy they just arrested was one of the biggest spammers. He used others comps as robots . A question to any attorneys out there, could we get a class action suit against the company that we are directed to? After all, they paid the spammer & could be considered an accomplice.

----- Original Message -----

From: Paul

To: SkyWires@yahoogroups.com

Sent: Friday, June 08, 2007 8:35 PM

Subject: [SkyWires] Re: Logo Design - $99

Just a note on received spam and "getting them back." unfortunately, the address you see in the email header - even the geeky full data view - are not necessarily where it came from - could be an innocent person...like me. Once week a year ago my email started filling up with undeliverable emails. turns out someone used my domain name in a spam mailing and every invalid email address in the list they used bounced back to me. And of course every delivered email had my return address on it. How can the spamee buy the product if they have my address? Because they are instructed to click on a link in the body of the email and that takes them to the spammer's site. Which in the case I'm describing was in China. We can make all the laws we want. But until our Congress grows a pair and tells Russia, China, etc. - those foreign locations from with 90% of the spams spews - that we will cut their internet access off, they will continue.
That's my story and I'm sticking to it.
73, Paul

--- In SkyWires@yahoogroups.com, "hogwild2050" <hoggreg@...> wrote:
>
> where are those child hacker prodogies when you need them. I would
> like a spam virus program that would just load the spammers e-mail or
> web site with so much junk as to cripple it.
>

2424. super loop 80

Yahoo group: SkyWires
Date: 2007-06-11 13:34:52 UTC
From: list email filter
Topic: 2415 Message: 2424

Ace and the group,

This antenna looks very interesting, I had been planning on an 80 horizontal loop for field day, but seeing this has me thinking (looks like it will perform better above 80m, and be easier to deploy). My problem is I've already got the materials for the 80 regular loop, including over 100 feet of 450 ohm ladderline. So, my question is this, what would the impact be of attaching ladderline where the balun is, and moving the balun closer to the transmitter (at the other end of the feedline)? I've also got an Elecraft switchable balun that I've used in the past, but it isn't weather-proof enough to have hanging in the air. Basically, I usually just have a coax jumper between it and the tuner, and bring the ladderline right down to the operating station. As the antenna seems to be balanced, would there be a performance problem changing the feedline arrangement?

73,

Erik
N7HMS
IRLP Node 3804 445.975 Simp PL103.5

Emails sent directly to this address instead of going through a yahoo group are automatically processed as junk mail, so I never see them. If you want to email me directly, try 'mycall' at 12bars dot com, thanks.

Donald Sanders wrote:
> Here's info on a Generic 80 mtr version. You would need to scale it down for 40 mtrs.
> http://www.bloomington.in.us/~wh2t/Super%20Loop%20Antenna.htm
> Ace - WH2T
>
>
>
> Healthfully yours,
> Don W4BWS

2425. Re: [SkyWires] super loop 80

Yahoo group: SkyWires
Date: 2007-06-11 16:21:40 UTC
From: Dr.Ace Ratliff
Topic: 2415 Message: 2425

Eric,
I don't see any problem with attaching ladderline instead of coax where the balun is, and moving the balun closer to the transmitter (at the other end of the feedline).
73, Ace

----- Original Message -----
From: list email filter
To: SkyWires@yahoogroups.com
Sent: Monday, June 11, 2007 8:34 AM
Subject: [SkyWires] super loop 80

Ace and the group,

This antenna looks very interesting, I had been planning on an 80 horizontal loop for field day, but seeing this has me thinking (looks like it will perform better above 80m, and be easier to deploy). My problem is I've already got the materials for the 80 regular loop, including over 100 feet of 450 ohm ladderline. So, my question is this, what would the impact be of attaching ladderline where the balun is, and moving the balun closer to the transmitter (at the other end of the feedline)? I've also got an Elecraft switchable balun that I've used in the past, but it isn't weather-proof enough to have hanging in the air. Basically, I usually just have a coax jumper between it and the tuner, and bring the ladderline right down to the operating station. As the antenna seems to be balanced, would there be a performance problem changing the feedline arrangement?

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Erik
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Emails sent directly to this address instead of going through a yahoo group are automatically processed as junk mail, so I never see them. If you want to email me directly, try 'mycall' at 12bars dot com, thanks.

Donald Sanders wrote:
> Here's info on a Generic 80 mtr version. You would need to scale it down for 40 mtrs.
> http://www.bloomington.in.us/~wh2t/Super%20Loop%20Antenna.htm
> Ace - WH2T
>
>
>
> Healthfully yours,
> Don W4BWS

2426. Re: [SkyWires] Re: Logo Design - $99

Yahoo group: SkyWires
Date: 2007-06-11 16:03:46 UTC
From: Christopher Zeman
Topic: 2408 Message: 2426

I'm not a big advocate of capital punishment, but I've always felt that it would be an appropriate punishment for spammers. I've heard of a couple of cases where a spammer has been murdered, and laughed about it. I saw no reason to even investigate the murder. I doubt the person who did it is going to do it again. I fully understand why they did it. :)

Chris

WILLIAM STEFFEL wrote:
>
> Thats why I dont use it. But a program does exist if we could find the
> real spammer.A couple years ago I read about a spammer in
> Louisianathat was mad because his personal e mail was jammed because
> his addy was listed on the net.serves him right.
>
> ----- Original Message -----
> *From:* Callum M0MCX <mailto:callum@...>
> *To:* SkyWires@yahoogroups.com <mailto:SkyWires@yahoogroups.com>
> *Sent:* Sunday, June 10, 2007 12:09 PM
> *Subject:* RE: [SkyWires] Re: Logo Design - $99
>
> >>>It returns spam to the sender over a thousand times to jam their
> e mail
>
> William, almost exclusively the real sender is actually fabricated
> to look like someone else. You will be sending your thousand
> emails to the wrong person.
>
> I?ll bow out
>
> Callum McCormick
>
> M0MCX
>
> 07976 631881
>
> http://www.m0mcx.co.uk/ <http://www.m0mcx.co.uk/>
>
> ---
>
> *From:* SkyWires@yahoogroups.com <mailto:SkyWires@yahoogroups.com>
> [mailto:SkyWires@yahoogroups.com] *On Behalf Of *WILLIAM STEFFEL
> *Sent:* 10 June 2007 06:29
> *To:* SkyWires@yahoogroups.com
> *Subject:* Re: [SkyWires] Re: Logo Design - $99

>
> I have a program called "Bounce Spam". It returns spam to the
> sender over a thousand times to jam their e mail but the a**holes
> use others comps as robots so you would just be punishing an
> innocent person.The guy they just arrested was one of the biggest
> spammers. He used others comps as robots . A question to any
> attorneys out there, could we get a class action suit against the
> company that we are directed to? After all, they paid the spammer
> & could be considered an accomplice.
>
> ----- Original Message -----
>
> *From:* Paul <mailto:k7nhb@...>
>
> *To:* SkyWires@yahoogroups.com <mailto:SkyWires@yahoogroups.com>
>
> *Sent:* Friday, June 08, 2007 8:35 PM
>
> *Subject:* [SkyWires] Re: Logo Design - $99
>
> Just a note on received spam and "getting them back."
> unfortunately,
> the address you see in the email header - even the geeky full data
> view - are not necessarily where it came from - could be an
> innocent
> person...like me. Once week a year ago my email started filling up
> with undeliverable emails. turns out someone used my domain
> name in a
> spam mailing and every invalid email address in the list they used
> bounced back to me. And of course every delivered email had my
> return
> address on it. How can the spamee buy the product if they have my
> address? Because they are instructed to click on a link in the
> body of
> the email and that takes them to the spammer's site. Which in
> the case
> I'm describing was in China. We can make all the laws we want. But
> until our Congress grows a pair and tells Russia, China, etc.
> - those
> foreign locations from with 90% of the spams spews - that we
> will cut
> their internet access off, they will continue.
> That's my story and I'm sticking to it.
> 73, Paul
>
> --- In SkyWires@yahoogroups.com
> <mailto:SkyWires%40yahoogroups.com>, "hogwild2050"
> <hoggreg@...> wrote:
> >
> > where are those child hacker prodogies when you need them. I

> would
> > like a spam virus program that would just load the spammers
> e-mail or
> > web site with so much junk as to cripple it.
> >
>
>

2428. Re: super loop 80

Yahoo group: SkyWires
Date: 2007-06-15 11:06:12 UTC
From: bambazonke01
Topic: 2415 Message: 2428

I changed my G5RV antenna into a Super loop BUT the twinlead or
Ladder line HAS to be 32 ft long. I added 56 ft to either end of the
G5RV , shortened the support span and pulled the new feed poit out
to a 4:1 balun where it is fed by 75 ohm coax. The whole antenna
looks like an equilateral triangle.
It works very well.
Jim VE3DDY

--- In SkyWires@yahoogroups.com, list email filter <modeerf@...>
wrote:
>
> Ace and the group,
>
> This antenna looks very interesting, I had been planning on an 80
> horizontal loop for field day, but seeing this has me thinking
(looks
> like it will perform better above 80m, and be easier to deploy).
My
> problem is I've already got the materials for the 80 regular loop,
> including over 100 feet of 450 ohm ladderline. So, my question is
this,
> what would the impact be of attaching ladderline where the balun
is, and
> moving the balun closer to the transmitter (at the other end of
the
> feedline)? I've also got an Elecraft switchable balun that I've
used in
> the past, but it isn't weather-proof enough to have hanging in the
air.
> Basically, I usually just have a coax jumper between it and the
tuner,
> and bring the ladderline right down to the operating station. As
the
> antenna seems to be balanced, would there be a performance problem
> changing the feedline arrangement?
>
>
> 73,
>
> Erik
> N7HMS
> IRLP Node 3804 445.975 Simp PL103.5
>
> Emails sent directly to this address instead of going through a
yahoo

> group are automatically processed as junk mail, so I never see
them. If
> you want to email me directly, try 'mycall' at 12bars dot com,
thanks.
>
>
> Donald Sanders wrote:
> > Here's info on a Generic 80 mtr version. You would need to scale
it down for 40 mtrs.
> > http://www.bloomington.in.us/~wh2t/Super%20Loop%20Antenna.htm
> > Ace - WH2T
> >
> >
> >
> > Healthfully yours,
> > Don W4BWS
>

2429. SuperLoop. Horzontal vs Vertical

Yahoo group: SkyWires
Date: 2007-06-15 15:41:22 UTC
From: Randal Jarrett
Topic: 2429 Message: 2429

What would the results be mounting a superloop horizontal vs vertical?

--
Randy Jarrett K4RSJ
Randy's Ham Shack
<rsj@...>
FWD# 654871

2430. Re: [SkyWires] Re: super loop 80

Yahoo group: SkyWires
Date: 2007-06-15 19:09:04 UTC
From: Dr.Ace Ratliff
Topic: 2415 Message: 2430

Hi Jim,
What are you using as the 1/4 wave matching stub ?
300 ohm TV type twin lead or 450 ohm ladder line etc. ???
The length of the ladder line or twin lead stub will vary with the velocity factor of the type of ladder line or twin lead used to construct the 1/4 wave stub.

"Ladder line / twin lead velocity factors vary by brand, type, insulation, wire size, etc. The best method is to use a grid dip oscillator or antenna analyzer to measure the resonant frequency of the 1/4 wave matching stub during construction, rather than by just using the mathematical formula to determine the length. "

I updated the page at
http://www.bloomington.in.us/~wh2t/Super%20Loop%20Antenna.htm
it now shows about 32 feet.

When Don/K8THU built the antenna he ended up using a 1/4 wave matching stub that was 33' 4" long.
73, Ace - WH2T

----- Original Message -----
From: bambazonke01
To: SkyWires@yahoogroups.com
Sent: Friday, June 15, 2007 6:06 AM
Subject: [SkyWires] Re: super loop 80

I changed my G5RV antenna into a Super loop BUT the twinlead or
Ladder line HAS to be 32 ft long. I added 56 ft to either end of the
G5RV , shortened the support span and pulled the new feed poit out
to a 4:1 balun where it is fed by 75 ohm coax. The whole antenna
looks like an equilateral triangle.
It works very well.
Jim VE3DDY
.

2431. Trap for 160/80m loop?

Yahoo group: SkyWires
Date: 2007-06-18 03:17:38 UTC
From: Sam
Topic: 2431 Message: 2431

I want to use a ~265 foot horizontal 80m closed loop, on 160m
what I need/want to do is
open the far side of the loop when it is operated on 160m
and close it for 80m and above
how do I do that?

the loop is and has to be coax fed
not a situation where ladder line can be used!!!!!

TIA
ka5oai

2432. Re: Trap for 160/80m loop?

Yahoo group: SkyWires
Date: 2007-06-18 10:15:54 UTC
From: bambazonke01
Topic: 2431 Message: 2432

--- In SkyWires@yahoogroups.com, "Sam" <ka5oai@...> wrote:
>
> I want to use a ~265 foot horizontal 80m closed loop, on 160m
> what I need/want to do is
> open the far side of the loop when it is operated on 160m
> and close it for 80m and above
> how do I do that?
>
> the loop is and has to be coax fed
> not a situation where ladder line can be used!!!!!
>
> TIA
> ka5oai
>
What you could consider doing is to add a 1/4 wave shorted stub for 80 meters made from tv twin lead or ladder line at the point opposite the feed point. A 1/4 w stub shorted at the bottom acts as an open circuit at the top at the resonant frequency.
You would then have to deduct the total length of the two stub wires from the 160 meter overall length. So what you end up with is the full overall length including the two lengths of the stub operating on 160 and because the stub opens the far end you end up with 2 one wave lengths fed in phase on 80 which theoretically gives you 4 db gain.
The feedpoint has then got to be fed with a 4:1 balun and 75 ohm coax as the feed impedance is close to 300 ohms.
The shorted end of the stub can be attached to a cord and pulled back into the plane of the loop.
Remember the overall size of the loop has shrunk by approx 132 ft so it occupies a smaller area.
It seems to me that you wouldn't have to use velocity factor on the stub length in your calculations.
Jim VE3DDY

2433. Re: super loop 80

Yahoo group: SkyWires
Date: 2007-06-18 10:41:30 UTC
From: bambazonke01
Topic: 2415 Message: 2433

Hi Ace,
I remember you asking me about this design some years ago. I still have the e-mail somewhere. It didn't originate with me and I'm sure the original inventor gets miffed with us for not giving him credit. Perhaps he is just happy that we use his design. I don't even remember who he was. :-)
I don't calculate using velocity factor. I have found that when calculating velocity factor the length was always too short and I had to splice in some length that brought me close to the straight 1/4 wave. It is probably better to start with the full length 1/4 W and prune it back to suit.
I turned my G5RV into the super loop years ago and it still performs flawlessly. There is no comparison between the two antennas as the super loop lays down a strong signal where the G5RV can't even be heard.
Incidentally, I have a new one for you . It is based on a DDRR (Direct Discontinuity Ring Radiator) loop, is portable and is only 4 ft square on 40 M.
It performs at least equivalent to a dipole at 40 ft when it is only 2 to 3 ft above ground and vertically polarized. It may even out perform a dipole and certainly outperforms a G5RV at least at my QTH. It is direcional rotatable with a fig 8 pattern.I guess that is why it's better than a dipole. It doesn't need a groundplane at all. like the DDRR does so it is highly portable.
The only drawback is that it is a single band item but who cares when it is so small.
Send me an e-mail off line and I'll send you pictures and construction design details of it.
Jim VE3DDY

--- In SkyWires@...m, "Dr.Ace Ratliff" <wh2t@...> wrote:
>
> Hi Jim,
> What are you using as the 1/4 wave matching stub ?
> 300 ohm TV type twin lead or 450 ohm ladder line etc. ???
> The length of the ladder line or twin lead stub will vary with the velocity factor of the type of ladder line or twin lead used to construct the 1/4 wave stub.
>
> "Ladder line / twin lead velocity factors vary by brand, type, insulation, wire size, etc.
> The best method is to use a grid dip oscillator or antenna analyzer to measure the resonant frequency of the 1/4 wave matching stub during construction, rather than by just using the mathematical formula to determine the length. "

>
> I updated the page at
> http://www.bloomington.in.us/~wh2t/Super%20Loop%20Antenna.htm
> it now shows about 32 feet.
>
> When Don/K8THU built the antenna he ended up using a 1/4 wave
matching stub that was 33' 4" long.
> 73, Ace - WH2T
>
> ----- Original Message -----
> From: bambazonke01
> To: SkyWires@yahoogroups.com
> Sent: Friday, June 15, 2007 6:06 AM
> Subject: [SkyWires] Re: super loop 80
>
>
> I changed my G5RV antenna into a Super loop BUT the twinlead or
> Ladder line HAS to be 32 ft long. I added 56 ft to either end of
the
> G5RV , shortened the support span and pulled the new feed poit
out
> to a 4:1 balun where it is fed by 75 ohm coax. The whole antenna
> looks like an equilateral triangle.
> It works very well.
> Jim VE3DDY
> .
>

2434. RE: [SkyWires] Trap for 160/80m loop?

Yahoo group: SkyWires
Date: 2007-06-20 06:59:09 UTC
From: Callum M0MCX
Topic: 2431 Message: 2434

Sam, I did this for a 40 meter loop - turning into an 80 meter antenna when required. I did my band changes manually by running into the garden, lowering the loop and disconnecting the jumpers. I "removed" about 6 feet of wire from the 40 meter loop to make my 80m open loop. I did it last year also with my 80m loop to achieve 160 (with less success).

Suggest to make this switch-able, put a pair of relays in about 8 feet apart to remove a section of wire out the loop. Can't think of a more practical method I'm afraid - but you will probably need to support the relays somehow.

Regards,

Callum McCormick

M0MCX

07976 631881

http://www.m0mcx.co.uk/

From: SkyWires@yahoogroups.com [mailto:SkyWires@yahoogroups.com] On Behalf Of Sam
Sent: 18 June 2007 04:18
To: SkyWires@yahoogroups.com
Subject: [SkyWires] Trap for 160/80m loop?

I want to use a ~265 foot horizontal 80m closed loop, on 160m
what I need/want to do is
open the far side of the loop when it is operated on 160m
and close it for 80m and above
how do I do that?

the loop is and has to be coax fed
not a situation where ladder line can be used!!!!!

TIA
ka5oai

2435. Extending Delta loop to skyloop

Yahoo group: SkyWires
Date: 2007-06-23 03:10:39 UTC
From: Marty Bluhm
Topic: 2435 Message: 2435

I've been reading my mail on the various loops that have been constructed via the reflector. I've been curious since I found Dave Fischer W0MHS article on Loop Skywire in Nov 1985 QST.

I currently have a semi-loop in the shape of a delta with the apex at 30ft in a tree. The left side of the triangle is 50ft, the right side is 60ft and the base is approximately 55ft for a total of approximately 165ft. It is felt a the corner of the 60ft side and the base with 450 ohm ladder line through a SGC 239 into RG8X.

I've been kicking around the idea of extending the antenna into a diamond shape which would add approximately 100 more ft to the antenna, giving a total of 210ft. Moving the feed point to the peak of the house, continuing to feed it with 450 ohm ladder line down to a 4:1 balun in the shack and a short piece (less than 3 ft) of rg8x to the antenna switch.

All the words I've read and using the length calculator from NS1U web site, unless I can get 544 ft out of 210 ft (really stretching it :), I can forget 160m which is my main objective with 80m secondary.

Any ideas on improving. One person was talking about hanging drop extensions from the horizontal loop. Umm. Interesting.

Any thoughts are more than welcome. This is in the planning stages. The present loop is working; but in true ham tradition, never never satisfied.

Thanks
73
Marty
W8AKS

2437. steel building

Yahoo group: SkyWires
Date: 2007-06-27 17:37:04 UTC
From: Steve Holman
Topic: 2437 Message: 2437

Hello this is my first post but i have been lurking for a while.

I am building a 660 ft post tensioned loop around part of my back pasture, however the loop will enclose a 12X20 steel loafing shed for the horses. the shed is within 15 to 20 ft of the northern part of the loop. this is also the area of the feed point.

My question is what if any impact to the loop will the shed have on the loop pattern. I would assume that if it was centered in the loop it would have the least impact but offset to one side makes me wonder. I could move the loop and place the shed outside the enclosed area but that would make the installation harder and the feedline would double in legenth. The feed line is 450om twinlead.

Thanks for any comments or suggestions.

Steve H.
N5WDD

2438. RE: [SkyWires] Extending Delta loop to skyloop

Yahoo group: SkyWires
Date: 2007-06-27 19:19:39 UTC
From: Callum M0MCX
Topic: 2435 Message: 2438

Marty,

My terrible trait of ☐just doing it☐ rules here, particularly with an SG auto-tuner.

If you can get the loop to a half-wave or larger, then it☐ll work quite well (assuming the auto-tuner grabs a match).

Callum McCormick
M0MCX
http://www.m0mcx.co.uk/

From: SkyWires@yahoogroups.com [mailto:SkyWires@...m] On Behalf Of Marty Bluhm
Sent: 23 June 2007 04:11
To: SkyWires@yahoogroups.com
Subject: [SkyWires] Extending Delta loop to skyloop

I've been reading my mail on the various loops that have been constructed via the reflector. I've been curious since I found Dave Fischer W0MHS article on Loop Skywire in Nov 1985 QST.

I currently have a semi-loop in the shape of a delta with the apex at 30ft in a tree. The left side of the triangle is 50ft, the right side is 60ft and the base is approximately 55ft for a total of approximately 165ft. It is felt a the corner of the 60ft side and the base with 450 ohm ladder line through a SGC 239 into RG8X.

I've been kicking around the idea of extending the antenna into a diamond shape which would add approximately 100 more ft to the antenna, giving a total of 210ft. Moving the feed point to the peak of the house, continuing to feed it with 450 ohm ladder line down to a 4:1 balun in the shack and a short piece (less than 3 ft) of rg8x to the antenna switch.

All the words I've read and using the length calculator from NS1U web site, unless I can get 544 ft out of 210 ft (really stretching it :), I can forget 160m which is my main objective with 80m secondary.

Any ideas on improving. One person was talking about hanging drop extensions from the horizontal loop. Umm. Interesting.

Any thoughts are more than welcome. This is in the planning stages. The present loop is working; but in true ham tradition, never never satisfied.

Thanks
73

Marty
W8AKS

2439. RE: [SkyWires] Extending Delta loop to skyloop

Yahoo group: SkyWires
Date: 2007-06-27 19:29:45 UTC
From: Marty Bluhm
Topic: 2435 Message: 2439

Hi Callum,
Thanks for the reply. I've done a bit of rethinking. I can extend the south end of the diamond to the fireplace chimney (not in use) instead of the eaves of the house.. Doing this will give me a total of 254ft of wire. A half wave is 273ft.leaving me about 17ft shy. I'm considering cutting the 17ft into half and hanging the 8 1/2 ft vertically from the horitzontal wires. The north and south ends of the diamond will be approximately 30ft in the air with the two side poles 25ft in the air. My major problem is one side that goes through the tree at the north end hanging under some branches. Unfortunately, I cant get up into the air to lift the wire over the limbs. One solution would be to rent a bucket truck to put it over the branches. Rather expensive solution.

That is where the project stands at the moment. Getting all the items together and then some help.
Thanks again for the reply. I'll let you know how it turns out.
73
Marty
W8AKS

-----Original Message-----
From: SkyWires@yahoogroups.com [mailto:SkyWires@yahoogroups.com]On Behalf Of Callum M0MCX
Sent: Wednesday, June 27, 2007 19:20
To: SkyWires@yahoogroups.com
Subject: RE: [SkyWires] Extending Delta loop to skyloop

Marty,

My terrible trait of ?just doing it? rules here, particularly with an SG auto-tuner.

If you can get the loop to a half-wave or larger, then it?ll work quite well
(assuming the auto-tuner grabs a match).

Callum McCormick
M0MCX
http://www.m0mcx.co.uk/

_____
From: SkyWires@yahoogroups.com [mailto:SkyWires@yahoogroups.com] On Behalf Of Marty Bluhm
Sent: 23 June 2007 04:11
To: SkyWires@yahoogroups.com
Subject: [SkyWires] Extending Delta loop to skyloop

I've been reading my mail on the various loops that have been constructed via the reflector. I've been curious since I found Dave Fischer W0MHS article on Loop Skywire in Nov 1985 QST.

I currently have a semi-loop in the shape of a delta with the apex at 30ft in a tree. The left side of the triangle is 50ft, the right side is 60ft and
the base is approximately 55ft for a total of approximately 165ft. It is felt a the corner of the 60ft side and the base with 450 ohm ladder line through a SGC 239 into RG8X.

I've been kicking around the idea of extending the antenna into a diamond shape which would add approximately 100 more ft to the antenna, giving a total of 210ft. Moving the feed point to the peak of the house, continuing to feed it with 450 ohm ladder line down to a 4:1 balun in the shack and a short piece (less than 3 ft) of rg8x to the antenna switch.

All the words I've read and using the length calculator from NS1U web site,
unless I can get 544 ft out of 210 ft (really stretching it :), I can forget
160m which is my main objective with 80m secondary.

Any ideas on improving. One person was talking about hanging drop extensions
from the horizontal loop. Umm. Interesting.

Any thoughts are more than welcome. This is in the planning stages. The present loop is working; but in true ham tradition, never never satisfied.

Thanks
73
Marty
W8AKS

2440. RE: [SkyWires] steel building

Yahoo group: SkyWires
Date: 2007-06-27 20:57:10 UTC
From: Mike w7kol
Topic: 2437 Message: 2440

Hi Steve, I had my 1000 Foot loop positioned in a way where the wire went over the top of my shop with a steel roof, the wire was about 10 feet right above the roof and it did not effect it at all, Mike

Mike w7kol

From: "Steve Holman"
Reply-To: SkyWires@yahoogroups.com
To: SkyWires@yahoogroups.com
Subject: [SkyWires] steel building
Date: Wed, 27 Jun 2007 17:37:04 -0000

Hello this is my first post but i have been lurking for a while.

I am building a 660 ft post tensioned loop around part of my back pasture, however the loop will enclose a 12X20 steel loafing shed for the horses. the shed is within 15 to 20 ft of the northern part of the loop. this is also the area of the feed point.

My question is what if any impact to the loop will the shed have on the loop pattern. I would assume that if it was centered in the loop it would have the least impact but offset to one side makes me wonder. I could move the loop and place the shed outside the enclosed area but that would make the installation harder and the feedline would double in legenth. The feed line is 450om twinlead.

Thanks for any comments or suggestions.

Steve H.
N5WDD

Don?t miss your chance to WIN $10,000 and other great prizes from Microsoft Office Live (http://g.msn.com/8HMAENUS/2746??PS=47575)

2441. Re: [SkyWires] Extending Delta loop to skyloop

Yahoo group: SkyWires
Date: 2001-08-13 07:50:14 UTC
From: Donald Sanders
Topic: 2435 Message: 2441

Marty, See the July 2007 issue of QST, Hints and Kinks,
for a low cost way to get the wire over the limbs using a
home made telescoping pole.
This may be of help.
Healthfully yours,
Don W4BWS
----- Original Message -----
From: Marty Bluhm
To: SkyWires@yahoogroups.com
Sent: Wednesday, June 27, 2007 2:29 PM
Subject: RE: [SkyWires] Extending Delta loop to skyloop

Hi Callum,
Thanks for the reply. I've done a bit of rethinking. I can extend the south end of the diamond to the fireplace chimney (not in use) instead of the eaves of the house.. Doing this will give me a total of 254ft of wire. A half wave is 273ft.leaving me about 17ft shy. I'm considering cutting the 17ft into half and hanging the 8 1/2 ft vertically from the horitzontal wires. The north and south ends of the diamond will be approximately 30ft in the air with the two side poles 25ft in the air. My major problem is one side that goes through the tree at the north end hanging under some branches. Unfortunately, I cant get up into the air to lift the wire over the limbs. One solution would be to rent a bucket truck to put it over the branches. Rather expensive solution.

That is where the project stands at the moment. Getting all the items together and then some help.
Thanks again for the reply. I'll let you know how it turns out.
73
Marty
W8AKS

-----Original Message-----
From: SkyWires@yahoogroups.com [mailto:SkyWires@yahoogroups.com]On Behalf Of Callum M0MCX
Sent: Wednesday, June 27, 2007 19:20
To: SkyWires@yahoogroups.com
Subject: RE: [SkyWires] Extending Delta loop to skyloop

Marty,

My terrible trait of "just doing it" rules here, particularly with an SG
auto-tuner.

If you can get the loop to a half-wave or larger, then it'll work quite well
(assuming the auto-tuner grabs a match).

Callum McCormick
M0MCX
http://www.m0mcx.co.uk/

From: SkyWires@yahoogroups.com [mailto:SkyWires@yahoogroups.com] On Behalf Of Marty Bluhm
Sent: 23 June 2007 04:11
To: SkyWires@yahoogroups.com
Subject: [SkyWires] Extending Delta loop to skyloop

I've been reading my mail on the various loops that have been constructed via the reflector. I've been curious since I found Dave Fischer W0MHS article on Loop Skywire in Nov 1985 QST.

I currently have a semi-loop in the shape of a delta with the apex at 30ft in a tree. The left side of the triangle is 50ft, the right side is 60ft and the base is approximately 55ft for a total of approximately 165ft. It is felt a the corner of the 60ft side and the base with 450 ohm ladder line through a SGC 239 into RG8X.

I've been kicking around the idea of extending the antenna into a diamond shape which would add approximately 100 more ft to the antenna, giving a total of 210ft. Moving the feed point to the peak of the house, continuing to feed it with 450 ohm ladder line down to a 4:1 balun in the shack and a short piece (less than 3 ft) of rg8x to the antenna switch.

All the words I've read and using the length calculator from NS1U web site, unless I can get 544 ft out of 210 ft (really stretching it :), I can forget 160m which is my main objective with 80m secondary.

Any ideas on improving. One person was talking about hanging drop extensions from the horizontal loop. Umm. Interesting.

Any thoughts are more than welcome. This is in the planning stages. The present loop is working; but in true ham tradition, never never satisfied.

Thanks
73
Marty
W8AKS

2442. RE: [SkyWires] Extending Delta loop to skyloop

Yahoo group: SkyWires
Date: 2007-06-27 21:51:48 UTC
From: Marty Bluhm
Topic: 2435 Message: 2442

Thanks Don, I missed that. I'll check it out and see what I can. Appreciate the heads up.
73
Marty
W8AKS

-----Original Message-----
From: SkyWires@yahoogroups.com [mailto:SkyWires@yahoogroups.com]On Behalf Of Donald Sanders
Sent: Monday, August 13, 2001 07:50
To: SkyWires@yahoogroups.com
Subject: Re: [SkyWires] Extending Delta loop to skyloop

Marty, See the July 2007 issue of QST, Hints and Kinks,
for a low cost way to get the wire over the limbs using a
home made telescoping pole.
This may be of help.
Healthfully yours,
Don W4BWS
----- Original Message -----
From: Marty Bluhm
To: SkyWires@yahoogroups.com
Sent: Wednesday, June 27, 2007 2:29 PM
Subject: RE: [SkyWires] Extending Delta loop to skyloop

Hi Callum,
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That is where the project stands at the moment. Getting all the items together and then some help.
Thanks again for the reply. I'll let you know how it turns out.
73
Marty
W8AKS

-----Original Message-----
From: SkyWires@yahoogroups.com [mailto:SkyWires@yahoogroups.com]On
Behalf Of Callum M0MCX
Sent: Wednesday, June 27, 2007 19:20
To: SkyWires@yahoogroups.com
Subject: RE: [SkyWires] Extending Delta loop to skyloop

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SG
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(assuming the auto-tuner grabs a match).

Callum McCormick
M0MCX
http://www.m0mcx.co.uk/

_____
From: SkyWires@yahoogroups.com [mailto:SkyWires@yahoogroups.com] On
Behalf
Of Marty Bluhm
Sent: 23 June 2007 04:11
To: SkyWires@yahoogroups.com
Subject: [SkyWires] Extending Delta loop to skyloop

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in a tree. The left side of the triangle is 50ft, the right side is
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the base is approximately 55ft for a total of approximately 165ft. It
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felt a the corner of the 60ft side and the base with 450 ohm ladder
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through a SGC 239 into RG8X.

I've been kicking around the idea of extending the antenna into a
diamond
shape which would add approximately 100 more ft to the antenna, giving
a
total of 210ft. Moving the feed point to the peak of the house,
continuing
to feed it with 450 ohm ladder line down to a 4:1 balun in the shack
and a
short piece (less than 3 ft) of rg8x to the antenna switch.

All the words I've read and using the length calculator from NS1U web site,
unless I can get 544 ft out of 210 ft (really stretching it :), I can forget
160m which is my main objective with 80m secondary.

Any ideas on improving. One person was talking about hanging drop extensions
from the horizontal loop. Umm. Interesting.

Any thoughts are more than welcome. This is in the planning stages. The
present loop is working; but in true ham tradition, never never satisfied.

Thanks
73
Marty
W8AKS

2443. N4PC loop

Yahoo group: SkyWires
Date: 2007-06-27 23:41:57 UTC
From: Callum M0MCX
Topic: 2443 Message: 2443

I downloaded EZNec tonight and noticed a loop in the demo that I haven't come across called N4PC Loop. Did some research and only worked out that it might be a corner fed loop, is this right?

Callum McCormick

M0MCX

07976 631881

http://www.m0mcx.co.uk/

2444. Re: [SkyWires] N4PC loop

Yahoo group: SkyWires
Date: 2007-06-28 06:33:12 UTC
From: Frank
Topic: 2443 Message: 2444

Hi Callum

I have also tried to find info on the N4PC loop. As I understand , as described in CQ Dec-1990 , it´s a square
with 51 feet legs . A phasing line extends from corner to corner and is feed by a balanced transmission line attached at the center
of the phasing line.
Now.. that might not be the one described inEZNec (dont have that). There are several versions of the loop as I understand
it and the one descibed in CQ is a futher development of the original.
I have the CQ article if You´d like it I could try to scan it and upload it to the group.

By the way thats a nice home-page

73/Frank
SM5QU/KC0YQI

----- Original Message -----
From: Callum M0MCX
To: SkyWires@yahoogroups.com
Sent: Thursday, June 28, 2007 1:41 AM
Subject: [SkyWires] N4PC loop

I downloaded EZNec tonight and noticed a loop in the demo that I haven't come across called N4PC Loop. Did some research and only worked out that it might be a corner fed loop, is this right?

Callum McCormick

M0MCX

07976 631881

http://www.m0mcx.co.uk/

2445. Re: [SkyWires] N4PC loop

Yahoo group: SkyWires
Date: 2007-06-28 06:40:34 UTC
From: icra@galaxynet.com
Topic: 2443 Message: 2445

> I have also tried to find info on the N4PC loop. As I understand ,
> as described in CQ Dec-1990 , it´s a square
> with 51 feet legs . A phasing line extends from corner to corner and
> is feed by a balanced transmission line attached at the center
> of the phasing line.
> Now.. that might not be the one described inEZNec (dont have that).
> There are several versions of the loop as I understand
> it and the one descibed in CQ is a futher development of the
> original.
> I have the CQ article if You´d like it I could try to scan it and
> upload it to the group.
>
Even if no one else is interested, I would like to see it.....

Mel
N7OKL

2446. Re: [SkyWires] N4PC loop

Yahoo group: SkyWires
Date: 2007-06-28 06:58:55 UTC
From: Frank
Topic: 2443 Message: 2446

Hi Mel

I have uploaded the files /folder/N4PC. might not be a scanner expert but I think it´s readable

73/Frank/SM5QU/KC0YQI

----- Original Message -----
From: icra@...
To: SkyWires@yahoogroups.com
Sent: Thursday, June 28, 2007 8:40 AM
Subject: Re: [SkyWires] N4PC loop

> I have also tried to find info on the N4PC loop. As I understand ,
> as described in CQ Dec-1990 , it´s a square
> with 51 feet legs . A phasing line extends from corner to corner and
> is feed by a balanced transmission line attached at the center
> of the phasing line.
> Now.. that might not be the one described inEZNec (dont have that).
> There are several versions of the loop as I understand
> it and the one descibed in CQ is a futher development of the
> original.
> I have the CQ article if You´d like it I could try to scan it and
> upload it to the group.
>
Even if no one else is interested, I would like to see it.....

Mel
N7OKL

2447. Re: steel building & loop interaction

Yahoo group: SkyWires
Date: 2007-06-28 12:17:28 UTC
From: Steve Holman
Topic: 2437 Message: 2447

Thanks for your imput. The loop wire will be at least 10 or more feet away from the shed so their may not be that much impact but i wanted to see if anyone could shed some light on what may or may not be the results.

Steve

2448. Re: [SkyWires] N4PC loop

Yahoo group: SkyWires
Date: 2007-06-28 03:33:57 UTC
From: Donald Sanders
Topic: 2443 Message: 2448

N4PC described that loop in a article back in the 80's.
He followed up with a couple of modification articles.
I just took my 40 meter loop down getting ready for a
move. It was full wave at 25 feet above ground. I fed
it with coax as a one band antenna. After i move i plan
to reinstall it with ladder line and tuner. It worked well
for me as a NVIS antenna on 40 meters. I plan to use
it on 40,30,and 20 meters when i reinstall it.
Healthfully yours,
Don W4BWS
----- Original Message -----
From: Callum M0MCX
To: SkyWires@yahoogroups.com
Sent: Wednesday, June 27, 2007 6:41 PM
Subject: [SkyWires] N4PC loop

I downloaded EZNec tonight and noticed a loop in the demo that I haven't come across called N4PC Loop. Did some research and only worked out that it might be a corner fed loop, is this right?

Callum McCormick

M0MCX

07976 631881

http://www.m0mcx.co.uk/

2449. Re: [SkyWires] N4PC loop

Yahoo group: SkyWires
Date: 2007-06-28 20:05:04 UTC
From: Ken Burchfield
Topic: 2443 Message: 2449

Give Packet Radio a try ....Mississippi.......145.010.......Simplex.......1200 Baud

Hi Frank,
Thanks for uploading the files on N4PC loop
No images made it thru, could you upload diagram
if available or my email k5jxl@...
Thanks agn & 73 Ken
----- Original Message ----
From: Frank <fravin@...>
To: SkyWires@yahoogroups.com
Sent: Thursday, June 28, 2007 1:58:55 AM
Subject: Re: [SkyWires] N4PC loop

Hi Mel

I have uploaded the files /folder/N4PC. might not
be a scanner expert but I think

it´s readable

73/Frank/SM5QU/KC0YQI

Sick sense of humor? Visit Yahoo! TV's
Comedy with an Edge to see what's on, when.
http://tv.yahoo.com/collections/222

2450. Re: [SkyWires] N4PC loop

Yahoo group: SkyWires
Date: 2007-06-28 20:19:33 UTC
From: icra@galaxynet.com
Topic: 2443 Message: 2450

> Thanks for uploading the files on N4PC loop

I would also like to say thanks....

I was able to download them just fine....

Now need to find the follow up articles......

Mel
N7OKL

2451. Re: [SkyWires] steel building

Yahoo group: SkyWires
Date: 2007-06-29 05:31:44 UTC
From: K.Currie
Topic: 2437 Message: 2451

Steve it has been my experience that things in side of the loop have very little if any afece on the preformance of the loop. I think adjacent to it would be much more of a problem. I have a 1000' loop with other antennas in side of it with no trouble. Thats my take here on it .
73s Keith
----- Original Message -----
From: Steve Holman
To: SkyWires@yahoogroups.com
Sent: Wednesday, June 27, 2007 11:37 AM
Subject: [SkyWires] steel building

Hello this is my first post but i have been lurking for a while.

I am building a 660 ft post tensioned loop around part of my back pasture, however the loop will enclose a 12X20 steel loafing shed for the horses. the shed is within 15 to 20 ft of the northern part of the loop. this is also the area of the feed point.

My question is what if any impact to the loop will the shed have on the loop pattern. I would assume that if it was centered in the loop it would have the least impact but offset to one side makes me wonder. I could move the loop and place the shed outside the enclosed area but that would make the installation harder and the feedline would double in legenth. The feed line is 450om twinlead.

Thanks for any comments or suggestions.

Steve H.
N5WDD

No virus found in this incoming message.
Checked by AVG Free Edition.
Version: 7.5.446 / Virus Database: 269.9.10/873 - Release Date: 6/26/07 11:54 PM

2452. Re: [SkyWires] N4PC loop

Yahoo group: SkyWires
Date: 2007-06-29 18:07:08 UTC
From: Frank
Topic: 2443 Message: 2452

Hi Ken

Sure ..would You like me to upload to Your email.It´s a rather big
file abt~2Mb ?

73/Frank

----- Original Message -----
From: Ken Burchfield
To: SkyWires@yahoogroups.com
Sent: Thursday, June 28, 2007 10:05 PM
Subject: Re: [SkyWires] N4PC loop

Give Packet Radio a try ....Mississippi.......145.010.......Simplex.......1200 Baud

Hi Frank,
Thanks for uploading the files on N4PC loop
No images made it thru, could you upload diagram
if available or my email k5jxl@...
Thanks agn & 73 Ken

----- Original Message ----
From: Frank <fravin@glocalnet.net>
To: SkyWires@yahoogroups.com
Sent: Thursday, June 28, 2007 1:58:55 AM
Subject: Re: [SkyWires] N4PC loop

Hi Mel

I have uploaded the files /folder/N4PC. might not be a scanner expert but I think
it´s readable

73/Frank/SM5QU/KC0YQI

Fussy? Opinionated? Impossible to please? Perfect. Join Yahoo!'s user panel and lay it on
us.

2453. Re: [SkyWires] N4PC loop

Yahoo group: SkyWires
Date: 2007-06-30 00:12:39 UTC
From: Ken Burchfield
Topic: 2443 Message: 2453

Give Packet Radio a try ....Mississippi.......145.010.......Simplex.......1200 Baud

Roger Frank,
Plse give it a try suppose to be able to take 10mg attachments, altho have not tried one that large.
Thanks
73 Ken

----- Original Message ----
From: Frank <fravin@...>
To: SkyWires@yahoogroups.com
Sent: Friday, June 29, 2007 1:07:08 PM
Subject: Re: [SkyWires] N4PC loop

Hi Ken

Sure ..would You like me to upload to Your
email.It´s a rather big

file abt~2Mb ?

73/Frank

_____
Take the Internet to Go: Yahoo!Go puts the Internet in your pocket: mail, news, photos & more.
http://mobile.yahoo.com/go?refer=1GNXIC

2454. 10 meters... ?

Yahoo group: SkyWires
Date: 2007-07-01 14:46:45 UTC
From: Jason Buchanan
Topic: 2454 Message: 2454

hi all,

I've got a 160m full wave loop (it's 544' long) and am wondering if i'd buy anything making it 574' (which would help make it closer to resonance at 28.000MHz). I diddled around with it at 29.550MHz and it tunes ok there and also seems to tune ok at the bottom end for CW operation... "Seems" to anyway. Not enough going on 10 meters it seems to really tell.

So just wondering what everyone thought, if I should just leave it alone or lengthen it. And if I do lengthen it then 160 meters will be way off in terms of optimal length (very long).

thanks

--
73 Jason N1SU
http://n1su.com/

2455. Re: 10 meters... ?

Yahoo group: SkyWires
Date: 2007-07-01 15:24:08 UTC
From: Don Keith
Topic: 2454 Message: 2455

Jason, you did not mention what kind of feedline you were using on this loop. If you are using coax, you will need to operate reasonably close to resonant points for the best results. If you are using open wire feedline or ladder line, you should be able to use the antenna on most bands with reasonable results. Length is not crucial so long as it is at least a full wavelength for the lowest frequency on which you intend to use it.

I doubt adding 30 feet would do much.

73,

Don N4KC
www.n4kc.com

--- In SkyWires@yahoogroups.com, Jason Buchanan <jsb@...> wrote:
>
>
> hi all,
>
> I've got a 160m full wave loop (it's 544' long) and am wondering
if
> i'd buy anything making it 574' (which would help make it closer
to
> resonance at 28.000MHz). I diddled around with it at 29.550MHz
and
> it tunes ok there and also seems to tune ok at the bottom end for
CW
> operation... "Seems" to anyway. Not enough going on 10 meters it
> seems to really tell.
>
> So just wondering what everyone thought, if I should just leave it
> alone or lengthen it. And if I do lengthen it then 160 meters
will
> be way off in terms of optimal length (very long).
>
> thanks
>
> --
> 73 Jason N1SU
> http://n1su.com/
>

2456. Re: [SkyWires] 10 meters... ?

Yahoo group: SkyWires
Date: 2007-07-01 16:03:15 UTC
From: David Shrum
Topic: 2454 Message: 2456

Jason if you are using a tuner like I am, it should be able to tune it for use anywhere, I am using 300 ohm TV wire from my 160 loop into my MFJ-944 tuner and then RG 58 coax to my radio (about 3 feet of the RG 58), and it can tune it so my radio doesn't complain.
Dave N8PU

Jason Buchanan wrote:
>
> hi all,
>
> I've got a 160m full wave loop (it's 544' long) and am wondering if
> i'd buy anything making it 574' (which would help make it closer to
> resonance at 28.000MHz). I diddled around with it at 29.550MHz and it
> tunes ok there and also seems to tune ok at the bottom end for CW
> operation... "Seems" to anyway. Not enough going on 10 meters it
> seems to really tell.
>
> So just wondering what everyone thought, if I should just leave it
> alone or lengthen it. And if I do lengthen it then 160 meters will be
> way off in terms of optimal length (very long).
>
> thanks
>
> --
> 73 Jason N1SU
> http://n1su.com/
>

2457. Re: [SkyWires] Re: 10 meters... ?

Yahoo group: SkyWires
Date: 2007-07-02 00:27:06 UTC
From: Jason Buchanan
Topic: 2454 Message: 2457

On Jul 1, 2007, at 11:24 AM, Don Keith wrote:

> Jason, you did not mention what kind of feedline you were using on
> this loop. If you are using coax, you will need to operate
> reasonably close to resonant points for the best results. If you are
> using open wire feedline or ladder line, you should be able to use
> the antenna on most bands with reasonable results. Length is not
> crucial so long as it is at least a full wavelength for the lowest
> frequency on which you intend to use it.
>
> I doubt adding 30 feet would do much.

thanks for the info - i'll leave it as is. I'm using ladder line. I was able to hear a few stations on 10m CW today and was able to tune it without my radio folding back so will leave it as is.

I noticed that there's a big, lush crop of poison ivy in the way so i'll have to wait a while anyway. hi

thanks

--
73 Jason N1SU
http://n1su.com/

2458. Re: [SkyWires] 10 meters... ?

Yahoo group: SkyWires
Date: 2007-07-02 00:31:59 UTC
From: Jason Buchanan
Topic: 2454 Message: 2458

On Jul 1, 2007, at 12:03 PM, David Shrum wrote:

> Jason if you are using a tuner like I am, it should be able to tune it
> for use anywhere, I am using 300 ohm TV wire from my 160 loop into my
> MFJ-944 tuner and then RG 58 coax to my radio (about 3 feet of the RG
> 58), and it can tune it so my radio doesn't complain.
> Dave N8PU

I'm using ladder line from the feedpoint to the back of a Dentron
Super Duper 3KW tuner - 2 feet from the tuner I have a porcelain DPDT
knife switch to toggle the polarity (15 meters seems to work best
with it reversed). The setup works pretty well - it's pretty handy
to be able to work all the bands with one antenna.

thanks

--
73 Jason N1SU
http://n1su.com/

2460. MCX ZigZag SkyLoop

Yahoo group: SkyWires
Date: 2007-07-03 18:00:40 UTC
From: Callum M0MCX
Topic: 2460 Message: 2460

I've modelled what I can only call a "ZigZag" loop which has both vertical and horizontal components with some interesting gain patterns (and a small bandwidth unfortunately). Perhaps ideal for open wire feeder and a tuner but I aimed it originally at a 50 ohm match to drive it with coax - and I did it, so if you can tolerate a 50kHz 2:1 bandwidth and want a loop with lower angles of radiation, this may be your cup of tea.

I'll be happy to share my results in the form of an MMANA file if people want.

?

Callum McCormick

M0MCX

07976 631881

http://www.m0mcx.co.uk/

2461. RE: [SkyWires] N4PC loop

Yahoo group: SkyWires
Date: 2007-07-03 17:56:36 UTC
From: Callum M0MCX
Topic: 2443 Message: 2461

Thanks for the upload. I finally got around to downloading them tonight. I☐m a bit of a MMANA geek so I☐ll go and model my own and see what it says. More recently I☐ve been modelling a loop with a ground reflector and getting some huge gains on paper ☐ also some vertical loops fir reflectors; some driven out of phase ☐ and some passive. There☐s a huge amount of mucking about still left in these loops yet ☐ mind you I☐m fairly new to this game, I☐m sure it☐s all been done before.

I must say though that the author of this article discusses the excellent DX properties of a horizontal, low band loop - when used on the higher bands. I completely disagree. In practice (and the software appears to agree with this), I have found that the only possible DX from a low band loop is when you push a 40m loop into service on 20m ☐ and then it☐s really on very good for about 1,500 miles ☐ maybe shorter. All this on 30 feet and below. Modelling higher, say 50 feet still suggests the same.

Am I wrong? What☐s with this myth?

allum McCormick

M0MCX

07976 631881

http://www.m0mcx.co.uk/

From: SkyWires@yahoogroups.com [mailto:SkyWires@yahoogroups.com] On Behalf Of Frank
Sent: 28 June 2007 07:59
To: SkyWires@yahoogroups.com
Subject: Re: [SkyWires] N4PC loop

Hi Mel

I have uploaded the files /folder/N4PC. might not be a scanner expert but I think

it´s readable

73/Frank/SM5QU/KC0YQI

----- Original Message -----

From: icra@galaxynet. <mailto:icra@...> com

To: SkyWires@yahoogroup <mailto:SkyWires@yahoogroups.com> s.com

Sent: Thursday, June 28, 2007 8:40 AM

Subject: Re: [SkyWires] N4PC loop

> I have also tried to find info on the N4PC loop. As I understand ,
> as described in CQ Dec-1990 , it´s a square
> with 51 feet legs . A phasing line extends from corner to corner and
> is feed by a balanced transmission line attached at the center
> of the phasing line.
> Now.. that might not be the one described inEZNec (dont have that).
> There are several versions of the loop as I understand
> it and the one descibed in CQ is a futher development of the
> original.
> I have the CQ article if You´d like it I could try to scan it and
> upload it to the group.
>
Even if no one else is interested, I would like to see it.....

Mel
N7OKL

2463. to Moderator

Yahoo group: SkyWires
Date: 2007-07-12 22:53:12 UTC
From: Commander John
Topic: 2463 Message: 2463

If you can't properly moderate this group from the likes of the previous message I will be unsubscribing from this group.
john w9zy

2464. Re: [SkyWires] to Moderator

Yahoo group: SkyWires
Date: 2007-07-12 23:11:39 UTC
From: Sarge
Topic: 2463 Message: 2464

Oh good grief, one darned spam got through. Just delete it.

If you can't properly moderate this group from the likes of the previous message I will be unsubscribing from this group.
john w9zy

No virus found in this incoming message.
Checked by AVG Free Edition.
Version: 7.5.476 / Virus Database: 269.10.4/898 - Release Date: 7/12/2007 4:08 PM

2465. Re: [SkyWires] to Moderator

Yahoo group: SkyWires
Date: 2007-07-12 23:29:29 UTC
From: David Shrum
Topic: 2463 Message: 2465

Thanks for your support.
Dave N8PU

Sarge wrote:
> Oh good grief, one darned spam got through. Just delete it.
>

2466. Re: [SkyWires] to Moderator

Yahoo group: SkyWires
Date: 2007-07-12 23:28:37 UTC
From: David Shrum
Topic: 2463 Message: 2466

Well John I guess it's good by to you, that is unless you can get the list owner to give us a little more leeway. This is GETTING TO BE A VERY TIRING ATTACK ON US. We have explained over and over and over again that the list owner DID NOT give us the ability to put new members on a moderated status for their first few posts, we HAVE looked and the list owner reserved that privilege for them self. I for one am a moderator on another ham related group and we DO have to approve new members and a few posts there.

If I seems a little touchy on this, it is because this isn't the first time some one has ask us why we allow this to happen, all we CAN do is to ban after the fact, if we could accept or reject 'new' members, I for one would like to have some one tell us why we should allow them into the group, before they become members, but as I said that is not an option for us.
Dave N8PU

Commander John wrote:
> If you can't properly moderate this group from the likes of the
> previous message I will be unsubscribing from this group.
> john w9zy
>

2467. Re: [SkyWires] to Moderator

Yahoo group: SkyWires
Date: 2007-07-12 23:30:25 UTC
From: list email filter
Topic: 2463 Message: 2467

Buh-bye now... seriously, the last email I got from this group was:

RE: [SkyWires] N4PC loop

and it certainly wasn't spam.

Perhaps you should consider updating or improving your email client,
there are lots of them out there, that are free that do a pretty good
job of protecting you from ever seeing the spam and phishing attacks.

Seriously, don't leave the group, but do think about some
'self-protection'. The internet is an increasingly hostile environment,
and everyone needs to do what they can to stay safe. Simply relying on
others to do so is really never going to be successful. Take on some of
the responsibility, no matter how effective or restrictive a group is,
you'll still have some junk slip through sometimes.

73,

Erik, N7HMS
IRLP Node 3804 445.975 Simp PL103.5
North Bend, WA CN97ck

Emails sent directly to this address instead of going through a yahoo
group are automatically processed as junk mail, so I never see them. If
you want to email me directly, please use 'mycall' at 12bars dot com,
thanks.

Commander John wrote:
> If you can't properly moderate this group from the likes of the previous message I will be unsubscribing from this group.
> john w9zy
>

2468. Re: [SkyWires] to Moderator

Yahoo group: SkyWires
Date: 2007-07-12 23:41:38 UTC
From: Sarge
Topic: 2463 Message: 2468

ya can't catch a law breaker until they break a law. Then ya hang 'em from a tall tree. This is USENET, not Eutopia.

> Thanks for your support.
> Dave N8PU
>
> Sarge wrote:
>> Oh good grief, one darned spam got through. Just delete it.
>>
>
>
>
> Yahoo! Groups Links
>
>
>
>
>
>
> --
> No virus found in this incoming message.
> Checked by AVG Free Edition.
> Version: 7.5.476 / Virus Database: 269.10.4/898 - Release Date: 7/12/2007
> 4:08 PM
>
>

2469. 2 Turn Loop?

Yahoo group: SkyWires
Date: 2007-07-16 05:17:44 UTC
From: Michael
Topic: 2469 Message: 2469

Does any one care to give their opinion on this antenna?
(I found it in the groups "File" section)
Good, Bad? Is it worth a try?
Is there a UV stable zip cord?
OR use 300 Ohm twin lead OR?
Any one else have any other suggestions on this?

Michael
N7RDV

2470. Re: 2 Turn Loop?

Yahoo group: SkyWires
Date: 2007-07-16 12:06:12 UTC
From: stocktonclinton
Topic: 2469 Message: 2470

Greetings Michael,

I have not tried a two turn full wave loop antenna.

While I am intrigued by the 2 files I like approaching
these things in a practical sense. I don't like to spend
a lot of time fixing antennas when I could be on the air.

I would suggest building two loops, One a one turn standard full
wave loop and then a two turn loop both for ten meters. That way you
can actually switch back and forth and see which one really does what
you want.

The turn loop [each turn being a full wave] means you are using the
same space as you would for a one turn loop. On 40, and espically on
80 and 160 you will have a lot of lamp cord between supports. I
would venture to say it will require some repair time.

My choice would be to get some copper weld wire from the wire man or
another suppliers and some 300 ohm line, and use a good tuner.

If you do build a two turn loop I would love to see your results, and
also let us know how many times a year you have to repair or replace
the lamp cord.

I hope I haven't poured out too much cold water on the idea. I don't
know of anyone personally who use one, and I was just trying to be to
practical and safe with the regular skywire loop.

My loop is a full wave 40 meter loop [144 feet] fed with 300 ohm
feed line and tuned with an MFJ 974HB tuner. I have an Off Center
Fed 137 foot wire that I use on 80 and once in a while 40. The loop
is better on 40 in most cases.

God Bless and 73's
Clint AGØK

--- In SkyWires@yahoogroups.com, "Michael" <n7rdv@...> wrote:
>
> Does any one care to give their opinion on this antenna?
> (I found it in the groups "File" section)
> Good, Bad? Is it worth a try?
> Is there a UV stable zip cord?
> OR use 300 Ohm twin lead OR?
> Any one else have any other suggestions on this?
>
> Michael

> N7RDV
>

2471. RE: [SkyWires] 2 Turn Loop?

Yahoo group: SkyWires
Date: 2007-07-16 22:54:05 UTC
From: Callum M0MCX
Topic: 2469 Message: 2471

I have modelled a loop like this for 40m and it doesn't have anything going for it bar 0.1 dBi extra gain depending on how you feed it and almost no extra gain for low angle DX.

I'd personally go either fully two element loop (like a quad or something) or stay single. Building a passive reflector about 5% larger than the driven element, a quarter wavelength behind the driven is worth it though gaining you 5.4dBi at 20 degrees against 0.5 dBi at 20 degrees for a single. If you build a passive, you can then feed the driven element at the bottom of the loop (like a horizontal loop) which makes the engineering more simple.

73,

Callum McCormick

M0MCX

07976 631881

http://www.m0mcx.co.uk/

From: SkyWires@yahoogroups.com [mailto:SkyWires@yahoogroups.com] On Behalf Of Michael
Sent: 16 July 2007 06:18
To: SkyWires@yahoogroups.com
Subject: [SkyWires] 2 Turn Loop?

Does any one care to give their opinion on this antenna?
(I found it in the groups "File" section)
Good, Bad? Is it worth a try?
Is there a UV stable zip cord?
OR use 300 Ohm twin lead OR?
Any one else have any other suggestions on this?

Michael
N7RDV

2472. 2 Turn Loop?

Yahoo group: SkyWires
Date: 2007-07-17 18:02:03 UTC
From: Michael
Topic: 2469 Message: 2472

Thank you both!
That is what I had figured.
But, it never hurts to ask!

What it looks like I will end up
putting up is 228 foot of #14
insulated primary wire at about
45 - 50 feet in height.

Feed with 55 - 60 feet of 600 Ohm
open wire line and a 4:1 Balun at
the shack, then 20 feet of RG-213
to the tuner.

3 weeks left until vacation time and
the antenna goes up!

73
Michael
N7RDV

2473. RE: [SkyWires] 2 Turn Loop?

Yahoo group: SkyWires
Date: 2007-07-17 19:08:30 UTC
From: Callum M0MCX
Topic: 2469 Message: 2473

I have emailed you privately, the 2d far field radiation patterns of a 228 feet loop at 45 feet for 75m (3.8Mhz) through to 10m (28.5Mhz)

The 40m band looks great!

Callum McCormick

M0MCX

07976 631881

http://www.m0mcx.co.uk/

From: SkyWires@yahoogroups.com [mailto:SkyWires@yahoogroups.com] On Behalf Of Michael
Sent: 17 July 2007 19:02
To: SkyWires@yahoogroups.com
Subject: [SkyWires] 2 Turn Loop?

Thank you both!
That is what I had figured.
But, it never hurts to ask!

What it looks like I will end up
putting up is 228 foot of #14
insulated primary wire at about
45 - 50 feet in height.

Feed with 55 - 60 feet of 600 Ohm
open wire line and a 4:1 Balun at
the shack, then 20 feet of RG-213
to the tuner.

3 weeks left until vacation time and
the antenna goes up!

73
Michael
N7RDV

2475. Re: [SkyWires] to Moderator

Yahoo group: SkyWires
Date: 2007-07-19 18:31:37 UTC
From: Christopher Zeman
Topic: 2463 Message: 2475

Exactly. I am in a number of Yahoo groups, and a SPAMMER gets in every so often. You delete it, move on, and anxiously wait for the next news story about a SPAMMER getting murdered. I get a lot more SPAM sent to my email accounts from sources other than Yahoo Groups. The SPAMMERS will stop at nothing to reach everyone with their messages. NOTHING

Chris
N9XCR

Sarge wrote:
>
> Oh good grief, one darned spam got through. Just delete it.
>
>
> If you can't properly moderate this group from the likes of the
> previous message I will be unsubscribing from this group.
> john w9zy
>
> ---
> No virus found in this incoming message.
> Checked by AVG Free Edition.
> Version: 7.5.476 / Virus Database: 269.10.4/898 - Release Date:
> 7/12/2007 4:08 PM
>
>

2477. Re: [SkyWires] to Moderator>>do your job

Yahoo group: SkyWires
Date: 2007-07-19 21:22:25 UTC
From: Commander John
Topic: 2463 Message: 2477

Christopher Zeman <chris_yahoo.com@...> wrote: Exactly. I am in a number of Yahoo groups, and a SPAMMER gets in every so often. You delete it, move on, and anxiously wait for the next news story about a SPAMMER getting murdered. I get a lot more SPAM sent to my email accounts from sources other than Yahoo Groups. The SPAMMERS will stop at nothing to reach everyone with their messages. NOTHING

Chris
N9XCR

Sarge wrote:
Oh good grief, one darned spam got through. Just delete it.

If you can't properly moderate this group from the likes of the previous message I will be unsubscribing from this group.
john w9zy

No virus found in this incoming message.
Checked by AVG Free Edition.
Version: 7.5.476 / Virus Database: 269.10.4/898 - Release Date: 7/12/2007 4:08 PM

W9ZY
.... Commander John ....

2478. Re: [SkyWires] to Moderator>>do your job

Yahoo group: SkyWires
Date: 2007-07-19 22:55:35 UTC
From: David Shrum
Topic: 2463 Message: 2478

Just in case any one STILL thinks we (the Moderators) aren't doing our jobs; this is what the group settings are for memberships, and NO, we have no way to change it.

Membership Type: Open (anyone can join)

Dave N8PU

Commander John wrote:
>
>
> */Christopher Zeman <chris_yahoo.com@...>/* wrote:
>
>
> **
>
>
> *W9ZY*
> */ .... Commander John ..../*
> */ /*

2479. Re: [SkyWires] to Moderator>>do your job

Yahoo group: SkyWires
Date: 2007-07-20 15:49:13 UTC
From: Jason Buchanan
Topic: 2463 Message: 2479

On Jul 19, 2007, at 6:55 PM, David Shrum wrote:

> Just in case any one STILL thinks we (the Moderators) aren't doing our
> jobs; this is what the group settings are for memberships, and NO, we
> have no way to change it.
>
> Membership Type: Open (anyone can join)
>
> Dave N8PU

I moderate the WinDRM mailing list on googlegroups. Never had a problem with spam, porn, etc.

I built a SkyWires group on Google http://groups.google.com/group/skywires but it's only got one member: me hi - i'm not recommending everyone jump ship from Yahoo but if the porn continues to creep in there are alternatives.

thanks,
Jason

--
73 Jason N1SU
http://n1su.com/loop.html

2480. Re: [SkyWires] to Moderator>>do your job

Yahoo group: SkyWires
Date: 2007-07-20 17:12:46 UTC
From: chasm@texas.net
Topic: 2463 Message: 2480

On Fri, 20 Jul 2007 11:49:13 -0400, Jason Buchanan <jsb@...> wrote:
>
>I built a SkyWires group on Google http://groups.google.com/group/
>skywires but it's only got one member: me hi - i'm not recommending
>everyone jump ship from Yahoo but if the porn continues to creep in
>there are alternatives.
>
>
>thanks,
>Jason

just do not understand how you get spam of any kind on any list when you use the tools provided to you. now, I don't know too much about this, having started with a lunchbox with a yellow screen and operating BBS' then fidonet then joining elists on the net (contrary to popular opinion - I NEVER heard of anyone named GORE concerning the origin of the internet.. just some company called DOD or USArmy or something like that) so, I have owned, operated, fought in the flamewars of the old BBS days and today, only own about 15 elists and one reflector (whatever that is). Point is, I am a newby at this but isfa I can tell, Yahoo may have a heck of a lot of problems but their FREE elists and herd of management tools are not part of them. Mostly, people not being willing to use these tools for fear of that GD'd PC Crap and OFFENDING someone, iow... the list owners are the cause of a list on YHG having spam.

I do not have any spam on my lists. but then, almost all of my lists are completely MODERATED so that nothing gets posted unless I or one of my two doz moderators lets it thru. ALL new members are automatically moderated and stay that way (most of my members have been moderated since they joined -- going back to 1998) The lists are kept ON TOPIC and are not extremely busy. I have approx 4,000 members on all of my lists. (not counting the 3 or 4 under a 100 members.). And, this thread is one that would never have started on my lists because there would be no reason for it. ie -- no spam. if there were, the comments would not have made it to the light of day. They would have come directly to me OFF LIST and I would have investigated, solved the problem. It really violates RFC 1855, Rules of Netiquette to be criticizing the moderator ON the list. That has happened a handful of times but those messages were caught and off list discussions determined that those members really wanted to belong to a different venue.<G>.

enuff, I say contact the moderator off list and assist him in setting the list to full moderation if necessary but certainly to put new members on moderation for at least a year. the old rule of a few messages, etc does not work. A few have tried that and then taught me to set a one yr wait.

cheers
73/chas

--
K5DAM Houston EL29fu AAR6TU
Jason .. delete any or all of this in either direction of this line.... chas
--
Charles L Hamilton, chasm@..., Houston, TX
Owner/Moderator of Cast Bullet, Black Powder, Carcinoid Cancer,
RV-G, Patriot, Canon-DSLR, BulletSmithing, Reload and other elists.
To Join the SHOOTING lists:
http://groups.yahoo.com/group/bulletswaging/join swaging
http://groups.yahoo.com/group/bp-L/join BPCR and ML, REAL BP!!
http://groups.yahoo.com/group/cb-L/join cast bullet, smokeless
http://groups.yahoo.com/group/reload-L/join generic reloading
http://groups.yahoo.com/group/rimfires/join all kinds of rimfire
http://groups.yahoo.com/group/SandW/join S&Wesson list
http://groups.yahoo.com/group/schuetzen/join SCHUETZEN says it all
http://groups.yahoo.com/group/jagdhutte/join "Classified" adverts
http://groups.yahoo.com/group/SchuetzenChat/join offtopic elsewhere
http://guns-up.blogspot.com/

2481. Re: [SkyWires] to Moderator>>do your job

Yahoo group: SkyWires
Date: 2007-07-20 17:13:19 UTC
From: Andy
Topic: 2463 Message: 2481

The problem of the limitations of this group's Moderators was discussed a few years ago.

I think the problem is either that the group's Owner didn't grant full powers to the Moderators, or that the SkyWires group was somehow set up with some of the moderator controls permanently missing. You heard that right.

The Moderators are unable to stop a spammer until after-the-fact. Which they are vigilant about. But not until some spam has already gotten through. You can't stop something you don't know is coming.

Andy

2482. Re: [SkyWires] to Moderator>>do your job

Yahoo group: SkyWires
Date: 2007-07-20 17:17:30 UTC
From: chasm@texas.net
Topic: 2463 Message: 2482

On Fri, 20 Jul 2007 11:49:13 -0400, Jason Buchanan <jsb@...> wrote:

>
>> Just in case any one STILL thinks we (the Moderators) aren't doing our
>> jobs; this is what the group settings are for memberships, and NO, we
>> have no way to change it.
>>
>> Membership Type: Open (anyone can join)
>>
>> Dave N8PU

feel free to give me the necessaries and I will set this list to moderated and
you will not have any spam problems. OPEN is not the only option.

Group Settings
< Back to Management Group Settings Help
Membership Type and Welcome Message (Edit)
Membership Type: Restricted (you approve all requests for membership)

if you really want this fixed, let me know.
chas

...

2483. Re: [SkyWires] to Moderator>>do your job

Yahoo group: SkyWires
Date: 2007-07-20 17:18:58 UTC
From: chasm@texas.net
Topic: 2463 Message: 2483

On Fri, 20 Jul 2007 13:13:19 -0400, Andy <Andy.groups@...> wrote:

>The problem of the limitations of this group's Moderators was discussed a
>few years ago.
>
>I think the problem is either that the group's Owner didn't grant full
>powers to the Moderators, or that the SkyWires group was somehow set up with
>some of the moderator controls permanently missing. You heard that right.
>

who is the list owner??? and there should be at least TWO of them.
chas

...

2484. Re: to Moderator

Yahoo group: SkyWires
Date: 2007-07-20 17:53:50 UTC
From: Mike
Topic: 2463 Message: 2484

I take a proactive approach and forward the spam to abuse@....
If it originated from yahoo then they're history.

--- In SkyWires@yahoogroups.com, Christopher Zeman
<chris_yahoo.com@...> wrote:
>
> Exactly. I am in a number of Yahoo groups, and a SPAMMER gets in
every
> so often. You delete it, move on, and anxiously wait for the next
news
> story about a SPAMMER getting murdered. I get a lot more SPAM sent
to my
> email accounts from sources other than Yahoo Groups. The SPAMMERS
will
> stop at nothing to reach everyone with their messages. NOTHING
>
> Chris
> N9XCR
>
>
> Sarge wrote:
> >
> > Oh good grief, one darned spam got through. Just delete it.
> >
> >
> > If you can't properly moderate this group from the likes of
the
> > previous message I will be unsubscribing from this group.
> > john w9zy
> >
> > ----------

> > No virus found in this incoming message.
> > Checked by AVG Free Edition.
> > Version: 7.5.476 / Virus Database: 269.10.4/898 - Release
Date:
> > 7/12/2007 4:08 PM
> >
> >
>

2485. Re: [SkyWires] to Moderator>>do your job

Yahoo group: SkyWires
Date: 2007-07-20 17:54:30 UTC
From: chasm@texas.net
Topic: 2463 Message: 2485

ok, looking at the Members /Moderators section there are three (3) moderators
all created in 2004 and one owner

one, some or all of the three moderators need to be empowered so that he or
they can reset the membership settings to close this list to email address
mining, stop accepting attachments (primary method of introducing malware and
all sorts of virus type stuff.) and moderate messages until you know who you
can trust and who you cannot. oh, and of course, set all new members to
moderated. and that is just a start. Attachments can be sent to a mod and he
can put them into the FILE or PHOTO website section.
fwiw
73/chas
--
K5DAM Houston EL29fu AAR6TU

On Fri, 20 Jul 2007 13:13:19 -0400, Andy <Andy.groups@...> wrote:

>The problem of the limitations of this group's Moderators was discussed a
>few years ago.
>
>I think the problem is either that the group's Owner didn't grant full
>powers to the Moderators, or that the SkyWires group was somehow set up with
>some of the moderator controls permanently missing. You heard that right.
>
>The Moderators are unable to stop a spammer until after-the-fact. Which
>they are vigilant about. But not until some spam has already gotten
>through. You can't stop something you don't know is coming.
>
>Andy

2486. 160 vs 80 loop ?

Yahoo group: SkyWires
Date: 2007-07-20 18:00:30 UTC
From: oh6bi
Topic: 2486 Message: 2486

Hello all in the group !

I have been thinking to make 160mb loop, I have good
possibilities to make it. It will be 40x40 meters square,
but I dont know what are differencies between 80 mb and 160mb loops
concerning upper bands, the antenna should cover all HAM bands.
Feedpoint will be one of the dorners.

My question is: what is best solution to work 80 to 10m bands.
Is it as good to make 160 loop as 80 loop ???

About 160m band , I am sometimes speaking there but it is not
necessary if 80m loop works better with higher frequensies...

The height from ground will be abt 18 meters and the loop will be
almost in free space.

At the moment I am feeding 62 meter long wire but there are some
TVIs and Stereoreceiver problems. In this flat there are more than
hundred families and if someone is complaining it means there can be
tens of new complainings....

Please give Your suggestions
best regards and 73s ge rami, oh6bi

2487. Re: to Moderator>>do your job

Yahoo group: SkyWires
Date: 2007-07-20 17:59:05 UTC
From: Richard Zolla
Topic: 2463 Message: 2487

Are we ever going to get back to talking about antennas?????

Rick N6NKN

--- In SkyWires@yahoogroups.com, <chasm@...> wrote:
>
> ok, looking at the Members /Moderators section there are three (3)
moderators
> all created in 2004 and one owner
>
> one, some or all of the three moderators need to be empowered so
that he or
> they can reset the membership settings to close this list to email
address
> mining, stop accepting attachments (primary method of introducing
malware and
> all sorts of virus type stuff.) and moderate messages until you
know who you
> can trust and who you cannot. oh, and of course, set all new
members to
> moderated. and that is just a start. Attachments can be sent to a
mod and he
> can put them into the FILE or PHOTO website section.
> fwiw
> 73/chas
> --
> K5DAM Houston EL29fu AAR6TU
>
>
>
>
> On Fri, 20 Jul 2007 13:13:19 -0400, Andy <Andy.groups@...> wrote:
>
> >The problem of the limitations of this group's Moderators was
discussed a
> >few years ago.
> >
> >I think the problem is either that the group's Owner didn't grant
full
> >powers to the Moderators, or that the SkyWires group was somehow
set up with
> >some of the moderator controls permanently missing. You heard
that right.
> >
> >The Moderators are unable to stop a spammer until after-the-fact.

Which
> >they are vigilant about. But not until some spam has already
gotten
> >through. You can't stop something you don't know is coming.
> >
> >Andy
>

2488. Re: [SkyWires] to Moderator>>do your job

Yahoo group: SkyWires
Date: 2007-07-20 16:22:39 UTC
From: Vince Werber
Topic: 2463 Message: 2488

What is this anyway???

Modern email clients have their own filters and if configured correctly by the 'operator' you don't need to see any spam or whatever...

I know of only one list that doesn't get spam... that one I am a co-moderator of but you must understand that that one group has seven (7) moderators in each different part of the world... even then one can get by...

If you don't like spam use the filters in your email client... or shut off your computer and read all that junk mail you get from the U.S.P.O....

If you really want to have something to rave about... get a domain and play...

73
vince
ka1iic
http://vincewerber.org

On Friday 20 July 2007 17:12, chasm@... wrote:
> On Fri, 20 Jul 2007 11:49:13 -0400, Jason Buchanan <jsb@...> wrote:
> >I built a SkyWires group on Google http://groups.google.com/group/
> >skywires but it's only got one member: me hi - i'm not recommending
> >everyone jump ship from Yahoo but if the porn continues to creep in
> >there are alternatives.
> >
> >
> >thanks,
> >Jason
>
> just do not understand how you get spam of any kind on any list when you
> use the tools provided to you. now, I don't know too much about this,
> having started with a lunchbox with a yellow screen and operating BBS' then
> fidonet then joining elists on the net (contrary to popular opinion - I
> NEVER heard of anyone named GORE concerning the origin of the internet..
> just some company called DOD or USArmy or something like that) so, I have
> owned, operated, fought in the flamewars of the old BBS days and today,
> only own about 15 elists and one reflector (whatever that is). Point is,
> I am a newby at this but isfa I can tell, Yahoo may have a heck of a lot of
> problems but their FREE elists and herd of management tools are not part of
> them. Mostly, people not being willing to use these tools for fear of that
> GD'd PC Crap and OFFENDING someone, iow... the list owners are the cause
> of a list on YHG having spam.
>
> I do not have any spam on my lists. but then, almost all of my lists are
> completely MODERATED so that nothing gets posted unless I or one of my two

> doz moderators lets it thru. ALL new members are automatically moderated
> and stay that way (most of my members have been moderated since they joined
> -- going back to 1998) The lists are kept ON TOPIC and are not extremely
> busy. I have approx 4,000 members on all of my lists. (not counting the 3
> or 4 under a 100 members.). And, this thread is one that would never
> have started on my lists because there would be no reason for it. ie -- no
> spam. if there were, the comments would not have made it to the light of
> day. They would have come directly to me OFF LIST and I would have
> investigated, solved the problem. It really violates RFC 1855, Rules of
> Netiquette to be criticizing the moderator ON the list. That has happened
> a handful of times but those messages were caught and off list discussions
> determined that those members really wanted to belong to a different
> venue.<G>.
>
> enuff, I say contact the moderator off list and assist him in setting the
> list to full moderation if necessary but certainly to put new members on
> moderation for at least a year. the old rule of a few messages, etc does
> not work. A few have tried that and then taught me to set a one yr wait.
>
> cheers
> 73/chas
> --
> K5DAM Houston EL29fu AAR6TU
> Jason .. delete any or all of this in either direction of this line....
> chas

2489. RE: [SkyWires] Re: to Moderator>>do your job

Yahoo group: SkyWires
Date: 2007-07-20 20:29:32 UTC
From: Callum M0MCX
Topic: 2463 Message: 2489

>>> Are we ever going to get back to talking about antennas?????

Agreed!

All the moderators need to do it track down the owner and have all their privileges set as "owners". They can then configure the group as most others have them, by request.

Vince, Your suggestion won't work old man, we all get the spam because it comes from the group.

Callum McCormick

M0MCX

07976 631881

http://www.m0mcx.co.uk/

From: SkyWires@yahoogroups.com [mailto:SkyWires@yahoogroups.com] On Behalf Of Richard Zolla
Sent: 20 July 2007 18:59
To: SkyWires@yahoogroups.com
Subject: [SkyWires] Re: to Moderator>>do your job

Are we ever going to get back to talking about antennas?????

Rick N6NKN

--- In SkyWires@yahoogroup <mailto:SkyWires%40yahoogroups.com> s.com, <chasm@...> wrote:
>
> ok, looking at the Members /Moderators section there are three (3) moderators
> all created in 2004 and one owner
>
> one, some or all of the three moderators need to be empowered so that he or
> they can reset the membership settings to close this list to email address
> mining, stop accepting attachments (primary method of introducing malware and
> all sorts of virus type stuff.) and moderate messages until you know who you
> can trust and who you cannot. oh, and of course, set all new members to

> moderated. and that is just a start. Attachments can be sent to a
mod and he
> can put them into the FILE or PHOTO website section.
> fwiw
> 73/chas
> --
> K5DAM Houston EL29fu AAR6TU
>
>
>
>
> On Fri, 20 Jul 2007 13:13:19 -0400, Andy <Andy.groups@...> wrote:
>
> >The problem of the limitations of this group's Moderators was
discussed a
> >few years ago.
> >
> >I think the problem is either that the group's Owner didn't grant
full
> >powers to the Moderators, or that the SkyWires group was somehow
set up with
> >some of the moderator controls permanently missing. You heard
that right.
> >
> >The Moderators are unable to stop a spammer until after-the-fact.
Which
> >they are vigilant about. But not until some spam has already
gotten
> >through. You can't stop something you don't know is coming.
> >
> >Andy
>

2490. RE: [SkyWires] 160 vs 80 loop ?

Yahoo group: SkyWires
Date: 2007-07-20 20:46:49 UTC
From: Callum M0MCX
Topic: 2486 Message: 2490

Rami,

I was a loop fanatic. I still am but I use them as mono-banders for the low bands (I have a 40m and an 80m loop). 160m loop at 18 meters will be fantastic for one thing, 160 meters. Everything else is a compromise. The radiation pattern for multiple wavelength loops gets worse the more wavelengths you fit in and you'll get neither cloud-warming or DX capability.

At 1.9 Mhz, you'll get a lovely cloud-warmer with an 8.7dBi vertical gain, sloping off to -5 dBi at 20 degrees - this is fantastic for local (sub 1,000 miles) 160m

At 3.8 Mhz, you'll get a clover leaf type pattern with the main gain at about 6.0 dBi at 37 degrees (pretty good for 1,000 copies and some DX potential with a fair wind)

At 7.2 Mhz, you'll get something that's an utter waste of time; -5.0 dBi in the cloud-warming angle and -2.9dBi at 60 degrees. Best to use a 6 inch nail instead (this is AWFULL)

At 14.25 Mhz, you'll get a pair of shooting lobes at 56 degrees with a reasonable gain of 5.5 dBi (lobes too high for anything greater than 1,000 miles, use a basic vertical instead)

At 21.25 Mhz, you'll have large flower pattern with best gain of 7.5 dBi at 37 degrees (lobes not low enough for decent DX - use a vertical)

At 28.5 Mhz, you have a 7.5 dBi gain at 26 degrees (lobes not low enough, use a vertical)

You'll need a tuner - and feed it with ladder line because there's no way you'll match it with coax well enough to go through the bands.

(All in my humble opinion - and experience!)

Callum McCormick

M0MCX

07976 631881

http://www.m0mcx.co.uk/

From: SkyWires@yahoogroups.com [mailto:SkyWires@yahoogroups.com] On Behalf Of oh6bi
Sent: 20 July 2007 19:01

To: SkyWires@yahoogroups.com
Subject: [SkyWires] 160 vs 80 loop ?

Hello all in the group !

I have been thinking to make 160mb loop, I have good
possibilities to make it. It will be 40x40 meters square,
but I dont know what are differencies between 80 mb and 160mb loops
concerning upper bands, the antenna should cover all HAM bands.
Feedpoint will be one of the dorners.

My question is: what is best solution to work 80 to 10m bands.
Is it as good to make 160 loop as 80 loop ???

About 160m band , I am sometimes speaking there but it is not
necessary if 80m loop works better with higher frequensies...

The height from ground will be abt 18 meters and the loop will be
almost in free space.

At the moment I am feeding 62 meter long wire but there are some
TVIs and Stereoreceiver problems. In this flat there are more than
hundred families and if someone is complaining it means there can be
tens of new complainings....

Please give Your suggestions
best regards and 73s ge rami, oh6bi

2491. Re: [SkyWires] 160 vs 80 loop ?

Yahoo group: SkyWires
Date: 2007-07-25 14:48:39 UTC
From: Steve Ward
Topic: 2486 Message: 2491

A 160 meter loop should work all bands 160 - 10. On the design frequency, if in the horizontal plane, most of the energy will be high angle and should be good for regional contacts out to about 600 miles. A 160 meter loop operating on 80 meters will have a lower angle of takeoff and should produce good results with local and DX. As a general rule, the takeoff angle becomes lower as you increase in frequency, which should be very good for DX on 20 - 10. Some feed the loop with coax and some feed with ladder line. I have never had a problem using coax so long as the run is under 100 feet. If more than 100 feet, I would suggest using ladder line from the loop to a 4:1 remote balun just outside the shack and then a short run of quality coax to the rig.

Good luck OM. Let me know how it turns out. 73 de N5ETV

oh6bi <9j2bi@...> wrote:
Hello all in the group !

I have been thinking to make 160mb loop, I have good
possibilities to make it. It will be 40x40 meters square,
but I dont know what are differencies between 80 mb and 160mb loops
concerning upper bands, the antenna should cover all HAM bands.
Feedpoint will be one of the dorners.

My question is: what is best solution to work 80 to 10m bands.
Is it as good to make 160 loop as 80 loop ???

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necessary if 80m loop works better with higher frequensies...

The height from ground will be abt 18 meters and the loop will be
almost in free space.

At the moment I am feeding 62 meter long wire but there are some
TVIs and Stereoreceiver problems. In this flat there are more than
hundred families and if someone is complaining it means there can be
tens of new complainings....

Please give Your suggestions
best regards and 73s ge rami, oh6bi

Choose the right car based on your needs. Check out Yahoo! Autos new Car Finder tool.

2492. Re: [SkyWires] 160 vs 80 loop ?

Yahoo group: SkyWires
Date: 2007-07-25 15:17:56 UTC
From: Kyle A
Topic: 2486 Message: 2492

I have a 160, and use it on all the HF bands with no problems. I have even used it on 6m a couple of times. Mine is 30-50 feet in the air as the land slopes up and down around it. 80 for example gives me NVIS and DX. So does 40. 160 works great, but I don't know how far I can get yet; it seems to work the whole US from here (Georgia). 20 works to the horizon, then has the normal skip zone, works all over the US and I've worked Europe. 17, I've worked as far as the Leeward Islands (so far). 10 has been very active, and I've worked all over the US, and also check into local nets hearing all the local check ins that are either DX or < ~80 miles.

My loop has only been up a few months. I'm using 100W max, and I hook up my loop differently than most.

> the antenna should cover all HAM bands.
Well, I'm sorry, you're just not going to be able to work that 1.2GHz band with your loop 160m loop. ;)

73,
Kyle
W4KDA

oh6bi wrote:
>
>
> Hello all in the group !
>
> I have been thinking to make 160mb loop, I have good
> possibilities to make it. It will be 40x40 meters square,
> but I dont know what are differencies between 80 mb and 160mb loops
> concerning upper bands, the antenna should cover all HAM bands.
> Feedpoint will be one of the dorners.
>
> My question is: what is best solution to work 80 to 10m bands.
> Is it as good to make 160 loop as 80 loop ???
>
> About 160m band , I am sometimes speaking there but it is not
> necessary if 80m loop works better with higher frequensies...
>
> The height from ground will be abt 18 meters and the loop will be
> almost in free space.
>
> At the moment I am feeding 62 meter long wire but there are some
> TVIs and Stereoreceiver problems. In this flat there are more than
> hundred families and if someone is complaining it means there can be
> tens of new complainings....

>
> Please give Your suggestions
> best regards and 73s ge rami, oh6bi
>
>

2493. 60m or 60m horz loop

Yahoo group: SkyWires
Date: 2007-07-25 16:26:13 UTC
From: Sam Morgan
Topic: 2493 Message: 2493

I presently have a 60m loop ~188' The loop lays on the 2nd floor tar and gravel roof of my apartment building at 20'. The roof shape is such that the loop is a rectangle ~26' x ~68'. It's fed in a corner with ~25' of coax into a T tuner in the shack. I mainly use the loop for rx on all bands but have transmitted on 60m an 40m with reasonable success out to 750-1000 miles. Using 80watts and getting 59 to 59+ reports.

My question is related to trying to run the loop on 80m or 160m. As is I can't even get 100 miles away on 160m. On 80m much the same I can not be heard sufficiently to even get a signal report.

If I were to extend the loops long sides from 68' to 115'. I'm of the opinion that I would see very little improvement on 80m. Not worth the effort. What's the groups opinion?

I have also considered doing the above expansion to resonate it on 80m and adding a coax stub (I forget right now if it's a 1/4 wave or 1/2 wave?) but it would make the loop appear to be an open 1/2 wavelength loop on 160m. While being a closed loop for the rest of the hf frequencies from 80m -10m.

Again I wonder if the effort would be worth the results? The low height above ground being only 20' and it laying on the roof as well as the narrow rectangle shape, all seem to stack the deck against it as a transmitting antenna. And I'm not sure I would gain anything on receive either? Opinions?

I'm only considering this as a local friend is bugging me to get on 80m and 160m with him. I can already talk to him but no one else in the group can hear me.

TIA
--
GB & 73's
KA5OAI
Sam Morgan

2494. [SkyWires] 60m or 80m horz loop

Yahoo group: SkyWires
Date: 2007-07-25 16:39:38 UTC
From: Sam Morgan
Topic: 2494 Message: 2494

Sorry subject line was wrong on the other attempt.....
leave it as a 60m loop
or expand to a 80m loop
(plus 1/2 Wavelength on 160m)

try this again
==========
I presently have a 60m loop ~188' The loop lays on the 2nd floor tar and gravel roof of my apartment building at 20'. The roof shape is such that the loop is a rectangle ~26' x ~68'. It's fed in a corner with ~25' of coax into a T tuner in the shack. I mainly use the loop for rx on all bands but have transmitted on 60m an 40m with reasonable success out to 750-1000 miles. Using 80watts and getting 59 to 59+ reports.

My question is related to trying to run the loop on 80m or 160m. As is I can't even get 100 miles away on 160m. On 80m much the same I can not be heard sufficiently to even get a signal report.

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Again I wonder if the effort would be worth the results? The low height above ground being only 20' and it laying on the roof as well as the narrow rectangle shape, all seem to stack the deck against it as a transmitting antenna. And I'm not sure I would gain anything on receive either? Opinions?

I'm only considering this as a local friend is bugging me to get on 80m and 160m with him. I can already talk to him but no one else in the group can hear me.

TIA
--
GB & 73's
KA5OAI
Sam Morgan

2495. Re: [SkyWires] 60m or 60m horz loop

Yahoo group: SkyWires
Date: 2007-07-26 03:30:04 UTC
From: Sarge
Topic: 2493 Message: 2495

On 160, 80 and probably 40, what you have is a NVIS antenna.
You are projecting straight up and the signals of 40meters and lower freqs
are bouncing off the f layer and back to earth in an inverted cone shape.
The cone will cover out to maybe a few hundred miles depending on power and
freq. That is what NVIS is for. Your roof is the "ground reflector".
The other bands are higher freqs and they penetrate the layer rather than
bounce off.

Sarge

2497. Putting a gound counterpoise under this big loop??

Yahoo group: SkyWires
Date: 2007-07-27 01:18:15 UTC
From: radioman1044
Topic: 2497 Message: 2497

Hello, Just wondering if anyone here has tried this? I have read that it does work. My loop is up about 50 feet and in from each tower about 12 feet. If I would put a GROUND wire around it, it would be at about 40 feet and just a tad longer than the top loop. They say don't conect the counterpoise wire to anything....Not sure if it would be worth the work to put another one on...Any thoughts
73
Larry

2499. Re: Putting a gound counterpoise under this big loop??

Yahoo group: SkyWires
Date: 2007-07-27 11:41:22 UTC
From: Jim
Topic: 2497 Message: 2499

It sure does work but it's hard to do comparative tests except by comparing it to signals received on a 2 nd antenna. It seems to lower the angle of the signal.
I did something similar when I built the DCTL loop . (See pictures under VE3DDY) It is actually a DDRR antenna with a ground loop underneath to replace the extensive ground plane. That is why I am able to change the way it is polarized in vertical or horizontal. The vertical mode has good directivity in a bi-directional pattern.
Jim "DDY"

--- In SkyWires@yahoogroups.com, "radioman1044" <lgwsaw@...> wrote:
>
> Hello, Just wondering if anyone here has tried this? I have read that
> it does work. My loop is up about 50 feet and in from each tower about
> 12 feet. If I would put a GROUND wire around it, it would be at about
> 40 feet and just a tad longer than the top loop. They say don't conect
> the counterpoise wire to anything....Not sure if it would be worth the
> work to put another one on...Any thoughts
> 73
> Larry
>

2500. RE: [SkyWires] 160 vs 80 loop ?

Yahoo group: SkyWires
Date: 2007-07-27 16:17:13 UTC
From: Callum M0MCX
Topic: 2486 Message: 2500

>>> very good for DX on 20 - 10.

Steve, I've not seen that either in practice of via modelling. All the RF is between 25 and 55 degrees, it doesn't flatten out.

Anyone else actually done regular day-to-day DX on a 160m loop?

Callum McCormick

M0MCX

07976 631881

http://www.m0mcx.co.uk/

From: SkyWires@yahoogroups.com [mailto:SkyWires@yahoogroups.com] On Behalf Of Steve Ward
Sent: 25 July 2007 15:49
To: SkyWires@yahoogroups.com
Subject: Re: [SkyWires] 160 vs 80 loop ?

A 160 meter loop should work all bands 160 - 10. On the design frequency, if in the horizontal plane, most of the energy will be high angle and should be good for regional contacts out to about 600 miles. A 160 meter loop operating on 80 meters will have a lower angle of takeoff and should produce good results with local and DX. As a general rule, the takeoff angle becomes lower as you increase in frequency, which should be very good for DX on 20 - 10. Some feed the loop with coax and some feed with ladder line. I have never had a problem using coax so long as the run is under 100 feet. If more than 100 feet, I would suggest using ladder line from the loop to a 4:1 remote balun just outside the shack and then a short run of quality coax to the rig.

Good luck OM. Let me know how it turns out. 73 de N5ETV

oh6bi <9j2bi@...> wrote:

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possibilities to make it. It will be 40x40 meters square,
but I dont know what are differencies between 80 mb and 160mb loops
concerning upper bands, the antenna should cover all HAM bands.
Feedpoint will be one of the dorners.

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Is it as good to make 160 loop as 80 loop ???

About 160m band , I am sometimes speaking there but it is not
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The height from ground will be abt 18 meters and the loop will be
almost in free space.

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TVIs and Stereoreceiver problems. In this flat there are more than
hundred families and if someone is complaining it means there can be
tens of new complainings....

Please give Your suggestions
best regards and 73s ge rami, oh6bi

_____

Choose the right car based on your needs. Check out Yahoo!
<http://us.rd.yahoo.com/evt=48518/*http:/autos.yahoo.com/carfinder/;_ylc=X3o
DMTE3NWsyMDd2BF9TAzk3MTA3MDc2BHNlYwNtYWlsdGFncwRzbGsDY2FyLWZpbmRlcg--%20>
Autos new Car Finder tool.

2501. Re: Putting a gound counterpoise under this big loop??

Yahoo group: SkyWires
Date: 2007-07-27 23:40:40 UTC
From: radioman1044
Topic: 2497 Message: 2501

--- Thanks Jim... I hope some other folks ring in here and give there thoughts.....73 Larry

In SkyWires@yahoogroups.com, "Jim" <jimandruthrv@...> wrote
>
> It sure does work but it's hard to do comparative tests except by
> comparing it to signals received on a 2 nd antenna. It seems to lower
> the angle of the signal.
> I did something similar when I built the DCTL loop . (See pictures
> under VE3DDY) It is actually a DDRR antenna with a ground loop
> underneath to replace the extensive ground plane. That is why I am
> able to change the way it is polarized in vertical or horizontal.
> The vertical mode has good directivity in a bi-directional pattern.
> Jim "DDY"
>
> --- In SkyWires@yahoogroups.com, "radioman1044" <lgwsaw@> wrote:
> >
> > Hello, Just wondering if anyone here has tried this? I have read
> that
> > it does work. My loop is up about 50 feet and in from each tower
> about
> > 12 feet. If I would put a GROUND wire around it, it would be at
> about
> > 40 feet and just a tad longer than the top loop. They say don't
> conect
> > the counterpoise wire to anything....Not sure if it would be worth
> the
> > work to put another one on...Any thoughts
> > 73
> > Larry
> >
>

2502. there is one member that is forwarding info

Yahoo group: SkyWires
Date: 2007-07-30 14:16:28 UTC
From: Roger Haffner
Topic: 2502 Message: 2502

there is one member that is forwarding info.

to the group that wat is go on that wat has a few peple anoed

2503. RE: [SkyWires] there is one member that is forwarding info

Yahoo group: SkyWires
Date: 2007-07-30 14:59:04 UTC
From: Callum M0MCX
Topic: 2502 Message: 2503

Where's that translator gone?

Callum McCormick

M0MCX

07976 631881

http://www.m0mcx.co.uk/

_____

From: SkyWires@yahoogroups.com [mailto:SkyWires@yahoogroups.com] On Behalf Of Roger Haffner
Sent: 30 July 2007 15:16
To: SkyWires@yahoogroups.com
Subject: [SkyWires] there is one member that is forwarding info

there is one member that is forwarding info.

to the group that wat is go on that wat has a few peple anoed

2504. Re: [SkyWires] 160 vs 80 loop ?

Yahoo group: SkyWires
Date: 2007-07-31 02:23:44 UTC
From: Steve Ward
Topic: 2486 Message: 2504

Kyle, I installed a 530 foot horizontal loop last week. I am feeding with coax since my entire run from feedpoint to tuner is about 50 foot. The feedpoint is just outside the shack and is up 30 feet. I have to add a small bit of inductance on 30 meters for the internal tuner to tune, but the rest of the bands tune easily. So far I have worked some 3's, 4's and 0's on 10 meter psk 31 but have not done much else with it yet other than some regional 80 meter phone this morning. You mentioned that you feed your loop a bit differently than most. I am interested to hear about how you feed your antenna. I have not yet figured out how many wavelengths my antenna would be on 1.2 Ghz..HIHI.

73 de N5ETV, Steve

Kyle A <kyle@...> wrote:
I have a 160, and use it on all the HF bands with no problems. I have
even used it on 6m a couple of times. Mine is 30-50 feet in the air as
the land slopes up and down around it. 80 for example gives me NVIS and
DX. So does 40. 160 works great, but I don't know how far I can get
yet; it seems to work the whole US from here (Georgia). 20 works to the
horizon, then has the normal skip zone, works all over the US and I've
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10 has been very active, and I've worked all over the US, and also
check into local nets hearing all the local check ins that are either DX
or < ~80 miles.

My loop has only been up a few months. I'm using 100W max, and I hook
up my loop differently than most.

> the antenna should cover all HAM bands.
Well, I'm sorry, you're just not going to be able to work that 1.2GHz
band with your loop 160m loop. ;)

73,
Kyle
W4KDA

oh6bi wrote:
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> possibilities to make it. It will be 40x40 meters square,
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> Please give Your suggestions
> best regards and 73s ge rami, oh6bi
>
>

Pinpoint customers who are looking for what you sell.

2505. RE: [SkyWires] 160 vs 80 loop ?

Yahoo group: SkyWires
Date: 2007-07-31 02:55:45 UTC
From: Steve Ward
Topic: 2486 Message: 2505

Callum, While it certainly is not a BIG GUN DX antenna, most dismiss the horizontal loop as a cloud heater only. 25 to 55 degrees is certainly not as good as 18 degrees but is still substantially "flatter" than what one would expect on the fundamental frequency. I worked Europe and Oceana on 10 meters in the 1990's from a previous QTH with a 272 foot Horizontal Loop designed for 80 meters. The previous loop was fed with coax and was up 40 feet. It was definately not as good an antenna for 10 meters as my 3 element quad at the same elevation. Very good for DX is not the same as Excellent for DX. I still think that a loop is a good choice for a "casual"operator who wants the simplicity of a single antenna for multiple bands. There are obviously better choices of antenna than a horizontal loop for those interested in dependable, as you say, day-to-day DX. Thanks for the comments for it is technical exchanges such as these that keep the cobwebs out of the brain.

73, N5ETV, Steve

Callum M0MCX <callum@...> wrote:
>>> very good for DX on 20 - 10.

Steve, I?ve not seen that either in practice of via modelling. All the RF is between 25 and 55 degrees, it doesn?t flatten out.

Anyone else actually done regular day-to-day DX on a 160m loop?

Callum McCormick
M0MCX
07976 631881
http://www.m0mcx.co.uk/

From: SkyWires@yahoogroups.com [mailto:SkyWires@yahoogroups.com] On Behalf Of Steve Ward
Sent: 25 July 2007 15:49
To: SkyWires@yahoogroups.com
Subject: Re: [SkyWires] 160 vs 80 loop ?

A 160 meter loop should work all bands 160 - 10. On the design frequency, if in the horizontal plane, most of the energy will be high angle and should be good for regional contacts out to about 600 miles. A 160 meter loop operating on 80 meters will have a lower angle of takeoff and should produce good results with local and DX. As a general rule, the takeoff angle becomes lower as you increase in frequency, which should be very good for DX on 20 - 10. Some feed the loop with coax and some feed with ladder line. I have never had a problem using coax so long as the run is under 100 feet. If more than 100 feet, I would suggest using ladder line from the loop to a 4:1 remote balun just outside the shack and then a short run of quality coax to the rig.

Good luck OM. Let me know how it turns out. 73 de N5ETV

oh6bi <9j2bi@...> wrote:

Hello all in the group !

I have been thinking to make 160mb loop, I have good
possibilities to make it. It will be 40x40 meters square,
but I dont know what are differencies between 80 mb and 160mb loops
concerning upper bands, the antenna should cover all HAM bands.
Feedpoint will be one of the dorners.

My question is: what is best solution to work 80 to 10m bands.
Is it as good to make 160 loop as 80 loop ???

About 160m band , I am sometimes speaking there but it is not
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At the moment I am feeding 62 meter long wire but there are some
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best regards and 73s ge rami, oh6bi

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2506. RE: [SkyWires] 160 vs 80 loop ?

Yahoo group: SkyWires
Date: 2007-07-31 08:24:45 UTC
From: Callum M0MCX
Topic: 2486 Message: 2506

Yes, I completely agree Steve. I've worked ZL and VK from the UK on a 40m loop and of course, there is some RF given off at low angles but let us not be fooled into thinking that we have lots of RF given off at 10 degrees.

As you say though, for a casual operator, I don't think there's a better antenna, no.

Callum McCormick

M0MCX

07976 631881

http://www.m0mcx.co.uk/

_____

From: SkyWires@yahoogroups.com [mailto:SkyWires@yahoogroups.com] On Behalf Of Steve Ward
Sent: 31 July 2007 03:56
To: SkyWires@yahoogroups.com
Subject: RE: [SkyWires] 160 vs 80 loop ?

Callum, While it certainly is not a BIG GUN DX antenna, most dismiss the horizontal loop as a cloud heater only. 25 to 55 degrees is certainly not as good as 18 degrees but is still substantially "flatter" than what one would expect on the fundamental frequency. I worked Europe and Oceana on 10 meters in the 1990's from a previous QTH with a 272 foot Horizontal Loop designed for 80 meters. The previous loop was fed with coax and was up 40 feet. It was definately not as good an antenna for 10 meters as my 3 element quad at the same elevation. Very good for DX is not the same as Excellent for DX. I still think that a loop is a good choice for a "casual"operator who wants the simplicity of a single antenna for multiple bands. There are obviously better choices of antenna than a horizontal loop for those interested in dependable, as you say, day-to-day DX. Thanks for the comments for it is technical exchanges such as these that keep the cobwebs out of the brain.

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http://www.m0mcx. <http://www.m0mcx.co.uk/> co.uk/

_____

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Sent: 25 July 2007 15:49
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<http://us.rd.yahoo.com/evt=48518/*http:/autos.yahoo.com/carfinder/;_ylc=X3o
DMTE3NWsyMDd2BF9TAzk3MTA3MDc2BHNlYwNtYWlsdGFncwRzbGsDY2FyLWZpbmRlcg--%20>
Autos new Car Finder tool.

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<http://us.rd.yahoo.com/evt=48518/*http:/autos.yahoo.com/carfinder/;_ylc=X3o
DMTE3NWsyMDd2BF9TAzk3MTA3MDc2BHNlYwNtYWlsdGFncwRzbGsDY2FyLWZpbmRlcg--%20>
Autos new Car Finder tool.

2507. RE: [SkyWires] 160 vs 80 loop ?

Yahoo group: SkyWires
Date: 2007-07-31 08:25:34 UTC
From: Callum M0MCX
Topic: 2486 Message: 2507

>>>I have to add a small bit of inductance on 30 meters for the internal tuner to tune

Steve, how do you do this? Switch it in on a relay?

Callum McCormick

M0MCX

07976 631881

http://www.m0mcx.co.uk/

_____

From: SkyWires@yahoogroups.com [mailto:SkyWires@yahoogroups.com] On Behalf Of Steve Ward
Sent: 31 July 2007 03:24
To: SkyWires@yahoogroups.com
Subject: Re: [SkyWires] 160 vs 80 loop ?

Kyle, I installed a 530 foot horizontal loop last week. I am feeding with coax since my entire run from feedpoint to tuner is about 50 foot. The feedpoint is just outside the shack and is up 30 feet. I have to add a small bit of inductance on 30 meters for the internal tuner to tune, but the rest of the bands tune easily. So far I have worked some 3's, 4's and 0's on 10 meter psk 31 but have not done much else with it yet other than some regional 80 meter phone this morning. You mentioned that you feed your loop a bit differently than most. I am interested to hear about how you feed your antenna. I have not yet figured out how many wavelengths my antenna would be on 1.2 Ghz..HIHI.

73 de N5ETV, Steve

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I have a 160, and use it on all the HF bands with no problems. I have even used it on 6m a couple of times. Mine is 30-50 feet in the air as the land slopes up and down around it. 80 for example gives me NVIS and DX. So does 40. 160 works great, but I don't know how far I can get yet; it seems to work the whole US from here (Georgia). 20 works to the horizon, then has the normal skip zone, works all over the US and I've worked Europe. 17, I've worked as far as the Leeward Islands (so far). 10 has been very active, and I've worked all over the US, and also check into local nets hearing all the local check ins that are either DX or < ~80 miles.

My loop has only been up a few months. I'm using 100W max, and I hook
up my loop differently than most.

> the antenna should cover all HAM bands.
Well, I'm sorry, you're just not going to be able to work that 1.2GHz
band with your loop 160m loop. ;)

73,
Kyle
W4KDA

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<http://us.rd.yahoo.com/evt=48250/*http:/searchmarketing.yahoo.com/arp/spons
oredsearch_v9.php?o=US2226&cmp=Yahoo&ctv=AprNI&s=Y&s2=EM&b=50> customers
who are looking for what you sell.

2508. RE: [SkyWires] 160 vs 80 loop ?

Yahoo group: SkyWires
Date: 2007-07-31 14:20:37 UTC
From: Steve Ward
Topic: 2486 Message: 2508

I use the internal tuner thru the manual tuner. The manual tuner is set in the tune mode with the inductor set at a "K" setting [MFJ tuner] and both capacitors set at "0". I suspect that this may do the same thing as the MFJ auto range extender but I may be wrong. On all the other bands, I bypass the external tuner and use only the internal tuner.

Callum M0MCX <callum@...> wrote: >>>I have to add a small bit of inductance on 30 meters for the internal tuner to tune

Steve, how do you do this? Switch it in on a relay?

Callum McCormick
M0MCX
07976 631881
http://www.m0mcx.co.uk/

From: SkyWires@yahoogroups.com [mailto:SkyWires@yahoogroups.com] On Behalf Of Steve Ward
Sent: 31 July 2007 03:24
To: SkyWires@yahoogroups.com
Subject: Re: [SkyWires] 160 vs 80 loop ?

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Looking for a deal? Find great prices on flights and hotels with Yahoo! FareChase.

2509. RE: [SkyWires] 160 vs 80 loop ?

Yahoo group: SkyWires
Date: 2007-07-31 14:19:30 UTC
From: Steve Ward
Topic: 2486 Message: 2509

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2510. DX and a 75mtr Loop

Yahoo group: SkyWires
Date: 2007-08-11 13:49:13 UTC
From: lazysenior
Topic: 2510 Message: 2510

I read all the 160mtr Vs 80 mtr loop thread with interest. I put up a 255ft loop 3yrs ago. It is a 3 sided (delta) loop. The feedpoint apex is at 60 ft hanging off one of my towers. The other 2 supports are at about 35 ft. This means the antenna slopes. When I first put it up I used coax to feed it per the Skywire article in ARRL Antenna handbook. This setup did not perform well SWR was Quite high (10:1) on some bands. After several months I took it down and fed it with open wire feedline - the real stuff (600 ohm) that W7FG sells. This made it a much better antenna for all bands.

This antenna works better (usually) than my centerfed (same W7FG feedline) 130ft doublet. I only use the wire antennas for 75mtrs thru 30 mtrs.

Recently I got the DX bug (again). I have worked all the DX countries I could find on 20mtrs where I use a Tennadyne T6 beam.SO I decided to give 40mtrs and 30 mtrs a go for DX. The results have been eye opening. I had thought the Loop was good mainly for local (USA) contacts.NOT SO.

The last week I have worked Tahiti, Wallis and Fortuna Islands on 40 mtrs. Also Japan and Australia on 30 mtrs. These were all stations that were S6 or better on the loop. On my doublet some DX was not even heard at all...

Does a Loop work DX? it does at K9IUQ's location.....

Or I forgot to mention that I use the loop for local contacts too. It works great and is almost always better than the doublet.

Stan K9IUQ

2511. Element material?

Yahoo group: SkyWires
Date: 2007-08-12 03:30:30 UTC
From: Facility 406
Topic: 2511 Message: 2511

Anyone using stainless steel cable for their radiating element?

I am considering 3\16" or 1\4".

Comments?

Kurt

2512. Re: Element material?

Yahoo group: SkyWires
Date: 2007-08-12 03:41:47 UTC
From: Richard Zolla
Topic: 2511 Message: 2512

Interesting idea. The only use I can find for stainless on the web is for whips and J-poles. There must be a reason, but I don't know what it is.

Rick N6NKN

--- In SkyWires@yahoogroups.com, "Facility 406" <facility_406@...> wrote:
>
> Anyone using stainless steel cable for their radiating element?
>
> I am considering 3\16" or 1\4".
>
> Comments?
>
> Kurt
>

2513. RE: [SkyWires] Re: Element material?

Yahoo group: SkyWires
Date: 2007-08-12 03:50:24 UTC
From: ag0k@ag0k.com
Topic: 2511 Message: 2513
Attachments: 1 described; binary payloads are missing from this source WARC

When I worked Civil Service for the
Coast Guard we installed several Folded
Dipoles made by B&W made with Stainless
Steel Wire.
The held up extremely well.

The only problem you will have is that
unless you can weld stainless you will
have to make your connections
mechanically which is not
bad. You can use Stainless Steel
hardware to connect your copper to the
stainless steel wire, and use conductive
grease to insure your
connection and keep moisture and
corrosion out.

You could also use Stainless Steel
crimps to attach copper to the wire.

I prefer Copper Weld to Stainless Steel
Wire. Stainless Steel wire is harder,
more bridle and a pain to work with.
The wire man has a copper/steel wire
with 30% cooper which is easy to work
with.

I hope this helps
73's AGØK Clint

Grace, Peace, and Joy, be yours,

Rev. W. Clinton Stockton, pastor
Andrews Presbyterian Church
104 S. Rosemary Ave
Andrews, SC 29510
<mailto:pastor@...>
pastor@andrewspca.com
Office 843 264 5596
Manse 843 264 8756
Cellphone 843 325-9760

-----Original Message-----
From: SkyWires@yahoogroups.com
[mailto:SkyWires@yahoogroups.com] On
Behalf Of Richard Zolla

Sent: Saturday, August 11, 2007 11:42 PM
To: SkyWires@yahoogroups.com
Subject: [SkyWires] Re: Element
material?

Interesting idea. The only use I can
find for stainless on the web is
for whips and J-poles. There must be a
reason, but I don't know what it
is.

Rick N6NKN

--- In SkyWires@yahoogroup
<mailto:SkyWires%40yahoogroups.com>
s.com, "Facility 406" <facility_406@...>

wrote:
>
> Anyone using stainless steel cable for
their radiating element?
>
> I am considering 3\16" or 1\4".
>
> Comments?
>
> Kurt
>

2514. Re: [SkyWires] Re: Element material?

Yahoo group: SkyWires
Date: 2007-08-12 03:57:12 UTC
From: Facility 406
Topic: 2511 Message: 2514

"There must be a reason, but I don't know what it is."

It doesn't corrode, is strong and it is easy to solder. My other choice is copperweld, which I don't care for and I can't solder to the galvanized stuff, which is a pity as I have about 5,000' of it, so I'll use that to hold up my masts.

Kurt

2515. Re: Element material?

Yahoo group: SkyWires
Date: 2007-08-12 04:02:28 UTC
From: Richard Zolla
Topic: 2511 Message: 2515

Kurt,

I may be mistaken, but I don't think it is easy to solder.

Rick N6NKN

--- In SkyWires@yahoogroups.com, "Facility 406" <facility_406@...>
wrote:
>
> "There must be a reason, but I don't know what it is."
>
> It doesn't corrode, is strong and it is easy to solder. My other
choice is
> copperweld, which I don't care for and I can't solder to the
galvanized
> stuff, which is a pity as I have about 5,000' of it, so I'll use
that to
> hold up my masts.
>
> Kurt
>

2516. Whoops.

Yahoo group: SkyWires
Date: 2007-08-12 04:03:00 UTC
From: Facility 406
Topic: 2516 Message: 2516

"it is easy to solder."

I was thinking about aluminum when I made this comment. I've soldered aluminum to brass or copper without problem, should've tried SS before asking. I'll try it in the morning and report back.

Thanks,

Kurt

2517. Re: [SkyWires] Re: Element material?

Yahoo group: SkyWires
Date: 2007-08-13 04:08:25 UTC
From: icra@galaxynet.com
Topic: 2511 Message: 2517

As I recall, in addition to being very stiff, prone to 'flex breaking', it is pretty high resistance...

Nothing says you can not use it......used several antennas made with it and they worked fine....just that there are other materials that are easier to work with...

It does not take solder well at all.....plan on mechanical connection methods....

Mel
N7OKL

2518. Re: [SkyWires] Re: Element material?

Yahoo group: SkyWires
Date: 2007-08-12 04:44:22 UTC
From: Facility 406
Topic: 2511 Message: 2518

"I may be mistaken, but I don't think it is easy to solder."

I'f I had hair, I'd be pulling it out... I think the neighborhood learned some new words... I tried three times, couldn't figure out what was wrong, turned out I was using the wrong flux! Once I found the right stuff, the SS sweated as easy, if not easier than copper. I was using a whip from a CB antenna to test with, cut it in half, put the pieces side by side, about a 3\16" overlap and ran a bead down the middle. It's nice and strong too, folded the whip more than 180? without the joint snapping or peeling. I'll get some SS cable this week and sweat the ends and see how it goes, but don't expect problems after tonights quick test. I re-tested my other flux on aluminum, that sweated as easy as copper too. I can post pics to the group later if anyone is interested.

Kurt

2519. Re: [SkyWires] Re: Element material?

Yahoo group: SkyWires
Date: 2007-08-12 04:46:05 UTC
From: Facility 406
Topic: 2511 Message: 2519

> As I recall, in addition to being very stiff, prone to 'flex breaking', it is pretty high
> resistance...

Actually, I was thinking about some of that 49 strand limp noodle stuff, not a solid single strand.

Kurt

2520. Re: [SkyWires] Re: Element material?

Yahoo group: SkyWires
Date: 2007-08-12 05:13:18 UTC
From: Sarge
Topic: 2511 Message: 2520

----- Original Message -----
From: "Richard Zolla" <N8NKN@...>
To: <SkyWires@yahoogroups.com>
Sent: Saturday, August 11, 2007 10:41 PM
Subject: [SkyWires] Re: Element material?

> Interesting idea. The only use I can find for stainless on the web is
> for whips and J-poles. There must be a reason, but I don't know what it
> is.
>
> Rick N6NKN

Weight??

2522. Soldering, Stainless, Copper, Aluminum

Yahoo group: SkyWires
Date: 2007-08-13 01:50:18 UTC
From: kd7jyk
Topic: 2522 Message: 2522

I added some pictures to the photos section.

Soldered aluminum.

I had trouble with the stainless cable, it is 133 strand, my soldering gun didn't like it, I used a torch, much harder to control the heat, but you can see in the photos, I tinned the stainless cable, tinned a penny, then soldered them both together. I was wondering what to use for lugs at the end of the cable, but I think that stainless long nuts, (threaded couplers) soldered to the ends of the cable will give me a good connection, plus something to bolt the feedline to!

I also added a picture of the stainless steel CB antenna whip I mended last night...

Kurt

2523. Ten Tec 229B with 160 meter Loop

Yahoo group: SkyWires
Date: 2007-08-14 06:13:03 UTC
From: Dale
Topic: 2523 Message: 2523

Hello all, I'm getting a Ten Tec model 229B antenna tuner and also planning to put up a 540' loop fed with either coax or 450 ohm ladder line and was wondering if this is a good tuner to us with this loop? Any thoughts, suggestions, ideas? Thanks.

2524. Re: [SkyWires] Ten Tec 229B with 160 meter Loop

Yahoo group: SkyWires
Date: 2007-08-14 13:38:33 UTC
From: Bill Graham
Topic: 2523 Message: 2524

Dale,

The Tec Tec 229B is a great tuner, rated for full legal power, and includes a balun built-in. Also uses a roller inductor, which will extend the tuning range (useful for WARC bands, MARS, strange matches, emergency comms, ...etc.).

You'll do best to feed the loop with ladder line; 450 ohm will work fine. I strongly recommend either using 14 gauge copper-clad steel 'windowed' ladder line (Wireman type 554) for strength, or true 600 ohm ladder line (I've read very good reviews on the W7GF line). Be aware that if you use a 'windowed' ladder line (440/450 ohms), the impedance WILL change (somewhat) when wet. This can be a minor pain, since you'll produce a tuner setting chart for your frequencies of interest, which will only be a starting point when the line is wet. True 600 ohm ladder line does not have this annoying characteristic.

I brought the ladder line right into the shack, and directly to the back of the tuner. Beware that you need to keep the ladder line away from metal as much as possible, especially metal that is running parallel to the ladder line. The recommended distance is 2-3 times the gap of the ladder line (2-3" in the case of 1" 440/450 ohm ladder line). I made PVC standoffs to keep it away from the base of my tower. I've never had any problems with "RF in the shack".

Alternatively, you could bring the ladder line to an external balun (hopefully, right outside your shack), then run a SHORT length of coax from the external balun to your tuner (bypassing the balun inside your tuner in this configuration). The idea being that it's easier to get the coax into the shack (running around/across metal) that it is to get ladder line into the shack. It's your call, but a good external balun will run approximately $125.00.

Also, if there is any possibility of your loop antenna wire brushing against tree branches or whatever, make sure you use insulated wire for the antenna (I recommend Wireman type 531, 13-gauge Copper-Clad steel, again for strength).

Here in Florida, physical strength is critical if we hope for the antenna to survive the winds and storms.

I'm running an 276' 80M loop, built with the Wireman 531 antenna wire and the Wireman 440 ohm ladder line, all fed with a Heathkit SA-2060A tuner (very similar to your TenTec). The loop is only ~25-35' high, but is doing a great job on 40/80M in the evenings. If you really want to get out for DX, like any horizontal antenna, get the loop as high as possible. But, I'm telling you (there are many other testimonials on

the web of similar results) that even with the loop hung low, your results will be very, very good. And, don't forget that hearing is just as (actually, more than) important that sending, and the horizontal loop is a VERY quite receive antenna, especially on the low bands (40/80/160M) at night.

I'm moving my QTH next spring, and hope to put up a 160M loop at 60' (the land is no problem, but the height might be ... we'll see).

Good luck,
Bill AG4SI

Dale wrote:
>
> Hello all, I'm getting a Ten Tec model 229B antenna tuner and also
> planning to put up a 540' loop fed with either coax or 450 ohm ladder
> line and was wondering if this is a good tuner to us with this loop?
> Any thoughts, suggestions, ideas? Thanks.
>
>

2525. Re: Ten Tec 229B with 160 meter Loop

Yahoo group: SkyWires
Date: 2007-08-14 13:41:14 UTC
From: Richard Zolla
Topic: 2523 Message: 2525

Hi Dale,

There are 10 reviews of the 229 B on Eham. All the reviewers like it a lot. Should tune your loop just fine.

Rick N6NKN

--- In SkyWires@yahoogroups.com, "Dale" <bayou50@...> wrote:
>
> Hello all, I'm getting a Ten Tec model 229B antenna tuner and also
> planning to put up a 540' loop fed with either coax or 450 ohm ladder
> line and was wondering if this is a good tuner to us with this loop?
> Any thoughts, suggestions, ideas? Thanks.
>

2526. Re: Ten Tec 229B with 160 meter Loop

Yahoo group: SkyWires
Date: 2007-08-14 16:15:33 UTC
From: Dale
Topic: 2523 Message: 2526

First thank you Bill, AG4SI for taking the time to really explain yourself in your response, great info in there. Thanks! And also thanks Richard for the reference back to eham reviews.

I had read those and see as you say everyone seems to like this tuner. However, I was looking to hear from loop owners about using this tuner with their loop. So again guys thanks for the info.

I can't wait to get my loop up it's just so hot here now that I may wait until we get into fall to put it up, who knows. I should be able to get most of the loop up about 45 to 55+ feet. I'll post here and let everyone know how it goes.

2527. Re: Ten Tec 229B with 160 meter Loop

Yahoo group: SkyWires
Date: 2007-08-15 20:30:29 UTC
From: oldlongbeard
Topic: 2523 Message: 2527

--- In SkyWires@yahoogroups.com, "Dale" <bayou50@...> wrote:
>SNIP<

Dale- I use a 229B to tune my 80M full-wave horizontal loop. It works very well. You will most likely need to add the capacitor on the rear connector when using it on 160M. I have my loop fed with commercial window-line (The 1" wide, 450 Ohm suff), and that comes into the shack where it is connected to a home-brew choke-balun type of thingy. (That is a 6" diameter chunk of plastic tubing about 18" long, with coax close-wound on it.) The coax continues off that home-brew device,and into the 229 tuner. I run approximately 700W or so at times, and can use the set-up on 10M-80M, and can get a fairly close match on 160M with it, although I usually use my 80M EDZ doublet on 160M. Sure hope this helps. Only thing I can mention is that on 2 of the 4 #229 tuners I have owned, the caps that are wired around the band switch were "smoked". I think they might be marginal under some load conditions. I replaced them with some nicer, higher power ones, and had no further trouble. The L-network is my favorite tuner, and The Ten Tec units are about the best ones out there.

73-
Greg, KC8HXO
Grand Haven, MI

2528. Re: 160 vs 80 loop ?

Yahoo group: SkyWires
Date: 2007-08-15 23:19:52 UTC
From: Murray Lycan
Topic: 2486 Message: 2528

I have just completed raising my previously sloping 283-foot
triangular loop.

Before configuration:
Sloping 3-sided loop with corners at 85 / 20 / 20 feet respectively.

After configuration:
Almost horizontal 3-sided loop with corners at 85 / 80 / 80 feet.
Since land slopes downward toward lower corners, loop is a little more
sloping in the SE direction than these numbers suggest.

Feed:
100 feet of 600-ohm ladder line from highest corner terminated at my
shack window into a 4:1 balun with 5-foot length of RG-8 coax to tuner.

Tuner:
Drake MN-2000

Transmit Power:
500 watts

One corner is suspended from my 90-foot tower, while the other two
corners are suspended from trees. Photo at qrz.com for VE7HA. Skyhooks
placed in trees via a homemade slingshot/fishing reel apparatus that
shoots amazingly accurately 3/4 ounce weights over tree tops.

There was a major improvement with the After configuration. The added
height is the secret. If you have the space, this antenna is simple
and relatively inexpensive. Its performance is excellent on 80 through
10 meters both theoretically and in practice.

Anybody who wants EZNEC plots, I can forward on request.
Angles of radiation are: 10 metres: 6 deg.; 12 metres: 7 deg.; 15
metres: 8 deg.; 17 metres: 9 deg.; 20 metres: 12 deg.; 40 metres: 24
deg. On 80 metres, as expected, the antenna provides excellent
local/regional coverage. It is not a DX antenna for 80 metres. Due to
poor conditions, I've not tested much on 10~15 metres. But on 17, 20
and 40 metres, it works very well.

Noise: Very, very quiet. Compared to a 12-foot high elevated Steppir
BigIR vertical with 14 tuned radials (2 per band) also installed in
the backyard, there is no comparison. With current conditions, I will
dismantle the Steppir since it is so noisy as to be unusable compared
with this loop. The loop may result in S0 to S2 noise while the
vertical will show S5 to S7 noise. And I live in a rural location with
no nearby industrial noise sources. The rig noise blanker can reduce
the vertical noise at times. But the loop is so much more pleasant to

use.

Signal strength: It's true, the vertical can sometimes produce similar receive signal strengths, but often the loop provides a higher S-meter reading. However, considering comments under Noise, I always choose the loop to use and lower the Steppir vertical radiator to avoid interfering with the loop.

Tuneup: Easy on all bands 80 through 10 metres using Drake tuner. Measured SWR at rig after tuning is typically 1.3 to 1.5. On 40 metres, SWR can be tuned to 1:1. So rig/amp are happy.

With the After configuration, characteristics are similar to using a beam antenna (without as much gain usually) except no rotation required. Generally, the loop is omnidirectional however it does have nulls in some directions and the "backside" radiation pattern can be several dB lower than "forward" direction. In other words, a yagi will probably crack pileups faster, but for sheer communication capability, the loop is hard to beat.

After playing with larger loops over the years (up to 625 feet in circumference), tips to follow religiously:
- Model first. Randomly choosing a large circumference invites failure.
- Only feed with wide-spaced ladder line. Don't think of using coax.
- Though I've not tried a 160-metre loop, I would choose it over an 80-metre loop if I had the space. My experience is that larger numbers of wavelengths on the loop add gain.
- Install the loop high. Use a slingshot. Much easier than climbing or throwing rocks at trees. Height lowers the angle of radiation.

I will try this loop for AM BCB dxing this winter. A large loop is the only antenna on which I've heard transpacific dx on the AM band. The loop is already performing excellently for SWLing.

If anybody wants a sked to hear this loop, let me know.

73,
Murray VE7HA

--- In SkyWires@yahoogroups.com, "oh6bi" <9j2bi@...> wrote:
>
> Hello all in the group !
>
> I have been thinking to make 160mb loop, I have good
> possibilities to make it. It will be 40x40 meters square,
> but I dont know what are differencies between 80 mb and 160mb loops
> concerning upper bands, the antenna should cover all HAM bands.
> Feedpoint will be one of the dorners.
>
> My question is: what is best solution to work 80 to 10m bands.
> Is it as good to make 160 loop as 80 loop ???
>

> About 160m band , I am sometimes speaking there but it is not
> necessary if 80m loop works better with higher frequensies...
>
> The height from ground will be abt 18 meters and the loop will be
> almost in free space.
>
> At the moment I am feeding 62 meter long wire but there are some
> TVIs and Stereoreceiver problems. In this flat there are more than
> hundred families and if someone is complaining it means there can be
> tens of new complainings....
>
> Please give Your suggestions
> best regards and 73s ge rami, oh6bi
>

2529. Re: [SkyWires] Re: 160 vs 80 loop ?

Yahoo group: SkyWires
Date: 2007-08-16 05:12:16 UTC
From: Hans Remeeus
Topic: 2486 Message: 2529

Fabulous message! Thanks Murray.

I am planning to install a DeltaLoop of 3 x 40 meters (= 3 x 130 feet)
length at about 10 meters (= 33 feet) height.

If I have the loop ready I very much like to have a sked with you.

73,
Hans Remeeus (PA1HR)
http://www.remeeus.eu
Communication is about people, the rest is technology.

Murray Lycan schreef:
>
>
> I have just completed raising my previously sloping 283-foot
> triangular loop.
>

>
> If anybody wants a sked to hear this loop, let me know.
>
> 73,
> Murray VE7HA
>

2530. Re: 160 vs 80 loop ?

Yahoo group: SkyWires
Date: 2007-08-16 07:04:53 UTC
From: Murray Lycan
Topic: 2486 Message: 2530

Hans,

Your suggested loop will have following characteristics according to
modeling program:
10m: 12 dBi gain @ 12 deg. elevation
12m: 13 dBi gain @ 15 deg. elevation
15m: 12 dBi gain @ 16 deg. elevation
17m: 12 dBi gain @ 20 deg. elevation
20m: 10 dBi gain @ 23 deg. elevation
40m: 6 dBi gain @ 39 deg. elevation
80m: 8 dBi gain @ vertical elevation

By deviating from the standard full wave circumference dimensions of
about 560 feet (160-metre loop), 283 feet (80-metre loop) or 142 feet
(40-metre loop), loading the antenna could become a problem for your
rig since the SWR may become quite high on some bands.

Glad to have a sked. Let me know when and where.

73, Murray

--- In SkyWires@yahoogroups.com, Hans Remeeus <hans@...> wrote:
>
>
> Fabulous message! Thanks Murray.
>
> I am planning to install a DeltaLoop of 3 x 40 meters (= 3 x 130 feet)
> length at about 10 meters (= 33 feet) height.
>
> If I have the loop ready I very much like to have a sked with you.
>
>
> 73,
> Hans Remeeus (PA1HR)
> http://www.remeeus.eu
> Communication is about people, the rest is technology.

2531. Re: [SkyWires] Re: 160 vs 80 loop ?

Yahoo group: SkyWires
Date: 2007-08-16 09:48:31 UTC
From: Hans Remeeus
Topic: 2486 Message: 2531

Hello Murray,

Many thanks for the characteristics; this is really very interesting and very kind of you!

I will use about 150 feet 600 Ohm open feeder line from the same wire as the horizontal DeltaLoop.

The antenne tuner will be the LL-Tuner, see more details on http://www.lltuners.nl/

And a home-made tuner which is developed for loop antennas. This is the GR-1500 Unbalanced-to-balanced Transmatch (ARRL handbook 198?).

73,
Hans Remeeus (PA1HR)
http://www.remeeus.eu
Communication is about people, the rest is technology.

Murray Lycan schreef:
>
>
> Hans,
>
> Your suggested loop will have following characteristics according to
> modeling program:
> 10m: 12 dBi gain @ 12 deg. elevation
> 12m: 13 dBi gain @ 15 deg. elevation
> 15m: 12 dBi gain @ 16 deg. elevation
> 17m: 12 dBi gain @ 20 deg. elevation
> 20m: 10 dBi gain @ 23 deg. elevation
> 40m: 6 dBi gain @ 39 deg. elevation
> 80m: 8 dBi gain @ vertical elevation
>
> By deviating from the standard full wave circumference dimensions of
> about 560 feet (160-metre loop), 283 feet (80-metre loop) or 142 feet
> (40-metre loop), loading the antenna could become a problem for your
> rig since the SWR may become quite high on some bands.
>
> Glad to have a sked. Let me know when and where.
>
> 73, Murray
>

2532. Re: [SkyWires] Re: Ten Tec 229B with 160 meter Loop

Yahoo group: SkyWires
Date: 2007-08-17 13:10:46 UTC
From: Steve Ward
Topic: 2523 Message: 2532

Dale, I agree with everything that Bill gave you. I run a 530 foot loop up only 30 feet and have had good results. I currently feed with coax with the entire run being about 40 feet since the feedpoint is just outside the shack. My plans for improvement include feeding with homebrew ladder line to an external balun just outside the shack and then a 8 foot run of coax from the balun to the back of the tuner. R.L. Cebik has a good article posted about making your own ladder line that might be worth reading. Also, Radio Works out of Portsmouth, Virginia makes a Remote Balun built specifically for this purpose which covers 160-10 easily. Good luck with your installation. I will look for you on the air.
73, Steve, N5ETV

Dale <bayou50@...> wrote:
First thank you Bill, AG4SI for taking the time to really explain yourself in your response, great info in there. Thanks! And also thanks Richard for the reference back to eham reviews.

I had read those and see as you say everyone seems to like this tuner. However, I was looking to hear from loop owners about using this tuner with their loop. So again guys thanks for the info.

I can't wait to get my loop up it's just so hot here now that I may wait until we get into fall to put it up, who knows. I should be able to get most of the loop up about 45 to 55+ feet. I'll post here and let everyone know how it goes.

Shape Yahoo! in your own image. Join our Network Research Panel today!

2534. Re: [SkyWires]

Yahoo group: SkyWires
Date: 2007-08-22 01:35:13 UTC
From: Facility 406
Topic: 2534 Message: 2534

"I have added you to my friends network today!"

Really? Then why have me click on a link to get somewhere I already am?

Setting up the list for NON-automatic subscription will prevent spammers from using the auto-subscribe, send spam, unsubscribe, so you can't delete them bacause they no longer exist tactic, which as you can see works very well, moderators or not... You won't have to go in and manually delete all the spam from the archives any more either! I approve the members to my lists, only get one or two spam account requests a month, but it's easy to filter out accounts like domeliketheresnotomarrowandmydogtoo@... or monsterpenisforsalecheap@... it's not like the spammers use cryptic accounts that can be confused for something legitimate. Asking potential subscribers to add a little personal info helps too as an automated system wouldn't be able to send an on topic message... But, the important part is to CHANGE "Membership does not require approval", "Messages do not require approval" will not need to be changed since the spammers would no longer be able to get in. I see this has been a problem in the past, if the Owner or Moderator needs help with setting things up to prevent this, please contact me.

Kurt

2535. Re: [SkyWires]

Yahoo group: SkyWires
Date: 2007-08-22 02:00:24 UTC
From: David Shrum
Topic: 2534 Message: 2535

Kurt,
You must be new to this list, us moderators do NOT have that option open
to us, we can only ban after the fact.
Dave N8PU

PS This has been hashed over many many times before...

Facility 406 wrote:
>
> "I have added you to my friends network today!"
>
> Really? Then why have me click on a link to get somewhere I already am?
>
> Setting up the list for NON-automatic subscription will prevent spammers
> from using the auto-subscribe, send spam, unsubscribe, so you can't delete
> them bacause they no longer exist tactic, which as you can see works very
> well, moderators or not... You won't have to go in and manually delete all
> the spam from the archives any more either! I approve the members to my
> lists, only get one or two spam account requests a month, but it's easy to
> filter out accounts like
> domeliketheresnotomarrowandmydogtoo@...
> <mailto:domeliketheresnotomarrowandmydogtoo%40fubarpornorma.com> or
> monsterpenisforsalecheap@...
> <mailto:monsterpenisforsalecheap%40inferiorwoman.com> it's not like
> the spammers use
> cryptic accounts that can be confused for something legitimate. Asking
> potential subscribers to add a little personal info helps too as an
> automated system wouldn't be able to send an on topic message... But, the
> important part is to CHANGE "Membership does not require approval",
> "Messages do not require approval" will not need to be changed since the
> spammers would no longer be able to get in. I see this has been a problem
> in the past, if the Owner or Moderator needs help with setting things
> up to
> prevent this, please contact me.
>
> Kurt
>
>

2536. Re: [SkyWires]

Yahoo group: SkyWires
Date: 2007-08-22 02:39:04 UTC
From: Facility 406
Topic: 2536 Message: 2536

I'll have to check one of my lists, it's certainly an option that can be done by the owner, will create a moderator account and double check.

Kurt

> You must be new to this list, us moderators do NOT have that option open
> to us, we can only ban after the fact.
> Dave N8PU

2537. Control\Moderation of a Group.

Yahoo group: SkyWires
Date: 2007-08-22 04:38:08 UTC
From: Facility 406
Topic: 2537 Message: 2537

It is not my intent to beat this subject to death or put anyone down, but I read some of the comments in the archives and it is clear that many members, owners, co-owners and moderators aren't aware of how things are controlled or how they can be handled so easily, the following information solves all spam problems for all groups.

For starters, the owner or moderator with control must turn off the option "Membership does not require approval" on the group homepage. Once this is done, no spam can get through unless a moderator permits a spammer to join. The automated spam systems take advantage of groups having open subscription. Most automated systems subscribe, send spam, unsubscribe. If you find an account to ban, you're lucky! You can ban it, but expect another one within a few minutes to hours, to days, it's about as effective as killing mosquitoes near a marsh, one at a time... Solution? Cut off the water to the marsh. Not too effective it is fed by the Colorado River (BIG marsh), but you CAN take measures to ensure the mosquitoes can't breed.

Now, a quick test.

I subscribed my wife to one of my groups, changed her to moderator (one click) and was given these options (see below), basically absolute control. Each line is preceded by a check box. The owner has to give a moderator the option of what they can or can not control as each moderator is created.

I have now switched over to my wifes account after attempting to subscribe to my group with a fabricated address not meeting the requirements to get into my group. As a moderator, I can see the request and approve or deny, since it is obviously spam, I have chosen as a moderator to deny the request without any members knowing or seeing what has happened. Other than signing into my group as an owner to set moderator settings initially, everything was done through e-mail which makes it exceptionally easy, no knowledge of the group\webpage settings, etc. needed by the moderator.

Also, as an owner or moderator, I can list the messages to visually scan them for spam, click a box next to the them and delete them en masse, a good thing if the archives are public to attract new members and you don't want them to see a string of pornography ads that may turn them away.

I'll be more than happy to talk a moderator or owner through the steps to help keep a group spam free.

Moderator abilities below as seen from the group owners account, depending on what abilities you give a moderator, he\she will see these too:

Moderators can change delivery and posting settings for individual members. Check the additional privileges you want to give this moderator and click Make Moderator below.

Notification:

Notify this moderator when there are pending messages/memberships which require approval.

Notify this moderator when a member joins/leaves this group or new files uploaded.

Notify this moderator when there are pending messages which have been identified as possible spam.

Moderator Privileges:

Approve pending messages and photos Add, remove, and change moderator privileges

Approve pending members

Set auto-send options for files

Invite and add members

Change group settings

Remove members and reset bouncing members

Delete this group

Ban members

2538. Re: [SkyWires] Control\Moderation of a Group.

Yahoo group: SkyWires
Date: 2007-08-22 12:06:04 UTC
From: Kyle A
Topic: 2537 Message: 2538

I enjoy the group, but don't enjoy the spam. Dave has said many times
the owner did not give him the appropriate access to correct the problem.

What I have been wondering is where/who is the owner, and why won't he
allow us to fix this otherwise excellent forum?

73,
Kyle
W4KDA

Facility 406 wrote:
>
>
> It is not my intent to beat this subject to death or put anyone down, but I
> read some of the comments in the archives and it is clear that many members,
> owners, co-owners and moderators aren't aware of how things are controlled
> or how they can be handled so easily, the following information solves all
> spam problems for all groups.
>
> For starters, the owner or moderator with control must turn off the option
> "Membership does not require approval" on the group homepage. Once this is
> done, no spam can get through unless a moderator permits a spammer to join.
> The automated spam systems take advantage of groups having open
> subscription. Most automated systems subscribe, send spam, unsubscribe. If
> you find an account to ban, you're lucky! You can ban it, but expect
> another one within a few minutes to hours, to days, it's about as effective
> as killing mosquitoes near a marsh, one at a time... Solution? Cut off the
> water to the marsh. Not too effective it is fed by the Colorado River (BIG
> marsh), but you CAN take measures to ensure the mosquitoes can't breed.
>
> Now, a quick test.
>
> I subscribed my wife to one of my groups, changed her to moderator (one
> click) and was given these options (see below), basically absolute control.
> Each line is preceded by a check box. The owner has to give a moderator the
> option of what they can or can not control as each moderator is created.
>
> I have now switched over to my wifes account after attempting to subscribe
> to my group with a fabricated address not meeting the requirements to get
> into my group. As a moderator, I can see the request and approve or deny,
> since it is obviously spam, I have chosen as a moderator to deny the request
> without any members knowing or seeing what has happened. Other than signing
> into my group as an owner to set moderator settings initially, everything
> was done through e-mail which makes it exceptionally easy, no knowledge of
> the group\webpage settings, etc. needed by the moderator.
>

> Also, as an owner or moderator, I can list the messages to visually scan
> them for spam, click a box next to the them and delete them en masse, a good
> thing if the archives are public to attract new members and you don't want
> them to see a string of pornography ads that may turn them away.
>
> I'll be more than happy to talk a moderator or owner through the steps to
> help keep a group spam free.
>
> Moderator abilities below as seen from the group owners account, depending
> on what abilities you give a moderator, he\she will see these too:
>
> Moderators can change delivery and posting settings for individual members.
> Check the additional privileges you want to give this moderator and click
> Make Moderator below.
>
> Notification:
>
> Notify this moderator when there are pending messages/memberships which
> require approval.
>
> Notify this moderator when a member joins/leaves this group or new files
> uploaded.
>
> Notify this moderator when there are pending messages which have been
> identified as possible spam.
>
> Moderator Privileges:
>
> Approve pending messages and photos Add, remove, and change moderator
> privileges
>
> Approve pending members
>
> Set auto-send options for files
>
> Invite and add members
>
> Change group settings
>
> Remove members and reset bouncing members
>
> Delete this group
>
> Ban members
>
>

2539. Re: [SkyWires] Control\Moderation of a Group.

Yahoo group: SkyWires
Date: 2007-08-22 17:39:50 UTC
From: chasm@texas.net
Topic: 2537 Message: 2539

On Wed, 22 Aug 2007 08:06:04 -0400, Kyle A <kyle@...> wrote:

>I enjoy the group, but don't enjoy the spam. Dave has said many times
>the owner did not give him the appropriate access to correct the problem.
>
>What I have been wondering is where/who is the owner, and why won't he
>allow us to fix this otherwise excellent forum?

or lacking that, why have we not created SkyWires2@... and moved
our selves over there???? of course, making two owners who trust each other
and who agree on how the list should be directed and run.

fwiw
73/chas
--
K5DAM Houston EL29fu AAR6TU

LONG time elist/bbs/fidonet list(s) owner over almost or more?, 20yrs.

...

2540. Re: [SkyWires] Control\Moderation of a Group.

Yahoo group: SkyWires
Date: 2007-08-22 20:48:11 UTC
From: van lincoln
Topic: 2537 Message: 2540

Because the owner doesn't exist anymore. That's why.

At 08:06 AM 8/22/2007 -0400, you wrote:
>I enjoy the group, but don't enjoy the spam. Dave has said many times
>the owner did not give him the appropriate access to correct the problem.
>
>What I have been wondering is where/who is the owner, and why won't he
>allow us to fix this otherwise excellent forum?
>
>73,
>Kyle
>W4KDA
>
>Facility 406 wrote:
>>
>>
>> It is not my intent to beat this subject to death or put anyone down, but I
>> read some of the comments in the archives and it is clear that many
members,
>> owners, co-owners and moderators aren't aware of how things are controlled
>> or how they can be handled so easily, the following information solves all
>> spam problems for all groups.
>>
>> For starters, the owner or moderator with control must turn off the option
>> "Membership does not require approval" on the group homepage. Once this is
>> done, no spam can get through unless a moderator permits a spammer to join.
>> The automated spam systems take advantage of groups having open
>> subscription. Most automated systems subscribe, send spam, unsubscribe. If
>> you find an account to ban, you're lucky! You can ban it, but expect
>> another one within a few minutes to hours, to days, it's about as effective
>> as killing mosquitoes near a marsh, one at a time... Solution? Cut off the
>> water to the marsh. Not too effective it is fed by the Colorado River (BIG
>> marsh), but you CAN take measures to ensure the mosquitoes can't breed.
>>
>> Now, a quick test.
>>
>> I subscribed my wife to one of my groups, changed her to moderator (one
>> click) and was given these options (see below), basically absolute control.
>> Each line is preceded by a check box. The owner has to give a moderator the
>> option of what they can or can not control as each moderator is created.
>>
>> I have now switched over to my wifes account after attempting to subscribe
>> to my group with a fabricated address not meeting the requirements to get
>> into my group. As a moderator, I can see the request and approve or deny,
>> since it is obviously spam, I have chosen as a moderator to deny the

request
>> without any members knowing or seeing what has happened. Other than signing
>> into my group as an owner to set moderator settings initially, everything
>> was done through e-mail which makes it exceptionally easy, no knowledge of
>> the group\webpage settings, etc. needed by the moderator.
>>
>> Also, as an owner or moderator, I can list the messages to visually scan
>> them for spam, click a box next to the them and delete them en masse, a
good
>> thing if the archives are public to attract new members and you don't want
>> them to see a string of pornography ads that may turn them away.
>>
>> I'll be more than happy to talk a moderator or owner through the steps to
>> help keep a group spam free.
>>
>> Moderator abilities below as seen from the group owners account, depending
>> on what abilities you give a moderator, he\she will see these too:
>>
>> Moderators can change delivery and posting settings for individual members.
>> Check the additional privileges you want to give this moderator and click
>> Make Moderator below.
>>
>> Notification:
>>
>> Notify this moderator when there are pending messages/memberships which
>> require approval.
>>
>> Notify this moderator when a member joins/leaves this group or new files
>> uploaded.
>>
>> Notify this moderator when there are pending messages which have been
>> identified as possible spam.
>>
>> Moderator Privileges:
>>
>> Approve pending messages and photos Add, remove, and change moderator
>> privileges
>>
>> Approve pending members
>>
>> Set auto-send options for files
>>
>> Invite and add members
>>
>> Change group settings
>>
>> Remove members and reset bouncing members
>>
>> Delete this group
>>

>> Ban members
>>
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>Yahoo! Groups Links
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2541. Re: Control\Moderation of a Group.

Yahoo group: SkyWires
Date: 2007-08-22 20:57:41 UTC
From: Richard Zolla
Topic: 2537 Message: 2541

I think the moderator should exercise his right and end this
discussion.

Lets get back to Skywires.

Rick N6NKN

--- In SkyWires@yahoogroups.com, van lincoln <vlincoln@...> wrote:
>
> Because the owner doesn't exist anymore. That's why.
>
> At 08:06 AM 8/22/2007 -0400, you wrote:
> >I enjoy the group, but don't enjoy the spam. Dave has said many
times
> >the owner did not give him the appropriate access to correct the
problem.
> >
> >What I have been wondering is where/who is the owner, and why
won't he
> >allow us to fix this otherwise excellent forum?
> >
> >73,
> >Kyle
> >W4KDA
> >
> >Facility 406 wrote:
> >>
> >>
> >> It is not my intent to beat this subject to death or put anyone
down, but I
> >> read some of the comments in the archives and it is clear that
many
> members,
> >> owners, co-owners and moderators aren't aware of how things are
controlled
> >> or how they can be handled so easily, the following information
solves all
> >> spam problems for all groups.
> >>
> >> For starters, the owner or moderator with control must turn off
the option
> >> "Membership does not require approval" on the group homepage.
Once this is
> >> done, no spam can get through unless a moderator permits a
spammer to join.
> >> The automated spam systems take advantage of groups having open

> >> subscription. Most automated systems subscribe, send spam,
unsubscribe. If
> >> you find an account to ban, you're lucky! You can ban it, but
expect
> >> another one within a few minutes to hours, to days, it's about
as effective
> >> as killing mosquitoes near a marsh, one at a time... Solution?
Cut off the
> >> water to the marsh. Not too effective it is fed by the Colorado
River (BIG
> >> marsh), but you CAN take measures to ensure the mosquitoes can't
breed.
> >>
> >> Now, a quick test.
> >>
> >> I subscribed my wife to one of my groups, changed her to
moderator (one
> >> click) and was given these options (see below), basically
absolute control.
> >> Each line is preceded by a check box. The owner has to give a
moderator the
> >> option of what they can or can not control as each moderator is
created.
> >>
> >> I have now switched over to my wifes account after attempting to
subscribe
> >> to my group with a fabricated address not meeting the
requirements to get
> >> into my group. As a moderator, I can see the request and approve
or deny,
> >> since it is obviously spam, I have chosen as a moderator to deny
the
> request
> >> without any members knowing or seeing what has happened. Other
than signing
> >> into my group as an owner to set moderator settings initially,
everything
> >> was done through e-mail which makes it exceptionally easy, no
knowledge of
> >> the group\webpage settings, etc. needed by the moderator.
> >>
> >> Also, as an owner or moderator, I can list the messages to
visually scan
> >> them for spam, click a box next to the them and delete them en
masse, a
> good
> >> thing if the archives are public to attract new members and you
don't want
> >> them to see a string of pornography ads that may turn them away.
> >>

> >> I'll be more than happy to talk a moderator or owner through the
steps to
> >> help keep a group spam free.
> >>
> >> Moderator abilities below as seen from the group owners account,
depending
> >> on what abilities you give a moderator, he\she will see these
too:
> >>
> >> Moderators can change delivery and posting settings for
individual members.
> >> Check the additional privileges you want to give this moderator
and click
> >> Make Moderator below.
> >>
> >> Notification:
> >>
> >> Notify this moderator when there are pending
messages/memberships which
> >> require approval.
> >>
> >> Notify this moderator when a member joins/leaves this group or
new files
> >> uploaded.
> >>
> >> Notify this moderator when there are pending messages which have
been
> >> identified as possible spam.
> >>
> >> Moderator Privileges:
> >>
> >> Approve pending messages and photos Add, remove, and change
moderator
> >> privileges
> >>
> >> Approve pending members
> >>
> >> Set auto-send options for files
> >>
> >> Invite and add members
> >>
> >> Change group settings
> >>
> >> Remove members and reset bouncing members
> >>
> >> Delete this group
> >>
> >> Ban members
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> >Yahoo! Groups Links
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2542. Re: [SkyWires] Control\Moderation of a Group.

Yahoo group: SkyWires
Date: 2007-08-22 21:04:35 UTC
From: chasm@texas.net
Topic: 2537 Message: 2542

On Wed, 22 Aug 2007 15:48:11 -0500, van lincoln <vlincoln@...>
wrote:
>Because the owner doesn't exist anymore. That's why.

the answer to this is to send a copy of the death certificate to YAHOOGROUPS gods and ask them to transfer ownership to <name> or something very nearly as much as a pain as that. we have had long discussions on the elist owners lists. the best way is to do what I have suggested and have done in the past.--- new list, everyone transfers themselves. those left over can be transferred from the defunct list to the new list.

everyone unsubscribes from the old list. after it has been unused for about 12 months, you can petition to use the name and then when granted, simply transfer the new list name to the old listname. it does work. I have had to do it once.

anyway, with the change to the new list, we can turn off the porn solicitations, etc.

fwiw
73/chas
--
K5DAM Houston EL29fu AAR6TU

2543. Re: [SkyWires] Control\Moderation of a Group.

Yahoo group: SkyWires
Date: 2007-08-23 02:39:59 UTC
From: Facility 406
Topic: 2537 Message: 2543

> or lacking that, why have we not created SkyWires2@... and
moved
> our selves over there???? of course, making two owners who trust each
other
> and who agree on how the list should be directed and run.

I can set that up, move all the files over, re-assign the same moderators, give them more power to begin with and let everyone move to the new group. A mirror image, but without the 2,542 previous acrhived messages, that would be unrealistic and pointless to move over, but since the message archives are public, they could be viewed easily enough.

Kurt

2544. Re: [SkyWires] Control\Moderation of a Group.

Yahoo group: SkyWires
Date: 2007-08-23 14:15:03 UTC
From: Jason Buchanan
Topic: 2537 Message: 2544

On Aug 22, 2007, at 10:39 PM, Facility 406 wrote:

>> or lacking that, why have we not created SkyWires2@...
>> and
> moved
>> our selves over there???? of course, making two owners who trust
>> each
> other
>> and who agree on how the list should be directed and run.
>
> I can set that up, move all the files over, re-assign the same
> moderators,
> give them more power to begin with and let everyone move to the new
> group. A
> mirror image, but without the 2,542 previous acrhived messages,
> that would
> be unrealistic and pointless to move over, but since the message
> archives
> are public, they could be viewed easily enough.

I set up a skywires group on Google Groups:

http://groups.google.com/group/skywires

Basically there's two options...

Join http://groups.google.com/group/skywires or make a new one on
yahoo...

The third option is to just deal with the porno garbage.

--
73 Jason N1SU
http://n1su.com/

2545. Re: [SkyWires] Control\Moderation of a Group.

Yahoo group: SkyWires
Date: 2007-08-23 15:18:29 UTC
From: chasm@texas.net
Topic: 2537 Message: 2545

On Thu, 23 Aug 2007 10:15:03 -0400, Jason Buchanan <jsb@...> wrote:
>
>I set up a skywires group on Google Groups:
>
>http://groups.google.com/group/skywires

Gmail/ggroups don't have the capabilites for protection which YHG has.
I would still go with YHG> also, GGroups is not as moderator friendly as is
YHG.

fwiw
73/chas
--
K5DAM Houston EL29fu AAR6TU

2546. Re: [SkyWires] Control\Moderation of a Group.

Yahoo group: SkyWires
Date: 2007-08-23 18:07:08 UTC
From: Facility 406
Topic: 2537 Message: 2546

So, you guys want me to make a filtered mirror image on yahoo, or what...?

Kurt

----- Original Message -----
From: <chasm@...>

> Gmail/ggroups don't have the capabilites for protection which YHG has.
> I would still go with YHG> also, GGroups is not as moderator friendly as
is
> YHG.

2547. Re: [SkyWires] Control\Moderation of a Group.

Yahoo group: SkyWires
Date: 2007-08-23 23:02:36 UTC
From: chasm@texas.net
Topic: 2537 Message: 2547

On Thu, 23 Aug 2007 11:07:08 -0700, "Facility 406"
<facility_406@...> wrote:

>So, you guys want me to make a filtered mirror image on yahoo, or what...?
>
>Kurt

Kurt, I am afraid it is up to the moderators of the list.
I will say that if you did so, and the mods told us to move, I would be the
first to do so. or, right up there as soon as I knew to make the change.
in re the archives of the present list, I can download those over time and
then slowly upload them to the new list but they would show my From line.
I have on my HDD, 1295 of the archived messages now.
Maybe we could get YHG to move them all - over to the new list for us.
We could ask.

again, we need (the moderators need) to send a formal message to YHG to
transfer ownership to one or both of them AQAP. We might try that first.

The person for the moderators to contact would be
Jami Heldt
Groups Community Manager
jheldt@...

At least he/she could get some movement started on how to get this done.
For sure, when it does get changed -- MAKE _TWO(2)_ OWNERS immediately
Replace one every time he/she becomes non functional for the task.

I have a dozen or more elists all on YHG, I have one co-owner. He has NO
interest in any of my lists. But, he takes over whenever I go into the
hospital and he knows how to do what I want done if I happen to not come out
in a cognizant condition. (I have a terminal illness).

I will stay tuned.

73/chas
--
K5DAM Houston EL29fu AAR6TU

2548. Re: [SkyWires] Control\Moderation of a Group.

Yahoo group: SkyWires
Date: 2007-08-23 23:13:19 UTC
From: Craig Harder
Topic: 2537 Message: 2548

You have my vote.
Craig KE5PIQ

On 8/23/07, chasm@... <chasm@...> wrote:
> On Thu, 23 Aug 2007 11:07:08 -0700, "Facility 406"
> <facility_406@...> wrote:
>
> >So, you guys want me to make a filtered mirror image on yahoo, or what...?
> >
> >Kurt
>
>
> Kurt, I am afraid it is up to the moderators of the list.
> I will say that if you did so, and the mods told us to move, I would be the
> first to do so. or, right up there as soon as I knew to make the change.
> in re the archives of the present list, I can download those over time and
> then slowly upload them to the new list but they would show my From line.
> I have on my HDD, 1295 of the archived messages now.
> Maybe we could get YHG to move them all - over to the new list for us.
> We could ask.
>
> again, we need (the moderators need) to send a formal message to YHG to
> transfer ownership to one or both of them AQAP. We might try that first.
>
> The person for the moderators to contact would be
> Jami Heldt
> Groups Community Manager
> jheldt@...
>
> At least he/she could get some movement started on how to get this done.
> For sure, when it does get changed -- MAKE _TWO(2)_ OWNERS immediately
> Replace one every time he/she becomes non functional for the task.
>
> I have a dozen or more elists all on YHG, I have one co-owner. He has NO
> interest in any of my lists. But, he takes over whenever I go into the
> hospital and he knows how to do what I want done if I happen to not come out
> in a cognizant condition. (I have a terminal illness).
>
> I will stay tuned.
>
> 73/chas
> --
> K5DAM Houston EL29fu AAR6TU
>
>

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> Yahoo! Groups Links
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2549. Re: [SkyWires] Control\Moderation of a Group.

Yahoo group: SkyWires
Date: 2007-08-24 00:25:23 UTC
From: Dr.Ace Ratliff
Topic: 2537 Message: 2549

Sounds good to me.
Ace - WH2T

----- Original Message -----
From: Facility 406
To: SkyWires@yahoogroups.com
Sent: Thursday, August 23, 2007 1:07 PM
Subject: Re: [SkyWires] Control\Moderation of a Group.

So, you guys want me to make a filtered mirror image on yahoo, or what...?

Kurt

----- Original Message -----
From: <chasm@...>

> Gmail/ggroups don't have the capabilites for protection which YHG has.
> I would still go with YHG> also, GGroups is not as moderator friendly as
is
> YHG.

2550. Re: [SkyWires] Control\Moderation of a Group.

Yahoo group: SkyWires
Date: 2007-08-23 23:47:55 UTC
From: David Shrum
Topic: 2537 Message: 2550

I just emailed the list owner to see if he would allow us, sgordon1, dr_ace1, and me to see if he will give us more leeway in an effort to get a handle on the spam. If you feel you must I can't stop you, but I would suggest we give him some time to get my email and respond one way or the other.

I had forgotten (didn't remember) I had his email address, thats why I hadn't done it before.
Dave N8PU

Craig Harder wrote:
>
> You have my vote.
> Craig KE5PIQ
>
> On 8/23/07, chasm@... <mailto:chasm%40texas.net>
> <chasm@... <mailto:chasm%40texas.net>> wrote:
> > On Thu, 23 Aug 2007 11:07:08 -0700, "Facility 406"
> > <facility_406@... <mailto:facility_406%40earthlink.net>>
> wrote:
> >
> > >So, you guys want me to make a filtered mirror image on yahoo, or
> what...?
> > >
> > >Kurt
> >
>
>

2551. Re: [SkyWires] Control\Moderation of a Group.

Yahoo group: SkyWires
Date: 2007-08-23 23:58:22 UTC
From: David Shrum
Topic: 2537 Message: 2551

WELL, I guess he won't be getting that email I sent,

"Returned mail: User unknown"

Oh well, I agree with Ace.

Dave N8PU

David Shrum wrote:
>
> I just emailed the list owner to see if he would allow us, sgordon1,
> dr_ace1, and me to see if he will give us more leeway in an effort to
> get a handle on the spam. If you feel you must I can't stop you, but I
> would suggest we give him some time to get my email and respond one way
> or the other.
>
> I had forgotten (didn't remember) I had his email address, thats why I
> hadn't done it before.
> Dave N8PU
>
> Craig Harder wrote:
> >
> > You have my vote.
> > Craig KE5PIQ
> >
> > On 8/23/07, chasm@... <mailto:chasm%40texas.net>
> <mailto:chasm%40texas.net>
> > <chasm@... <mailto:chasm%40texas.net>
> <mailto:chasm%40texas.net>> wrote:
> > > On Thu, 23 Aug 2007 11:07:08 -0700, "Facility 406"
> > > <facility_406@... <mailto:facility_406%40earthlink.net>
> <mailto:facility_406%40earthlink.net>>
> > wrote:
> > >
> > > >So, you guys want me to make a filtered mirror image on yahoo, or
> > what...?
> > > >
> > > >Kurt
>
> _

2552. Re: [SkyWires] Control\Moderation of a Group.

Yahoo group: SkyWires
Date: 2007-08-24 01:57:48 UTC
From: schuetzen
Topic: 2537 Message: 2552

again, we need (the moderators need) to send a formal message to YHG to transfer ownership to one or both of them AQAP. We might try that first.

The person for the moderators to contact would be
Jami Heldt
Groups Community Manager
jheldt@...

At least he/she could get some movement started on how to get this done. For sure, when it does get changed -- MAKE _TWO(2)_ OWNERS immediately Replace one every time he/she becomes non functional for the task.

DAVID

I really suggest that you contact the above and see if they will do the transfer. point is, if we do create a Skywires2, and are later able to get the original list name, we will have lost the original archives and, gained some new message archives.

Instead, if we will simply send Jami a concise and clear message and request s/he help you get the ownership transferred, and you are successful, then you solve all the problems.

Give YHG a couple of weeks to try to contact the owner, stay on them with a weekly query. In your request, be sure to stress how long it has been since you have heard from the owner and what reply you get from mail sent to the last known address.

I will bet that you will get the list into your names in less than a month. I think it would be worth trying. especially since you have a PERSON with an email address to contact.

I would hold off for up to a month. if no luck then, then lets do the change if YOU ALL WANT TO DO SO !!! again, it is up to you guys.

fwiw
chas/K5DAM

2553. I think the owner has just updated his profile today.....

Yahoo group: SkyWires
Date: 2007-08-24 02:14:49 UTC
From: chasm@texas.net
Topic: 2537 Message: 2553

exemptfromlife
Offline Send Message Invite to Yahoo! 360? exemptfromlife junkmail@...

FYI
the above owner of this list just upgraded his profile today.
I think that he is listening and might know what is going on already.
I would go to his profile and post a message to the address shown there.
fwiw
73/chas
--
K5DAM Houston EL29fu AAR6TU

2554. RE: [SkyWires] Control\Moderation of a Group.

Yahoo group: SkyWires
Date: 2007-08-23 23:05:19 UTC
From: Callum M0MCX
Topic: 2537 Message: 2554

Can we first try and send an email to the help people at Yahoo first before shooting off over to a new one?

We just need ownership rights.

Callum McCormick

M0MCX

07976 631881

http://www.m0mcx.co.uk/

_____

From: SkyWires@yahoogroups.com [mailto:SkyWires@yahoogroups.com] On Behalf Of Facility 406
Sent: 23 August 2007 19:07
To: SkyWires@yahoogroups.com
Subject: Re: [SkyWires] Control\Moderation of a Group.

So, you guys want me to make a filtered mirror image on yahoo, or what...?

Kurt

----- Original Message -----
From: <chasm@texas. <mailto:chasm%40texas.net> net>

> Gmail/ggroups don't have the capabilites for protection which YHG has.
> I would still go with YHG> also, GGroups is not as moderator friendly as is
> YHG.

2555. Re: [SkyWires] I think the owner has just updated his profile today.....

Yahoo group: SkyWires
Date: 2007-08-24 09:35:21 UTC
From: David Shrum
Topic: 2537 Message: 2555

If you go to the web home page of this group and look for "Activity within 7 days:" you will see how many new members have joined, if you click on the link you will see him listed as a regular member? (scratching head) But if you use his 'nickname' and search the entire member list, you will see his nickname listed twice, once as list owner and once as a regular member. I sent an email to his listed email address requesting some help, we'll just wait and see.
Dave N8PU

chasm@... wrote:
>
> exemptfromlife
> Offline Send Message Invite to Yahoo! 360? exemptfromlife junkmail@...
>
> FYI
> the above owner of this list just upgraded his profile today.
> I think that he is listening and might know what is going on already.
> I would go to his profile and post a message to the address shown there.
> fwiw
> 73/chas
> --
> K5DAM Houston EL29fu AAR6TU
>
>

2556. Re: [SkyWires] I think the owner has just updated his profile today.....

Yahoo group: SkyWires
Date: 2007-08-24 14:55:30 UTC
From: Dr.Ace Ratliff
Topic: 2537 Message: 2556

Hi All,
I sent the owner
Recent Activity
a.. 7New Members
Visit Your Group
Biz Resources
Y! Small Business

Articles, tools,

forms, and more.

Endurance Zone
on Yahoo! Groups

Communities about

higher endurance.

Yahoo! Groups
Join a yoga group

and take the stress

out of your life.
Recent Activity
a.. 7New Members
Visit Your Group
Biz Resources
Y! Small Business

Articles, tools,

forms, and more.

Endurance Zone
on Yahoo! Groups

Communities about

higher endurance.

Yahoo! Groups
Join a yoga group

and take the stress

out of your life.
(exemptfromlife junkmail@...) an eMail yesterday explaining what needed to be done.

73, Ace - WH2T

----- Original Message -----
From: David Shrum
To: SkyWires@yahoogroups.com
Sent: Friday, August 24, 2007 4:35 AM
Subject: Re: [SkyWires] I think the owner has just updated his profile today.....

If you go to the web home page of this group and look for "Activity
within 7 days:" you will see how many new members have joined, if you
click on the link you will see him listed as a regular member?
(scratching head) But if you use his 'nickname' and search the entire
member list, you will see his nickname listed twice, once as list owner
and once as a regular member. I sent an email to his listed email
address requesting some help, we'll just wait and see.
Dave N8PU

chasm@... wrote:
>
> exemptfromlife
> Offline Send Message Invite to Yahoo! 360° exemptfromlife junkmail@...
>
> FYI
> the above owner of this list just upgraded his profile today.
> I think that he is listening and might know what is going on already.
> I would go to his profile and post a message to the address shown there.
> fwiw
> 73/chas
> --
> K5DAM Houston EL29fu AAR6TU
>
>

2557. Re: [SkyWires] I think the owner has just updated his profile today.....

Yahoo group: SkyWires
Date: 2007-08-24 19:35:50 UTC
From: Facility 406
Topic: 2537 Message: 2557

> If you go to the web home page of this group and look for "Activity
> within 7 days:" you will see how many new members have joined, if you
> click on the link you will see him listed as a regular member?
> (scratching head) But if you use his 'nickname' and search the entire
> member list, you will see his nickname listed twice, once as list owner
> and once as a regular member.

You think you're acratching your head... I did that to one of my own groups, wait'll the owner wastes three days trying to figure it out, better chance of him just clicking the delete button at that point...

Kurt

2558. Re: [SkyWires] Control\Moderation of a Group.

Yahoo group: SkyWires
Date: 2007-08-25 03:36:11 UTC
From: Andy
Topic: 2537 Message: 2558

> Instead, if we will simply send Jami a concise and clear message and
> request s/he help you get the ownership transferred, and you are
> successful, then you solve all the problems.

From what I have heard they NEVER (well, almost never) transfer ownership of a Yahoogroup, even if the previous owner has died. Instead, they will be happy to delete the entire group (and all its files and archived messages) for you.

So be careful what you ask for, unless you are prepared to create a new group and populate it with everything important to save.

(Over on another group someone said there was one group Yahoo did transfer ownership on, under extremely unusual circumstances, and people were not successful to get Yahoo to do it again on other groups.)

Andy

2559. Loop noise

Yahoo group: SkyWires
Date: 2007-08-28 06:24:00 UTC
From: dxnature
Topic: 2559 Message: 2559

Hi OM's,

I have made a horizontal 40 loop with 17 meters of 450 Ohm open feeder line into an MFJ-941e tuner. As my dipoles worked fine I wanted a quiter antenna, but the loop has the same noise level. Last year I made a T2FD and am very pleased with it as a receive antenna, but I expected the loop to be even better, hmmm ... not so :-(

My aim now is to put a automatic coupler at the feed point of the loop and enter the shack with a coax feeder. My radio is a FT-817 with only 5 watt there is not mutch to choose from in antenna coupler world. Most of them need at least 5 watts to activate. Seems to me that the SGC-SG-211 is the one capable to run this setup. Who says that this is the way to go.

Are there other theories to get rid of the noise levels and keep the use of the open feeder? I chose this setup to use the loop as a wideband antenna to work different bands and its low loss of power.

Any suggestions???

73's
Ron Liekens
ON3RON, DXA-64

2560. Re: Loop noise

Yahoo group: SkyWires
Date: 2007-08-28 12:07:26 UTC
From: stocktonclinton
Topic: 2559 Message: 2560

I would suggest a good quality 4 to 1 current balun, which could be purchased at wireman.com and use coax and your tuner you are using now. The 4 to 1 balun works well. That is what I am doing and the noise is down from what I see on my 137' zepp and my log is full of DX.

73's Clint AGØK
ag0k@...

--- In SkyWires@yahoogroups.com, "dxnature" <on3ron@...> wrote:
>
> Hi OM's,
>
> I have made a horizontal 40 loop with 17 meters of 450 Ohm open feeder
> line into an MFJ-941e tuner. As my dipoles worked fine I wanted a
> quiter antenna, but the loop has the same noise level. Last year I
> made a T2FD and am very pleased with it as a receive antenna, but I
> expected the loop to be even better, hmmm ... not so :-(
>
> My aim now is to put a automatic coupler at the feed point of the loop
> and enter the shack with a coax feeder. My radio is a FT-817 with only
> 5 watt there is not mutch to choose from in antenna coupler world.
> Most of them need at least 5 watts to activate. Seems to me that the
> SGC-SG-211 is the one capable to run this setup. Who says that this is
> the way to go.
>
> Are there other theories to get rid of the noise levels and keep the
> use of the open feeder? I chose this setup to use the loop as a
> wideband antenna to work different bands and its low loss of power.
>
> Any suggestions???
>
> 73's
> Ron Liekens
> ON3RON, DXA-64
>

2561. Re: Loop noise

Yahoo group: SkyWires
Date: 2007-08-28 22:41:37 UTC
From: Murray Lycan
Topic: 2559 Message: 2561

Ron,

I think it would be a shame to change your configuration. Your current configuration with ladder line right to your tuner seems more desireable than changing to coax, even with the antenna-mounted tuner. If you can try the new configuration without spending money or too much effort, do so just to try it. Otherwise, keep the ladder line configuration with tuner.

You don't say on which band/time you are having a "noise problem". How much noise? What kind of noise? Conditions in general now can be terrible on a given day/band and noise varies greatly from day to day on my loop. Noise on my 283-foot triangular horizontal loop at 80 feet high is much lower than my vertical, but I don't have a dipole to compare. Certainly, loops usually have less noise than other antennas.

Do you have reason to believe you may have a lot of local man-made noise such as generated from industrial sources? Or are you just in a regular residential neighbourhood with the usual sources?

Keeping the ladder line feed will allow lots of possibilities for multi-band operation. I operate very successfully from 3.5 through 30MHz with the single loop using ladder line.

Murray
VE7HA

--- In SkyWires@yahoogroups.com, "dxnature" <on3ron@...> wrote:
>
> Hi OM's,
>
> I have made a horizontal 40 loop with 17 meters of 450 Ohm open feeder line into an MFJ-941e tuner.....

2562. Re: Loop noise

Yahoo group: SkyWires
Date: 2007-08-28 22:56:59 UTC
From: dxnature
Topic: 2559 Message: 2562

Hi Clint,

Thanks for the reply!

Now I use the 450 Ohm open line balanced feeder. So you tell me to use the balun before the tuner? What if I put a 1:1 link coupling before the tuner and then continue with a coax to the shack. Would this not be more suficcient. It could keep a bit of static from the tuner. As the SCG tuner likes a high impedance to work with. The 1:1 will be a logic choice I think.

I decided to purchase a SG-239 today instead of the SG-211. I will mount the tuner and balun in a waterproof container at the base of my tower. From the feed point of the loop there will be about 3 foot open feeder running to the Tuner.

Another approach is to mount the tuner at the feedpoint of the loop and after that continue with a good grade double shielded coax to keep the noise to a minimum.

What say...

73' Ron - on3ron
on3ron@...

--- In SkyWires@yahoogroups.com, "stocktonclinton" <ag0k@...> wrote:
>
> I would suggest a good quality 4 to 1 current balun, which could be
> purchased at wireman.com and use coax and your tuner you are using
> now. The 4 to 1 balun works well. That is what I am doing and the
> noise is down from what I see on my 137' zepp and my log is full of
> DX.
>
> 73's Clint AGØK
> ag0k@...
>
> --- In SkyWires@yahoogroups.com, "dxnature" <on3ron@> wrote:
> >
> > Hi OM's,
> >
> > I have made a horizontal 40 loop with 17 meters of 450 Ohm open
> feeder
> > line into an MFJ-941e tuner. As my dipoles worked fine I wanted a
> > quiter antenna, but the loop has the same noise level. Last year I
> > made a T2FD and am very pleased with it as a receive antenna, but I
> > expected the loop to be even better, hmmm ... not so :-(
> >

> > My aim now is to put a automatic coupler at the feed point of the
> loop
> > and enter the shack with a coax feeder. My radio is a FT-817 with
> only
> > 5 watt there is not mutch to choose from in antenna coupler world.
> > Most of them need at least 5 watts to activate. Seems to me that the
> > SGC-SG-211 is the one capable to run this setup. Who says that this
> is
> > the way to go.
> >
> > Are there other theories to get rid of the noise levels and keep the
> > use of the open feeder? I chose this setup to use the loop as a
> > wideband antenna to work different bands and its low loss of power.
> >
> > Any suggestions???
> >
> > 73's
> > Ron Liekens
> > ON3RON, DXA-64
> >
>

2563. Re: Loop noise

Yahoo group: SkyWires
Date: 2007-08-28 23:13:16 UTC
From: stocktonclinton
Topic: 2559 Message: 2563

Hi Ron,

Sorry I did not make clear what I would do and am doing. I have a 4 to 1 balun at the loop and bring coax all the way into the shack and then use my tuner to tune the coax just before the rig.

I found this make for a very workable system with lower noise.

I was using 300 twin lead from the antenna all the way into the shack and I had trouble with computers and on 20 meters when I transmitted it even caused my shredder to start running.

Since I put the balun at the loop and use unbalanced coax and tune it at the rig I have had no problems.

Good Luck and 73
AGØK Clint

--- In SkyWires@yahoogroups.com, "dxnature" <on3ron@...> wrote:
>
> Hi Clint,
>
> Thanks for the reply!
>
> Now I use the 450 Ohm open line balanced feeder. So you tell me to use
> the balun before the tuner? What if I put a 1:1 link coupling before
> the tuner and then continue with a coax to the shack. Would this not
> be more suficcient. It could keep a bit of static from the tuner. As
> the SCG tuner likes a high impedance to work with. The 1:1 will be a
> logic choice I think.
>
> I decided to purchase a SG-239 today instead of the SG-211. I will
> mount the tuner and balun in a waterproof container at the base of my
> tower. From the feed point of the loop there will be about 3 foot open
> feeder running to the Tuner.
>
> Another approach is to mount the tuner at the feedpoint of the loop
> and after that continue with a good grade double shielded coax to keep
> the noise to a minimum.
>
> What say...
>

> 73' Ron - on3ron
> on3ron@...
>
> --- In SkyWires@yahoogroups.com, "stocktonclinton" <ag0k@> wrote:
> >
> > I would suggest a good quality 4 to 1 current balun, which could
be
> > purchased at wireman.com and use coax and your tuner you are
using
> > now. The 4 to 1 balun works well. That is what I am doing and
the
> > noise is down from what I see on my 137' zepp and my log is full
of
> > DX.
> >
> > 73's Clint AGØK
> > ag0k@
> >
> > --- In SkyWires@yahoogroups.com, "dxnature" <on3ron@> wrote:
> > >
> > > Hi OM's,
> > >
> > > I have made a horizontal 40 loop with 17 meters of 450 Ohm open
> > feeder
> > > line into an MFJ-941e tuner. As my dipoles worked fine I wanted
a
> > > quiter antenna, but the loop has the same noise level. Last
year I
> > > made a T2FD and am very pleased with it as a receive antenna,
but I
> > > expected the loop to be even better, hmmm ... not so :-(
> > >
> > > My aim now is to put a automatic coupler at the feed point of
the
> > loop
> > > and enter the shack with a coax feeder. My radio is a FT-817
with
> > only
> > > 5 watt there is not mutch to choose from in antenna coupler
world.
> > > Most of them need at least 5 watts to activate. Seems to me
that the
> > > SGC-SG-211 is the one capable to run this setup. Who says that
this
> > is
> > > the way to go.
> > >
> > > Are there other theories to get rid of the noise levels and
keep the
> > > use of the open feeder? I chose this setup to use the loop as a

> > > wideband antenna to work different bands and its low loss of
power.
> > >
> > > Any suggestions???
> > >
> > > 73's
> > > Ron Liekens
> > > ON3RON, DXA-64
> > >
> >
>

2564. Re: Loop noise

Yahoo group: SkyWires
Date: 2007-08-28 23:15:24 UTC
From: stocktonclinton
Topic: 2559 Message: 2564

I do think just running the coax from your rig out to the tuner at the base of the tower and open feeded to the loop should work just great. Let me know how it works 73's Clint

--- In SkyWires@yahoogroups.com, "dxnature" <on3ron@...> wrote:
>
> Hi Clint,
>
> Thanks for the reply!
>
> Now I use the 450 Ohm open line balanced feeder. So you tell me to use
> the balun before the tuner? What if I put a 1:1 link coupling before
> the tuner and then continue with a coax to the shack. Would this not
> be more suficcient. It could keep a bit of static from the tuner. As
> the SCG tuner likes a high impedance to work with. The 1:1 will be a
> logic choice I think.
>
> I decided to purchase a SG-239 today instead of the SG-211. I will
> mount the tuner and balun in a waterproof container at the base of my
> tower. From the feed point of the loop there will be about 3 foot open
> feeder running to the Tuner.
>
> Another approach is to mount the tuner at the feedpoint of the loop
> and after that continue with a good grade double shielded coax to keep
> the noise to a minimum.
>
> What say...
>
> 73' Ron - on3ron
> on3ron@...
>
> --- In SkyWires@yahoogroups.com, "stocktonclinton" <ag0k@> wrote:
> >
> > I would suggest a good quality 4 to 1 current balun, which could be
> > purchased at wireman.com and use coax and your tuner you are using
> > now. The 4 to 1 balun works well. That is what I am doing and the
> > noise is down from what I see on my 137' zepp and my log is full of

> > DX.
> >
> > 73's Clint AGØK
> > ag0k@
> >
> > --- In SkyWires@yahoogroups.com, "dxnature" <on3ron@> wrote:
> > >
> > > Hi OM's,
> > >
> > > I have made a horizontal 40 loop with 17 meters of 450 Ohm open
> > feeder
> > > line into an MFJ-941e tuner. As my dipoles worked fine I wanted
a
> > > quiter antenna, but the loop has the same noise level. Last
year I
> > > made a T2FD and am very pleased with it as a receive antenna,
but I
> > > expected the loop to be even better, hmmm ... not so :-(
> > >
> > > My aim now is to put a automatic coupler at the feed point of
the
> > loop
> > > and enter the shack with a coax feeder. My radio is a FT-817
with
> > only
> > > 5 watt there is not mutch to choose from in antenna coupler
world.
> > > Most of them need at least 5 watts to activate. Seems to me
that the
> > > SGC-SG-211 is the one capable to run this setup. Who says that
this
> > is
> > > the way to go.
> > >
> > > Are there other theories to get rid of the noise levels and
keep the
> > > use of the open feeder? I chose this setup to use the loop as a
> > > wideband antenna to work different bands and its low loss of
power.
> > >
> > > Any suggestions???
> > >
> > > 73's
> > > Ron Liekens
> > > ON3RON, DXA-64
> > >
> >
>

2565. Re: [SkyWires] Re: Loop noise

Yahoo group: SkyWires
Date: 2007-08-29 17:41:30 UTC
From: Dr.Ace Ratliff
Topic: 2559 Message: 2565

Hi ,
I agree with Clint "running the coax from your rig out to the tuner at
the base of the tower and open feed to the loop should work just
great" .
The only common time coax is a problem is when you present it with a high VSWR .
If you have a 50 ohm load on 50 ohm coax it will work great unless you have a very long run of coax.
73, Ace - WH2T

----- Original Message -----
From: stocktonclinton
To: SkyWires@yahoogroups.com
Sent: Tuesday, August 28, 2007 6:15 PM
Subject: [SkyWires] Re: Loop noise

I do think just running the coax from your rig out to the tuner at
the base of the tower and open feeded to the loop should work just
great. Let me know how it works 73's Clint

.

2566. Re: Loop noise

Yahoo group: SkyWires
Date: 2007-08-29 17:45:17 UTC
From: dxnature
Topic: 2559 Message: 2566

Murray,

Thanks for coming back on this item.

The setup with the ladder line was my initial configuration to keep the loop usable for the bands from 40 to 10 meters. I suspect to loose this as I put a balun or unun at the feedpoint and proceed with a coax.

Yesterday I ordered a SG-239 coupler and some Aircell 7 coax. At first I will mount the tuner at the botom of the tower connecting the antenna with abt 7 meters of ladder line. From the tuner to the shack I will use the coax and will see how thing are going. If the amount of noise is still prominent, I will put a 1:1 link coupling between the ladder line and the tuner.

The noise is not always present. It is all over the bands, even if there is no propagation even if the bands are not active, like 10 meters at night. It is evidend that the noise levels on 80 and 40 are higher. I live abt a mile out of town and the nearest industrial park is also a mile out on the other side. Not an ideal location, but there are no high tension powerlines or electric railroad in sight. I have to keep my plasma tv turned off for sure, hi hi :-)

I will keep you posted with the results.

many thanks,
Ron
ON3RON

--- In SkyWires@yahoogroups.com, "Murray Lycan" <zk2boy@...> wrote:
>
> Ron,
>
> I think it would be a shame to change your configuration. Your current
> configuration with ladder line right to your tuner seems more
> desireable than changing to coax, even with the antenna-mounted tuner.
> If you can try the new configuration without spending money or too
> much effort, do so just to try it. Otherwise, keep the ladder line
> configuration with tuner.
>
> You don't say on which band/time you are having a "noise problem". How
> much noise? What kind of noise? Conditions in general now can be
> terrible on a given day/band and noise varies greatly from day to day
> on my loop. Noise on my 283-foot triangular horizontal loop at 80 feet
> high is much lower than my vertical, but I don't have a dipole to
> compare. Certainly, loops usually have less noise than other antennas.
>

> Do you have reason to believe you may have a lot of local man-made
> noise such as generated from industrial sources? Or are you just in a
> regular residential neighbourhood with the usual sources?
>
> Keeping the ladder line feed will allow lots of possibilities for
> multi-band operation. I operate very successfully from 3.5 through
> 30MHz with the single loop using ladder line.
>
> Murray
> VE7HA
>
> --- In SkyWires@yahoogroups.com, "dxnature" <on3ron@> wrote:
> >
> > Hi OM's,
> >
> > I have made a horizontal 40 loop with 17 meters of 450 Ohm open
> feeder line into an MFJ-941e tuner.....
>

2567. Re: Loop noise

Yahoo group: SkyWires
Date: 2007-08-29 17:48:07 UTC
From: dxnature
Topic: 2559 Message: 2567

Howdy Clint,

Can you still use your loop on all the bands with the 4:1 balun and
the coax?

73'
Ron
ON3RON

--- In SkyWires@yahoogroups.com, "stocktonclinton" <ag0k@...> wrote:
>
> Hi Ron,
>
> Sorry I did not make clear what I would do and am doing. I have a 4
> to 1 balun at the loop and bring coax all the way into the shack and
> then use my tuner to tune the coax just before the rig.
>
> I found this make for a very workable system with lower noise.
>
> I was using 300 twin lead from the antenna all the way into the shack
> and I had trouble with computers and on 20 meters when I transmitted
> it even caused my shredder to start running.
>
> Since I put the balun at the loop and use unbalanced coax and tune it
> at the rig I have had no problems.
>
> Good Luck and 73
> AGØK Clint
>
> --- In SkyWires@yahoogroups.com, "dxnature" <on3ron@> wrote:
> >
> > Hi Clint,
> >
> > Thanks for the reply!
> >
> > Now I use the 450 Ohm open line balanced feeder. So you tell me to
> use
> > the balun before the tuner? What if I put a 1:1 link coupling before
> > the tuner and then continue with a coax to the shack. Would this not
> > be more suficcient. It could keep a bit of static from the tuner. As
> > the SCG tuner likes a high impedance to work with. The 1:1 will be a
> > logic choice I think.
> >
> > I decided to purchase a SG-239 today instead of the SG-211. I will
> > mount the tuner and balun in a waterproof container at the base of
> my

> > tower. From the feed point of the loop there will be about 3 foot
> open
> > feeder running to the Tuner.
> >
> > Another approach is to mount the tuner at the feedpoint of the loop
> > and after that continue with a good grade double shielded coax to
> keep
> > the noise to a minimum.
> >
> > What say...
> >
> > 73' Ron - on3ron
> > on3ron@
> >
> > --- In SkyWires@yahoogroups.com, "stocktonclinton" <ag0k@> wrote:
> > >
> > > I would suggest a good quality 4 to 1 current balun, which could
> be
> > > purchased at wireman.com and use coax and your tuner you are
> using
> > > now. The 4 to 1 balun works well. That is what I am doing and
> the
> > > noise is down from what I see on my 137' zepp and my log is full
> of
> > > DX.
> > >
> > > 73's Clint AGØK
> > > ag0k@
> > >
> > > --- In SkyWires@...m, "dxnature" <on3ron@> wrote:
> > > >
> > > > Hi OM's,
> > > >
> > > > I have made a horizontal 40 loop with 17 meters of 450 Ohm open
> > > feeder
> > > > line into an MFJ-941e tuner. As my dipoles worked fine I wanted
> a
> > > > quiter antenna, but the loop has the same noise level. Last
> year I
> > > > made a T2FD and am very pleased with it as a receive antenna,
> but I
> > > > expected the loop to be even better, hmmm ... not so :-(
> > > >
> > > > My aim now is to put a automatic coupler at the feed point of
> the
> > > loop
> > > > and enter the shack with a coax feeder. My radio is a FT-817
> with
> > > only
> > > > 5 watt there is not mutch to choose from in antenna coupler

> world.
> > > > Most of them need at least 5 watts to activate. Seems to me
> that the
> > > > SGC-SG-211 is the one capable to run this setup. Who says that
> this
> > > is
> > > > the way to go.
> > > >
> > > > Are there other theories to get rid of the noise levels and
> keep the
> > > > use of the open feeder? I chose this setup to use the loop as a
> > > > wideband antenna to work different bands and its low loss of
> power.
> > > >
> > > > Any suggestions???
> > > >
> > > > 73's
> > > > Ron Liekens
> > > > ON3RON, DXA-64
> > > >
> > >
> >
>

2568. Re: Loop noise

Yahoo group: SkyWires
Date: 2007-08-29 17:53:28 UTC
From: dxnature
Topic: 2559 Message: 2568

Hi Ace,

My toughts also. Do you know if it will make some sense to run the
coax in the ground. It will kill a bit of noise, won't it. Collecting
all the small bits to make a difference :-)

Thanks,
Ron
ON3RON

--- In SkyWires@yahoogroups.com, "Dr.Ace Ratliff" <wh2t@...> wrote:
>
> Hi ,
> I agree with Clint "running the coax from your rig out to the tuner at
> the base of the tower and open feed to the loop should work just
> great" .
> The only common time coax is a problem is when you present it with
a high VSWR .
> If you have a 50 ohm load on 50 ohm coax it will work great unless
you have a very long run of coax.
> 73, Ace - WH2T
>
> ----- Original Message -----
> From: stocktonclinton
> To: SkyWires@yahoogroups.com
> Sent: Tuesday, August 28, 2007 6:15 PM
> Subject: [SkyWires] Re: Loop noise
>
>
> I do think just running the coax from your rig out to the tuner at
> the base of the tower and open feeded to the loop should work just
> great. Let me know how it works 73's Clint
>
>
> .
>

2569. Re: Loop noise

Yahoo group: SkyWires
Date: 2007-08-29 19:02:12 UTC
From: stocktonclinton
Topic: 2559 Message: 2569

Hi Ron,

The 144 foot loop tunes on all amateur bands from 7.0 through 29.7.

The MFJ-974HB antenna tunder has a very wide range so I can tune the loop to with no difficulty.

Now my inboard tunner on my TS-440S will only tune it on 40,20,15,and 10. The SWR is two high on the warc bands.

I just tune it with the MFJ no matter what band I chose.

I hope that helps.

73's AGØK Clint

--- In SkyWires@yahoogroups.com, "dxnature" <on3ron@...> wrote:
>
> Howdy Clint,
>
> Can you still use your loop on all the bands with the 4:1 balun and
> the coax?
>
> 73'
> Ron
> ON3RON
>
> --- In SkyWires@yahoogroups.com, "stocktonclinton" <ag0k@> wrote:
> >
> > Hi Ron,
> >
> > Sorry I did not make clear what I would do and am doing. I have
a 4
> > to 1 balun at the loop and bring coax all the way into the shack
and
> > then use my tuner to tune the coax just before the rig.
> >
> > I found this make for a very workable system with lower noise.
> >
> > I was using 300 twin lead from the antenna all the way into the
shack
> > and I had trouble with computers and on 20 meters when I
transmitted
> > it even caused my shredder to start running.
> >
> > Since I put the balun at the loop and use unbalanced coax and
tune it

> > at the rig I have had no problems.
> >
> > Good Luck and 73
> > AGØK Clint
> >
> > --- In SkyWires@yahoogroups.com, "dxnature" <on3ron@> wrote:
> > >
> > > Hi Clint,
> > >
> > > Thanks for the reply!
> > >
> > > Now I use the 450 Ohm open line balanced feeder. So you tell me
to
> > use
> > > the balun before the tuner? What if I put a 1:1 link coupling
before
> > > the tuner and then continue with a coax to the shack. Would
this not
> > > be more suficcient. It could keep a bit of static from the
tuner. As
> > > the SCG tuner likes a high impedance to work with. The 1:1 will
be a
> > > logic choice I think.
> > >
> > > I decided to purchase a SG-239 today instead of the SG-211. I
will
> > > mount the tuner and balun in a waterproof container at the base
of
> > my
> > > tower. From the feed point of the loop there will be about 3
foot
> > open
> > > feeder running to the Tuner.
> > >
> > > Another approach is to mount the tuner at the feedpoint of the
loop
> > > and after that continue with a good grade double shielded coax
to
> > keep
> > > the noise to a minimum.
> > >
> > > What say...
> > >
> > > 73' Ron - on3ron
> > > on3ron@
> > >
> > > --- In SkyWires@yahoogroups.com, "stocktonclinton" <ag0k@>
wrote:
> > > >
> > > > I would suggest a good quality 4 to 1 current balun, which

could
> > be
> > > > purchased at wireman.com and use coax and your tuner you are
> > using
> > > > now. The 4 to 1 balun works well. That is what I am doing
and
> > the
> > > > noise is down from what I see on my 137' zepp and my log is
full
> > of
> > > > DX.
> > > >
> > > > 73's Clint AGØK
> > > > ag0k@
> > > >
> > > > --- In SkyWires@yahoogroups.com, "dxnature" <on3ron@> wrote:
> > > > >
> > > > > Hi OM's,
> > > > >
> > > > > I have made a horizontal 40 loop with 17 meters of 450 Ohm
open
> > > > feeder
> > > > > line into an MFJ-941e tuner. As my dipoles worked fine I
wanted
> > a
> > > > > quiter antenna, but the loop has the same noise level. Last
> > year I
> > > > > made a T2FD and am very pleased with it as a receive
antenna,
> > but I
> > > > > expected the loop to be even better, hmmm ... not so :-(
> > > > >
> > > > > My aim now is to put a automatic coupler at the feed point
of
> > the
> > > > loop
> > > > > and enter the shack with a coax feeder. My radio is a FT-
817
> > with
> > > > only
> > > > > 5 watt there is not mutch to choose from in antenna coupler
> > world.
> > > > > Most of them need at least 5 watts to activate. Seems to me
> > that the
> > > > > SGC-SG-211 is the one capable to run this setup. Who says
that
> > this
> > > > is
> > > > > the way to go.
> > > > >

> > > > > Are there other theories to get rid of the noise levels and
> > keep the
> > > > > use of the open feeder? I chose this setup to use the loop
as a
> > > > > wideband antenna to work different bands and its low loss
of
> > power.
> > > > > >
> > > > > > Any suggestions???
> > > > > >
> > > > > > 73's
> > > > > > Ron Liekens
> > > > > > ON3RON, DXA-64
> > > > > >
> > > > >
> > > >
> > >
> >
>

2570. Re: [SkyWires] Re: Loop noise

Yahoo group: SkyWires
Date: 2007-08-29 18:46:02 UTC
From: Dr.Ace Ratliff
Topic: 2559 Message: 2570

Hi Ron ,
I have read that running the coax on top of the ground at the bottom of the tower will decouple it from the tower. That is how I have mine. But it sure won't hurt to bury it , if it (the sheath) is rated for direct burial.
Good DX, Ace - WH2T

----- Original Message -----
From: dxnature
To: SkyWires@yahoogroups.com
Sent: Wednesday, August 29, 2007 12:53 PM
Subject: [SkyWires] Re: Loop noise

Hi Ace,

My toughts also. Do you know if it will make some sense to run the coax in the ground. It will kill a bit of noise, won't it. Collecting all the small bits to make a difference :-)

Thanks,
Ron
ON3RON

--- In SkyWires@yahoogroups.com, "Dr.Ace Ratliff" <wh2t@...> wrote:
>
> Hi ,
> I agree with Clint "running the coax from your rig out to the tuner at
> the base of the tower and open feed to the loop should work just
> great" .
> The only common time coax is a problem is when you present it with
a high VSWR .
> If you have a 50 ohm load on 50 ohm coax it will work great unless
you have a very long run of coax.
> 73, Ace - WH2T
>
> ----- Original Message -----
> From: stocktonclinton
> To: SkyWires@yahoogroups.com
> Sent: Tuesday, August 28, 2007 6:15 PM
> Subject: [SkyWires] Re: Loop noise
>
>
> I do think just running the coax from your rig out to the tuner at
> the base of the tower and open feeded to the loop should work just
> great. Let me know how it works 73's Clint
>
>

> .
>

2571. Re: [SkyWires] Re: Loop noise

Yahoo group: SkyWires
Date: 2007-08-29 18:50:13 UTC
From: Dr.Ace Ratliff
Topic: 2559 Message: 2571

Ron,
You said "The setup with the ladder line was my initial configuration " . Were you running the ladder line all the way to the rig ?
If so , How were you connecting the ladder line to the rig ?
73, Ace -WH2T

----- Original Message -----
From: dxnature
To: SkyWires@yahoogroups.com
Sent: Wednesday, August 29, 2007 12:45 PM
Subject: [SkyWires] Re: Loop noise

Murray,

Thanks for coming back on this item.

The setup with the ladder line was my initial configuration to keep
the loop usable for the bands from 40 to 10 meters. I suspect to loose
this as I put a balun or unun at the feedpoint and proceed with a coax.

Yesterday I ordered a SG-239 coupler and some Aircell 7 coax. At first
I will mount the tuner at the botom of the tower connecting the
antenna with abt 7 meters of ladder line. From the tuner to the shack
I will use the coax and will see how thing are going. If the amount of
noise is still prominent, I will put a 1:1 link coupling between the
ladder line and the tuner.

The noise is not always present. It is all over the bands, even if
there is no propagation even if the bands are not active, like 10
meters at night. It is evidend that the noise levels on 80 and 40 are
higher. I live abt a mile out of town and the nearest industrial
park is also a mile out on the other side. Not an ideal location, but
there are no high tension powerlines or electric railroad in sight. I
have to keep my plasma tv turned off for sure, hi hi :-)

I will keep you posted with the results.

many thanks,
Ron
ON3RON

--- In SkyWires@yahoogroups.com, "Murray Lycan" <zk2boy@...> wrote:
>
> Ron,
>
> I think it would be a shame to change your configuration. Your current
> configuration with ladder line right to your tuner seems more

> desireable than changing to coax, even with the antenna-mounted tuner.
> If you can try the new configuration without spending money or too
> much effort, do so just to try it. Otherwise, keep the ladder line
> configuration with tuner.
>
> You don't say on which band/time you are having a "noise problem". How
> much noise? What kind of noise? Conditions in general now can be
> terrible on a given day/band and noise varies greatly from day to day
> on my loop. Noise on my 283-foot triangular horizontal loop at 80 feet
> high is much lower than my vertical, but I don't have a dipole to
> compare. Certainly, loops usually have less noise than other antennas.
>
> Do you have reason to believe you may have a lot of local man-made
> noise such as generated from industrial sources? Or are you just in a
> regular residential neighbourhood with the usual sources?
>
> Keeping the ladder line feed will allow lots of possibilities for
> multi-band operation. I operate very successfully from 3.5 through
> 30MHz with the single loop using ladder line.
>
> Murray
> VE7HA
>
>
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all about dogs.
.

2572. Re: Loop noise

Yahoo group: SkyWires
Date: 2007-08-29 18:28:37 UTC
From: Murray Lycan
Topic: 2559 Message: 2572

When I first moved to this location, I had terrible noise. I couldn't understand how a rural location with few nearby neighbours could be so noisy. Using the normal procedures of switching off everything I could inside my own house, I finally discovered on the floor of my radio shack an extremely electrically noisy "Made in China" inverter power cube that was powering my Internet cable modem. To find this, I had to turn off the power to my radio shack and run the radio on battery.

I threw that cube across the room and replaced with a Made in U.S.A. product. All noise problems disappeared.

Murray

--- In SkyWires@yahoogroups.com, "dxnature" <on3ron@...> wrote:
>
.....The noise is not always present. It is all over the bands, even if there is no propagation even if the bands are not active, like 10 meters at night. It is evidend that the noise levels on 80 and 40 are higher. I live abt a mile out of town and the nearest industrial
> park is also a mile out on the other side. Not an ideal location, but there are no high tension powerlines or electric railroad in sight. I have to keep my plasma tv turned off for sure, hi hi :-)

2573. Open feederline through the wall

Yahoo group: SkyWires
Date: 2007-08-30 04:40:40 UTC
From: Hans Remeeus
Topic: 2573 Message: 2573

Hello,

Yesterday I installed a DeltaLoop of 410 feet length (125 meters) at 35 feet height (10 meters) between three wooden poles of about 8 inch (20 cm).

I will use open feederline of 165 feet (40 meters) from the same wire as the DeltaLoop.

What is the best solution to bring the open feederline through the wall? The outside and inside walls are made of bricks. Together the wall is less than 1 feet (30 cm) thick.

Any practical ideas?

Many thanks in advance.

--

73,
Hans Remeeus (PA1HR)
http://www.remeeus.eu
Communication is about people, the rest is technology.

2574. Re: [SkyWires] Open feederline through the wall

Yahoo group: SkyWires
Date: 2007-08-30 05:09:21 UTC
From: Garth Conover
Topic: 2573 Message: 2574

When I needed to go thru a thick Masonry wall of that type I drilled 2 holes the same spacing as the feed line using a long mason bit and a dewalt hammer drill.

I then pushed .250 copper threaded rod thru those holes. Using a copper flat washer and nut on each side to pull it up tight. I soldered solder tinned closed loop terminations on the exterior ladder line. With another copper nut I made the exterior connections. Inside I pretty much did the same thing but I used an open lug and copper wing nuts so I could disconnect quickly in Electrical storms, high wind and heavy dry snow to avoid static buildup issues. A bit of Silicone or exterior RTV under the flat washers on both sides would keep any moisture and little critters outside where it and they belong.

I am sure there will be many points of view that will come out and not knowing exactly what you situation looks like I figured I would pass on what worked for many years for me.

Good luck

----- Original Message -----
From: Hans Remeeus<mailto:hans@...>
To: SkyWires@yahoogroups.com<mailto:SkyWires@yahoogroups.com>
Sent: Thursday, August 30, 2007 12:40 AM
Subject: [SkyWires] Open feederline through the wall

Hello,

Yesterday I installed a DeltaLoop of 410 feet length (125 meters) at 35
feet height (10 meters) between three wooden poles of about 8 inch (20 cm).

I will use open feederline of 165 feet (40 meters) from the same wire as
the DeltaLoop.

What is the best solution to bring the open feederline through the wall?
The outside and inside walls are made of bricks. Together the wall is
less than 1 feet (30 cm) thick.

Any practical ideas?

Many thanks in advance.

--

73,
Hans Remeeus (PA1HR)
http://www.remeeus.eu<http://www.remeeus.eu/>
Communication is about people, the rest is technology.

2575. Re: [SkyWires] Open feederline through the wall

Yahoo group: SkyWires
Date: 2007-08-30 12:36:08 UTC
From: Clive Lorton
Topic: 2573 Message: 2575

A friend has done exactly the same except he used a heavy duty coax with the centre and screed shorted together instead of the copper rod.

Clive G8POC

----- Original Message -----
From: Garth Conover
To: SkyWires@yahoogroups.com
Sent: Thursday, August 30, 2007 6:09 AM
Subject: Re: [SkyWires] Open feederline through the wall

When I needed to go thru a thick Masonry wall of that type I drilled 2 holes the same spacing as the feed line using a long mason bit and a dewalt hammer drill.

I then pushed .250 copper threaded rod thru those holes. Using a copper flat washer and nut on each side to pull it up tight. I soldered solder tinned closed loop terminations on the exterior ladder line. With another copper nut I made the exterior connections. Inside I pretty much did the same thing but I used an open lug and copper wing nuts so I could disconnect quickly in Electrical storms, high wind and heavy dry snow to avoid static buildup issues. A bit of Silicone or exterior RTV under the flat washers on both sides would keep any moisture and little critters outside where it and they belong.

I am sure there will be many points of view that will come out and not knowing exactly what you situation looks like I figured I would pass on what worked for many years for me.

Good luck

2576. Re: Open feederline through the wall

Yahoo group: SkyWires
Date: 2007-08-30 13:19:42 UTC
From: stocktonclinton
Topic: 2573 Message: 2576

You could also drill two holes, same spacing as your line, insert plastic tubing or small pvc pipe. Strip back enough spacers to get the line through the wall and then connect enough line inside to get to the tuner.

If you have a 2 ft piece of rg-8 just laying around the coax idea would work great as well. I haave a friend in missouri who just used the center insulator and wire throwing away the braid and outer jacked.

Any of these should work. I am assuming that the copper all-thread, which is an idea I like had some sort of insulation around it through the holes. Wet Brick will conduct.

Have a great day
73's AGØK Clint

--- In SkyWires@yahoogroups.com, "Clive Lorton" <clive@...> wrote:
>
> A friend has done exactly the same except he used a heavy duty coax with the centre and screed shorted together instead of the copper rod.
>
> Clive G8POC
>
>
> ----- Original Message -----
> From: Garth Conover
> To: SkyWires@yahoogroups.com
> Sent: Thursday, August 30, 2007 6:09 AM
> Subject: Re: [SkyWires] Open feederline through the wall
>
>
> When I needed to go thru a thick Masonry wall of that type I drilled 2 holes the same spacing as the feed line using a long mason bit and a dewalt hammer drill.
>
> I then pushed .250 copper threaded rod thru those holes. Using a copper flat washer and nut on each side to pull it up tight. I soldered solder tinned closed loop terminations on the exterior ladder line. With another copper nut I made the exterior connections. Inside I pretty much did the same thing but I used an open lug and copper wing nuts so I could disconnect quickly in Electrical storms, high wind and heavy dry snow to avoid static buildup issues. A bit of Silicone or exterior RTV under the flat washers on both sides would keep any moisture and little critters outside where it and they belong.

>
> I am sure there will be many points of view that will come out
and not knowing exactly what you situation looks like I figured I
would pass on what worked for many years for me.
>
> Good luck
>

2577. Re: Open feederline through the wall

Yahoo group: SkyWires
Date: 2007-08-30 14:42:30 UTC
From: Don Keith
Topic: 2573 Message: 2577

Of course, the BEST way is one continuous run of open wire, all the way to your matchbox (or balun, if you only intend to use the antenna at resonance), but that is not an option for many of us. I use the following two methods, and both seem to work well.

1) On my skywire loop, I run 450-ohm ladder line to a hole in the brick wall of the basement where the air conditioner feeds through. There, I have two parallel pieces of RG-8 (NOT 8X!) coax taped together that make a run of about 12 feet (3.6 meters) to the shack and tuner. I use banana plugs to tie each leg of the ladder line to each of the coax center conductors. The coax shields are tied together at the tuner end and attached to the station common ground and the two center conductors go right to the balanced output of the tuner. Considering the varying impedances seen using this antenna system on every band, the impedance of the parallel coax cables is no big deal. The run should be as short as possible and the coax as low-loss as you can get. When not operating, I disconnect the banana plugs outside and drop the feedline on the ground for lightning and static-buildup protection.

2) For a flat-top all-band doublet (135 feet or 40 meters long, I run the ladder line to a DX Engineering 1-to-1 balun mounted just above the hole in the brick, then have a short run of RG-213 to the tuner. Again, "short run" is the operative word on coax. And I use banana plugs on the ends of the ladder line to the balun for the same reason as above...quick disconnect when it thunders.

There's argument about the ratio of the balun for such a setup. Some say 4-to-1 or higher since the ladder line is 450 ohm, nominally. Truth is, the impedances will vary all over the place, depending on frequency and other factors. Since most tuners handle higher impedances better, I prefer passing along whatever the feedline and antenna throws at the tuner rather than risk having the balun stepping down an already low, low impedance.

Good luck with the antenna. I'll wager it will serve you well.

Don N4KC
www.n4kc.com

--- In SkyWires@yahoogroups.com, Hans Remeeus <hans@...> wrote:
>
>
> Hello,
>
> Yesterday I installed a DeltaLoop of 410 feet length (125 meters)

at 35
> feet height (10 meters) between three wooden poles of about 8 inch
(20 cm).
>
> I will use open feederline of 165 feet (40 meters) from the same
wire as
> the DeltaLoop.
>
> What is the best solution to bring the open feederline through the
wall?
> The outside and inside walls are made of bricks. Together the wall
is
> less than 1 feet (30 cm) thick.
>
> Any practical ideas?
>
> Many thanks in advance.
>
>
> --
>
> 73,
> Hans Remeeus (PA1HR)
> http://www.remeeus.eu
> Communication is about people, the rest is technology.
>

2578. Re: [SkyWires] Open feederline through the wall

Yahoo group: SkyWires
Date: 2007-08-30 15:40:39 UTC
From: Donald Sanders
Topic: 2573 Message: 2578

I have mine running through the wall by drilling two holes through the wall to pass a 1/8 inch threaded rod. I slipped plastic sleeving over the rod where it is in the wall. I fasten the feedline on the outside to the rods with 2 nuts and a crimp lug on the feedline wires. I do the same on the inside with a 4:1 balun on the inside and coax to the tuner. I can also run balanced line to my other tuner on the inside.
I have a friend that runs 300 ohm thru the wall inside a piece of plastic pipe and then 450 line external and internal to the station.

Healthfully yours,
Don W4BWS
----- Original Message -----
From: Hans Remeeus
To: SkyWires@yahoogroups.com
Sent: Wednesday, August 29, 2007 11:40 PM
Subject: [SkyWires] Open feederline through the wall

Hello,

Yesterday I installed a DeltaLoop of 410 feet length (125 meters) at 35 feet height (10 meters) between three wooden poles of about 8 inch (20 cm).

I will use open feederline of 165 feet (40 meters) from the same wire as the DeltaLoop.

What is the best solution to bring the open feederline through the wall? The outside and inside walls are made of bricks. Together the wall is less than 1 feet (30 cm) thick.

Any practical ideas?

Many thanks in advance.

--

73,
Hans Remeeus (PA1HR)
http://www.remeeus.eu
Communication is about people, the rest is technology.

2579. Re: [SkyWires] Re: Loop noise

Yahoo group: SkyWires
Date: 2007-08-30 12:33:36 UTC
From: Vince Werber
Topic: 2559 Message: 2579

Hi All,

My loop is 280 feet and my old Johnson match box handles it excellently on all bands.

As for noise... My loop has less than half the noise of my reference dipole at 35 feet...

If I were getting a comparative amount of noise on my loop as the dipole the first thing I would check would be the balance of the overall loop and feed line... more of the feed line tho... In order for the noise to be cancelled the feed line must be balanced... objects close to the feed line or the loop can cause imbalance...

vince
ka1iic

On Wednesday 29 August 2007 19:02, stocktonclinton wrote:
> Hi Ron,
>
> The 144 foot loop tunes on all amateur bands from 7.0 through 29.7.
>
> The MFJ-974HB antenna tunder has a very wide range so I can tune the
> loop to with no difficulty.
>
> Now my inboard tunner on my TS-440S will only tune it on 40,20,15,and
> 10. The SWR is two high on the warc bands.
>
> I just tune it with the MFJ no matter what band I chose.
>
> I hope that helps.
>
> 73's AGØK Clint
>
> --- In SkyWires@yahoogroups.com, "dxnature" <on3ron@...> wrote:
> > Howdy Clint,
> >
> > Can you still use your loop on all the bands with the 4:1 balun and
> > the coax?
> >
> > 73'
> > Ron
> > ON3RON
> >
> > --- In SkyWires@yahoogroups.com, "stocktonclinton" <ag0k@> wrote:
> > > Hi Ron,

> > >
> > > Sorry I did not make clear what I would do and am doing. I have
>
> a 4
>
> > > to 1 balun at the loop and bring coax all the way into the shack
>
> and
>
> > > then use my tuner to tune the coax just before the rig.
> > >
> > > I found this make for a very workable system with lower noise.
> > >
> > > I was using 300 twin lead from the antenna all the way into the
>
> shack
>
> > > and I had trouble with computers and on 20 meters when I
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> transmitted
>
> > > it even caused my shredder to start running.
> > >
> > > Since I put the balun at the loop and use unbalanced coax and
>
> tune it
>
> > > at the rig I have had no problems.
> > >
> > > Good Luck and 73
> > > AGØK Clint
> > >
> > > --- In SkyWires@yahoogroups.com, "dxnature" <on3ron@> wrote:
> > > > Hi Clint,
> > > >
> > > > Thanks for the reply!
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> > > > Now I use the 450 Ohm open line balanced feeder. So you tell me
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> to
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> > > use
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> > > > the balun before the tuner? What if I put a 1:1 link coupling
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> > > > the tuner and then continue with a coax to the shack. Would
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> > > > be more suficcient. It could keep a bit of static from the
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> tuner. As
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> > > > the SCG tuner likes a high impedance to work with. The 1:1 will
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> be a
>
> > > > logic choice I think.
> > > >
> > > > I decided to purchase a SG-239 today instead of the SG-211. I
>
> will
>
> > > > mount the tuner and balun in a waterproof container at the base
>
> of
>
> > > my
> > >
> > > > tower. From the feed point of the loop there will be about 3
>
> foot
>
> > > open
> > >
> > > > feeder running to the Tuner.
> > > >
> > > > Another approach is to mount the tuner at the feedpoint of the
>
> loop
>
> > > > and after that continue with a good grade double shielded coax
>
> to
>
> > > keep
> > >
> > > > the noise to a minimum.
> > > >
> > > > What say...
> > > >
> > > > 73' Ron - on3ron
> > > > on3ron@
> > > >
> > > > --- In SkyWires@yahoogroups.com, "stocktonclinton" <ag0k@>
>
> wrote:
> > > > > I would suggest a good quality 4 to 1 current balun, which

>
> could
>
> > > be
> > >
> > > > > purchased at wireman.com and use coax and your tuner you are
> > >
> > > using
> > >
> > > > > now. The 4 to 1 balun works well. That is what I am doing
>
> and
>
> > > the
> > >
> > > > > noise is down from what I see on my 137' zepp and my log is
>
> full
>
> > > of
> > >
> > > > > DX.
> > > > >
> > > > > 73's Clint AGØK
> > > > > ag0k@
> > > > >
> > > > > --- In SkyWires@yahoogroups.com, "dxnature" <on3ron@> wrote:
> > > > > > Hi OM's,
> > > > > >
> > > > > > I have made a horizontal 40 loop with 17 meters of 450 Ohm
>
> open
>
> > > > > feeder
> > > > >
> > > > > > line into an MFJ-941e tuner. As my dipoles worked fine I
>
> wanted
>
> > > a
> > >
> > > > > > quiter antenna, but the loop has the same noise level. Last
> > >
> > > year I
> > >
> > > > > > made a T2FD and am very pleased with it as a receive
>
> antenna,
>
> > > but I

> > >
> > > > > > expected the loop to be even better, hmmm ... not so :-(
> > > > > >
> > > > > > My aim now is to put a automatic coupler at the feed point
>
> of
>
> > > the
> > >
> > > > > loop
> > > > >
> > > > > > and enter the shack with a coax feeder. My radio is a FT-
>
> 817
>
> > > with
> > >
> > > > > only
> > > > >
> > > > > > 5 watt there is not mutch to choose from in antenna coupler
> > >
> > > world.
> > >
> > > > > > Most of them need at least 5 watts to activate. Seems to me
> > >
> > > that the
> > >
> > > > > > SGC-SG-211 is the one capable to run this setup. Who says
>
> that
>
> > > this
> > >
> > > > > is
> > > > >
> > > > > > the way to go.
> > > > > >
> > > > > > Are there other theories to get rid of the noise levels and
> > >
> > > keep the
> > >
> > > > > > use of the open feeder? I chose this setup to use the loop
>
> as a
>
> > > > > > wideband antenna to work different bands and its low loss
>
> of
>
> > > power.

> > >
> > > > > > Any suggestions???
> > > > > >
> > > > > > 73's
> > > > > > Ron Liekens
> > > > > > ON3RON, DXA-64
>
> Yahoo! Groups Links
>
>
>

2580. Re: [SkyWires] Re: Open feederline through the wall

Yahoo group: SkyWires
Date: 2007-08-30 19:21:30 UTC
From: Hans Remeeus
Topic: 2573 Message: 2580

Dear Don and others,

Many thanks for all the very interesting information! This helps a lot.

I use the DX Engineering 1:1 and 1:4 baluns and I am very curious how
they will work with the DeltaLoop.

Untill now I always used dipoles with the PA0LL tuner. Have a look for
this tuner at http://www.lltuners.nl/. However I also want to use a home
made tuner with 1 variable C and 4 coils.

Tomorrow I hope to finish the installation and do the first tests with
the DeltaLoop.

73,
Hans Remeeus (PA1HR)
http://www.remeeus.eu
Communication is about people, the rest is technology.

Don Keith schreef:
>
>
> Of course, the BEST way is one continuous run of open wire, all the
> way to your matchbox (or balun, if you only intend to use the antenna
> at resonance), but that is not an option for many of us. I use the
> following two methods, and both seem to work well.
>
> 1) On my skywire loop, I run 450-ohm ladder line to a hole in the
> brick wall of the basement where the air conditioner feeds through.
> There, I have two parallel pieces of RG-8 (NOT 8X!) coax taped
> together that make a run of about 12 feet (3.6 meters) to the shack
> and tuner. I use banana plugs to tie each leg of the ladder line to
> each of the coax center conductors. The coax shields are tied
> together at the tuner end and attached to the station common ground
> and the two center conductors go right to the balanced output of the
> tuner. Considering the varying impedances seen using this antenna
> system on every band, the impedance of the parallel coax cables is no
> big deal. The run should be as short as possible and the coax as low-
> loss as you can get. When not operating, I disconnect the banana
> plugs outside and drop the feedline on the ground for lightning and
> static-buildup protection.
>
> 2) For a flat-top all-band doublet (135 feet or 40 meters long, I run
> the ladder line to a DX Engineering 1-to-1 balun mounted just above
> the hole in the brick, then have a short run of RG-213 to the tuner.
> Again, "short run" is the operative word on coax. And I use banana

> plugs on the ends of the ladder line to the balun for the same reason
> as above...quick disconnect when it thunders.
>
> There's argument about the ratio of the balun for such a setup. Some
> say 4-to-1 or higher since the ladder line is 450 ohm, nominally.
> Truth is, the impedances will vary all over the place, depending on
> frequency and other factors. Since most tuners handle higher
> impedances better, I prefer passing along whatever the feedline and
> antenna throws at the tuner rather than risk having the balun
> stepping down an already low, low impedance.
>
> Good luck with the antenna. I'll wager it will serve you well.
>
> Don N4KC
> www.n4kc.com
>
> --- In SkyWires@yahoogroups.com <mailto:SkyWires%40yahoogroups.com>,
> Hans Remeeus <hans@...> wrote:
> >
> >
> > Hello,
> >
> > Yesterday I installed a DeltaLoop of 410 feet length (125 meters)
> at 35
> > feet height (10 meters) between three wooden poles of about 8 inch
> (20 cm).
> >
> > I will use open feederline of 165 feet (40 meters) from the same
> wire as
> > the DeltaLoop.
> >
> > What is the best solution to bring the open feederline through the
> wall?
> > The outside and inside walls are made of bricks. Together the wall
> is
> > less than 1 feet (30 cm) thick.
> >
> > Any practical ideas?
> >
> > Many thanks in advance.
> >
> >
> > --
> >
> > 73,
> > Hans Remeeus (PA1HR)
> > http://www.remeeus.eu <http://www.remeeus.eu>
> > Communication is about people, the rest is technology.
> >
>

>
>
> __________ NOD32 2492 (20070830) Informatie __________
>
> Dit bericht is gecontroleerd door het NOD32 Antivirus Systeem.
> http://www.nod32.nl

2581. Loop parasitic element?

Yahoo group: SkyWires
Date: 2007-08-30 22:42:39 UTC
From: Bruce Conner
Topic: 2581 Message: 2581

I was doodling in a meeting today (so sue me!), and I had an idea about a possible improvement to a full wave horizontal loop. Maybe this has been done before, or maybe my thinking is flawed; let me know. Here's what I was thinking:

You have a square horizontal loop, full wave for 80 meters - standard stuff. The takeoff angle improves as you use it on 40 and 20, but loops are still not known for their wonderful takeoff angle, even if they do work DX OK. I was hoping to improve that, at least for 20 meters. So rather than using a parasitic element to boost gain in one direction, I was thinking, what if you could use it to lower the takeoff angle? Here's how (I hope). You have the 80 meter loop as the driven element (say 70 feet on a side) and INSIDE that, at about the same height, you suspend a 20 meter loop (about 35 feet per side)with no connections, just parasitic. It is spaced at about 1/4 wavelength from the outer loop all the way around. A small loop inside a big loop.

Would this have the takeoff angle lowering effect I'm looking for? I know people have stacked loops vertically, but I've never seen one set up as a square donut before. Anybody care to comment (or point and laugh)? I haven't done much with antenna modeling software and I have no idea if any of them could handle this anyway, but if someone cares to try...

Bruce
WB8OGK

2582. Hello - Any thoughts of using say 3.2mm multistrand Stainless Steel Wire

Yahoo group: SkyWires
Date: 2007-08-31 13:30:29 UTC
From: Adam
Topic: 2582 Message: 2582

Hello All, Has anybody tried or have any thoughts on how suitable multistrand Stainless Steel Wire would perform say compared to good copperweld?

Its hard to get good copperweld in Australia & I'm finding it difficult to obtain electrical conductivity info on SS Wire rope. I also tohught SS Multistrand wire would stayup a lot longer but I'm concerned about its conductivity (ie. lack of information).

I was originally looking at a single strand of Stainless Steel MIG/TIG welding wire of ~1.1mm for my new HOPL as the MIG copperweld I use keeps rusting out.

Has anybody sucessfully used Single Strand or Multistrand Stainless Steel Wire/Wirerope?.... I would like to hear from you.

73's

Adam

2583. Re: [SkyWires] Hello - Any thoughts of using say 3.2mm multistrand Stainless Steel Wire

Yahoo group: SkyWires
Date: 2007-08-31 16:17:32 UTC
From: Ken Burchfield
Topic: 2582 Message: 2583

Adam,
I have not tried the stainless wire , or have not found the electrical conductivity.
From the advertisement Bushcom uses stainless wire in making their antennas.
I have seen some others using stainless wire.
Long time use in mobile antennas
73 Ken
http://www.bushcomm.com.au/
BBA-100 HF ANTENNA

Our flagship model and all round best performer to date is the BBA-100 Antenna.

Highly efficient, engineered to meet the exacting standards of professional users, yet comparatively affordable, the BBA-100 has much to offer to a wide range of private and commercial users.

The BBA-100 is adaptable enough to suit a wide range of installation situations - from between two purpose built antennas at a professional site to between a tree and the backyard shed and even in an inverted "v" configuration*.

Light, yet sturdy construction ensures low total mass wind loading even though the highest quality materials are used in construction, such as stainless steel wire and fittings and UV resistant fibreglass rods This produces an antenna that will survive the rigours of the outdoors for many years.

A range of BBA-100 variants are available - including shorter, longer and 500W (AM) & 1KW variations. These models include BBA-100S, BBA-100E, BBA-500, BBA-500E.

Give Packet Radio a try ....Mississippi.......145.010.......Simplex.......1200 Baud

----- Original Message ----
From: Adam <mada73@...>
To: SkyWires@yahoogroups.com
Sent: Friday, August 31, 2007 8:30:29 AM
Subject: [SkyWires] Hello - Any thoughts of using say 3.2mm multistrand Stainless Steel Wire

Hello All, Has anybody tried or have any thoughts on how suitable
multistrand Stainless Steel Wire would perform say compared to good
copperweld?

Its hard to get good copperweld in Australia & I'm finding it
difficult to obtain electrical conductivity info on SS Wire rope. I
also tohught SS Multistrand wire would stayup a lot longer but I'm
concerned about its conductivity (ie. lack of information).

I was originally looking at a single strand of Stainless Steel MIG/TIG welding wire of ~1.1mm for my new HOPL as the MIG copperweld I use keeps rusting out.

Has anybody sucessfully used Single Strand or Multistrand Stainless Steel Wire/Wirerope?.... I would like to hear from you.

73's

Adam

Yahoo! Groups Links

Need a vacation? Get great deals
to amazing places on Yahoo! Travel.
http://travel.yahoo.com/

2584. Re: Open feederline through the wall

Yahoo group: SkyWires
Date: 2007-08-31 17:46:21 UTC
From: Howard
Topic: 2573 Message: 2584

--- In SkyWires@yahoogroups.com, Hans Remeeus <hans@...> wrote:
>
>
> Hello,
>
> Yesterday I installed a DeltaLoop of 410 feet length (125 meters)
at 35
> feet height (10 meters) between three wooden poles of about 8 inch
(20 cm).
>
> I will use open feederline of 165 feet (40 meters) from the same
wire as
> the DeltaLoop.
>
> What is the best solution to bring the open feederline through the
wall?
> The outside and inside walls are made of bricks. Together the wall
is
> less than 1 feet (30 cm) thick.
>
> Any practical ideas?
>
> Many thanks in advance.
>
>
> --
>
> 73,
> Hans Remeeus (PA1HR)
> http://www.remeeus.eu
> Communication is about people, the rest is technology.

Try a plexiglass insert cut very close to width dimension of your window and a height of about 6 inches into the nearest window. Slide up the window abovr the height of the insert. Put some sticky backed foam insulation around the perimeter of the plexiglass insert and close the window down on the insert. A couple of L barckets mounted between the upper and lower window will hold everything in place. Drill a couple of holes with the spacing of your open wire line and pass the wire through.

Works great for me.
>

2585. Re: Hello - Any thoughts of using say 3.2mm multistrand Stainless Steel Wire

Yahoo group: SkyWires
Date: 2007-09-01 18:01:27 UTC
From: Bryan
Topic: 2582 Message: 2585

Hello Adam,

I have had experience with stranded Stainless Steel wire for a
160meter loop.

It has pros and cons, The pro is of course durability/strength etc.
The nice part also is that it doesent tend to stretch much so the
frequency will not vary a lot with temperature variances.

The Cons/downside of the equation is this. Stainless steel is not as
conductive. I had heard (and I do not at this time remember the source
but it was a ham) that Stainless Steel was only .8 as conductive and
radiative as copper wire/or copper weld.

If this were indeed true, I should think you would be looking at a
minimum of a 20% signal reduction (likely more by the time you
calculate DB algorythms and such), of efficency loss.

Of course if stainless steel was all I could get my hands on to get on
the air, I would certainly use it! HI HI!

I Inturn also would take steps to build a taller, or more complex
array to compensate for losses in other areas, paying special
attention to areas where I could compensate for "CURABLE" loss.

Hope this is of some assistance, Bryan Kc8hps

p.s. as a side note though, my stainless steel loop survived a major
ice storm with no damage :) .--- In SkyWires@yahoogroups.com, "Adam"
<mada73@...> wrote:
>
> Hello All, Has anybody tried or have any thoughts on how suitable
> multistrand Stainless Steel Wire would perform say compared to good
> copperweld?
>
> Its hard to get good copperweld in Australia & I'm finding it
> difficult to obtain electrical conductivity info on SS Wire rope. I
> also tohught SS Multistrand wire would stayup a lot longer but I'm
> concerned about its conductivity (ie. lack of information).
>
> I was originally looking at a single strand of Stainless Steel MIG/TIG
> welding wire of ~1.1mm for my new HOPL as the MIG copperweld I use
> keeps rusting out.
>
> Has anybody sucessfully used Single Strand or Multistrand Stainless

> Steel Wire/Wirerope?.... I would like to hear from you.
>
> 73's
>
> Adam
>

2586. Re: [SkyWires] Re: Hello - Any thoughts of using say 3.2mm multistrand Stainless Steel Wire

Yahoo group: SkyWires
Date: 2007-09-01 19:01:06 UTC
From: Ken Burchfield
Topic: 2582 Message: 2586

To Adam and All
Hope some of this information will be helpful:
73 Ken

Electrical Conductivity of Metals, including some alloys

* At 20° Celsius, based on copper as 100.
** Per degree C at 20° C.
Note: The conductivity of various metals is subject to variation according to processing and alloy composition.

Aluminum 59
Brass 28
Cadmium 19
Chromium 55
Cobalt 16.3
Constantin 3.24
Copper:
Hard drawn 89.5
Annealed 100
Gold 65
Iron:
Pure 17.7
Cast 2-12
Wrought 11.4
Lead 7
Manganin 3.7
Mercury 1.66
Molybdenum 33.2
Nichrome 1.45
Nickel 12-16
Nickel silver 5.3(18%)
Phosphor bronze 36
Platinum 15
Silver 106
Steel 3-15
Tin 13
Titanium 5
Tungsten 28.9
Zinc 28.2

http://www.vk1od.net/rigging/sag.htm
The Link above will have the full article
Cut some information out and placed below:
30% Copperweld

30% Copperweld has sufficient cladding thickness that the wire's conductivity is similar to copper over most of HF.

Copperweld delivers most of the strength of medium/high tensile steel and the conductivity at HF of copper.
2.7mm XL

The 2.7mm dia "XL" wire is an electric fence wire by Gallagher. They claim it is a high tensile steel wire clad with

aluminium, 30% by csa. Gallagher have supplied mechanical properties of the wire. The cladding thickness is 223

microns, which is sufficiently greater than the skin depth on HF that the wire's conductivity is similar to aluminium. XL

delivers 70% of the strength of high tensile steel and the conductivity at HF of aluminium (about 78% of copper at HF

due resistivity and skin effect).
Stainless Steel

Stainless steel has more loss than copper, and depending on the antenna, thin stainless steel wires may add 1 to 4 dB

of loss compared to copper.

Small diameter stainless steel is used in many commercial wideband HF antennas. Many if not all of these antennas

incorporate bulk resistive loss elements (eg T2FD designs) and loss in the antenna wire just means less loss needed in

the bulk loss elements. If an antenna doesn't depend on inherent or built in loss to achieve objectives (such as

improved VSWR over a wide frequency range), don't use stainless steel without considering its loss.

Give Packet Radio a try ....Mississippi.......145.010.......Simplex.......1200 Baud

----- Original Message ----
From: Bryan <kc8hps_2003@yahoo.com>
To: SkyWires@yahoogroups.com
Sent: Saturday, September 1, 2007 1:01:27 PM
Subject: [SkyWires] Re: Hello - Any thoughts of using say 3.2mm multistrand Stainless Steel Wire

Hello Adam,

I have had experience with stranded Stainless Steel wire for a
160meter loop.

It has pros and cons, The pro is of course durability/strength etc.
The nice part also is that it doesent tend to stretch much so the

frequency will not vary a lot with temperature variances.

The Cons/downside of the equation is this. Stainless steel is not as conductive. I had heard (and I do not at this time remember the source but it was a ham) that Stainless Steel was only .8 as conductive and radiative as copper wire/or copper weld.

If this were indeed true, I should think you would be looking at a minimum of a 20% signal reduction (likely more by the time you calculate DB algorythms and such), of efficency loss.

Of course if stainless steel was all I could get my hands on to get on the air, I would certainly use it! HI HI!

I Inturn also would take steps to build a taller, or more complex array to compensate for losses in other areas, paying special attention to areas where I could compensate for "CURABLE" loss.

Hope this is of some assistance, Bryan Kc8hps

p.s. as a side note though, my stainless steel loop survived a major ice storm with no damage :) .--- In SkyWires@yahoogroups.com, "Adam" <mada73@...> wrote:
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> 73's
>
> Adam
>

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http://surveylink.yahoo.com/gmrs/yahoo_panel_invite.asp?a=7

2587. Re: Hello - Any thoughts of using say 3.2mm multistrand Stainless Steel Wire

Yahoo group: SkyWires
Date: 2007-09-01 19:11:11 UTC
From: stocktonclinton
Topic: 2582 Message: 2587

Here is some information I found on the pages produced by Cebik.
Looking at the list of materials for making an antenna SS would be my
last choice.

73's AG0K Clint

Test 1: #14 wire dipole for 7.0 MHz
In this test, I took a resonant dipole model using lossless wire and
then changed materials (from the usual list of materials) to see what
the effect might be. Here is data on free space gain, source
impedance, and efficiency for a number of materials. 6063-T843 and
6061-T6 are common aluminum allows used mostly in tubing that we find
in HF and VHF beam antennas. The "Ey" notation is common computereze
for "x 10 to the y power." Note where the list changes from E7 to E6.
Conductivity Material Gain Source Z Efficiency
S/m dBi R ± jX Ohms %
Perfect (lossless) 2.13 72.2 + j 0.1 100.00
6.2893E7 Silver 2.04 73.7 + j 1.4 98.09
5.8001E7 Copper 2.04 73.7 + j 1.5 98.01
3.7665E7 Pure Al. 2.02 74.1 + j 1.8 97.54
3.0769E7 6063-T832 2.01 74.3 + j 1.9 97.28
2.4938E7 6061-T6 2.00 74.6 + j 2.2 96.98
1.5625E7 Brass 1.96 75.2 + j 2.7 96.19
9.0909E6 Phosphor Bronze 1.91 76.2 + j 3.6 95.02
1.3889E6 Stnlss Stl 302 1.55 83.0 + j 8.8 87.53

Note that even silver (untarnished) shows a 2% efficiency loss and a
0.1 dB gain loss relative to perfection. Even if silver were cheap, I
would not waste it on a wire antenna of this kind, given the
performance of copper. Also note the larger step drops as you move
below pure aluminum on the list.

--- In SkyWires@yahoogroups.com, Ken Burchfield <k5jxl@...> wrote:
>
> To Adam and All
> Hope some of this information will be helpful:
> 73 Ken
>
> Electrical Conductivity of Metals, including some alloys
>
> * At 20° Celsius, based on copper as 100.
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> Brass 28
> Cadmium 19
> Chromium 55
> Cobalt 16.3
> Constantin 3.24
> Copper:
> Hard drawn 89.5
> Annealed 100
> Gold 65
> Iron:
> Pure 17.7
> Cast 2-12
> Wrought 11.4
> Lead 7
> Manganin 3.7
> Mercury 1.66
> Molybdenum 33.2
> Nichrome 1.45
> Nickel 12-16
> Nickel silver 5.3(18%)
> Phosphor bronze 36
> Platinum 15
> Silver 106
> Steel 3-15
> Tin 13
> Titanium 5
> Tungsten 28.9
> Zinc 28.2
>
> http://www.vk1od.net/rigging/sag.htm
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>
> Give Packet Radio a
try ....Mississippi.......145.010.......Simplex.......1200 Baud
>
>
>
> ----- Original Message ----
> From: Bryan <kc8hps_2003@...>
> To: SkyWires@yahoogroups.com
> Sent: Saturday, September 1, 2007 1:01:27 PM
> Subject: [SkyWires] Re: Hello - Any thoughts of using say 3.2mm
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>
> p.s. as a side note though, my stainless steel loop survived a major
> ice storm with no damage :) .--- In
SkyWires@yahoogroups.com, "Adam"
> <mada73@> wrote:
> >
> > Hello All, Has anybody tried or have any thoughts on how suitable
> > multistrand Stainless Steel Wire would perform say compared to
good
> > copperweld?
> >
> > Its hard to get good copperweld in Australia & I'm finding it
> > difficult to obtain electrical conductivity info on SS Wire rope.
I
> > also tohught SS Multistrand wire would stayup a lot longer but
I'm
> > concerned about its conductivity (ie. lack of information).
> >
> > I was originally looking at a single strand of Stainless Steel
MIG/TIG
> > welding wire of ~1.1mm for my new HOPL as the MIG copperweld I
use
> > keeps rusting out.
> >
> > Has anybody sucessfully used Single Strand or Multistrand
Stainless
> > Steel Wire/Wirerope?.... I would like to hear from you.
> >
> > 73's
> >
> > Adam
> >
>
>

>
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>
>
>
>
>

> Shape Yahoo! in your own image. Join our Network Research Panel
today! http://surveylink.yahoo.com/gmrs/yahoo_panel_invite.asp?a=7
>

2588. New DeltaLoop

Yahoo group: SkyWires
Date: 2007-09-01 20:08:52 UTC
From: Hans Remeeus
Topic: 2588 Message: 2588

Yesterday I finished the installation of the 410 feet long horizontal
Delta Loop antenna at 30 feet height.
The open feeder line is about 125 feet long.

You will find a photo impression on
http://www.remeeus.eu/hamradio/antennes_tuners/deltaloop.htm
I did'nt have the time to translate the text into English, but I will do
this the coming days.

Signal reports (RX as well as TX) are dramatic good!

For the time being I did put the open feederline through a ventilation
roof tile, instead of through the wall. You will see this on one of the
photo's.

Sked are very welcome to test the DeltaLoop on 14 MHz!

--

73,
Hans Remeeus (PA1HR)
http://www.remeeus.eu
Communication is about people, the rest is technology.

2589. Re: [SkyWires] New DeltaLoop

Yahoo group: SkyWires
Date: 2007-09-01 20:39:39 UTC
From: John Isella
Topic: 2588 Message: 2589

Very nice work, where did you get the spacers for the ladder line,
those are real nice.

73 John K1KSC

On Sep 1, 2007, at 4:08 PM, Hans Remeeus wrote:

>
> Yesterday I finished the installation of the 410 feet long horizontal
> Delta Loop antenna at 30 feet height.
> The open feeder line is about 125 feet long.
>
> You will find a photo impression on
> http://www.remeeus.eu/hamradio/antennes_tuners/deltaloop.htm
> I did'nt have the time to translate the text into English, but I
> will do
> this the coming days.
>
> Signal reports (RX as well as TX) are dramatic good!
>
> For the time being I did put the open feederline through a ventilation
> roof tile, instead of through the wall. You will see this on one of
> the
> photo's.
>
> Sked are very welcome to test the DeltaLoop on 14 MHz!
>
>
> --
>
> 73,
> Hans Remeeus (PA1HR)
> http://www.remeeus.eu
> Communication is about people, the rest is technology.
>
>
>
>
> Yahoo! Groups Links
>
>
>

2590. Re: New DeltaLoop

Yahoo group: SkyWires
Date: 2007-09-01 20:47:28 UTC
From: stocktonclinton
Topic: 2588 Message: 2590

I also want to know where you found the spacer and mounts.
I love the looks of your installation.

73's AGØK Clint

--- In SkyWires@yahoogroups.com, John Isella <jjisella@...> wrote:
>
> Very nice work, where did you get the spacers for the ladder line,
> those are real nice.
>
> 73 John K1KSC
>
>
>
>
> On Sep 1, 2007, at 4:08 PM, Hans Remeeus wrote:
>
> >
> > Yesterday I finished the installation of the 410 feet long
horizontal
> > Delta Loop antenna at 30 feet height.
> > The open feeder line is about 125 feet long.
> >
> > You will find a photo impression on
> > http://www.remeeus.eu/hamradio/antennes_tuners/deltaloop.htm
> > I did'nt have the time to translate the text into English, but I
> > will do
> > this the coming days.
> >
> > Signal reports (RX as well as TX) are dramatic good!
> >
> > For the time being I did put the open feederline through a
ventilation
> > roof tile, instead of through the wall. You will see this on one
of
> > the
> > photo's.
> >
> > Sked are very welcome to test the DeltaLoop on 14 MHz!
> >
> >
> > --
> >
> > 73,
> > Hans Remeeus (PA1HR)

> > http://www.remeeus.eu
> > Communication is about people, the rest is technology.
> >
> >
> >
> >
> > Yahoo! Groups Links
> >
> >
> >
>

2591. Re: [SkyWires] Re: Hello - Any thoughts of using say 3.2mm multistrand Stainless Steel Wire

Yahoo group: SkyWires
Date: 2007-09-02 02:18:04 UTC
From: Facility 406
Topic: 2582 Message: 2591

"Stainless steel has more loss than copper, and depending on the antenna, thin stainless steel wires may add 1 to 4 dB"

Any idea what "thin" is? I am considering 3\16" or 1\4" stainless for my antenna.

Kurt

2592. Re: Hello - Any thoughts of using say 3.2mm multistrand Stainless Steel Wire

Yahoo group: SkyWires
Date: 2007-09-02 02:27:49 UTC
From: Richard Zolla
Topic: 2582 Message: 2592

Kurt,

I don't think you read that correctly. Thin stainless wires may add 1 to 4db *of loss* over copper.

--- In SkyWires@yahoogroups.com, "Facility 406" <facility_406@...> wrote:
>
> "Stainless steel has more loss than copper, and depending on the antenna,
> thin stainless steel wires may add 1 to 4 dB"
>
> Any idea what "thin" is? I am considering 3\16" or 1\4" stainless for my
> antenna.
>
> Kurt
>

2593. Re: [SkyWires] New DeltaLoop

Yahoo group: SkyWires
Date: 2007-09-02 05:23:33 UTC
From: Hans Remeeus
Topic: 2588 Message: 2593

Thanks John.

The spacers can be seen and bought at
http://www.hfparts.com/html/spreizer.html

However this site is in the German language (yet). If you need any
translation, just send me an e-mail.

I use the SP-120 spacers for 110 mm (4.33") spacing.

These spacers have a hole in the middle, for mounting them on any surface.

73,
Hans Remeeus (PA1HR)
http://www.remeeus.eu
Communication is about people, the rest is technology.

John Isella schreef:
>
>
> Very nice work, where did you get the spacers for the ladder line,
> those are real nice.
>
> 73 John K1KSC
>

2594. Re: [SkyWires] Re: New DeltaLoop

Yahoo group: SkyWires
Date: 2007-09-02 05:40:39 UTC
From: Hans Remeeus
Topic: 2588 Message: 2594

Thanks Clint.

The mounts are also from Germany, just as the spacers.

However I bought the spacers at a local company who installs lightning protections.

The mounts are from zB-S Technic in Durmersheim/Germany.
They have a site in the English language:
http://www.b-s-technic.de/B-S-Technic_Release%20Englisch/start_eng.htm

The product is Duplu-Clip. I used the 4 (1.56") and 6 (2.36") cm mounts.

I am afraid you have to buy at least 100 pcs. The same problem I had.
Perhaps your local radio club is interested in buying these mounts and the spacers.

73,
Hans Remeeus (PA1HR)
http://www.remeeus.eu
Communication is about people, the rest is technology.

stocktonclinton schreef:
>
>
> I also want to know where you found the spacer and mounts.
> I love the looks of your installation.
>
> 73's AG?K Clint
>

2595. Re: [SkyWires] Re: New DeltaLoop

Yahoo group: SkyWires
Date: 2007-09-02 05:54:22 UTC
From: Hans Remeeus
Topic: 2588 Message: 2595

Sorry, I made a typo. The product is called 'Nylon Duplo-Clip'.

I found a dealer in The Netherlands: Betonindustrie B.V. in Elshout
(tel. 0031 416 370067)

73,
Hans Remeeus (PA1HR)
http://www.remeeus.eu
Communication is about people, the rest is technology.

Hans Remeeus schreef:
>
> The product is Duplu-Clip. I used the 4 (1.56") and 6 (2.36") cm mounts.
>

2596. Re: [SkyWires] Re: Hello - Any thoughts of using say 3.2mm multistrand Stainless Steel Wire

Yahoo group: SkyWires
Date: 2007-09-02 20:22:51 UTC
From: schuetzen
Topic: 2582 Message: 2596

Facility 406 wrote:
> Any idea what "thin" is? I am considering 3\16" or 1\4" stainless for my
> antenna.
> Kurt

LACKING aluminum or copper or better conductors (meaning LESS LOSS), if SS is all you have, then use it. but it is really heavy. for the same strength as copper, why don't you try to find something lighter in SS? if those are all you have access to, then fine.

point is, get it up and get on the air.<G> it is too bad we are selling all of our copper to the Chinese who will send it back to us one day I expect. but until then, do you have copper access thru trading partners there in the area such as the Philipines, or so on??? These probably could obtain US copper from the Chinese at a lower cost than our copper wire which is likely made by the Chinese and shipped back here for sale.

iow, think about online purchasing from your "area" Western Pacific neighbors. I would go see what I could get from Singapore.

good luck
73/K5DAM chas

2597. Re: New DeltaLoop

Yahoo group: SkyWires
Date: 2007-09-02 20:47:56 UTC
From: Murray Lycan
Topic: 2588 Message: 2597

Hans,

Looks beautiful and professional.

I'd be happy to try a sked, but studying the path on my propagation program indicates a QSO could be a challenge with current conditions. I'm available 1600~0700Z most days. What time would you suggest? When do you hear west coast North America best on 20 metres, if at all now?

Murray
VE7HA

2598. Twinlead on the ground

Yahoo group: SkyWires
Date: 2007-09-03 03:50:58 UTC
From: Paul
Topic: 2598 Message: 2598

At home I can route Twinlead so it stays "in the air" until meets the balun to switch to coax. But in the field, I'm not so sure how high the antenna will be. I could just just the TwinLead feed to around 15 feet and put a 4:1 balun there and switch to coax. Or I could put the 4:1 right at the supported connection point of the wires in the air and run coax all the way to the rig. Or, I could run Twinlead all the way to the operating table and convert via the balun there. But if I do that, the twinlead will probably lay along the ground - depending upon terrain.

Is it best/imperative to keep the twinlead off the gound?
Thank you and 73,
Paul

2599. Re: Loop noise

Yahoo group: SkyWires
Date: 2007-09-05 18:26:22 UTC
From: dxnature
Topic: 2559 Message: 2599

Ace,

Yes I run the ladder line trough a wooden window about straight in to the tuner. Distance window / tuner is about 3 inch. From there I use 6 foot of coax into the tranceiver.

As of yesterday the loop is running via 52 feet of 450 ladderline into a SG-239 coupler and 6 foot coax into a QRP tranceiver. The loop is still at the same position and is producing noticably less noise. In fact the only major difference is the SG-239 coupler???

I'm a happy camper at the moment!

Many thanks to you all for the tips.

Ron,
ON3RON

--- In SkyWires@yahoogroups.com, "Dr.Ace Ratliff" <wh2t@...> wrote:
>
> Ron,
> You said "The setup with the ladder line was my initial configuration " . Were you running the ladder line all the way to the rig ?
> If so , How were you connecting the ladder line to the rig ?
> 73, Ace -WH2T
>
> ----- Original Message -----
> From: dxnature
> To: SkyWires@yahoogroups.com
> Sent: Wednesday, August 29, 2007 12:45 PM
> Subject: [SkyWires] Re: Loop noise
>
>
> Murray,
>
> Thanks for coming back on this item.
>
> The setup with the ladder line was my initial configuration to keep
> the loop usable for the bands from 40 to 10 meters. I suspect to loose
> this as I put a balun or unun at the feedpoint and proceed with a coax.
>
> Yesterday I ordered a SG-239 coupler and some Aircell 7 coax. At first
> I will mount the tuner at the botom of the tower connecting the
> antenna with abt 7 meters of ladder line. From the tuner to the shack

> I will use the coax and will see how thing are going. If the amount of
> noise is still prominent, I will put a 1:1 link coupling between the
> ladder line and the tuner.
>
> The noise is not always present. It is all over the bands, even if
> there is no propagation even if the bands are not active, like 10
> meters at night. It is evidend that the noise levels on 80 and 40 are
> higher. I live abt a mile out of town and the nearest industrial
> park is also a mile out on the other side. Not an ideal location, but
> there are no high tension powerlines or electric railroad in sight. I
> have to keep my plasma tv turned off for sure, hi hi :-)
>
> I will keep you posted with the results.
>
> many thanks,
> Ron
> ON3RON
>
> --- In SkyWires@yahoogroups.com, "Murray Lycan" <zk2boy@> wrote:
> >
> > Ron,
> >
> > I think it would be a shame to change your configuration. Your
current
> > configuration with ladder line right to your tuner seems more
> > desireable than changing to coax, even with the antenna-mounted
tuner.
> > If you can try the new configuration without spending money or too
> > much effort, do so just to try it. Otherwise, keep the ladder line
> > configuration with tuner.
> >
> > You don't say on which band/time you are having a "noise
problem". How
> > much noise? What kind of noise? Conditions in general now can be
> > terrible on a given day/band and noise varies greatly from day
to day
> > on my loop. Noise on my 283-foot triangular horizontal loop at
80 feet
> > high is much lower than my vertical, but I don't have a dipole to
> > compare. Certainly, loops usually have less noise than other
antennas.
> >
> > Do you have reason to believe you may have a lot of local man-made
> > noise such as generated from industrial sources? Or are you just
in a
> > regular residential neighbourhood with the usual sources?
> >
> > Keeping the ladder line feed will allow lots of possibilities for
> > multi-band operation. I operate very successfully from 3.5 through
> > 30MHz with the single loop using ladder line.

> >
> > Murray
> > VE7HA
> >
> >
> Recent Activity
> a.. 4New Members
> Visit Your Group
> Share Photos
> Put your favorite
>
> photos and
>
> more online.
>
> Moderator Central
> Get answers to
>
> your questions about
>
> running Y! Groups.
>
> Dog Zone
> on Yahoo! Groups
>
> Join a Group
>
> all about dogs.
> .
>

2600. Re: [SkyWires] Open feederline through the wall

Yahoo group: SkyWires
Date: 2007-09-07 14:57:28 UTC
From: Jason Buchanan
Topic: 2573 Message: 2600

I bored a 15/16" hole through the wall to the outside of the house and ran the ladder line through the hole (i'm using #16 gauge black PVC coated window line). The hole is behind the plastic window shutters (hides the hole when it is time to move out of the house). The ladder line runs up the side of the house and runs along the underside of the eaves. I use ceramic fence post insulators to hang the ladder line under the eaves. I placed the insulators at intervals that met the holes in the ladder line. At the side of the house I use banana plugs to disconnect the feedline. I painted the insulators and feed line with leftover latex paint and it's nearly invisible.

I may get a hole saw and put a piece of 2" PVC pipe through the wall but it works fine as is. I used silicone sealant to plug the hole on the outside of the house, to keep the little beasties out.

73 Jason N1SU

On Aug 30, 2007, at 12:40 AM, Hans Remeeus wrote:

>
> Hello,
>
> Yesterday I installed a DeltaLoop of 410 feet length (125 meters)
> at 35
> feet height (10 meters) between three wooden poles of about 8 inch
> (20 cm).
>
> I will use open feederline of 165 feet (40 meters) from the same
> wire as
> the DeltaLoop.
>
> What is the best solution to bring the open feederline through the
> wall?
> The outside and inside walls are made of bricks. Together the wall is
> less than 1 feet (30 cm) thick.
>
> Any practical ideas?
>
> Many thanks in advance.
>
>
> --
>
> 73,
> Hans Remeeus (PA1HR)

> http://www.remeeus.eu
> Communication is about people, the rest is technology.
>
>
>
>
> Yahoo! Groups Links
>
>
>

--
73 Jason N1SU
http://n1su.com/

2601. Re: [SkyWires] Open feederline through the wall

Yahoo group: SkyWires
Date: 2007-09-07 18:20:27 UTC
From: K.Currie
Topic: 2573 Message: 2601

I have always used stand offs on my ladder line at my tower and any metal that it came close to, but in tha house I run it along the floor joist in the basement. Do you think that can cause a problem? I never thought much about it being close to wood.
VE5HKC Keith
----- Original Message -----
From: Jason Buchanan
To: SkyWires@yahoogroups.com
Sent: Friday, September 07, 2007 8:57 AM
Subject: Re: [SkyWires] Open feederline through the wall

I bored a 15/16" hole through the wall to the outside of the house and ran the ladder line through the hole (i'm using #16 gauge black PVC coated window line). The hole is behind the plastic window shutters (hides the hole when it is time to move out of the house). The ladder line runs up the side of the house and runs along the underside of the eaves. I use ceramic fence post insulators to hang the ladder line under the eaves. I placed the insulators at intervals that met the holes in the ladder line. At the side of the house I use banana plugs to disconnect the feedline. I painted the insulators and feed line with leftover latex paint and it's nearly invisible.

I may get a hole saw and put a piece of 2" PVC pipe through the wall but it works fine as is. I used silicone sealant to plug the hole on the outside of the house, to keep the little beasties out.

73 Jason N1SU

On Aug 30, 2007, at 12:40 AM, Hans Remeeus wrote:

>
> Hello,
>
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> at 35
> feet height (10 meters) between three wooden poles of about 8 inch
> (20 cm).
>
> I will use open feederline of 165 feet (40 meters) from the same
> wire as
> the DeltaLoop.
>
> What is the best solution to bring the open feederline through the
> wall?
> The outside and inside walls are made of bricks. Together the wall is
> less than 1 feet (30 cm) thick.

>
> Any practical ideas?
>
> Many thanks in advance.
>
>
> --
>
> 73,
> Hans Remeeus (PA1HR)
> http://www.remeeus.eu
> Communication is about people, the rest is technology.
>
>
>
>
> Yahoo! Groups Links
>
>
>

--
73 Jason N1SU
http://n1su.com/

No virus found in this incoming message.
Checked by AVG Free Edition.
Version: 7.5.476 / Virus Database: 269.13.5/988 - Release Date: 9/4/07 9:14 AM

2602. Re: [SkyWires] Open feederline through the wall

Yahoo group: SkyWires
Date: 2007-09-07 19:07:40 UTC
From: Hans Remeeus
Topic: 2573 Message: 2602

Hello Keith,

My experience is that this does'nt matter.

However I use the same standoffs at the wall inside the shack as I use outside. But this is more for a good look.

The only problem I have experienced with open feederline is snow...

73,
Hans Remeeus (PA1HR)
http://www.remeeus.eu
Communication is about people, the rest is technology.

K.Currie schreef:
>
>
> I have always used stand offs on my ladder line at my tower and any
> metal that it came close to, but in tha house I run it along the floor
> joist in the basement. Do you think that can cause a problem? I never
> thought much about it being close to wood.
> VE5HKC Keith
>

2603. Re: [SkyWires] Twinlead on the ground

Yahoo group: SkyWires
Date: 2007-09-07 20:17:20 UTC
From: Hans Remeeus
Topic: 2598 Message: 2603

Hello Paul,

You always have to keep the twinlead (or any other open feederline) off the ground, when it is outside the house.

Inside the house it is not a problem to lay it along the ground. As far as it will not get wet.

Putting the 4:1 right at the connection point and run coax to the shack perhaps is the most easiest way.
I did it the more difficult way, hi! Just have a look at http://www.remeeus.eu/hamradio/antennes_tuners/deltaloop.htm
I use 4:1 balun inside the shack as well as a balanced tuner. This gives me some more flexibility.

73.

Hans Remeeus (PA1HR)
http://www.remeeus.eu
Communication is about people, the rest is technology.

Paul schreef:
>
>
> At home I can route Twinlead so it stays "in the air" until meets the
> balun to switch to coax. But in the field, I'm not so sure how high
> the antenna will be. I could just just the TwinLead feed to around 15
> feet and put a 4:1 balun there and switch to coax. Or I could put the
> 4:1 right at the supported connection point of the wires in the air
> and run coax all the way to the rig. Or, I could run Twinlead all the
> way to the operating table and convert via the balun there. But if I
> do that, the twinlead will probably lay along the ground - depending
> upon terrain.
>
> Is it best/imperative to keep the twinlead off the gound?
> Thank you and 73,
> Paul
>

2604. RE: [SkyWires] Twinlead on the ground

Yahoo group: SkyWires
Date: 2007-09-08 04:03:58 UTC
From: Christopher Zeman
Topic: 2598 Message: 2604
Attachments: 2 described; binary payloads are missing from this source WARC

Very nice!!!

From: SkyWires@yahoogroups.com [mailto:SkyWires@yahoogroups.com] On Behalf Of Hans Remeeus
Sent: Friday, September 07, 2007 3:17 PM
To: SkyWires@yahoogroups.com
Subject: Re: [SkyWires] Twinlead on the ground

Hello Paul,

You always have to keep the twinlead (or any other open feederline) off the ground, when it is outside the house.

Inside the house it is not a problem to lay it along the ground. As far as it will not get wet.

Putting the 4:1 right at the connection point and run coax to the shack perhaps is the most easiest way.
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I use 4:1 balun inside the shack as well as a balanced tuner. This gives me some more flexibility.

73.

Hans Remeeus (PA1HR)
http://www.remeeus.eu
Communication is about people, the rest is technology.

Paul schreef:
>
>
> At home I can route Twinlead so it stays "in the air" until meets the
> balun to switch to coax. But in the field, I'm not so sure how high
> the antenna will be. I could just just the TwinLead feed to around 15
> feet and put a 4:1 balun there and switch to coax. Or I could put the
> 4:1 right at the supported connection point of the wires in the air
> and run coax all the way to the rig. Or, I could run Twinlead all the
> way to the operating table and convert via the balun there. But if I
> do that, the twinlead will probably lay along the ground - depending
> upon terrain.
>
> Is it best/imperative to keep the twinlead off the gound?
> Thank you and 73,
> Paul
>

2605. Re: Twinlead on the ground

Yahoo group: SkyWires
Date: 2007-09-08 05:48:11 UTC
From: Paul
Topic: 2598 Message: 2605

Yes,
Great photos, Hans.
73,
Paul

--- In SkyWires@yahoogroups.com, "Christopher Zeman" <chris@...> wrote:
>
> Very nice!!!
>
>
>
> From: SkyWires@yahoogroups.com [mailto:SkyWires@yahoogroups.com] On
Behalf
> Of Hans Remeeus
> Sent: Friday, September 07, 2007 3:17 PM
> To: SkyWires@yahoogroups.com
> Subject: Re: [SkyWires] Twinlead on the ground
>
>
>
>
> Hello Paul,
>
> You always have to keep the twinlead (or any other open feederline) off
> the ground, when it is outside the house.
>
> Inside the house it is not a problem to lay it along the ground. As far
> as it will not get wet.
>
> Putting the 4:1 right at the connection point and run coax to the shack
> perhaps is the most easiest way.
> I did it the more difficult way, hi! Just have a look at
> http://www.remeeus.eu/hamradio/antennes_tuners/deltaloop.htm
> I use 4:1 balun inside the shack as well as a balanced tuner. This
gives
> me some more flexibility.
>
> 73.
>
> Hans Remeeus (PA1HR)
> http://www.remeeus.eu
> Communication is about people, the rest is technology.
>
> Paul schreef:
> >

> >
> > At home I can route Twinlead so it stays "in the air" until meets the
> > balun to switch to coax. But in the field, I'm not so sure how high
> > the antenna will be. I could just just the TwinLead feed to around 15
> > feet and put a 4:1 balun there and switch to coax. Or I could put the
> > 4:1 right at the supported connection point of the wires in the air
> > and run coax all the way to the rig. Or, I could run Twinlead all the
> > way to the operating table and convert via the balun there. But if I
> > do that, the twinlead will probably lay along the ground - depending
> > upon terrain.
> >
> > Is it best/imperative to keep the twinlead off the gound?
> > Thank you and 73,
> > Paul
> >
>

2606. Re: [SkyWires] Re: Twinlead on the ground

Yahoo group: SkyWires
Date: 2007-09-08 06:46:07 UTC
From: Hans Remeeus
Topic: 2598 Message: 2606

Thanks Paul and Chris.

It was very nice to do. It took a lot of thinking and reading, in this group too!

I hope other people will get ideas about how to make a loop antenna and how to lead an open feederline to the shack.

73,
Hans Remeeus (PA1HR)
http://www.remeeus.eu
Communication is about people, the rest is technology.

Paul schreef:
>
>
> Yes,
> Great photos, Hans.
> 73,
> Paul
>
> --- In SkyWires@yahoogroups.com <mailto:SkyWires%40yahoogroups.com>,
> "Christopher Zeman" <chris@...> wrote:
> >
> > Very nice!!!
> >

2607. RE: [SkyWires] Re: Twinlead on the ground

Yahoo group: SkyWires
Date: 2007-09-08 13:09:07 UTC
From: Callum M0MCX
Topic: 2598 Message: 2607

>>>how to lead an open feederline to the shack

This is very interesting, I don't recall reading much about this. I always wondered how to turn corners and I'm still not quite sure?

Is there supposed to be exactly the same amount of line in each side of the feeder..?

Callum McCormick

M0MCX

07976 631881

http://www.m0mcx.co.uk/

From: SkyWires@yahoogroups.com [mailto:SkyWires@yahoogroups.com] On Behalf Of Hans Remeeus
Sent: 08 September 2007 07:46
To: SkyWires@yahoogroups.com
Subject: Re: [SkyWires] Re: Twinlead on the ground

Thanks Paul and Chris.

It was very nice to do. It took a lot of thinking and reading, in this group too!

I hope other people will get ideas about how to make a loop antenna and how to lead an open feederline to the shack.

73,
Hans Remeeus (PA1HR)
http://www.remeeus. <http://www.remeeus.eu> eu
Communication is about people, the rest is technology.

Paul schreef:
>
>
> Yes,
> Great photos, Hans.
> 73,
> Paul
>
> --- In SkyWires@yahoogroup <mailto:SkyWires%40yahoogroups.com> s.com <mailto:SkyWires%40yahoogroups.com>,
> "Christopher Zeman" <chris@...> wrote:

> >
> > Very nice!!!
> >

2608. Re: [SkyWires] Re: Twinlead on the ground

Yahoo group: SkyWires
Date: 2007-09-08 19:25:23 UTC
From: Hans Remeeus
Topic: 2598 Message: 2608

Hello Callum,

A minor difference of (lets say) a few inches compared to the
feederlength of 150 feet would not harm very much. I my case there are
left corners and right corners, so afterall the difference of length of
the open feederling could be ignored.

Enjoy your new linear amplifier! I use the same one, for a couple of
years. Great amp.

73,
Hans Remeeus (PA1HR)
http://www.remeeus.eu
Communication is about people, the rest is technology.

Callum M0MCX schreef:
>
>
>> >>how to lead an open feederline to the shack
>
>
>
> This is very interesting, I don?t recall reading much about this. I
> always wondered how to turn corners and I?m still not quite sure?
>
>
>
> Is there supposed to be exactly the same amount of line in each side of
> the feeder..?
>
>
>
> Callum McCormick
>
> M0MCX
>
> 07976 631881
>
> http://www.m0mcx.co.uk/ <http://www.m0mcx.co.uk/>
>

2609. Re: [SkyWires] Twinlead on the ground

Yahoo group: SkyWires
Date: 2007-09-08 21:13:36 UTC
From: Erik Weaver
Topic: 2598 Message: 2609

> You always have to keep the twinlead (or any other open feederline) off
> the ground, when it is outside the house.

...Or It Explodes!!!
...Always!

Strangely, in light of this newly discovered physical law, one past year during field day I strung up a low 135-foot long dipole (that's the total length), connected it with something like 60-feet of window line, and dropped that on the ground for over 20-feet. I did however manage _not_ to loop it around the metal awning of the pavilion.

No flames. Not even smoke. Worked my state of Missouri just fine. Good signals in both directions.

Not that I am recommending this as good design. But to say open line must _always_ be kept off the earth is simply _not_ true.

(That, by the way, is usually the proper reply when someone says something _always_ is true, and doubly so in the world of amateur radio.... always!)

> Inside the house it is not a problem to lay it along the ground. As far
> as it will not get wet.

Rain, nearby metal objects, magnetic fields, positive ion concentrators (e.g. concrete).... I think you'll be better off reading on your own about open feed line and what conditions it is designed to work properly with, what conditions cause dramatic difficulties, and use your best informed judgment when bridging situations somewhere between these extremes. But it isn't as simple as merely keeping it dry.

>> At home I can route Twinlead so it stays "in the air" until meets the
>> balun to switch to coax. But in the field, I'm not so sure how high
>> the antenna will be. I could just just the TwinLead feed to around 15
>> feet and put a 4:1 balun there and switch to coax. Or I could put the
>> 4:1 right at the supported connection point of the wires in the air
>> and run coax all the way to the rig. Or, I could run Twinlead all the
>> way to the operating table and convert via the balun there.

Loss is the only thing that is important. And if you are talking about HF, it isn't all that important, and especially not across short runs. But I digress....

Experiment. All of the above may work. There are many variables, some of which are unique to each site. In general, balanced line (of any design, be it, open, twin lead, ladder line, or window line) has much less loss

than coax. This in turn often provides much more flexibility when using it. I find this especially useful in portable operations. At home you can fiddle and tweak to your heart's desire and maximizing system flexibility is not quite as important.

Whatever you decide, or experiment with, be aware that if you also have available several different lengths of coax you can quickly and simply alter the complex impedance your antenna system delivers to your XCVR (or transmatch). Should you find you cannot tune a given set-up just add (or subtract) about 10% of a wavelength (or any convenient random length of coax you already have on hand) and try again. Changing the length of coax will in nearly all cases alter the impedance "seen by" your XCVR (or transmatch). If that new impedance is within the tuning range of your XCVR/transmatch, then you are in business, making contacts! If not, try a different length of coax.

If you alter the length of coax by 25% or 50% of a wavelength at the frequency giving you trouble you will have done a lot to easily alter the complex impedance to a value that may be usable. If this fails a more complex solution may be required. But altering the length of coax is a simple and easy means to try first, and is very easy to implement in the field.

If you find you cannot tune your antenna system, you might, just for fun, try stomping your twinlead into the ground! This will alter the twinlead's dielectric value, altering its impedance, which in turn will alter the complex impedance ultimately delivered to your XCVR/transmatch. (It will tend to be more lossy too -- but you may make a contact whereas before you couldn't even tune the system!)

Or it still may not work at all. Try it and see what happens!

>> But if I
>> do that, the twinlead will probably lay along the ground - depending
>> upon terrain.

When operating potable my friend and I have successfully raised our ladder line above the earth by taping it to fiberglass with electrical tape. We found some reflective markers, as one might use to mark the edge of a driveway, and discovered the shaft was fiberglass. And reflective! We found this useful at night. It keeps the "extra" ladder line above the earth and is easy to see when stumbling about at night holding only a flashlight for lighting your path.

(But using metal anywhere near balanced line is not a good idea, so don't use metal poles to support your twinlead above the earth. "Anywhere near" means no closer than the width of the balanced line. And further away is even better.)

>> Is it best/imperative to keep the twinlead off the gound?

You should generally find the twin lead operates better when _off_ the ground, but it will "work" either way. I've even had had one corner of a loop fall onto the earth and still "work" -- it was acting very strangely and required frequent retuning, and was basically a pain in the rear-end to use, but it did in fact allow me to transmit and receive RF signals. So while it worked it did not really work very well, and it clearly did not work anywhere near its maximum efficiency. Be aware each of those is measured by different standards.

In short --if that remains possible-- read and ask questions, then do the best job you can with what is at hand, and so long as the impedance delivered from the antenna system to your XCVR (or transmatch) is within that devices ability to load into safely, you will make some contacts, and the system will "work". This is not to say you won't be able to improve upon it.

This is part of the fun of antenna systems. There is almost always room for improvement or something new to test! Enjoy the process!

73-Erik n0ew

2610. Re: [SkyWires] Twinlead on the ground

Yahoo group: SkyWires
Date: 2007-09-09 06:03:18 UTC
From: Hans Remeeus
Topic: 2598 Message: 2610

Hello Erik,

Perhaps it is a matter of language, because the English language is not my native language. It is Dutch.

However I really would *always* keep the twinlead off the ground, when it is outside the house.

It probably would not explode, but there are more that one reasons why I would keep the open feederline off the ground. Safety reasons, amongst other things.

We have two children, two dogs and two cats playing/running nearby the DeltaLoop I use. The antenna and feeder line are now high enough so nobody can touch them. What would happen when one of the children, dogs, cats or what ever living creature damages the feederline on the ground while running QRO...?

I would *never* advise anybody to lay the open feederline on the ground outside the shack, for various reasons.

Sorry for my bad English.

73,
Hans Remeeus (PA1HR)
http://www.remeeus.eu
Communication is about people, the rest is technology.

Erik Weaver schreef:
>
>
> > You always have to keep the twinlead (or any other open feederline) off
> > the ground, when it is outside the house.
>
> ...Or It Explodes!!!
> ...Always!
>
> Strangely, in light of this newly discovered physical law, one past year
> during field day I strung up a low 135-foot long dipole (that's the
> total length), connected it with something like 60-feet of window line,
> and dropped that on the ground for over 20-feet. I did however manage
> _not_ to loop it around the metal awning of the pavilion.
>
> No flames. Not even smoke. Worked my state of Missouri just fine. Good
> signals in both directions.
>
> Not that I am recommending this as good design. But to say open line

> must _always_ be kept off the earth is simply _not_ true.
>
> (That, by the way, is usually the proper reply when someone says
> something _always_ is true, and doubly so in the world of amateur
> radio.... always!)
>

2611. RE: [SkyWires] Re: Twinlead on the ground

Yahoo group: SkyWires
Date: 2007-09-09 10:20:56 UTC
From: Callum M0MCX
Topic: 2598 Message: 2611

>>>Enjoy your new linear amplifier!

How did you know?

I will experiment with some open wire feeder from shack, through walls to outside next spring based on your encouragement. Thanks!

Callum McCormick
M0MCX
07976 631881
http://www.m0mcx.co.uk/

-----Original Message-----
From: SkyWires@yahoogroups.com [mailto:SkyWires@yahoogroups.com] On Behalf Of Hans Remeeus
Sent: 08 September 2007 20:25
To: SkyWires@yahoogroups.com
Subject: Re: [SkyWires] Re: Twinlead on the ground

Hello Callum,

A minor difference of (lets say) a few inches compared to the feederlength of 150 feet would not harm very much. I my case there are left corners and right corners, so afterall the difference of length of the open feederling could be ignored.

Enjoy your new linear amplifier! I use the same one, for a couple of years. Great amp.

73,
Hans Remeeus (PA1HR)
http://www.remeeus.eu
Communication is about people, the rest is technology.

Callum M0MCX schreef:
>
>
>> >>how to lead an open feederline to the shack
>
>
>
> This is very interesting, I don't recall reading much about this. I
> always wondered how to turn corners and I'm still not quite sure?
>
>
>
> Is there supposed to be exactly the same amount of line in each side of

> the feeder..?
>
>
>
> Callum McCormick
>
> M0MCX
>
> 07976 631881
>
> http://www.m0mcx.co.uk/ <http://www.m0mcx.co.uk/>
>

Yahoo! Groups Links

2612. Re: [SkyWires] Re: Twinlead on the ground

Yahoo group: SkyWires
Date: 2007-09-09 10:33:00 UTC
From: Hans Remeeus
Topic: 2598 Message: 2612

Hello Callum,

Your very nice website told me about your new amp.

Glad to know that I encouraged you. I hope you will get a good working antennasystem.

All the best and 73,
Hans Remeeus (PA1HR)
http://www.remeeus.eu
Communication is about people, the rest is technology.

Callum M0MCX schreef:
>
>
> >>>Enjoy your new linear amplifier!
>
> How did you know?
>
> I will experiment with some open wire feeder from shack, through walls to
> outside next spring based on your encouragement. Thanks!
>
> Callum McCormick
> M0MCX
> 07976 631881
> http://www.m0mcx.co.uk/ <http://www.m0mcx.co.uk/>
>

2613. Re: [SkyWires] Twinlead on the ground

Yahoo group: SkyWires
Date: 2007-09-09 14:57:57 UTC
From: Erik Weaver
Topic: 2598 Message: 2613

Hi Hans,

"Always" and "never" convey essentially the same meaning as you are using them in this context. But I do see your point! QRO and dogs chewing transmission line and children determined to find out what that new thing on the ground tastes like are serious considerations in the environment you describe.

However, we are however no longer talking about how antenna systems operate from a technical view point and are now discussing antenna system safety. A valid topic worthy of careful consideration, but I did not understood the original question to be about RF safety. My points were not in any way accounting for any safety factors. The world is replete with examples of doing things less efficiently for greater safety.

I have nothing to say against the idea of raising as much as the antenna system as possible above prying hands and eyes. Certainly it is generally safer for those around the antenna system; especially if they are not hams. For that matter, my intent was not to advise anyone to lay their balanced line on the ground as a good general practice. It is generally _not_ the best plan.

I was only pointing out that is far different than saying "never" (or "always"). Such absolute statements are always wrong in amateur radio (irony intended ;))

My concern is one seldom knows the experience of the person asking the original question, and one can not know who may read the thread in the future, nor who is reading along with the rest of us yet remaining silent. To these persons it is unfair to make unqualified statements that you can "never" do X, or must "always" do Y. Because such extreme statements are _almost_ never true. Therefore such statements are misleading and do a disservice to the person trying to learn more about our fascinating service/hobby.

Had you pointed out you personally would never lay any transmission line on the ground for safety reasons, and you would not advice ever laying unshielded balanced line on the ground due to that contact unbalancing the feed line and almost certainly adding new losses to the antenna system, that would have been a completely different statement. That is qualifying the reasons why you recommend avoiding said actions. (And for logical and very understandable reasons, which I agree with.)

But telling a person seeking understanding to simply never/always do something, doesn't teach them very much. They need to understand _why_ we recommend doing/not doing something. As they understand the various motivations behind why we as a group do some things and avoid others

they will begin to work out new challenges for themselves without need
of our advice. This is because they are learning the principals
underlying the rules of thumb we sometimes too easily express without
qualification.

Now that we understand the different motivations we each had when making
our statements, perhaps our dear readers will be able to understand we
both meant well, but may have been better able to explain our respective
positions.

Apology accepted and apology extended in turn.

73-Erik Weaver n0ew

Hans Remeeus wrote:
> Hello Erik,
>
> Perhaps it is a matter of language, because the English language is not
> my native language. It is Dutch.
>
> However I really would *always* keep the twinlead off the ground, when
> it is outside the house.
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> It probably would not explode, but there are more that one reasons why I
> would keep the open feederline off the ground. Safety reasons, amongst
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> We have two children, two dogs and two cats playing/running nearby the
> DeltaLoop I use. The antenna and feeder line are now high enough so
> nobody can touch them. What would happen when one of the children, dogs,
> cats or what ever living creature damages the feederline on the ground
> while running QRO...?
>
> I would *never* advise anybody to lay the open feederline on the ground
> outside the shack, for various reasons.
>
> Sorry for my bad English.
>
>
> 73,
> Hans Remeeus (PA1HR)
> http://www.remeeus.eu
> Communication is about people, the rest is technology.
>
>
>
> Erik Weaver schreef:
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>> > You always have to keep the twinlead (or any other open feederline) off
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>>

>> ...Or It Explodes!!!
>> ...Always!
>>
>> Strangely, in light of this newly discovered physical law, one past year
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>> _not_ to loop it around the metal awning of the pavilion.
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>> signals in both directions.
>>
>> Not that I am recommending this as good design. But to say open line
>> must _always_ be kept off the earth is simply _not_ true.
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>> (That, by the way, is usually the proper reply when someone says
>> something _always_ is true, and doubly so in the world of amateur
>> radio.... always!)
>>
>
>
>
> Yahoo! Groups Links
>
>
>

2614. Re: [SkyWires] Twinlead on the ground

Yahoo group: SkyWires
Date: 2007-09-09 19:02:03 UTC
From: Hans Remeeus
Topic: 2598 Message: 2614

Hello Erik,

Many thanks for your kind message.

We are living on other continents, so a little misunderstanding does not have to harm the relationship.

We use to say: never say never.

I know what you mean and I have learned from your point of view.

All the best!

73,
Hans Remeeus (PA1HR)
http://www.remeeus.eu
Communication is about people, the rest is technology.

Erik Weaver schreef:
>
>
> Hi Hans,
>
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> using them in this context. But I do see your point! QRO and dogs
> chewing transmission line and children determined to find out what that
> new thing on the ground tastes like are serious considerations in the
> environment you describe.
>
> However, we are however no longer talking about how antenna systems
> operate from a technical view point and are now discussing antenna
> system safety. A valid topic worthy of careful consideration, but I did
> not understood the original question to be about RF safety. My points
> were not in any way accounting for any safety factors. The world is
> replete with examples of doing things less efficiently for greater safety.
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> I have nothing to say against the idea of raising as much as the antenna
> system as possible above prying hands and eyes. Certainly it is
> generally safer for those around the antenna system; especially if they
> are not hams. For that matter, my intent was not to advise anyone to lay
> their balanced line on the ground as a good general practice. It is
> generally _not_ the best plan.
>
> I was only pointing out that is far different than saying "never" (or
> "always"). Such absolute statements are always wrong in amateur radio (
> irony intended ;))
>

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> original question, and one can not know who may read the thread in the
> future, nor who is reading along with the rest of us yet remaining
> silent. To these persons it is unfair to make unqualified statements
> that you can "never" do X, or must "always" do Y. Because such extreme
> statements are _almost_ never true. Therefore such statements are
> misleading and do a disservice to the person trying to learn more about
> our fascinating service/hobby.
>
> Had you pointed out you personally would never lay any transmission line
> on the ground for safety reasons, and you would not advice ever laying
> unshielded balanced line on the ground due to that contact unbalancing
> the feed line and almost certainly adding new losses to the antenna
> system, that would have been a completely different statement. That is
> qualifying the reasons why you recommend avoiding said actions. (And for
> logical and very understandable reasons, which I agree with.)
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> But telling a person seeking understanding to simply never/always do
> something, doesn't teach them very much. They need to understand _why_
> we recommend doing/not doing something. As they understand the various
> motivations behind why we as a group do some things and avoid others
> they will begin to work out new challenges for themselves without need
> of our advice. This is because they are learning the principals
> underlying the rules of thumb we sometimes too easily express without
> qualification.
>
> Now that we understand the different motivations we each had when making
> our statements, perhaps our dear readers will be able to understand we
> both meant well, but may have been better able to explain our respective
> positions.
>
> Apology accepted and apology extended in turn.
>
> 73-Erik Weaver n0ew

2615. Re: Twinlead on the ground

Yahoo group: SkyWires
Date: 2007-09-10 05:55:29 UTC
From: Paul
Topic: 2598 Message: 2615

And, if this tread has any more life, to bring it back to the focus I intended ... the question was about a Remote portable system, operating in some isolated mountain top - and away from crawling children and chewing dogs. I hadn't planned on open wire line - just twin lead or maybe ladderline. The idea was to play with antennas that had a little more gain, or different characteristics than a standard dipole.

I posted here because a loop was one of those "designs" under consideration. TwinLead was advised as the feeder twinlead/ladderline for best match, but to add a 4:1 balun and ocnvert to coax before getting to the tuner or rig.

I have a small 15W 4:1 current balun that seems fine for the QRP operation. But I could put it right at the antenna and go to coax immediately, or run twinlead for some X feet (say 16 feet) and then convert to coax, or run twinlead right to the rig and convert then. But if I take the last option, the twinlead my rest on the ground a bit unless I'm careful.

I'm pretty sure I can et 20 feet up so 16 feet of twinlead, then the balun, then coax the rest of the way sounds the best.

73,
Paul

PS: The size design leans more to 20M (maybe 30)and up

2616. Antenna impedance

Yahoo group: SkyWires
Date: 2007-09-11 01:01:23 UTC
From: knyuen88
Topic: 2616 Message: 2616

What is the antenna impedance-- Hi Z or low Z? (at the AM band) of a car radio ?
I am interested to build an ATU to match the radio to a long wire antenna for DX receptions. Any suggestion?

Thanks in advance.

2617. RE: [SkyWires] Antenna impedance

Yahoo group: SkyWires
Date: 2007-09-11 02:17:10 UTC
From: ag0k@ag0k.com
Topic: 2616 Message: 2617
Attachments: 1 described; binary payloads are missing from this source WARC

Both these links will give you plenty of info on building very high efficiency loop antennas for the AM Broadcast band. Multi turn loops work extremely well on received signals.

The one site has a calculator to assist you in determining the number of turns, and size of your loop receive.

The advantage to building a multi turn loop is you can turn it to null our interfering noise or even an interfering station.

http://www.mindspring.com/~loop_antenna/
http://www.angelfire.com/mb/amandx/loop.html

Grace, Peace, and Joy, be yours,

Rev. W. Clinton Stockton, pastor
Andrews Presbyterian Church
104 S. Rosemary Ave
Andrews, SC 29510
<mailto:pastor@andrewspca.com>
pastor@...
Office 843 264 5596
Manse 843 264 8756
Cellphone 843 325-9760

-----Original Message-----
From: SkyWires@yahoogroups.com [mailto:SkyWires@yahoogroups.com] On Behalf Of knyuen88
Sent: Monday, September 10, 2007 9:01 PM
To: SkyWires@yahoogroups.com
Subject: [SkyWires] Antenna impedance

What is the antenna impedance-- Hi Z or low Z? (at the AM band) of a car radio ?
I am interested to build an ATU to match the radio to a long wire antenna for DX receptions. Any suggestion?

Thanks in advance.

2618. Re: Antenna impedance

Yahoo group: SkyWires
Date: 2007-09-11 02:53:17 UTC
From: knyuen88
Topic: 2616 Message: 2618

Thanks for the info. However am still wanted to know the input impedance of a car radio's is Hi Z or Lo Z before I can determine how the ATU should be connected to the radio. I did try to hook the radio to a homebrew ATU and neither the Hi Z nor the Lo Z output feedings to the car radio makes any noticable improvement for DX receptions.
Was told the car radio input is Hi Z (not Lo Z)at the AM band and the coaxial cable used in the car is not 50 or 75 ohms but a very low distribution capacity shielding wires. Any idea ?

--- In SkyWires@yahoogroups.com, <ag0k@...> wrote:
>
> Both these links will give you plenty of
> info on building very high efficiency
> loop antennas for the AM Broadcast band.
> Multi turn loops work extremely well on
> received signals.
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> The one site has a calculator to assist
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> and size of your loop receive.
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> The advantage to building a multi turn
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> interfering noise or even an interfering
> station.
>
>
> http://www.mindspring.com/~loop_antenna/
> http://www.angelfire.com/mb/amandx/loop.
> html
>
>
>
> Grace, Peace, and Joy, be yours,
>
> Rev. W. Clinton Stockton, pastor
> Andrews Presbyterian Church
> 104 S. Rosemary Ave
> Andrews, SC 29510
> <mailto:pastor@...>
> pastor@...
> Office 843 264 5596
> Manse 843 264 8756
> Cellphone 843 325-9760

>
>
>
> -----Original Message-----
> From: SkyWires@yahoogroups.com
> [mailto:SkyWires@yahoogroups.com] On
> Behalf Of knyuen88
> Sent: Monday, September 10, 2007 9:01 PM
> To: SkyWires@yahoogroups.com
> Subject: [SkyWires] Antenna impedance
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>
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> What is the antenna impedance-- Hi Z or
> low Z? (at the AM band) of a
> car radio ?
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> the radio to a long wire
> antenna for DX receptions. Any
> suggestion?
>
> Thanks in advance.
>

2619. Re: Antenna impedance

Yahoo group: SkyWires
Date: 2007-09-11 11:37:34 UTC
From: W1OOW
Topic: 2616 Message: 2619

--- In SkyWires@yahoogroups.com, "knyuen88" <knyuen88@...> wrote:
>
> What is the antenna impedance-- Hi Z or low Z? (at the AM band) of a
> car radio ?
> I am interested to build an ATU to match the radio to a long wire
> antenna for DX receptions. Any suggestion?
>
> Thanks in advance.
>

The impedance of the coaxial cable that feeds the antenna input of a
car radio is 91 ohms. Presumably, that is the impedance of the
antenna input of the radio.

I hope this helps.

Vince, W1OOW

2620. RE: [SkyWires] Antenna impedance

Yahoo group: SkyWires
Date: 2007-09-11 13:58:19 UTC
From: ag0k@ag0k.com
Topic: 2616 Message: 2620
Attachments: 1 described; binary payloads are missing from this source WARC

If you plan on using a long wire I would bring the wire all the way into the shack to the tuner
and also provide a good ground for the tuner. I would suggest a simple L-C circuit. The length
of the long wire will determine how much L you would need. If you get someone with a modeling
program to plug in your long wire then you can get your total L needed for 1.7 mhz and for .530 mhz.
You could get a fixed value for the 1.7 and then just keep adding L as you tune down to .530 mhz.
Either a variable roller inductor or an air wound that you can tap. A fixed capacitor of 9 to 365 mmf should
do the job from you antenna connector to ground. Then you should get a good match for any receive freq
in the am broadcast band. Remember, the longer the long wire the less L you would need. a 1/4 wave at
1.7 is about 137 feet. At .530 mhz a 1/4 wave is about 441 feet.

I would be interested if someone has a modeling program how much variable L would be needed to match
a 137 foot long wire to 530 KHZ. I might think about building something as well. I do like AM DX. I sometimes
listen to Trans World Radio from Bonaire on 800 KHZ in the winter months.

Good Luck, and I hope this helps you think about your project some.

Let me know how it turns out. 73's AGØK
Clint

Grace, Peace, and Joy, be yours,

Rev. W. Clinton Stockton, pastor
Andrews Presbyterian Church
104 S. Rosemary Ave
Andrews, SC 29510
<mailto:pastor@...>
pastor@...
Office 843 264 5596
Manse 843 264 8756
Cellphone 843 325-9760

-----Original Message-----
From: SkyWires@yahoogroups.com
[mailto:SkyWires@yahoogroups.com] On
Behalf Of knyuen88
Sent: Monday, September 10, 2007 9:01 PM
To: SkyWires@yahoogroups.com
Subject: [SkyWires] Antenna impedance

What is the antenna impedance-- Hi Z or
low Z? (at the AM band) of a
car radio ?
I am interested to build an ATU to match
the radio to a long wire
antenna for DX receptions. Any
suggestion?

Thanks in advance.

2621. Feed Line for 40 m Loop Skywire

Yahoo group: SkyWires
Date: 2007-09-14 02:21:08 UTC
From: VG - Vince
Topic: 2621 Message: 2621

Hi All,

Vince here, I just put up a Skywire for 40m that is about 20ft. above ground. I followed the plan of the "Loop Skywire" from the ARRL wire antenna classics and have it fed with rg 59.My run of coax is about 50ft. to the tuner. My question is, what do most of the members use for feed line? 600 ohm open wire, 450 ohm ladder line, 300 ohm tv twin lead or coax? Any help would be great.

Thanks es 73

VA3GRV ee

2622. RE: [SkyWires] Feed Line for 40 m Loop Skywire

Yahoo group: SkyWires
Date: 2007-09-14 02:56:58 UTC
From: D. Scott MacKenzie
Topic: 2621 Message: 2622

Any of those will work - it depends if you are going to use it on just 40M - than stick with RG-59 - but RG-8 would be better. If you plan to use different band - than use ladder line - 450 ohm, 300 ohm. I use 450 ohm and it is excellent - with the 4:1 balun, it is nearly 1:1 oon 40M with my 80M loop.

-----Original Message-----
From: SkyWires@yahoogroups.com [mailto:SkyWires@yahoogroups.com]On Behalf Of VG - Vince
Sent: Thursday, September 13, 2007 10:21 PM
To: SkyWires@yahoogroups.com
Subject: [SkyWires] Feed Line for 40 m Loop Skywire

Hi All,

Vince here, I just put up a Skywire for 40m that is about 20ft. above ground. I followed the plan of the "Loop Skywire" from the ARRL wire antenna classics and have it fed with rg 59.My run of coax is about 50ft. to the tuner. My question is, what do most of the members use for feed line? 600 ohm open wire, 450 ohm ladder line, 300 ohm tv twin lead or coax? Any help would be great.

Thanks es 73

VA3GRV ee

2623. Re: [SkyWires] Feed Line for 40 m Loop Skywire

Yahoo group: SkyWires
Date: 2007-09-14 05:30:52 UTC
From: Donald Sanders
Topic: 2621 Message: 2623

Vince, I use RG59,approx 25 foot, then rg58 with my 40meter loop.
This provides a bit of impedance matching and the TX loads better
without a tuner.
I also have a loop fed with 450 ladder line for all band. Coax limits
you to monoband use where ladderline or 300 twinlead to a tuner
allows several bands to be worked.

Healthfully yours,
Don W4BWS
----- Original Message -----
From: VG - Vince
Subject: [SkyWires] Feed Line for 40 m Loop Skywire
Hi All,

Vince here, I just put up a Skywire for 40m that is about 20ft. above
ground and have it fed with rg 59. My run of coax is about
50ft. to the tuner. My question is, what do most of the members use for
feed line?
Thanks es 73

VA3GRV ee

2624. Re: [SkyWires] Re: Antenna impedance

Yahoo group: SkyWires
Date: 2007-09-15 16:09:44 UTC
From: Andy
Topic: 2616 Message: 2624

> Was told the car radio input is Hi Z (not Lo Z)at the AM band and
> the coaxial cable used in the car is not 50 or 75 ohms but a very low
> distribution capacity shielding wires. Any idea ?

It's my understanding that car radio whip antennas, being rather short, are hi-Z, but have a rather low radiation resistance. Hence their efficiency is low.

The coax cable I've seen did have a tiny inner wire, making it higher Z (lower C) than normal. I wouldn't expect the radio to necessarily match the coax cable impedance because the cable is very short compared to a wavelength so matching it isn't important. Perhaps better to tailor the radio's input impedance to the antenna, not the cable.

For reception, at MW frequencies, efficiency (and getting an impedance match) is not so important as it is at higher frequencies. Even lousy antennas tend to work "well enough." When the atmospheric noise received by the antenna exceeds the electrical noise of the radio's front-end, there's not much point to improving the efficiency or the impedance match.

Andy

2625. Re: Antenna impedance

Yahoo group: SkyWires
Date: 2007-09-16 03:06:56 UTC
From: knyuen88
Topic: 2616 Message: 2625

Nevertheless I noted that the optimum length of a car antenna is an insulated wire aboout 6 ft--- not an outdoor long wire. Have tried connected to a home made ATU yet did note any signals (within the .55 to 1.6Mhz AM broadcast band) improvement achived. --- either to the LoZ or the HiZ output/input sides of the tuner. Only pickup more noises as well as interferences from high power local stations. Agree what you mentioned that the car antenna is a sort of Hi Z RF pickup probe rather than a whip(wire) antenna. Yet am still interested if can make an effective antenna matching devices to "TUNE/peaking" the car radio to an outdoor longwires for AM broadcast DXing. Any advise ?

--- In SkyWires@yahoogroups.com, Andy <Andy.groups@...> wrote:
>
> > Was told the car radio input is Hi Z (not Lo Z)at the AM band and
> > the coaxial cable used in the car is not 50 or 75 ohms but a very low
> > distribution capacity shielding wires. Any idea ?
>
> It's my understanding that car radio whip antennas, being rather short, are
> hi-Z, but have a rather low radiation resistance. Hence their efficiency is
> low.
>
> The coax cable I've seen did have a tiny inner wire, making it higher Z
> (lower C) than normal. I wouldn't expect the radio to necessarily match the
> coax cable impedance because the cable is very short compared to a
> wavelength so matching it isn't important. Perhaps better to tailor the
> radio's input impedance to the antenna, not the cable.
>
> For reception, at MW frequencies, efficiency (and getting an impedance
> match) is not so important as it is at higher frequencies. Even lousy
> antennas tend to work "well enough." When the atmospheric noise received by
> the antenna exceeds the electrical noise of the radio's front-end, there's
> not much point to improving the efficiency or the impedance match.
>
> Andy

>

2626. Re: [SkyWires] Re: Antenna impedance

Yahoo group: SkyWires
Date: 2007-09-16 17:45:05 UTC
From: Jim Dunstan
Topic: 2616 Message: 2626

At 03:06 AM 9/16/2007 +0000, you wrote:

>Nevertheless I noted that the optimum length of a car antenna is an
>insulated wire aboout 6 ft--- not an outdoor long wire. Have tried
>connected to a home made ATU yet did note any signals (within
>the .55 to 1.6Mhz AM broadcast band) improvement achived. --- either
>to the LoZ or the HiZ output/input sides of the tuner. Only pickup
>more noises as well as interferences from high power local stations.
>Agree what you mentioned that the car antenna is a sort of Hi Z RF
>pickup probe rather than a whip(wire) antenna. Yet am still
>interested if can make an effective antenna matching devices
>to "TUNE/peaking" the car radio to an outdoor longwires for AM
>broadcast DXing. Any advise ?

The input impedance of a car radio is rather high. The coax/shielded wire is used to connect the radio to the antenna and should not be looked at as an RF 'feedline'. Most car radios are designed with a high gain front end with capacitive coupling to the antenna which is omni directional. The problem with using a car radio in the house or shop is that the ideal short 'whip' antenna is close to the radio and since the radio is indoors, close to interfering noise sources it doesn't make for good AM BC reception. If you want to have reasonably noise free reception you either have to move the radio outdoors away from noise sources or locate the antenna outdoors away from noise and bring the desired RF in with a feed line system.

Assume a suitable outdoor antenna properly coupled to a low impedance coaxial feed line. The end of the feed line comes to the indoor listening location. The question is, "how do you effectively couple the feed line to the radio?". A simple L network might work .... coupled in the reverse position to the usual configuration. ie the low impedance end connected to the incoming antenna feed line and the high impedance end connected to the input of the radio (with as short a connection as possible). The L network should be of a high Q construction.

Another system would be to construct a high Q tuned circuit like the old crystal set. If you use a coax feed from your antenna you would couple it with a small link to the tuned circuit. If you are directly feeding a long wire tap it in near the higher end of the coil. The radio would also be taped in to the high impedance end of the coil using a very small tunable coupling capacitor. There are all kinds of crystal set circuits on the internet. Just substitute the car radio input in place of the diode detector and use a small variable capacitor for coupling.

The crystal set style tuner will make a magnificent AM BC receiving device in combination with a car radio. The shortcoming of course is that your antenna system will have little or no directional properties. However,

baring QRM and QRN and RFI .... if the signal exists, you will hear it.

Jim

2627. Re: Feed Line for 40 m Loop Skywire

Yahoo group: SkyWires
Date: 2007-09-16 20:30:22 UTC
From: VG - Vince
Topic: 2621 Message: 2627

--- In SkyWires@yahoogroups.com, "Donald Sanders" <w4bws@...> wrote:

Thank you Gentlemen! :-)

Vince

>
> Vince, I use RG59,approx 25 foot, then rg58 with my 40meter loop.
> This provides a bit of impedance matching and the TX loads better
> without a tuner.
> I also have a loop fed with 450 ladder line for all band. Coax
limits
> you to monoband use where ladderline or 300 twinlead to a tuner
> allows several bands to be worked.
>
> Healthfully yours,
> Don W4BWS
> ----- Original Message -----
> From: VG - Vince
> Subject: [SkyWires] Feed Line for 40 m Loop Skywire
> Hi All,
>
> Vince here, I just put up a Skywire for 40m that is about 20ft.
above
> ground and have it fed with rg 59. My run of coax is about
> 50ft. to the tuner. My question is, what do most of the members use
for
> feed line?
> Thanks es 73
>
> VA3GRV ee
>

2629. Re: Antenna impedance

Yahoo group: SkyWires
Date: 2007-09-18 18:21:43 UTC
From: knyuen88
Topic: 2616 Message: 2629

Thanks for everybody's help.
After failing different configurations with the ATU have found a simple/dirty resolution:
1. Made a simply tunable LC circuit (one side to ground and the other side directly to the longwire antenna)
2. Connect an insulated wire to the car radio input and insert the other end inside the coil(wired over a 2"dia PVC pipe) of the LC network.
3. Peak the LC network to the desired AM broadcast station(s). The sensitive/selectivity(as well and noise rejections) changed notiecably!(Jumped-up to be exact !)

Will try with a Higher Q coils later and hope the outcome can be improved even further.

--- In SkyWires@yahoogroups.com, Jim Dunstan <jdunstan@...> wrote:
> The input impedance of a car radio is rather high. The coax/shielded wire
> is used to connect the radio to the antenna and should not be looked at as
> an RF 'feedline'. Most car radios are designed with a high gain front end
> with capacitive coupling to the antenna which is omni directional. The
> problem with using a car radio in the house or shop is that the ideal short
> 'whip' antenna is close to the radio and since the radio is indoors, close
> to interfering noise sources it doesn't make for good AM BC reception. If
> you want to have reasonably noise free reception you either have to move
> the radio outdoors away from noise sources or locate the antenna outdoors
> away from noise and bring the desired RF in with a feed line system.
>
> Assume a suitable outdoor antenna properly coupled to a low impedance
> coaxial feed line. The end of the feed line comes to the indoor listening
> location. The question is, "how do you effectively couple the feed line to
> the radio?". A simple L network might work .... coupled in the reverse
> position to the usual configuration. ie the low impedance end

connected to
> the incoming antenna feed line and the high impedance end connected
to the
> input of the radio (with as short a connection as possible). The L
network
> should be of a high Q construction.
>
> Another system would be to construct a high Q tuned circuit like
the old
> crystal set. If you use a coax feed from your antenna you would
couple it
> with a small link to the tuned circuit. If you are directly
feeding a long
> wire tap it in near the higher end of the coil. The radio would
also be
> taped in to the high impedance end of the coil using a very small
tunable
> coupling capacitor. There are all kinds of crystal set circuits on
the
> internet. Just substitute the car radio input in place of the
diode
> detector and use a small variable capacitor for coupling.
>
> The crystal set style tuner will make a magnificent AM BC receiving
device
> in combination with a car radio. The shortcoming of course is that
your
> antenna system will have little or no directional properties.
However,
> baring QRM and QRN and RFI .... if the signal exists, you will hear
it.
>
> Jim
>

2630. Slooper or loper- the horizontal loop at an angle

Yahoo group: SkyWires
Date: 2007-09-24 22:36:05 UTC
From: kc0ynpmissouri
Topic: 2630 Message: 2630

About two weeks ago, I put up a 40-meter loop, but instead of making it a true horizontal loop, I used my old inverted-V dipole setup and added a 10-foot pole. Consequently, it's 30 feet high on the high side and around 10 feet high on the low side in 35 x 35' foot square, more or less (142'total length). I was wondering if anyone had tried this sloping loop setup and what kind of luck you have had. The last ARRL propagation report showed 15 days of no sunspots, but the antenna seems to work better than my old 135' dipole did when we had few sunspots a few months back, making it into Italy, for example.

By the way, I feed mine with 450-ohm ladder line into a Palstar AT1500DT tuner. Before joining the group, I read the title of all the postings looking for a title similar to mine and certainly wish the feed line thread would die a quick death. Scanning through the postings shows its a "to each, his own" situation. I just used what I had, avoided the weight of the coax, and followed the ARRL Antenna Handbook's suggestion that coax provides an easy match because of its losses, but I will probably never change feed lines to test their theory, but it would be interesting to try.

2631. Re: Slooper or loper- the horizontal loop at an angle

Yahoo group: SkyWires
Date: 2007-09-25 15:29:02 UTC
From: lazysenior
Topic: 2630 Message: 2631

--- In SkyWires@yahoogroups.com, "kc0ynpmissouri" <croden@...> wrote:
>
> About two weeks ago, I put up a 40-meter loop, but instead of making
> it a true horizontal loop, I used my old inverted-V dipole setup and
> added a 10-foot pole. Consequently, it's 30 feet high on the high side
> and around 10 feet high on the low side in 35 x 35' foot square, more
> or less (142'total length). I was wondering if anyone had tried this

My loop is 280 ft long. It is 3 sided as I did not have 4 supports for a square loop. The apex is at 60 ft hanging off my tower and fed with W7FG open wire feedline. The other 2 supports of the loop are at about 35 ft. I have used this arrangement for 3 years. When I first put it up I used Coax. The open feeders work much better.

Does it work? Indeed it does. Check out the 3B7C online log for my call. I worked 3B7C six times with this loop. 75,40, and 30 meters.

On RTTY I used 400 watts except on 30mtrs where I only used 100 watts CW was 500 watts and the SSB contacts were 600 watts.

On 20 mtrs and up I use my Tennadyne LP beam.

The 3B7C Dxepedition is over 10,000 miles from my location. Not too shabby for what many consider a "cloud burner antenna"

This was not unusual either. I work Dx all the time with my loop and think nothing about it.

Stan K9IUQ

2632. super loop 40

Yahoo group: SkyWires
Date: 2007-09-27 09:14:21 UTC
From: gw02639
Topic: 2415 Message: 2632

hello all i have just put up a super loop 40 buy radio
works but the ant is to long by abt 6 to 8 ft and to
center ia only abt 4ft of the ground and pse can any one
cive me any info how to get around it i an on echolink
and on skype as alun39 look foward to a reaply gw0fjq alun

2633. RE: [SkyWires] super loop 40

Yahoo group: SkyWires
Date: 2007-09-29 08:44:05 UTC
From: Callum M0MCX
Topic: 2415 Message: 2633

Alan,

You are going to have to explain yourself properly, this isn't an SMS message centre :)

You saying that your plot is too small for the loop or that the loop is too big for its own resonance? Are you also saying that it's only 4 feet off the ground at the centre?

Please start again and slowly explain.

Back to you.

Callum McCormick

M0MCX

http://www.m0mcx.co.uk/

From: SkyWires@yahoogroups.com [mailto:SkyWires@yahoogroups.com] On Behalf Of gw02639
Sent: 27 September 2007 10:14
To: SkyWires@yahoogroups.com
Subject: [SkyWires] super loop 40

hello all i have just put up a super loop 40 buy radio works but the ant is to long by abt 6 to 8 ft and to center ia only abt 4ft of the ground and pse can any one cive me any info how to get around it i an on echolink and on skype as alun39 look foward to a reaply gw0fjq alun

2634. RE: [SkyWires] super loop 40

Yahoo group: SkyWires
Date: 2007-09-29 11:10:10 UTC
From: Paul MW0CDO
Topic: 2415 Message: 2634

Alan,

Don't worry, it will still work but obviously not as well as if it was 20+ ft AGL.

It's the same rule for a loop as for any other wire aerial.
Up as high as possible, don't worry if it's not a perfect square or rectangle etc.
Doesn't matter if the shape is square, round, triangular, rhomboid etc.

My loop slopes from about 50ft AGL down to 20ft AGL, works just fine.
The first loop I put up was about 20ft AGL at all 4 corners, worked very well.

To see pictures and a little more info, visit my very quick & dirty web page at the address below.
HYPERLINK "http://homepage.ntlworld.com/paultom/"http://homepage.ntlworld.com/paultom/

Hwyl!

Paul MW0CDO.

From: SkyWires@yahoogroups.com [mailto:SkyWires@yahoogroups.com] On Behalf Of Callum M0MCX
Sent: 29 September 2007 09:44
To: SkyWires@yahoogroups.com
Subject: RE: [SkyWires] super loop 40

Alan,

You are going to have to explain yourself properly, this isn’t an SMS message centre :)

You saying that your plot is too small for the loop or that the loop is too big for its own resonance? Are you also saying that it’s only 4 feet off the ground at the centre?

Please start again and slowly explain.

Back to you.

Callum McCormick

M0MCX

HYPERLINK "http://www.m0mcx.co.uk/"http://www.m0mcx.-co.uk/

From: SkyWires@... [mailto:SkyWires@...] On Behalf
Of gw02639
Sent: 27 September 2007 10:14
To: SkyWires@...
Subject: [SkyWires] super loop 40

hello all i have just put up a super loop 40 buy radio
works but the ant is to long by abt 6 to 8 ft and to
center ia only abt 4ft of the ground and pse can any one
cive me any info how to get around it i an on echolink
and on skype as alun39 look foward to a reaply gw0fjq alun

No virus found in this incoming message.
Checked by AVG Free Edition.
Version: 7.5.488 / Virus Database: 269.13.33/1036 - Release Date: 28/09/2007
15:40

No virus found in this outgoing message.
Checked by AVG Free Edition.
Version: 7.5.488 / Virus Database: 269.13.33/1036 - Release Date: 28/09/2007
15:40

2635. Fishing poles for loop supports...

Yahoo group: SkyWires
Date: 2007-09-30 22:34:43 UTC
From: n6vl
Topic: 2635 Message: 2635

I have 4 SD-20 fishing pole blanks bought a while back from World Radio. They are 20 feet long and never used. I have wondered about using them to support a horizontal loop. I can't use the top section since it is way too thin. I've thought of using small diameter PVC tubing on the top ends to strengthen it, and larger diameter PVC tubing on the bottom ends to add extra height.

I've live in Southern California, so extreme weather conditions aren't an issue. We do have high winds here from sometimes. There is certainly no ice or snow, but only rain in the winter months.

I'd like to hear from anyone who has used fishing poles as masts for a horizontal loop.

73,

Steve N6VL

2636. Re: [SkyWires] Fishing poles for loop supports...

Yahoo group: SkyWires
Date: 2007-09-30 22:45:15 UTC
From: Jim Dunstan
Topic: 2635 Message: 2636

At 10:34 PM 9/30/2007 +0000, you wrote:

>I have 4 SD-20 fishing pole blanks bought a while back from World
>Radio. They are 20 feet long and never used. I have wondered about
>using them to support a horizontal loop. I can't use the top section
>since it is way too thin. I've thought of using small diameter PVC
>tubing on the top ends to strengthen it, and larger diameter PVC tubing
>on the bottom ends to add extra height.
>
>I've live in Southern California, so extreme weather conditions aren't
>an issue. We do have high winds here from sometimes. There is certainly
>no ice or snow, but only rain in the winter months.
>
>I'd like to hear from anyone who has used fishing poles as masts for a
>horizontal loop.
>
>73,
>
>Steve N6VL

Hi Steve,

The four poles would make a great single band full wave loop for
20M. Form them in a crossed formation. The loop could then be mounted
either as a vertical of horizontal loop. If you really want a performance
antenna for 20M you could make a MOXON with forward gain and excellent
front to back. Using them as masts would be a waste.

73,

Jim VE3CI

2637. Re: Fishing poles for loop supports...

Yahoo group: SkyWires
Date: 2007-09-30 23:05:11 UTC
From: n6vl
Topic: 2635 Message: 2637

Jim,

I once saw a photo in World Radio News where a ham used a pair of SD-20 fishing poles to hold a piece of wire in an inverted-U configuration. It was streched over and above an RV, and the poles were pulled very tight. That was a few years ago and where I got the idea of using them as masts.

I also have thought of using them in a X configuration for a 20 meter loop. The poles are too heavy for that. The diameter for the large end is at least 1 1/2 inches.

I bought 6 fishing pole blanks for a hex beam project based on a construction article. The lengths of the six blanks are shorter and about half the diameter of the SD-20 blanks.

I'd like to build a horizontal loop for my lot, but find 4 supports is going to be a problem. I live on a 60 x 100 foot lot with about 55 x 80 feet actually usable in this situation. I'd like to keep it low profile, hence the idea of fishing pole blanks.

I currently have a sloping delta loop. It is 225 feet in circumference and 40 feet at the apex. The lower corners are 6 feet and the plane of the loop is diagonal, with some droop. It is lower corner fed with open wire line. I use this antenna mostly for 40 and 80 meters.

I have a 44 foot long inverted vee dipole, similar to the one on www.cebik.com. It is fed with ladder line and is about 30 feet at the apex. This antenna performs better than my loop on 30 meters and above. It has a broadside pattern on all bands up through 10 meters where it is 2 5/8 waves in phase. Above 10 meters, it will develop multiple lobes.

I'd like to have a single antenna for 80 through 10 meters. A truly horizontal loop will fill the need. The sloping loop doesn't work well on the higher HF bands. EZNEC modeling bears this out. That leaves me with trying to find 4 supports on a small suburban lot. That is where the fishing pole idea came from. I really want to avoid 4 metal masts. Am I dreaming?

73,

Steve N6VL

2638. Re: [SkyWires] Re: Fishing poles for loop supports...

Yahoo group: SkyWires
Date: 2007-09-30 23:26:21 UTC
From: Jim Dunstan
Topic: 2635 Message: 2638

At 11:05 PM 9/30/2007 +0000, you wrote:

>I have a 44 foot long inverted vee dipole, similar to the one on
>www.cebik.com. It is fed with ladder line and is about 30 feet at
>the apex. This antenna performs better than my loop on 30 meters and
>above. It has a broadside pattern on all bands up through 10 meters
>where it is 2 5/8 waves in phase. Above 10 meters, it will develop
>multiple lobes.
>
>I'd like to have a single antenna for 80 through 10 meters. A truly
>horizontal loop will fill the need. The sloping loop doesn't work
>well on the higher HF bands. EZNEC modeling bears this out. That
>leaves me with trying to find 4 supports on a small suburban lot.
>That is where the fishing pole idea came from. I really want to avoid
>4 metal masts. Am I dreaming?
>
>73,
>
>Steve N6VL

Hi Steve,

I don't know what you are using for the 30' mast for your 44' inverted V but you could extend it to 88' and it would certainly work well 80 through 10 mtrs. I used such an inverted V (100') also with a 30' TV mast for years and it worked great. If you could get the mast up another 15' it would be dynamite. I also had a 100' inverted V fed with open wire line that was mounted on a 30' TV mast on top of a 2 story house for a total of I would guess 65' and it was dynamite. I also used it as a top loaded vertical for 160m .... with water pipe as ground .... and worked the farmer's net as regularly as clock work.

73,

Jim, VE3CI

2639. Re: Fishing poles for loop supports...

Yahoo group: SkyWires
Date: 2007-10-01 04:54:44 UTC
From: n6vl
Topic: 2635 Message: 2639

Thanks Jim,

Actually the 44 foot length is there for a reason. It has broad side gain up through 10 meters. If I went with a 88 foot length, then the pattern would be broadside up through 20 meters and then break into lobes. These lobes would begin to take up a higher angle on the higher HF bands if I keep it in an inverted vee configurations.

I live on the US west coast, so a nice east-west pattern works quite well. I've had success working Alaska on 20 meters, even though it is off the end. It wouldn't be a good antenna for polar paths the way its currently oriented.

The idea of a horizontal loops doesn't prevent lobes on the higher bands. But it makes them more omni-directional. And I wouldn't be handicapped on the polar paths.

A horizontal loop would be a challenge at my QTH. I am hoping for some simple mast structures, even if only 20 to 25 feet high. The problem with the skywire is the need for multiple supports. I would to find some supports that don't require a lot of guying. It would be a lot easier if I had a few trees on my lot.

Sometimes I wonder about a smaller horizontal loop only for the upper HF bands. It would have to be a full wave on 40 to get the lower angle on 20. Acutally the 4 20 foot poles would make a horizontal loop resonant at 8.9 MHz. Maybe that might make a horizontal loop.

My sloping delta loop does great on 80 and 40.

Thanks for the ideas!

73,

Steve N6VL

2640. RE: [SkyWires] Fishing poles for loop supports...

Yahoo group: SkyWires
Date: 2007-10-01 23:03:14 UTC
From: Paul MW0CDO
Topic: 2635 Message: 2640

Hi Steve,

I used 4 cheap 20ft fishing poles to support a horizontal loop of 150ft approx.
It was up for 2 years here in Port Talbot South Wales without problems.

I live about 5 miles as the crow flies from Mumbles weather monitoring station which recorded winds up to 100mph while the poles were up.

I now have a bigger version of the loop up supported by 2 36ft aluminium telescopic masts with 20ft fishing poles on top of them.
The other 2 supports are 20ft fishing poles.

See HYPERLINK "http://homepage.ntlworld.com/paultom/"http://homepage.ntlworld.com/paultom/ for some pictures.
I've worked east coast US stations with 100w SSB on 160m with this one.

Paul MW0CDO.

From: SkyWires@yahoogroups.com [mailto:SkyWires@yahoogroups.com] On Behalf Of n6vl
Sent: 30 September 2007 23:35
To: SkyWires@yahoogroups.com
Subject: [SkyWires] Fishing poles for loop supports...

I have 4 SD-20 fishing pole blanks bought a while back from World Radio. They are 20 feet long and never used. I have wondered about using them to support a horizontal loop. I can't use the top section since it is way too thin. I've thought of using small diameter PVC tubing on the top ends to strengthen it, and larger diameter PVC tubing on the bottom ends to add extra height.

I've live in Southern California, so extreme weather conditions aren't an issue. We do have high winds here from sometimes. There is certainly no ice or snow, but only rain in the winter months.

I'd like to hear from anyone who has used fishing poles as masts for a horizontal loop.

73,

Steve N6VL

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Version: 7.5.488 / Virus Database: 269.13.35/1039 - Release Date: 29/09/2007 21:46

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Checked by AVG Free Edition.
Version: 7.5.488 / Virus Database: 269.13.35/1039 - Release Date: 29/09/2007 21:46

2641. Re: Fishing poles for loop supports...

Yahoo group: SkyWires
Date: 2007-10-02 02:23:26 UTC
From: n6vl
Topic: 2635 Message: 2641

Paul,

What wire gauge is 1 mm? I just looked at a chart, and it seems to be #18 gauge. Is that correct?

Also do you use the small diameter top section? It looks like you do in the photo. I don't want to break the small end off.

73,

Steve N6VL

--- In SkyWires@yahoogroups.com, "Paul MW0CDO" <gw7lhi@...> wrote:
>
> Hi Steve,
>
> I used 4 cheap 20ft fishing poles to support a horizontal loop of 150ft
> approx.
> It was up for 2 years here in Port Talbot South Wales without problems.
>
> I live about 5 miles as the crow flies from Mumbles weather monitoring
> station which recorded winds up to 100mph while the poles were up.
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> telescopic masts with 20ft fishing poles on top of them.
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> I've worked east coast US stations with 100w SSB on 160m with this one.
>
> Paul MW0CDO.
>

2642. Using 2 Smaller Gauge Wires in Place of Large Gauge Wires

Yahoo group: SkyWires
Date: 2007-10-02 13:29:02 UTC
From: denisnh
Topic: 2642 Message: 2642

Hi All. I remember reading (I think one of L. Cebik's articles?) that sometimes two smaller gauge wires are run together in place of a larger gauge wire that may not be available. This was only mentioned and I don't know if L. Cebik approved of this method or not.

I'm finally getting around to setting up a full wave horizontal loop for 80-10 meters. Buying wire is not an option for me at this point. However, I have a 1000 foot roll of industrial grade 18g wire laying around. It is by Chester Cable, type TEW /CSA, AWM, VW-1. It's designed for use in fairly hostile environments and the 18g wire is stranded and a silver color. I may be stainless but I'm not sure.

I realize heavier wire does have more bandwith, Besides that, how much performance would I lose if running a single 18g wire in place of 12g? If I were to run 2 wires side by side to simulate a heavier gauge wire, is it just a simple matter of taping it together every few feet? How about if it's twisted together kind of like a twisted pair? I'll be running 200 watts at the most for transmitter power.

Thanks,
Denis

2643. Feed Arrangement for Operating the Loop as a Vertical Antenna

Yahoo group: SkyWires
Date: 2007-10-02 13:55:31 UTC
From: denisnh
Topic: 2643 Message: 2643

The 18th edition of the ARRL Antenna Handbook (published 1998), page 5-16 talks about the "Loop Skywire". It mentions that by shorting the feed coax at the bottom of a vertical run, the antenna can be run as a vertical antenna??? This amazes me and I really don't understand how it would function that way. In this case, it looks as though the loop would work something like a capacitance hat? I seems a lot of gain would be lost this way but I'm no expert.

Also, in the files section of this group, Dr. Ace has an illustration and brief description of how to do this: Vertical Skywire <http://f1.grp.yahoofs.com/v1/0EACRxyDGWfhRyZvooZdhjzMty52qsuOsaY7MKaZsw\vQT_0GyrdN4U_6sEr-6oqtd8GWbSLR9R-e9VGHltbb9NbjRTSa5Q/Loop%20Antenna%20In\fo%20/loopv.jpg> He also mentions that with this method, the additional radiation length created by the vertical coax allows you to run on frequencies at twice the wavelength of the loop.

Going back to the antenna handbook mentioned above, an article immediately following the skywire on page 5-16 is a 40 meter vertical loop. I built this antenna exactly as described and it works great, but it's not an all-band antenna (although it will run some harmonics). If I were to take this antenna, re-install it as a horizontal with the vertical antenna coax, I should be able to run 80 meters on it. I would probably use a good quality coax such as rg-213 for the vertical element.

Any ideas on how this would perform in comparison to the conventional skywire with a ladder line feed?

Thanks,

Denis

2644. Re: [SkyWires] Feed Arrangement for Operating the Loop as a Vertical Antenna

Yahoo group: SkyWires
Date: 2007-10-02 17:59:01 UTC
From: Erik Weaver
Topic: 2643 Message: 2644

Hi Denisnh,

I'll comment on a little of this, but I can't answer all your questions. Maybe others will fill in the blanks for you. The 2nd best answer is to model the two antennas, which I have not done, and the very best way to judge is build them both on your side and compare, but who does that? I've not done either, but I have ran my own horizontal loop for a few years. Third best is to build the antenna system on paper and calculate some of what can be expected. That is what I'll discuss below.

With regard to feeding the loop at the base, according to my reading it is exactly like running it as a vertical with a large capacity hat. I tried that once or twice just to see if it worked. It did, but so did the loop used as a loop, so I only tested it and then then never used it as a vertical again. Also mine had very little vertical component to it so I didn't think it was an important difference in my configuration. (I took down my loop last winter when one of the corner supports broke. I've not put it back up yet.)

I've read many people run a loop this way to get on 160-meters. The ones I remember were using balanced feed line. You just connect both balanced feed line wires to the same output terminal on your XCVR (or transmatch/amp). The other (now unused terminal) is connected to an earth ground. The balanced feed line is now an active antenna element, and in a vertical orientation. Above this is the horizontal loop. It does act as a cap-hat. If you go back to Cebik's web pages I know he used to have several pages of info on cap-hats. That will provide much more info about them than I. (The same is true of antennas in general; you have found a very good and reliable source of antenna theory -- stick with Cebik -- he's one of the good guys!)

Remember, in a balanced feed line, current is opposite in both direction of flow and locations of min/max values. "Equal and opposite." If you recall your basic EM (electromagnetic) theory (found in the ARRL Handbook if you need to review it) that means the EM fields cancel one another, and therefore the balanced feed line does not radiate as does an antenna wire. When the two "legs" of the balanced feed line are connected to the same terminal at your station, this "balanced" condition no longer exists. Both wires now carry the same EM wave, having their min/max values (of both current and voltage) at the same locations along the wires, and the EM wave is moving in the same direction at the same time. Therefore, the wires now radiate as an antenna element. They no longer cancel each others EM field, so they radiate.

With regard to using balanced feed line or coax, the primary considerations are the surroundings and number of bands planned for use (which ties directly to transmission line loss).

Surroundings -- If you are weaving around and between a lot of material, especially metal or magnetic materials (including items such as electrical lines that create EM fields), then coax is best. It has shielding so it is not affected by that metal water pipe you just taped your transmission line to running across the basement ceiling ;) Recalling the balanced nature of balance line (whether open, twin lead, window, ladder, etc.) which is why it behaves as it does, if you disturb that balance, and unbalance it, at that point it begins to behave as a radiating element of your antenna. Generally not such a good plan in your basement ;) So when the surroundings will upset the balance of balanced feed line, use coax.

That's the easy part. It is pretty much straight forward.

Number of bands & transmission line loss -- This gets more complicated. Let's first briefly compare balanced line to coax. Balanced line (provided you do not allow it to become unbalanced) offers very little loss of energy over long distances. Nor does it radiate. This is due to the "equal and opposite" direction and magnitude of the EM energy flowing along the balanced line. By altering the diameter of the conductors and the distance between them, you can alter the impedance of this balanced transmission line. Generally amateur radio operators use something around 450-Ohm line, but one will still commonly find impedance values from 300- to 600-Ohms.

If you know the feed point impedance of your antenna across all the bands you intend to operate it upon, you can determine what impedance is best. I believe most of us just pick a specific type of balanced line (and therefore value of impedance) for entirely different reasons, such as what we happen to have, can easily make, or is currently on sale.

If you are running the transmission line in the clear, and want to minimize transmission line loss, and maximize the number of bands you can work, then balanced feed line is a good choice. "In the clear" means no closer to anything metal than one-width of the balanced line. More clearance from object is better. If you can ensure several widths-distance you should find it performs quite well. Maximizing the number of bands you can use means using a transmatch (aka antenna tuner) or setting up a series of tuning stubs, or switchable lengths of transmission line. Each of these effects impedance values. Pick your favorite method. (I'll not discuss these options here, as I think it is off-topic, and can be a lengthy discussion to describe fully. And many articles written about each option.)

Coax can run right along metal and not be affected by it. This is great is tight quarters, and it is often readily available which is also convenient. It too is available in a range of impedances, generally from 50-Ohms to 125-Ohms from specialty stores, and most commonly in either 50- or 75-Ohm impedance. The value of impedance is due to the size and

spacing of the inner conductor relative to the shielding, or braiding, wire surrounding it. Some of it is rated for underground routing, and some has high UV protection ratings. It can be run in parallel as a balanced line and some hams use it in this fashion to go through walls and maintain a balanced feed line while doing so (this is described in the ARRL Antenna Book, to which I think you said you have access, so I won't describe this further).

Coax has a special condition. If the coax impedance exactly equals the impedance of both the antenna and the XCVR there will be no loss along the transmission line (coax), other than a small amount of attenuation which is always present in real life. In all other cases, one should consider the amount of loss in the coax for each band you intend to operate upon. It can be quite high (bad), which is in stark contrast to balanced line in which this is pretty much not even an important consideration.

The ARRL Antenna Book discusses this topic. They have charts and tables of data which will allow you to estimate loss at various frequencies. If you evaluate the highest frequency for each band that will give you the worse-case condition for loss. Repeat this for each band you are interested in working.

I've been avoiding this part because too many people get too upset by it. Those charts and tables require you to know your swr.

VSWR is voltage standing wave ratio, and ISWR is current standing wave ratio. They are both the same value. One measures current and one measure voltage and then uses the resulting values in the same formula. They have the same ratio one to the other, so the resulting swr value is the same. So when people say VSWR just think "swr is swr" and you'll be fine. Neither ISWR or VSWR is better than the other, you just need to use the one your meter is designed to measure. Most devices measure voltage, so most often we are using VSWR in our calculations. For our purposes, they are the same thing: swr.

SWR -- Standing Wave Ratio. Basically two sine waves running in opposite directions at the same time. The first ("incident") sine wave moves from the XCVR to the antenna when you are transmitting. If the antenna has a different impedance than this sine wave (which is created by the interaction between the original impedance generate at the transmitter and the transmission line through which it is moving) a portion of the incident wave will reflect off the antenna and reverse direction. It now becomes the second sine wave, the "reflected" wave, and moves from the antenna feed point back toward the XCVR.

Freeze frame. You now have one waveform moving from the XCVR toward the antenna feed point, and a second waveform moving from the antenna feed point toward the XCVR. They each repeat their highest and lowest points of their sine waves at regularly repeating intervals during this trip. They will be different; each will have it's high and low at different points along the transmission line. But they don't behave as two

different things inside the transmission line, they combine as they pass one another to form a new "combined" waveform. If you were able to see this running along the transmission line (either coax or balanced) they would appear to be standing still. This is why it is called a Standing Wave. The swr is a comparison of the highs to the lows, hence, the term Standing Wave Ratio.

That is all swr means. We could choose to measure the two sine waves formed by the voltage, or the two formed by the current, traveling along the transmission line. Both would have the same swr after we solved the formula (but they would use different raw numbers). It is similar to asking what is the difference in ratio between 2:4 and 5:10? None, of course: 2 goes into 4 twice, and 5 goes into 10 twice, therefore both have the same ratio of 2:1.

However, due to the physical properties of coax and balanced line, they behave differently in terms of energy lost (mostly as heat) while traveling along the transmission line. Balanced line loss is generally much lower than coax over the same distance. You will see this on those charts and tables spoken of earlier.

(Not to be taken literally, but if you need a mental picture to sort this out, remember that heat is generated as energy travels through the wires of your transmission line. Open wire has no insulation, and ladder line has very little, so it traps less heat. Coax has a lot more insulation inside it, the heat can't escape and it gets hotter, faster, thus causing greater losses. Please, don't take that as what really happens, but if that image helps you remember the gross differences between the two types of transmission line, use it for that limited purpose. If you don't need that picture, forget I mentioned it.)

SO WHAT?!?!

Find the swr for the highest frequency on each band you intend to use your antenna on. Now go to those charts and tables in the Antenna Book and figure out the losses inside the transmission line. You will quickly see that a 10:1 swr isn't a great loss of power on balanced line, but is a large loss of power in coax.

Does that matter?

I don't know. Which, and how many, bands are you using the antenna on? What is the swr there? How much loss of power is that? Does that matter to you, or not? Those are the questions you have to answer to know if this is important to you for this particular antenna system. Once you crunch the numbers I suspect you'll quickly make up your mind.

Remember too, if you use a transmatch (aka antenna tuner), which is normal for this kind of antenna, you will not alter the swr along the transmission line between the transmatch and antenna feed point. So any loss calculations for that segment of the transmission line will remain the same as when the transmatch is not being used. This isn't good or

bad, just keep it in mind as one of the variables.

My Loop:

My loop was roughly 250-feet and triangular in shape (horizontal). Why? That is where my supporting trees are located. It went out my window as balanced line from my transmatch. Immediately it transitioned into my antenna wire (bare #14 stranded copper). It went up into the nearby tree outside my shack window, to a height of about 12 to 15 feet. At the bottom it was ladder line, quickly spread to about 3-feet apart, and by the top it spread out to about 4-feet distance between the two wires. They were balanced, but the distance steadily grew farther apart, and did so abruptly at the very bottom (perhaps disturbing the balance, near to the planet, thus inviting ground loss -- yet another topic). I never tried to calculate, and certainly never tried to measure the impedance change along this part of the antenna/feed line.

At the top of this vertical segment (first tree by the shack) one wire ran to a sycamore tree in the back yard to a height of about 40-feet, and the other wire ran from the shack-tree to a pine tree in the side yard to a height of about 50-feet. So my triangle loop was tilted somewhat. Highest corner to the east, lowest to the west, and middle corner toward the north.

My very first contact was in Australia, and I often used it to participate in a state-wide (MO) traffic net on 80-meters and sometimes 40-meters.

I have no idea what the swr was, nor what the losses were. I'm confident the losses were low because my transmission line was both balanced and very short. So regardless of the swr and line loss nearly all the energy transmitted to the antenna system was radiated. Really the only points of concern were transitioning under the window and that abrupt splitting of the ladder line so close to earth. Neither was optimal.

In other words, I'm confident it was efficient, meaning, nearly all the energy I put into it radiated from it, and very little was lost in the antenna system (transmission line and transmatch in my case). If you can achieve high efficiency you don't need much else. This is one reason dipoles are said to work so well. They are highly efficient.

I hope this helps a little. I recommend studying those transmission line loss tables in the Antenna Book. Once you know or estimate your swr and know the particulars of the transmission line (look up the "characteristic impedance" for your transmission line -- it should be readily available from the manufacturers data), you can see for yourself how much energy you will lose in various alternate systems. Then it is simply a matter of choosing the one that provides the overall best performance at the bands you prefer for the price you are willing/able to pay.

Have fun! You can learn a lot of good theory and real hands-on
application through this project. Antennas remain one of the most
accessible aspects of amateur radio we can easily and affordably play
with, so enjoy yourself, and be sure to let us know how it turns out for
you!

73-Erik Weaver n0ew

denisnh wrote:
> The 18th edition of the ARRL Antenna Handbook (published 1998), page
> 5-16 talks about the "Loop Skywire". It mentions that by shorting the
> feed coax at the bottom of a vertical run, the antenna can be run as a
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r-6oqtd8GWbSLR9R-e9VGHltbb9NbjRTSa5Q/Loop%20Antenna%20Info%20/loopv.jpg>
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> I were to take this antenna, re-install it as a horizontal with the
> vertical antenna coax, I should be able to run 80 meters on it. I would
> probably use a good quality coax such as rg-213 for the vertical element.
>
> Any ideas on how this would perform in comparison to the conventional
> skywire with a ladder line feed?
>
> Thanks,
>
> Denis
>
>

2645. RE: [SkyWires] Re: Fishing poles for loop supports...

Yahoo group: SkyWires
Date: 2007-10-02 23:24:51 UTC
From: Paul MW0CDO
Topic: 2635 Message: 2645

Hi Steve,

I have no idea what US wire gauge 1mm is.
The 1mm includes the insulation, but as mentioned on the web page it's incredibly tough.

Yes I do use the thin top section with the eye fitted, the wire passes through the eyes.
So far, no breakages.
When the wind blows, and boy does it blow!, the flexibility of all the poles allows the antenna to move in any direction and nothing breaks.

I've had a Butternut HF5b, a 5 ele Tonna for 6m and 13 ele Tonna for 2m trashed by the winds here.
My Butternut HF6v has survived so far as well, another very flexible antenna.

Paul MW0CDO.

From: SkyWires@yahoogroups.com [mailto:SkyWires@yahoogroups.com] On Behalf Of n6vl
Sent: 02 October 2007 03:23
To: SkyWires@yahoogroups.com
Subject: [SkyWires] Re: Fishing poles for loop supports...

Paul,

What wire gauge is 1 mm? I just looked at a chart, and it seems to be #18 gauge. Is that correct?

Also do you use the small diameter top section? It looks like you do in the photo. I don't want to break the small end off.

73,

Steve N6VL

--- In HYPERLINK "mailto:SkyWires%40yahoogroups.com"SkyWires@..., "Paul MW0CDO" <gw7lhi@...> wrote:
>
> Hi Steve,
>
> I used 4 cheap 20ft fishing poles to support a horizontal loop of 150ft
> approx.

> It was up for 2 years here in Port Talbot South Wales without
problems.
>
> I live about 5 miles as the crow flies from Mumbles weather
monitoring
> station which recorded winds up to 100mph while the poles were up.
>
> I now have a bigger version of the loop up supported by 2 36ft
aluminium
> telescopic masts with 20ft fishing poles on top of them.
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> See HYPERLINK
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Checked by AVG Free Edition.
Version: 7.5.488 / Virus Database: 269.13.39/1045 - Release Date: 02/10/2007
18:43

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18:43

2646. RE: [SkyWires] Re: Fishing poles for loop supports...

Yahoo group: SkyWires
Date: 2007-10-03 04:20:41 UTC
From: AD5VJ Bob
Topic: 2635 Message: 2646

Would you be willing to sell the Butternut for parts?

73 fer nw es gud DX,
QSL VIA: BUR, LotW, e-QSL
Bob AD5VJ
Old calls: WB5ZQU/WY5L/KH3-KE5CTY-N5IET
http://www.ad5vj.com/

Member: CTDXCC, NTCC, STXDXCC
10X#-37210, SMIRK#-5177
FISTS#-12637, SKCC#-2369
NAQCC#-1966, FP#-1141, RARS#-149

From: SkyWires@yahoogroups.com [mailto:SkyWires@yahoogroups.com] On Behalf Of Paul MW0CDO
Sent: Tuesday, October 02, 2007 6:25 PM
To: SkyWires@yahoogroups.com
Subject: RE: [SkyWires] Re: Fishing poles for loop supports...

Hi Steve,

I have no idea what US wire gauge 1mm is.
The 1mm includes the insulation, but as mentioned on the web page it's incredibly tough.

Yes I do use the thin top section with the eye fitted, the wire passes through the eyes.
So far, no breakages.
When the wind blows, and boy does it blow!, the flexibility of all the poles allows the antenna to move in any direction and nothing
breaks.

I've had a Butternut HF5b, a 5 ele Tonna for 6m and 13 ele Tonna for 2m trashed by the winds here.
My Butternut HF6v has survived so far as well, another very flexible antenna.

Paul MW0CDO.

From: SkyWires@yahoogroups.com [mailto:SkyWires@yahoogroups.com] On Behalf Of n6vl
Sent: 02 October 2007 03:23
To: SkyWires@yahoogroups.com
Subject: [SkyWires] Re: Fishing poles for loop supports...

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Also do you use the small diameter top section? It looks like you do
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Steve N6VL

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<gw7lhi@...> wrote:
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> Hi Steve,
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2647. RE: [SkyWires] Re: Fishing poles for loop supports...

Yahoo group: SkyWires
Date: 2007-10-03 04:21:50 UTC
From: AD5VJ Bob
Topic: 2635 Message: 2647

I mean the HF5b.

From: SkyWires@yahoogroups.com [mailto:SkyWires@yahoogroups.com] On Behalf Of Paul MW0CDO
Sent: Tuesday, October 02, 2007 6:25 PM
To: SkyWires@yahoogroups.com
Subject: RE: [SkyWires] Re: Fishing poles for loop supports...

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> station which recorded winds up to 100mph while the poles were up.
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one.
>
> Paul MW0CDO.
>

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2649. Re: Feed Arrangement for Operating the Loop as a Vertical Antenna

Yahoo group: SkyWires
Date: 2007-10-03 14:39:38 UTC
From: denisnh
Topic: 2643 Message: 2649

Hi Erik,
WOW! What a great reply! Very detailed. You should save this as part of the manuscript for your book. What? You're not writing a book? Well you should!

The night before I submitted my post, I read a few of Mr. Cebik's articles on feedlines. The charts in the article are quite remarkable when comparing coax against parallel lines of various impedances. The curves for parallel lines all hug the bottom of the chart where the favorable SWR and other factors are, while the coax lines soar skyward surprisingly fast, which concurs with your post.

I have not used any modeling software. Just not enough hours in the day, as most of my time has been spent trying to survive since my career did a crash and burn. All my HF antenna experience is in receive only antennas for shortwave. I've been dragging my feet on getting my General Class license but finally decided to go for it this month. Of course, I had masterd 5 wpm CW just in time for that requirement to be abolished. :-)

Some people seem to put all their faith in the modeling software. Whatever works for them, but I would never take a computer model as being 100% accurate. To me, the model really has to be built in 3D to prove it works. And this is coming from a former software engineer. :-) I've read about too many antenna designs that required adjustment contrary to the modeling data to get them to work. But modeling is a great start, and at least 90% accurate in my opinion.

The idea of using coax was more of a "fast start" idea while I fiddle with the antenna and try to improve it. I don't even know how much longer I'll be able to keep this house and that has zapped a lot of my motivation to build anything. What the heck though, and after reading your reply, I believe I will go with the 40 meter loop and orient it as a horizontal with paralell feedline.

Regarding running the line into the shack, shorting the wires and connecting them to the rig, there are a few reasons I can't do this. For one, there are children and unknowing people in the area that may get zapped if they are able to touch the wires. My ham station (or what's left of it) is in my basement office. I need to run the line vertically to about 8' above the ground, make the short at that point, and install a matching network either on a pole or tree in a PVC junction box. The ground wire would go there also, and then I need run the ground and an insulated feedwire the remaining distance to the ground, bury it and slip it through the side of the house

into the shack.

That's what I need to research next: Building a matching unit.

Wouldn't running the vertical radiators into the shack introduce a lot of RF there? I'm also wondering about the effect of having two vertical radiating elements so close together and the effect they would have on each other. Another thought would be to have a pulley located at the feedpoint where I could quickly lower the antenna and switch to coax for the vertical element and back to paralell feedlines for loop operation, but that may be a lot more trouble than it's worth.

One other thing to mention is that I have a decent antenna tuner. How this would work with a matching network is something else I'll have to research. Putting the tuner outside is not practical. Ideas, anyone?

Thanks again for the info, Erik!

Denis

--- In SkyWires@yahoogroups.com, Erik Weaver <erik@...> wrote:
>
> Hi Denisnh,
>
> I'll comment on a little of this, but I can't answer all your questions.
> Maybe others will fill in the blanks for you. The 2nd best answer is to
> model the two antennas, which I have not done, and the very best way to
> judge is build them both on your side and compare, but who does that?
> I've not done either, but I have ran my own horizontal loop for a few
> years. Third best is to build the antenna system on paper and calculate
> some of what can be expected. That is what I'll discuss below.
>
> With regard to feeding the loop at the base, according to my reading it
> is exactly like running it as a vertical with a large capacity hat. I
> tried that once or twice just to see if it worked. It did, but so did
> the loop used as a loop, so I only tested it and then then never used it
> as a vertical again. Also mine had very little vertical component to it
> so I didn't think it was an important difference in my configuration. (I

> took down my loop last winter when one of the corner supports
broke.
> I've not put it back up yet.)
>
> I've read many people run a loop this way to get on 160-meters. The
ones
> I remember were using balanced feed line. You just connect both
balanced
> feed line wires to the same output terminal on your XCVR (or
> transmatch/amp). The other (now unused terminal) is connected to an
> earth ground. The balanced feed line is now an active antenna
element,
> and in a vertical orientation. Above this is the horizontal loop.
It
> does act as a cap-hat. If you go back to Cebik's web pages I know
he
> used to have several pages of info on cap-hats. That will provide
much
> more info about them than I. (The same is true of antennas in
general;
> you have found a very good and reliable source of antenna theory --
> stick with Cebik -- he's one of the good guys!)
>
> Remember, in a balanced feed line, current is opposite in both
direction
> of flow and locations of min/max values. "Equal and opposite." If
you
> recall your basic EM (electromagnetic) theory (found in the ARRL
> Handbook if you need to review it) that means the EM fields cancel
one
> another, and therefore the balanced feed line does not radiate as
does
> an antenna wire. When the two "legs" of the balanced feed line are
> connected to the same terminal at your station, this "balanced"
> condition no longer exists. Both wires now carry the same EM wave,
> having their min/max values (of both current and voltage) at the
same
> locations along the wires, and the EM wave is moving in the same
> direction at the same time. Therefore, the wires now radiate as an
> antenna element. They no longer cancel each others EM field, so
they
> radiate.
>
> With regard to using balanced feed line or coax, the primary
> considerations are the surroundings and number of bands planned for
use
> (which ties directly to transmission line loss).
>
> Surroundings -- If you are weaving around and between a lot of
material,

> especially metal or magnetic materials (including items such as
> electrical lines that create EM fields), then coax is best. It has
> shielding so it is not affected by that metal water pipe you just
taped
> your transmission line to running across the basement ceiling ;)
> Recalling the balanced nature of balance line (whether open, twin
lead,
> window, ladder, etc.) which is why it behaves as it does, if you
disturb
> that balance, and unbalance it, at that point it begins to behave
as a
> radiating element of your antenna. Generally not such a good plan
in
> your basement ;) So when the surroundings will upset the balance of
> balanced feed line, use coax.
>
> That's the easy part. It is pretty much straight forward.
>
> Number of bands & transmission line loss -- This gets more
complicated.
> Let's first briefly compare balanced line to coax. Balanced line
> (provided you do not allow it to become unbalanced) offers very
little
> loss of energy over long distances. Nor does it radiate. This is
due to
> the "equal and opposite" direction and magnitude of the EM energy
> flowing along the balanced line. By altering the diameter of the
> conductors and the distance between them, you can alter the
impedance of
> this balanced transmission line. Generally amateur radio operators
use
> something around 450-Ohm line, but one will still commonly find
> impedance values from 300- to 600-Ohms.
>
> If you know the feed point impedance of your antenna across all the
> bands you intend to operate it upon, you can determine what
impedance is
> best. I believe most of us just pick a specific type of balanced
line
> (and therefore value of impedance) for entirely different reasons,
such
> as what we happen to have, can easily make, or is currently on sale.
>
> If you are running the transmission line in the clear, and want to
> minimize transmission line loss, and maximize the number of bands
you
> can work, then balanced feed line is a good choice. "In the clear"
means
> no closer to anything metal than one-width of the balanced line.
More

> clearance from object is better. If you can ensure several
> widths-distance you should find it performs quite well. Maximizing
the
> number of bands you can use means using a transmatch (aka antenna
tuner)
> or setting up a series of tuning stubs, or switchable lengths of
> transmission line. Each of these effects impedance values. Pick
your
> favorite method. (I'll not discuss these options here, as I think
it is
> off-topic, and can be a lengthy discussion to describe fully. And
many
> articles written about each option.)
>
> Coax can run right along metal and not be affected by it. This is
great
> is tight quarters, and it is often readily available which is also
> convenient. It too is available in a range of impedances, generally
from
> 50-Ohms to 125-Ohms from specialty stores, and most commonly in
either
> 50- or 75-Ohm impedance. The value of impedance is due to the size
and
> spacing of the inner conductor relative to the shielding, or
braiding,
> wire surrounding it. Some of it is rated for underground routing,
and
> some has high UV protection ratings. It can be run in parallel as a
> balanced line and some hams use it in this fashion to go through
walls
> and maintain a balanced feed line while doing so (this is described
in
> the ARRL Antenna Book, to which I think you said you have access,
so I
> won't describe this further).
>
> Coax has a special condition. If the coax impedance exactly equals
the
> impedance of both the antenna and the XCVR there will be no loss
along
> the transmission line (coax), other than a small amount of
attenuation
> which is always present in real life. In all other cases, one
should
> consider the amount of loss in the coax for each band you intend to
> operate upon. It can be quite high (bad), which is in stark
contrast to
> balanced line in which this is pretty much not even an important
> consideration.
>

> The ARRL Antenna Book discusses this topic. They have charts and
tables
> of data which will allow you to estimate loss at various
frequencies. If
> you evaluate the highest frequency for each band that will give you
the
> worse-case condition for loss. Repeat this for each band you are
> interested in working.
>
> I've been avoiding this part because too many people get too upset
by
> it. Those charts and tables require you to know your swr.
>
> VSWR is voltage standing wave ratio, and ISWR is current standing
wave
> ratio. They are both the same value. One measures current and one
> measure voltage and then uses the resulting values in the same
formula.
> They have the same ratio one to the other, so the resulting swr
value is
> the same. So when people say VSWR just think "swr is swr" and
you'll be
> fine. Neither ISWR or VSWR is better than the other, you just need
to
> use the one your meter is designed to measure. Most devices measure
> voltage, so most often we are using VSWR in our calculations. For
our
> purposes, they are the same thing: swr.
>
> SWR -- Standing Wave Ratio. Basically two sine waves running in
opposite
> directions at the same time. The first ("incident") sine wave moves
from
> the XCVR to the antenna when you are transmitting. If the antenna
has a
> different impedance than this sine wave (which is created by the
> interaction between the original impedance generate at the
transmitter
> and the transmission line through which it is moving) a portion of
the
> incident wave will reflect off the antenna and reverse direction.
It now
> becomes the second sine wave, the "reflected" wave, and moves from
the
> antenna feed point back toward the XCVR.
>
> Freeze frame. You now have one waveform moving from the XCVR toward
the
> antenna feed point, and a second waveform moving from the antenna
feed

> point toward the XCVR. They each repeat their highest and lowest
points
> of their sine waves at regularly repeating intervals during this
trip.
> They will be different; each will have it's high and low at
different
> points along the transmission line. But they don't behave as two
> different things inside the transmission line, they combine as they
pass
> one another to form a new "combined" waveform. If you were able to
see
> this running along the transmission line (either coax or balanced)
they
> would appear to be standing still. This is why it is called a
Standing
> Wave. The swr is a comparison of the highs to the lows, hence, the
term
> Standing Wave Ratio.
>
> That is all swr means. We could choose to measure the two sine
waves
> formed by the voltage, or the two formed by the current, traveling
along
> the transmission line. Both would have the same swr after we solved
the
> formula (but they would use different raw numbers). It is similar
to
> asking what is the difference in ratio between 2:4 and 5:10? None,
of
> course: 2 goes into 4 twice, and 5 goes into 10 twice, therefore
both
> have the same ratio of 2:1.
>
> However, due to the physical properties of coax and balanced line,
they
> behave differently in terms of energy lost (mostly as heat) while
> traveling along the transmission line. Balanced line loss is
generally
> much lower than coax over the same distance. You will see this on
those
> charts and tables spoken of earlier.
>
> (Not to be taken literally, but if you need a mental picture to
sort
> this out, remember that heat is generated as energy travels through
the
> wires of your transmission line. Open wire has no insulation, and
ladder
> line has very little, so it traps less heat. Coax has a lot more
> insulation inside it, the heat can't escape and it gets hotter,

faster,
> thus causing greater losses. Please, don't take that as what really
> happens, but if that image helps you remember the gross differences
> between the two types of transmission line, use it for that limited
> purpose. If you don't need that picture, forget I mentioned it.)
>
> SO WHAT?!?!
>
> Find the swr for the highest frequency on each band you intend to
use
> your antenna on. Now go to those charts and tables in the Antenna
Book
> and figure out the losses inside the transmission line. You will
quickly
> see that a 10:1 swr isn't a great loss of power on balanced line,
but is
> a large loss of power in coax.
>
> Does that matter?
>
> I don't know. Which, and how many, bands are you using the antenna
on?
> What is the swr there? How much loss of power is that? Does that
matter
> to you, or not? Those are the questions you have to answer to know
if
> this is important to you for this particular antenna system. Once
you
> crunch the numbers I suspect you'll quickly make up your mind.
>
> Remember too, if you use a transmatch (aka antenna tuner), which is
> normal for this kind of antenna, you will not alter the swr along
the
> transmission line between the transmatch and antenna feed point. So
any
> loss calculations for that segment of the transmission line will
remain
> the same as when the transmatch is not being used. This isn't good
or
> bad, just keep it in mind as one of the variables.
>
> My Loop:
>
> My loop was roughly 250-feet and triangular in shape (horizontal).
Why?
> That is where my supporting trees are located. It went out my
window as
> balanced line from my transmatch. Immediately it transitioned into
my
> antenna wire (bare #14 stranded copper). It went up into the nearby

tree
> outside my shack window, to a height of about 12 to 15 feet. At the
> bottom it was ladder line, quickly spread to about 3-feet apart,
and by
> the top it spread out to about 4-feet distance between the two
wires.
> They were balanced, but the distance steadily grew farther apart,
and
> did so abruptly at the very bottom (perhaps disturbing the balance,
near
> to the planet, thus inviting ground loss -- yet another topic). I
never
> tried to calculate, and certainly never tried to measure the
impedance
> change along this part of the antenna/feed line.
>
> At the top of this vertical segment (first tree by the shack) one
wire
> ran to a sycamore tree in the back yard to a height of about 40-
feet,
> and the other wire ran from the shack-tree to a pine tree in the
side
> yard to a height of about 50-feet. So my triangle loop was tilted
> somewhat. Highest corner to the east, lowest to the west, and
middle
> corner toward the north.
>
> My very first contact was in Australia, and I often used it to
> participate in a state-wide (MO) traffic net on 80-meters and
sometimes
> 40-meters.
>
> I have no idea what the swr was, nor what the losses were. I'm
confident
> the losses were low because my transmission line was both balanced
and
> very short. So regardless of the swr and line loss nearly all the
energy
> transmitted to the antenna system was radiated. Really the only
points
> of concern were transitioning under the window and that abrupt
splitting
> of the ladder line so close to earth. Neither was optimal.
>
> In other words, I'm confident it was efficient, meaning, nearly all
the
> energy I put into it radiated from it, and very little was lost in
the
> antenna system (transmission line and transmatch in my case). If
you can

> achieve high efficiency you don't need much else. This is one
reason
> dipoles are said to work so well. They are highly efficient.
>
> I hope this helps a little. I recommend studying those transmission
line
> loss tables in the Antenna Book. Once you know or estimate your
swr
> and know the particulars of the transmission line (look up the
> "characteristic impedance" for your transmission line -- it should
be
> readily available from the manufacturers data), you can see for
yourself
> how much energy you will lose in various alternate systems. Then it
is
> simply a matter of choosing the one that provides the overall best
> performance at the bands you prefer for the price you are
willing/able
> to pay.
>
> Have fun! You can learn a lot of good theory and real hands-on
> application through this project. Antennas remain one of the most
> accessible aspects of amateur radio we can easily and affordably
play
> with, so enjoy yourself, and be sure to let us know how it turns
out for
> you!
>
> 73-Erik Weaver n0ew
>
> denisnh wrote:
> > The 18th edition of the ARRL Antenna Handbook (published 1998),
page
> > 5-16 talks about the "Loop Skywire". It mentions that by
shorting the
> > feed coax at the bottom of a vertical run, the antenna can be run
as a
> > vertical antenna??? This amazes me and I really don't understand
how it
> > would function that way. In this case, it looks as though the
loop
> > would work something like a capacitance hat? I seems a lot of
gain
> > would be lost this way but I'm no expert.
> >
> > Also, in the files section of this group, Dr. Ace has an
illustration
> > and brief description of how to do this: Vertical Skywire
> >
<http://f1.grp.yahoofs.com/v1/0EACRxyDGWfhRyZvooZdhjzMty52qsuOsaY7MKaZ

swvQT_0GyrdN4U_6sEr-6oqtd8GWbSLR9R-e9VGHltbb9NbjRTSa5Q/Loop%20Antenna%20Info%20/loopv.jpg>
> > He also mentions that with this method, the additional radiation length
> > created by the vertical coax allows you to run on frequencies at twice
> > the wavelength of the loop.
> >
> > Going back to the antenna handbook mentioned above, an article
> > immediately following the skywire on page 5-16 is a 40 meter vertical
> > loop. I built this antenna exactly as described and it works great, but
> > it's not an all-band antenna (although it will run some harmonics). If
> > I were to take this antenna, re-install it as a horizontal with the
> > vertical antenna coax, I should be able to run 80 meters on it. I would
> > probably use a good quality coax such as rg-213 for the vertical element.
> >
> > Any ideas on how this would perform in comparison to the conventional
> > skywire with a ladder line feed?
> >
> > Thanks,
> >
> > Denis
> >
> >
>

2650. RE: [SkyWires] Re: Fishing poles for loop supports...

Yahoo group: SkyWires
Date: 2007-10-03 22:00:07 UTC
From: Paul MW0CDO
Topic: 2635 Message: 2650

Hi Bob,

I don't have the remains anymore, it got trashed 5 or 6 years ago and I gave the remains away.

Shipping would be expensive from the UK anyway..!

Cheers,

Paul MW0CDO.

From: SkyWires@yahoogroups.com [mailto:SkyWires@yahoogroups.com] On Behalf Of AD5VJ Bob
Sent: 03 October 2007 05:21
To: SkyWires@yahoogroups.com
Subject: RE: [SkyWires] Re: Fishing poles for loop supports...

Would you be willing to sell the Butternut for parts?

73 fer nw es gud DX,
QSL VIA: BUR, LotW, e-QSL
Bob AD5VJ
Old calls: WB5ZQU/WY5L/-KH3-KE5CTY--N5IET
HYPERLINK "http://www.ad5vj.com/"http://www.ad5vj.-com/

Member: CTDXCC, NTCC, STXDXCC
10X#-37210, SMIRK#-5177
FISTS#-12637, SKCC#-2369
NAQCC#-1966, FP#-1141, RARS#-149

From: SkyWires@... [mailto:SkyWires@-yahoogroups.-com] On Behalf Of Paul MW0CDO
Sent: Tuesday, October 02, 2007 6:25 PM
To: SkyWires@...
Subject: RE: [SkyWires] Re: Fishing poles for loop supports...

Hi Steve,

I have no idea what US wire gauge 1mm is.
The 1mm includes the insulation, but as mentioned on the web page it's incredibly tough.

Yes I do use the thin top section with the eye fitted, the wire passes through the eyes.

So far, no breakages.
When the wind blows, and boy does it blow!, the flexibility of all the poles allows the antenna to move in any direction and nothing breaks.

I've had a Butternut HF5b, a 5 ele Tonna for 6m and 13 ele Tonna for 2m trashed by the winds here.
My Butternut HF6v has survived so far as well, another very flexible antenna.

Paul MW0CDO.

From: SkyWires@... [mailto:SkyWires@-yahoogroups.-com] On Behalf Of n6vl
Sent: 02 October 2007 03:23
To: SkyWires@...
Subject: [SkyWires] Re: Fishing poles for loop supports...

Paul,

What wire gauge is 1 mm? I just looked at a chart, and it seems to be #18 gauge. Is that correct?

Also do you use the small diameter top section? It looks like you do in the photo. I don't want to break the small end off.

73,

Steve N6VL

--- In HYPERLINK "mailto:SkyWires%40yahoogroups.com"SkyWires@..., "Paul MW0CDO" <gw7lhi@...> wrote:
>
> Hi Steve,
>
> I used 4 cheap 20ft fishing poles to support a horizontal loop of 150ft
> approx.
> It was up for 2 years here in Port Talbot South Wales without problems.
>
> I live about 5 miles as the crow flies from Mumbles weather monitoring
> station which recorded winds up to 100mph while the poles were up.
>
> I now have a bigger version of the loop up supported by 2 36ft aluminium
> telescopic masts with 20ft fishing poles on top of them.
> The other 2 supports are 20ft fishing poles.
>
> See HYPERLINK

> "HYPERLINK
"http://homepage.ntlworld.com/paultom/"http://homepage.-ntlworld.-com/paulto
m/"HYPERLINK "http://homepage.ntlworld.com/"http://homepage.-ntlworld.-com/
paultom/
> for some pictures.
> I've worked east coast US stations with 100w SSB on 160m with this
one.
>
> Paul MW0CDO.
>

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Version: 7.5.488 / Virus Database: 269.14.0/1046 - Release Date: 03/10/2007
10:08

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Checked by AVG Free Edition.
Version: 7.5.488 / Virus Database: 269.14.0/1046 - Release Date: 03/10/2007
10:08

2651. Re: [SkyWires] Re: Feed Arrangement for Operating the Loop as a Vertical Antenna

Yahoo group: SkyWires
Date: 2007-10-03 22:41:26 UTC
From: Erik Weaver
Topic: 2643 Message: 2651

Hi Denis (I thought "Denisnh" was a unusual name! heheh)....

Comments in body below....

...snip...

> The curves for parallel lines all hug the bottom of the
> chart where the favorable SWR and other factors are, while the coax
> lines soar skyward surprisingly fast, which concurs with your post.

Cebik's web pages are filled with useful information -- time there is well spent. The rapid rise of losses in coax under high swr conditions is in sharp contrast to the low losses generally found in balanced ("parallel") feed line. It is one of the major differences between them. About the only negative that comes to mind with balanced feed line is the need to carefully route it; so it isn't practical in all cases.

Here's something else to consider....

Remember first the rare "special case" where impedance is the same everywhere in the antenna system (XCVR, transmission line, antenna, etc). With the exception of a tiny loss of energy as electrons rub against one another (this loss due to friction is usually insignificant in the typical amateur radio installation), nearly all the RF ("Radio Frequency") energy generated by the XCVR radiates from the antenna as radio waves. This is our goal of course.

By the way, I usually speak in terms of transmitting a radio signal and trying to send it out into the world (our "Hello World!" message), but the efficiencies (or lack thereof) work exactly the same in reverse. In other words, the antenna has the same gain (or loss) as a receiving antenna, as it does when transmitting. So our rare special case antenna will also deliver all the RF energy it collects to the receiver (less friction/heat lost to move the electrons -- which can never be avoided in the real world).

Now when the impedance is one value on the transmission line (and it doesn't matter what kind of transmission line), and the impedance of the antenna is a different value, some RF energy is reflected off the antenna feed point, back to the XCVR. How much is reflected depends upon how great the difference is between the impedances.

There is a difference in behavior at the antenna feed point between a coax fed antenna and a parallel line fed antenna.

Balanced (parallel) line only offers a two-way path between the antenna and the XCVR. Coax may offer a third pathway -- along the outside of the shielding (aka "braid") of the coax. This is because the higher the frequency of alternating current (like RF) the less deeply the RF penetrates into the conductor -- this is called "skin effect". RF doesn't penetrate very deeply into the conductor; it travels along the outer-most surface, shallow enough in fact that one wave of energy can travel along the inner surface of the coax shielding while a second wave travels along the outside surface of the same coax shielding, and the two will never meet. Therefore, coax can offer three conductors to RF: along the inner conductor; along the inside of the coax shielding; and along the outside of the coax shielding. We desire the first two paths, but we do not (usually) benefit from RF flowing on the outside of the coax shield.

Since balanced (parallel conductors) transmission line (aka feed line) is constructed of only two wires (which may be either stranded or solid wire), the reflected wave (that energy which is reflecting from the antenna feed point, back to the XCVR) has only one return path available to it -- it returns ("reflects") back along the same conductor that it originally traversed. This is a simple condition, and no "balun" (more accurately "bal-bal" for "balanced-to-balanced" in this case) is required to maintain the desired energy pathway between the XCVR and antenna.

("Balun" is a conjunction of "balanced" and "unbalanced" identifying a transition from a balanced transmission line to an unbalanced line. "Unun" identifies transitioning from "unbalanced" to "unbalanced" line. "Balbal" identifies transitioning from "balanced" to "balanced" line. Depending upon the design, this transformation may occur at a number of different ratios, of which 1:1 and 4:1 are the most commonly used.)

This simple two-way path is not always the case when using coax. If the impedance mismatch is great enough, some fraction of the RF will find an easier pathway flowing along the outside of the coax shielding. This can cause problems such as RFI (Radio Frequency Interference) and inaccurate readings on our meters (which are designed under the assumption RF will travel along two paths, not three). Suffering a bad case of "RF on the feed line" may cause RFI to affect other electronics in the area, provide false swr readings, and cause "RF bite" on our microphone. This is often caused by RF radiating off the outside of the coax, instead of the antenna. (Although in some cases problems may exist even when feed line radiation has been eliminated. RFI can be a difficult puzzle to solve.)

Enter the balun. By "wrapping" the coax with a much greater impedance than the antenna feed point, we keep any stray RF from moving onto the outside of the coax shielding. (Targeting a much greater impedance on the outside of the coax than inside it.) To the degree this is successful, RF may only travel onto the antenna, or back along the inside of the coax to the XCVR. (On either the inside of the shielding or along the surface of the center conductor. No RF travels along the

core of the center conductor, due to skin effect.)

Once again we have only two pathways for the RF to travel allowing our equipment and antenna system to behave as intended, and within predictable parameters. This is why a balun may be useful at the feed point of an antenna when using coax transmission line. It is also why, unless the coax impedance is very close to equaling the antenna's impedance where they meet (the feed point) a feed point balun is advisable when using coax.

Reflection, re-reflection, and re-re-reflection....

Recall the transmitted RF wave traveling along the transmission line to the antenna feed point, and not finding a perfectly equal impedance, some bounced back toward the XCVR in the original direction.

Now the reflected wave races toward the XCVR. Some of it was absorbed by the antenna, and some has been lost in the transmission line (heat/friction). So it isn't exactly at the same impedance when it started, and it has been altered in other ways too. Namely the "phase" of either the voltage or current has been shifted. To learn more about this, "Reflections II" by Walter Maxwell W2DU is a great book! Highly recommended! If you see one at a hamfest, buy it!

We'll skip over exactly what and why this change takes place (entire books have been written about just that!), but the RF wave is different than when it left the XCVR, and as a result, it will "bounce" (or re-reflect) off the XCVR, and move in the original direction again. It is re-reflected back toward the antenna feed point.

The re-reflection point will be the transmatch instead of the XCVR if a transmatch is being utilized. Either way, the RF wave will bounce back and forth, reflecting, re-reflecting, and re-re-reflecting, and so on, until it either all eventually escapes out the antenna or is absorbed as heat/friction in the transmission line. (In truth, it is always the sum of both events -- what isn't eventually changed into heat in the transmission line escapes the antenna as radiated RF.)

As the swr increases, and as the inherent loss of the transmission line increases (lower in balanced line; higher in coax), more of the RF energy is lost as unproductive heat/friction, and less is available to radiate from the antenna as a useful radio signal.

This is why high swr on balanced feed line isn't all that bad. Most of the RF energy will eventually "bounce" out of the antenna anyway. It doesn't really matter if it makes it out the very first trip, on the sixth, or 16th. Radiated is radiated. The person receiving your radio signal will never know if they are hearing the very first wave or a re-reflected wave. It just doesn't matter after the energy escapes the antenna.

Escaping the antenna is the trick!

And that is where coax may not work well in the same situation. Coax, suffering much greater losses to the RF as it traverses along it ("attenuation"), simply absorbs too much of the RF as it bounces back and forth, especially under high swr conditions. There isn't much left to escape out the antenna.

All of which leads to the generalized conclusion that wire antenna elements fed by balanced transmission line, operate very efficiently even under high swr conditions. That is why these types of antennas (from dipoles to loops) have built a reputation as practical multi-band solutions for many amateur radio operators. The only stumbling block is transforming their wide ranges of impedance into something close to a nominal 50-Ohms resistive (meaning little or no reactance) to match our "modern" (meaning non-tube) XCVRs. And that is precisely what a transmatch is designed to accomplish.

> All my HF antenna experience is in
> receive only antennas for shortwave. I've been dragging my feet on
> getting my General Class license but finally decided to go for it
> this month. Of course, I had masterd 5 wpm CW just in time for that
> requirement to be abolished. :-)

Heheh, yes, that sounds just about right! ;) Welcome to HF! And welcome to the world of transmitting antennas. They can be a lot of fun!

> Some people seem to put all their faith in the modeling software.
> Whatever works for them, but I would never take a computer model as
> being 100% accurate. To me, the model really has to be built in 3D
> to prove it works.
...snip...

Precisely! It can save a lot of time by eliminating very bad or very unlikely designs, but it is almost impossible to fully model the environment in which the antenna will be built. So you have to actually build it and test it at some point. This is like other rules of thumb. Take any of the "formulas" for determining the proper length of antenna elements. They all say to start too long and slowing trim it to a proper match.

Whether a formula for a simple dipole, or a computer model of a loop or beam, the idea isn't to make the perfect antenna on paper and then reproduce it exactly in the real world. It is to "get close" and possibly avoid some time lost in fiddling around. Beams are a good example. You can play with the modeling software and try out different element combinations and get an idea of the resulting envelopes and feed point impedances. This saves a lot of time, but ultimately you have build it and tune it to your exact site.

> ...snip... What the heck though, and after
> reading your reply, I believe I will go with the 40 meter loop and
> orient it as a horizontal with paralell feedline.

Adding a transmatch (aka antenna tuner) between your XCVR and antenna will most likely allow this to become a very usable multi-band antenna.

Every antenna displays its own range of impedances, and these vary on each band. (This "impedance" is more properly called "complex impedance" because it includes some reactance.) Very low impedances are typically difficult for many transmatches to "match," but any extreme value of complex impedance may fall outside the range which a given transmatch can "match." ("Match" means transforming the existing complex impedance, on the antenna-side of the transmatch, into an impedance (with little or no reactance) close to that which the XCVR is designed to work into.)

But there are workarounds, such as matching stubs, and other solutions. (See below.)

> Regarding running the line into the shack, shorting the wires and
> connecting them to the rig, there are a few reasons I can't do this.
> For one, there are children and unknowing people in the area that
> may get zapped if they are able to touch the wires. My ham station
> (or what's left of it) is in my basement office. I need to run the
> line vertically to about 8' above the ground, make the short at that
> point, and install a matching network either on a pole or tree in a
> PVC junction box. The ground wire would go there also, and then I
> need run the ground and an insulated feedwire the remaining distance
> to the ground, bury it and slip it through the side of the house
> into the shack.
>

If you are married to the idea of having the vertical option, this may be true. You might consider a simple 30-amp automotive relay too. Put 12-vdc to it and remotely control that shorting switch.

I'm not sure I'm picturing this properly. Where is the antenna feed point in relation to your shack? Pretty much right above it, or 50-feet distance after you get outside the house?

I'm wondering if we're talking about a longer run from the shack to the antenna feed point, like 50- to 100-feet or more, or a much shorter run like 20- or 30-feet?

Also, consider getting outside in as short a run as possible, and making a longer run of ladder line to get to the antenna feed point. I had one dipole for which I ran 300-Ohm twin lead transmission line half way around my house under the overhang of the roof.

> That's what I need to research next: Building a matching unit.

There are two different kinds of impedance matching devices. One is fixed, and the other is variable. Each has a number of different designs that may be implemented.

Fixed impedance matching devices work extremely well with single-frequency antenna systems. If broad enough they can work reasonably well for an entire amateur radio band. But I doubt you'll

find a single fixed impedance matching solution for all bands.

There are a couple options that come to mind to get around this limitation....

Easiest is to use a variable impedance matching device instead. A transmatch ("antenna tuner") in other words.

But that is not the only way to transform impedance with some variability. You could make a set of "matching stubs" which are typically lengths of coax cut to a specific size and either shorted or left open on the far end, with the other end connected to the antenna system using a "T" connector. If you have enough of these you could switch in the proper one to alter the impedance being presented to your XCVR to within a range acceptable to it, thus allowing it to load the antenna system without causing your XCVR damage.

Similar to this is using a number of lengths of coax to once again alter the impedance presented to the XCVR. Rather than connecting these with a "T" connector, instead you simply add or subtract them from the total length of transmission line. This in turn alters the impedance "seen" by the XCVR.

Of these, the simplest and easiest solution to implement is using a transmatch. Then if you do find a certain range of frequencies that you still cannot match on a given band, add a 1/8-wavelength (WL) length of transmission line (between your transmatch and antenna) and see if you can then match your system. If not, add another 1/8-WL, and try again. After you add 8 of these 1/8-WL lengths of transmission line you will be right back where you started (having added one full wavelength of transmission line). In many cases, one of these will shift the impedance "seen" by your transmatch enough to allow it to work.

Picture a one full sine wave, running horizontally left-to-right, which represents one full wavelength. As you travel up and down and up again along this sine wave, you are moving through changing values of impedance. (The actual values will be different for each frequency, of course.) Once you get to the end of one sine wave, and begin the next sine wave, the pattern repeats, and continues to do so until you reach the end of the transmission line (at the antenna feed point, transmatch, XCVR, amplifier, etc).

Now imagine a pair of horizontal lines, one somewhere between the middle of the sine wave and the tippy-top, and the second one somewhere between the middle of the sine wave and the very bottom. The area between these lines, crossing through the center-line, represents the range for which your transmatch will successfully transform the existing impedance (that falls between your two lines) into something fairly close to 50-Ohms, zero reactance. The area of the sine wave curve above and below these two lines is beyond your transmatch's ability to "tune your antenna."

Pick a point at the very tippy-top of the sine wave. Your transmatch cannot transform that impedance. By adding a short section of coax (between the antenna and the transmatch) you effectively move that point forward along the sine wave curve some distance. If that point now falls somewhere between your two lines, the transmatch can transform that impedance into something your XCVR will load into: in popular parlance, the antenna is now "tuned."

If that point did not move far enough, and it still lies above the upper line, you will have to add another short section of coax to move that point ever farther along the sine wave curve. In the example I used above you have 8 short pieces of coax, each 1/8-wavelength long, so if you end up adding all eight pieces, you are right back where you started. At some point you will find a value of impedance with which your transmatch can work, or you will have determined that transmatch is unable to tune that antenna system at that frequency.

(Adding or subtracting 1/8-WL sections is a reasonable tactic, which is why I cite that as an example. You only have to remember those lengths are (1) electrical lengths, not physical lengths; and (2) a 1/8-WL piece of coax for 20-meters, will be close to a 2/8 (or 1/4) wavelength piece of coax on 10-meters, and only a 1/16th WL on 40-meters.)

> Wouldn't running the vertical radiators into the shack introduce a
> lot of RF there?

Yes, if they are in fact radiating RF, that is likely. The idea is to avoid that from happening if they are supposed to be feed line, and if you do want to use them as vertical antenna elements, they only radiate where you wish to do so.

There are two basic kinds of transmission line: coax and balanced. If using coax, refer back up to the discussion about the "third path" for RF to travel along the outside of the coax shielding. If that takes place, then yes, you may experience a lot of RFI. If not, there should not be any problem. This is exactly where coax excels! Coil it, sit on it, tape it to a copper water pipe, if the RF is contained inside the inner-side of the shielding you will be fine.

This means using a properly designed balun at the antenna feed point, and properly transforming impedance at your XCVR. If the antenna has a properly working balun (so not RF gets on the outside of the coax at the antenna feed point) but you have a large impedance mismatch at the XCVR, you will allow RF to escape onto the coax there, and for the same reasons as it may do so at the antenna feed point. If you put a second properly designed balun at the XCVR feed point, it won't hurt anything, and if the impedance should become unbalanced for some reason, it will isolate the coax feed line.

It is also possible at some frequencies the coax will interact with your antenna. This may occur if it is of a proper length to be a harmonic of the RF, for example.

Balanced line will eliminate this RFI problem, however, since you are routing this inside and through a building it is quite likely at one or more points it will become unbalanced, and then your problem will be even worse. At that point it will be an antenna element. Generally not the goal of transmission line! ;)

IF you can ensure a minimum of one-widths distance (more is better -- see first email) from everything, this may then work. But that is unlikely. So using balanced transmission line indoors isn't generally a good choice. (Which is why so many people use coax indoors, of course.)

There is a third option. Use coax in a different configuration. This is described in your ARRL Antenna Book. You will cut two (exactly) equal lengths of coax. If you are using parallel line outside to feed your antenna, use the highest impedance coax you can find. The highest I've found online at the larger coax dealers was 125-Ohms. But if you can only get 50- or 75-Ohm, go ahead and use that. It won't be the end of the world or anything!

Now, tape these two lengths of coax together, or use cable ties, etc. This doesn't affect how it will work, but does make it easier to handle. You will use the two inner conductors as balanced parallel feed line. At each end solder the shielding together. On the outdoor-end you will leave this shielding "floating" (not connected to anything other than each other -- but do weather proof them so no water gets inside the coax). Indoors in your shack you will connect the shielding to your station ground. Connect the two inner conductors exactly as you would any other balanced parallel transmission line. You have created a shielded balanced line! This can be routed as if it were coax. Losses will be greater than with normal balanced line, but if the length of the run isn't too long it shouldn't be excessively high.

If you have a remote transmatch and match impedance outdoors between this coax-shielded-balanced line and the regular open line it should have pretty low loss (because the impedance can be closely matched to what both the paired-coax and XCVR are designed to work into).

The easiest way to get through a building, however, is to just use a high quality, low-loss coax and keep that run as short as possible. Refer back to those tables to calculate the loss at various frequencies.

Those are your major options, and each of them if done correctly, should not cause RFI problems.

> I'm also wondering about the effect of having two
> vertical radiating elements so close together and the effect they
> would have on each other.

Radiating? Or parallel conductors??

Radiating elements do of course interact with one another. That is how beams work. If you mean parallel conductors, the best plan is not allow them to radiate.

If you mean as radiating elements in a vertical antenna, study the Antenna Book in the section they discuss phased vertical elements. As I recall when they are quite close together the envelopes mostly overlap and there isn't much "phasing" taking place (no directivity, etc). *IF* I recall this correctly I don't think you will need worry about them adversely affecting one another. They should mostly behave as one vertical element on the HF bands.

> Another thought would be to have a pulley
> located at the feedpoint where I could quickly lower the antenna and
> switch to coax for the vertical element and back to paralell
> feedlines for loop operation, but that may be a lot more trouble than
> it's worth.

I'm too lazy for that! :) It is beginning to sound like work. Your mileage may vary.

> One other thing to mention is that I have a decent antenna tuner.

Good news! I suggest using it! :)

Connect it at your station with whatever length of coax best fits to your XCVR. That is the proper length for that coax. You want it short so you're not tripping over it, but not so short it is a problem to get to the back of your XCVR or any of the other connections.

You see, coming out of the back of your transmatch and going to your XCVR (if the transmatch is properly adjusted) the impedance will be very close to that which the XCVR is designed to work into. We haven't mentioned this, but I am assuming you have a "modern" transistor-based XCVR. (If you are using a tube-based XCVR much of what I have said will be somewhere between wrong and just unnecessary.) This means your XCVR wants to "load into" something close to 50-Ohms. So use 50-Ohm coax to connect the transmatch and XCVR and you will have nearly a perfectly matched impedance between them, at the designed impedance of the coax, so therefore there will be almost no loss along that length of coax, and it can be any length you desire, and not affect the impedance as a result of its length. (Within reason -- if you use a mile of coax, even the small losses will accumulate over such a long distance to adversely affect the system.)

This is because all the impedances are the same (the coax, and both "loads" on either side of it -- in this case the transmatch on one side and the XCVR on the other). Therefore you can take a long length of coax, measure the impedance, and you will find the same impedance at any other point along that coax. It is experiencing that "rare special condition" spoken of earlier.

So we now know there will not be any appreciable loss going from the XCVR to the transmatch. We also know once we get outside and onto the balanced (parallel) transmission line, there will be only minimal losses. So the only "tricky" part is getting from the indoor transmatch to that balanced line outdoors.

By the way, if you use insulated 450-Ohm ladder line as your outdoor parallel transmission line, that should eliminate the issue of kids grabbing the line. Especially, if as you say, this is 8-feet or so above the ground and pretty out-of-sight, out-of-mind.

You have not said how far the distance is between your shack and the proposed antenna feed point. 50-feet? 500-feet? There is a world of difference between these. If you are talking about less then 100-feet, I'd just buy really good low-loss coax (RG-213, LMR-400, Beldon 9913, or better -- something like that) and route it outside, and connect to my ladder line there.

Here's some typical losses for 100-feet of coax (double the losses for 200-feet and cut i in half for 50-feet):

COAX
Loss RG-174 RG-58 RG-8X RG-213 RG-6 RF-9913
1MHz 1.9dB 0.4dB 0.5dB 0.2dB 0.2dB 0.2dB
10MHz 3.3dB 1.4dB 1.0dB 0.6dB 0.6dB 0.4dB
50MHz 6.6dB 3.3dB 2.5dB 1.6dB 1.4dB 0.9dB
SOURCE: http://www.radiobooks.com/products/techinfo/coaxloss.htm

Attenuation (Loss, dB per 100 feet)
COAX: 30-MHz: 50-MHz:
RG-174 5.5 6.6
RG-58 2.5 4.1
RG-8X 2.0 2.1
RG-213 1.2 1.6
LMR-400 0.7 0.9
9913 0.8 1.5
SOURCE: http://www.universal-radio.com/catalog/cable/coaxperf.html#atten

You will note there are some minor differences in sources, but they generally agree. To really know for certain you have to measure your coax. There can be differences between production runs.

Still, if you buy 9913 and use 100-feet of it, you are somewhere around 1-dB or so of loss (as we know, this will be worse as swr climbs, so take that into account as well). As you may recall, a 3-dB loss is a reduction of half your power: 100-watts becomes 50-watts.

If you are only talking about a 30-foot or a 50-foot run the losses will be less. So if you use coax to get outside, and you are using the transmatch indoors and you want a multi-band antenna, do try to keep the coax run as short as possible. We know you'll have 8- to 10-feet of coax to get up away from the kids. Add to this whatever length is required to reach your transmatch. Then you can calculate various losses for each band at various degrees of mismatch.

> How this would work with a matching network is something else I'll
> have to research. Putting the tuner outside is not practical. Ideas,
> anyone?

That will work. You can use more than one impedance matching system at once. The end result is simply a sum of the interactions. We do so all the time anyway because transmission line itself is transforming impedance. In fact, one way to think of a transmatch is as a big variable length of coax shoved into a tiny black box! ;)

As I see it, your biggest issue is getting out of the basement and 8-feet above earth. That is where it seems you are most likely to suffer the greatest losses. If you use coax, then high swr will hurt. It you use ladder line --if that is possible-- you have to be very certain it remains balanced. Or use shielded balanced line. It is made commercially, so the larger transmission line suppliers may carry it, or know where you can order it.

But if you are able to exit your house quite close to your station, and the antenna feed point is pretty much right above your station, you are only talking about a coax run of about 20-feet (8-ft above earth; 8-ft ceiling; a foot or so to clear the wall/floor). That isn't a terribly long run of coax, and results should be pleasant.

>
> Thanks again for the info, Erik!

Sure thing. Happy to help.
73-Erik n0ew

END OF REPLY
# # #

>
> Denis
>
>
> --- In SkyWires@yahoogroups.com, Erik Weaver <erik@...> wrote:
>> Hi Denisnh,
>>
>> I'll comment on a little of this, but I can't answer all your
> questions.
>> Maybe others will fill in the blanks for you. The 2nd best answer
> is to
>> model the two antennas, which I have not done, and the very best
> way to
>> judge is build them both on your side and compare, but who does
> that?
>> I've not done either, but I have ran my own horizontal loop for a
> few
>> years. Third best is to build the antenna system on paper and
> calculate
>> some of what can be expected. That is what I'll discuss below.
>>
>> With regard to feeding the loop at the base, according to my
> reading it
>> is exactly like running it as a vertical with a large capacity hat.

> I
>> tried that once or twice just to see if it worked. It did, but so
> did
>> the loop used as a loop, so I only tested it and then then never
> used it
>> as a vertical again. Also mine had very little vertical component
> to it
>> so I didn't think it was an important difference in my
> configuration. (I
>> took down my loop last winter when one of the corner supports
> broke.
>> I've not put it back up yet.)
>>
>> I've read many people run a loop this way to get on 160-meters. The
> ones
>> I remember were using balanced feed line. You just connect both
> balanced
>> feed line wires to the same output terminal on your XCVR (or
>> transmatch/amp). The other (now unused terminal) is connected to an
>> earth ground. The balanced feed line is now an active antenna
> element,
>> and in a vertical orientation. Above this is the horizontal loop.
> It
>> does act as a cap-hat. If you go back to Cebik's web pages I know
> he
>> used to have several pages of info on cap-hats. That will provide
> much
>> more info about them than I. (The same is true of antennas in
> general;
>> you have found a very good and reliable source of antenna theory --
>> stick with Cebik -- he's one of the good guys!)
>>
>> Remember, in a balanced feed line, current is opposite in both
> direction
>> of flow and locations of min/max values. "Equal and opposite." If
> you
>> recall your basic EM (electromagnetic) theory (found in the ARRL
>> Handbook if you need to review it) that means the EM fields cancel
> one
>> another, and therefore the balanced feed line does not radiate as
> does
>> an antenna wire. When the two "legs" of the balanced feed line are
>> connected to the same terminal at your station, this "balanced"
>> condition no longer exists. Both wires now carry the same EM wave,
>> having their min/max values (of both current and voltage) at the
> same
>> locations along the wires, and the EM wave is moving in the same
>> direction at the same time. Therefore, the wires now radiate as an
>> antenna element. They no longer cancel each others EM field, so
> they

>> radiate.
>>
>> With regard to using balanced feed line or coax, the primary
>> considerations are the surroundings and number of bands planned for
> use
>> (which ties directly to transmission line loss).
>>
>> Surroundings -- If you are weaving around and between a lot of
> material,
>> especially metal or magnetic materials (including items such as
>> electrical lines that create EM fields), then coax is best. It has
>> shielding so it is not affected by that metal water pipe you just
> taped
>> your transmission line to running across the basement ceiling ;)
>> Recalling the balanced nature of balance line (whether open, twin
> lead,
>> window, ladder, etc.) which is why it behaves as it does, if you
> disturb
>> that balance, and unbalance it, at that point it begins to behave
> as a
>> radiating element of your antenna. Generally not such a good plan
> in
>> your basement ;) So when the surroundings will upset the balance of
>> balanced feed line, use coax.
>>
>> That's the easy part. It is pretty much straight forward.
>>
>> Number of bands & transmission line loss -- This gets more
> complicated.
>> Let's first briefly compare balanced line to coax. Balanced line
>> (provided you do not allow it to become unbalanced) offers very
> little
>> loss of energy over long distances. Nor does it radiate. This is
> due to
>> the "equal and opposite" direction and magnitude of the EM energy
>> flowing along the balanced line. By altering the diameter of the
>> conductors and the distance between them, you can alter the
> impedance of
>> this balanced transmission line. Generally amateur radio operators
> use
>> something around 450-Ohm line, but one will still commonly find
>> impedance values from 300- to 600-Ohms.
>>
>> If you know the feed point impedance of your antenna across all the
>> bands you intend to operate it upon, you can determine what
> impedance is
>> best. I believe most of us just pick a specific type of balanced
> line
>> (and therefore value of impedance) for entirely different reasons,
> such

>> as what we happen to have, can easily make, or is currently on sale.
>>
>> If you are running the transmission line in the clear, and want to
>> minimize transmission line loss, and maximize the number of bands
> you
>> can work, then balanced feed line is a good choice. "In the clear"
> means
>> no closer to anything metal than one-width of the balanced line.
> More
>> clearance from object is better. If you can ensure several
>> widths-distance you should find it performs quite well. Maximizing
> the
>> number of bands you can use means using a transmatch (aka antenna
> tuner)
>> or setting up a series of tuning stubs, or switchable lengths of
>> transmission line. Each of these effects impedance values. Pick
> your
>> favorite method. (I'll not discuss these options here, as I think
> it is
>> off-topic, and can be a lengthy discussion to describe fully. And
> many
>> articles written about each option.)
>>
>> Coax can run right along metal and not be affected by it. This is
> great
>> is tight quarters, and it is often readily available which is also
>> convenient. It too is available in a range of impedances, generally
> from
>> 50-Ohms to 125-Ohms from specialty stores, and most commonly in
> either
>> 50- or 75-Ohm impedance. The value of impedance is due to the size
> and
>> spacing of the inner conductor relative to the shielding, or
> braiding,
>> wire surrounding it. Some of it is rated for underground routing,
> and
>> some has high UV protection ratings. It can be run in parallel as a
>> balanced line and some hams use it in this fashion to go through
> walls
>> and maintain a balanced feed line while doing so (this is described
> in
>> the ARRL Antenna Book, to which I think you said you have access,
> so I
>> won't describe this further).
>>
>> Coax has a special condition. If the coax impedance exactly equals
> the
>> impedance of both the antenna and the XCVR there will be no loss
> along
>> the transmission line (coax), other than a small amount of

> attenuation
>> which is always present in real life. In all other cases, one
> should
>> consider the amount of loss in the coax for each band you intend to
>> operate upon. It can be quite high (bad), which is in stark
> contrast to
>> balanced line in which this is pretty much not even an important
>> consideration.
>>
>> The ARRL Antenna Book discusses this topic. They have charts and
> tables
>> of data which will allow you to estimate loss at various
> frequencies. If
>> you evaluate the highest frequency for each band that will give you
> the
>> worse-case condition for loss. Repeat this for each band you are
>> interested in working.
>>
>> I've been avoiding this part because too many people get too upset
> by
>> it. Those charts and tables require you to know your swr.
>>
>> VSWR is voltage standing wave ratio, and ISWR is current standing
> wave
>> ratio. They are both the same value. One measures current and one
>> measure voltage and then uses the resulting values in the same
> formula.
>> They have the same ratio one to the other, so the resulting swr
> value is
>> the same. So when people say VSWR just think "swr is swr" and
> you'll be
>> fine. Neither ISWR or VSWR is better than the other, you just need
> to
>> use the one your meter is designed to measure. Most devices measure
>> voltage, so most often we are using VSWR in our calculations. For
> our
>> purposes, they are the same thing: swr.
>>
>> SWR -- Standing Wave Ratio. Basically two sine waves running in
> opposite
>> directions at the same time. The first ("incident") sine wave moves
> from
>> the XCVR to the antenna when you are transmitting. If the antenna
> has a
>> different impedance than this sine wave (which is created by the
>> interaction between the original impedance generate at the
> transmitter
>> and the transmission line through which it is moving) a portion of
> the
>> incident wave will reflect off the antenna and reverse direction.

> It now
>> becomes the second sine wave, the "reflected" wave, and moves from
> the
>> antenna feed point back toward the XCVR.
>>
>> Freeze frame. You now have one waveform moving from the XCVR toward
> the
>> antenna feed point, and a second waveform moving from the antenna
> feed
>> point toward the XCVR. They each repeat their highest and lowest
> points
>> of their sine waves at regularly repeating intervals during this
> trip.
>> They will be different; each will have it's high and low at
> different
>> points along the transmission line. But they don't behave as two
>> different things inside the transmission line, they combine as they
> pass
>> one another to form a new "combined" waveform. If you were able to
> see
>> this running along the transmission line (either coax or balanced)
> they
>> would appear to be standing still. This is why it is called a
> Standing
>> Wave. The swr is a comparison of the highs to the lows, hence, the
> term
>> Standing Wave Ratio.
>>
>> That is all swr means. We could choose to measure the two sine
> waves
>> formed by the voltage, or the two formed by the current, traveling
> along
>> the transmission line. Both would have the same swr after we solved
> the
>> formula (but they would use different raw numbers). It is similar
> to
>> asking what is the difference in ratio between 2:4 and 5:10? None,
> of
>> course: 2 goes into 4 twice, and 5 goes into 10 twice, therefore
> both
>> have the same ratio of 2:1.
>>
>> However, due to the physical properties of coax and balanced line,
> they
>> behave differently in terms of energy lost (mostly as heat) while
>> traveling along the transmission line. Balanced line loss is
> generally
>> much lower than coax over the same distance. You will see this on
> those
>> charts and tables spoken of earlier.

>>
>> (Not to be taken literally, but if you need a mental picture to
> sort
>> this out, remember that heat is generated as energy travels through
> the
>> wires of your transmission line. Open wire has no insulation, and
> ladder
>> line has very little, so it traps less heat. Coax has a lot more
>> insulation inside it, the heat can't escape and it gets hotter,
> faster,
>> thus causing greater losses. Please, don't take that as what really
>> happens, but if that image helps you remember the gross differences
>> between the two types of transmission line, use it for that limited
>> purpose. If you don't need that picture, forget I mentioned it.)
>>
>> SO WHAT?!?!
>>
>> Find the swr for the highest frequency on each band you intend to
> use
>> your antenna on. Now go to those charts and tables in the Antenna
> Book
>> and figure out the losses inside the transmission line. You will
> quickly
>> see that a 10:1 swr isn't a great loss of power on balanced line,
> but is
>> a large loss of power in coax.
>>
>> Does that matter?
>>
>> I don't know. Which, and how many, bands are you using the antenna
> on?
>> What is the swr there? How much loss of power is that? Does that
> matter
>> to you, or not? Those are the questions you have to answer to know
> if
>> this is important to you for this particular antenna system. Once
> you
>> crunch the numbers I suspect you'll quickly make up your mind.
>>
>> Remember too, if you use a transmatch (aka antenna tuner), which is
>> normal for this kind of antenna, you will not alter the swr along
> the
>> transmission line between the transmatch and antenna feed point. So
> any
>> loss calculations for that segment of the transmission line will
> remain
>> the same as when the transmatch is not being used. This isn't good
> or
>> bad, just keep it in mind as one of the variables.
>>

>> My Loop:
>>
>> My loop was roughly 250-feet and triangular in shape (horizontal).
> Why?
>> That is where my supporting trees are located. It went out my
> window as
>> balanced line from my transmatch. Immediately it transitioned into
> my
>> antenna wire (bare #14 stranded copper). It went up into the nearby
> tree
>> outside my shack window, to a height of about 12 to 15 feet. At the
>> bottom it was ladder line, quickly spread to about 3-feet apart,
> and by
>> the top it spread out to about 4-feet distance between the two
> wires.
>> They were balanced, but the distance steadily grew farther apart,
> and
>> did so abruptly at the very bottom (perhaps disturbing the balance,
> near
>> to the planet, thus inviting ground loss -- yet another topic). I
> never
>> tried to calculate, and certainly never tried to measure the
> impedance
>> change along this part of the antenna/feed line.
>>
>> At the top of this vertical segment (first tree by the shack) one
> wire
>> ran to a sycamore tree in the back yard to a height of about 40-
> feet,
>> and the other wire ran from the shack-tree to a pine tree in the
> side
>> yard to a height of about 50-feet. So my triangle loop was tilted
>> somewhat. Highest corner to the east, lowest to the west, and
> middle
>> corner toward the north.
>>
>> My very first contact was in Australia, and I often used it to
>> participate in a state-wide (MO) traffic net on 80-meters and
> sometimes
>> 40-meters.
>>
>> I have no idea what the swr was, nor what the losses were. I'm
> confident
>> the losses were low because my transmission line was both balanced
> and
>> very short. So regardless of the swr and line loss nearly all the
> energy
>> transmitted to the antenna system was radiated. Really the only
> points
>> of concern were transitioning under the window and that abrupt

> splitting
>> of the ladder line so close to earth. Neither was optimal.
>>
>> In other words, I'm confident it was efficient, meaning, nearly all
> the
>> energy I put into it radiated from it, and very little was lost in
> the
>> antenna system (transmission line and transmatch in my case). If
> you can
>> achieve high efficiency you don't need much else. This is one
> reason
>> dipoles are said to work so well. They are highly efficient.
>>
>> I hope this helps a little. I recommend studying those transmission
> line
>> loss tables in the Antenna Book. Once you know or estimate your
> swr
>> and know the particulars of the transmission line (look up the
>> "characteristic impedance" for your transmission line -- it should
> be
>> readily available from the manufacturers data), you can see for
> yourself
>> how much energy you will lose in various alternate systems. Then it
> is
>> simply a matter of choosing the one that provides the overall best
>> performance at the bands you prefer for the price you are
> willing/able
>> to pay.
>>
>> Have fun! You can learn a lot of good theory and real hands-on
>> application through this project. Antennas remain one of the most
>> accessible aspects of amateur radio we can easily and affordably
> play
>> with, so enjoy yourself, and be sure to let us know how it turns
> out for
>> you!
>>
>> 73-Erik Weaver n0ew
>>
>> denisnh wrote:
>>> The 18th edition of the ARRL Antenna Handbook (published 1998),
> page
>>> 5-16 talks about the "Loop Skywire". It mentions that by
> shorting the
>>> feed coax at the bottom of a vertical run, the antenna can be run
> as a
>>> vertical antenna??? This amazes me and I really don't understand
> how it
>>> would function that way. In this case, it looks as though the
> loop

>>> would work something like a capacitance hat? I seems a lot of
> gain
>>> would be lost this way but I'm no expert.
>>>
>>> Also, in the files section of this group, Dr. Ace has an
> illustration
>>> and brief description of how to do this: Vertical Skywire
>>>
> <http://f1.grp.yahoofs.com/v1/0EACRxyDGWfhRyZvooZdhjzMty52qsuOsaY7MKaZ
> swvQT_0GyrdN4U_6sEr-6oqtd8GWbSLR9R-e9VGHltbb9NbjRTSa5Q/Loop%20Antenna%
> 20Info%20/loopv.jpg>
>>> He also mentions that with this method, the additional radiation
> length
>>> created by the vertical coax allows you to run on frequencies at
> twice
>>> the wavelength of the loop.
>>>
>>> Going back to the antenna handbook mentioned above, an article
>>> immediately following the skywire on page 5-16 is a 40 meter
> vertical
>>> loop. I built this antenna exactly as described and it works
> great, but
>>> it's not an all-band antenna (although it will run some
> harmonics). If
>>> I were to take this antenna, re-install it as a horizontal with
> the
>>> vertical antenna coax, I should be able to run 80 meters on it.
> I would
>>> probably use a good quality coax such as rg-213 for the vertical
> element.
>>> Any ideas on how this would perform in comparison to the
> conventional
>>> skywire with a ladder line feed?
>>>
>>> Thanks,
>>>
>>> Denis
>>>
>>>
>
>
>
>
>
> Yahoo! Groups Links
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>
>

2652. Re: [SkyWires] Using 2 Smaller Gauge Wires in Place of Large Gauge Wires

Yahoo group: SkyWires
Date: 2007-10-04 11:16:52 UTC
From: chasm@texas.net
Topic: 2642 Message: 2652

this all bander of yours
I am not clear on the concept.
the loop is going to be one wavelength long for the lowest freq you will
transmit on? and you want two of them together a la zip cord?
you will use a tuner for the "all band" capability?

I should think that if 12 ga solid is good for 1.5kw, your 18ga should
certainly handle 500W. not sure where to find the table for that. prolly the
ARRL Antenna book<G> everything else is in there.

another question, I wonder how many loops of wire you can make around a 50x75'
lot to equal one wavelength and what the separation has to be between them? I
am still looking for a QUIET RX antenna. 75m is so bad this am I cannot copy
the NCS.

thanks
73/chas
--
K5DAM Houston EL29fu AAR6TU
aar6tu@...

On Tue, 02 Oct 2007 13:29:02 -0000, "denisnh" <denisnh@...> wrote:

>Hi All. I remember reading (I think one of L. Cebik's articles?)
>that sometimes two smaller gauge wires are run together in place of a
>larger gauge wire that may not be available. This was only mentioned
>and I don't know if L. Cebik approved of this method or not.
>
>I'm finally getting around to setting up a full wave horizontal loop
>for 80-10 meters. Buying wire is not an option for me at this
>point. However, I have a 1000 foot roll of industrial grade 18g wire
>laying around. It is by Chester Cable, type TEW /CSA, AWM, VW-1.
>It's designed for use in fairly hostile environments and the 18g wire
>is stranded and a silver color. I may be stainless but I'm not sure.
>
>I realize heavier wire does have more bandwith, Besides that, how
>much performance would I lose if running a single 18g wire in place
>of 12g? If I were to run 2 wires side by side to simulate a heavier
>gauge wire, is it just a simple matter of taping it together every
>few feet? How about if it's twisted together kind of like a twisted
>pair? I'll be running 200 watts at the most for transmitter power.
>
>Thanks,
>Denis
>

>
>
>
>Yahoo! Groups Links
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>

2653. Re: [SkyWires] Using 2 Smaller Gauge Wires in Place of Large Gauge Wires

Yahoo group: SkyWires
Date: 2007-10-04 16:02:49 UTC
From: icra@galaxynet.com
Topic: 2642 Message: 2653

> Hi All. I remember reading (I think one of L. Cebik's articles?)
> that sometimes two smaller gauge wires are run together in place of
> a
> larger gauge wire that may not be available. This was only
> mentioned
> and I don't know if L. Cebik approved of this method or not.
>
> I'm finally getting around to setting up a full wave horizontal loop
> for 80-10 meters. Buying wire is not an option for me at this
> point. However, I have a 1000 foot roll of industrial grade 18g
> wire
> laying around. It is by Chester Cable, type TEW /CSA, AWM, VW-1.
> It's designed for use in fairly hostile environments and the 18g
> wire
> is stranded and a silver color. I may be stainless but I'm not
> sure.
>
> I realize heavier wire does have more bandwith, Besides that, how
> much performance would I lose if running a single 18g wire in place
> of 12g? If I were to run 2 wires side by side to simulate a heavier
> gauge wire, is it just a simple matter of taping it together every
> few feet? How about if it's twisted together kind of like a twisted
> pair? I'll be running 200 watts at the most for transmitter
> power.
>
At 200W, I would think the 18ga wire should handle it just fine.....

To expand the bandwidth, you can run 2 wires in parallel.....just taping them together every so
often would not really make enough difference to be worth the effort. Spacing them apart would...how much depends on the amount of spacing between the wires. This is from my experience.....I am not even close to being an antenna expert, nor do I play one on TV (or anywhere else).

Mel
N7OKL

2654. Re: Using 2 Smaller Gauge Wires in Place of Large Gauge Wires

Yahoo group: SkyWires
Date: 2007-10-04 22:36:38 UTC
From: denisnh
Topic: 2642 Message: 2654

Hi Chas,
I know the 18g will handle 300 watts ok. What I was worried about was how it would perform, vs. the heavier gauge wires. I did a lot of googling last night to research that problem. Everything I saw indicates a thinner wire has very little effect on performance and db loss. One article I read even talked about some modeling on this issue complete with charts, and the difference between between 12g and 18g was so small that it could be considered negligible. I may have to fiddle with the tuner a little more because of the reduced bandwidth but no big deal.

For 80 meters, I will run 272' (full wave length) of wire and feed it with some homebrew ladder line made from bare 16g stranded wire that someone game me years ago. Fortunately, I have a 10' 4"x4" post at the corner of my deck, and I can run the feeder down from the loop to the top of the post (which is well away from the house) down the post, under the deck, and run that right through the sill plate into my basement ham station, which happens to be conveniently located at that spot in the basement! think that should be fine, especially conidering I don't know how much longer I'll be at this location.

What frequency on 75m will you be running? Are the dimensions you mentioned the size of your yard? You may be able to do it, but you'll be right on the boundary of your property! If I could find time, I would like to try modeling a full wave loop that takes up a half wave worth of real estate, and somehow make two turns instead of one. Could be interesting! Of course, the other option is to go with a 40m loop and use the feed line as a vertical.

Thanks,
Denis

--- In SkyWires@yahoogroups.com, <chasm@...> wrote:
>
> this all bander of yours
> I am not clear on the concept.
> the loop is going to be one wavelength long for the lowest freq you will
> transmit on? and you want two of them together a la zip cord?
> you will use a tuner for the "all band" capability?
>
> I should think that if 12 ga solid is good for 1.5kw, your 18ga should
> certainly handle 500W. not sure where to find the table for that. prolly the
> ARRL Antenna book<G> everything else is in there.

>
> another question, I wonder how many loops of wire you can make
around a 50x75'
> lot to equal one wavelength and what the separation has to be
between them? I
> am still looking for a QUIET RX antenna. 75m is so bad this am I
cannot copy
> the NCS.
>
> thanks
> 73/chas
> --
> K5DAM Houston EL29fu AAR6TU
> aar6tu@...
>
>
>
> On Tue, 02 Oct 2007 13:29:02 -0000, "denisnh" <denisnh@...> wrote:
>
> >Hi All. I remember reading (I think one of L. Cebik's articles?)
> >that sometimes two smaller gauge wires are run together in place
of a
> >larger gauge wire that may not be available. This was only
mentioned
> >and I don't know if L. Cebik approved of this method or not.
> >
> >I'm finally getting around to setting up a full wave horizontal
loop
> >for 80-10 meters. Buying wire is not an option for me at this
> >point. However, I have a 1000 foot roll of industrial grade 18g
wire
> >laying around. It is by Chester Cable, type TEW /CSA, AWM, VW-1.
> >It's designed for use in fairly hostile environments and the 18g
wire
> >is stranded and a silver color. I may be stainless but I'm not
sure.
> >
> >I realize heavier wire does have more bandwith, Besides that, how
> >much performance would I lose if running a single 18g wire in
place
> >of 12g? If I were to run 2 wires side by side to simulate a
heavier
> >gauge wire, is it just a simple matter of taping it together every
> >few feet? How about if it's twisted together kind of like a
twisted
> >pair? I'll be running 200 watts at the most for transmitter power.
> >
> >Thanks,
> >Denis
> >

> >
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> >Yahoo! Groups Links
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2655. Re: Using 2 Smaller Gauge Wires in Place of Large Gauge Wires

Yahoo group: SkyWires
Date: 2007-10-04 22:38:25 UTC
From: denisnh
Topic: 2642 Message: 2655

Thanks for the response, Mel. I believe you're right, so it will be
a single 18g wire with ladder line.

Thanks,
Denis
--- In SkyWires@yahoogroups.com, icra@... wrote:
>
> > Hi All. I remember reading (I think one of L. Cebik's articles?)
> > that sometimes two smaller gauge wires are run together in place
of
> > a
> > larger gauge wire that may not be available. This was only
> > mentioned
> > and I don't know if L. Cebik approved of this method or not.
> >
> > I'm finally getting around to setting up a full wave horizontal
loop
> > for 80-10 meters. Buying wire is not an option for me at this
> > point. However, I have a 1000 foot roll of industrial grade 18g
> > wire
> > laying around. It is by Chester Cable, type TEW /CSA, AWM, VW-1.
> > It's designed for use in fairly hostile environments and the 18g
> > wire
> > is stranded and a silver color. I may be stainless but I'm not
> > sure.
> >
> > I realize heavier wire does have more bandwith, Besides that, how
> > much performance would I lose if running a single 18g wire in
place
> > of 12g? If I were to run 2 wires side by side to simulate a
heavier
> > gauge wire, is it just a simple matter of taping it together every
> > few feet? How about if it's twisted together kind of like a
twisted
> > pair? I'll be running 200 watts at the most for transmitter
> > power.
> >
> At 200W, I would think the 18ga wire should handle it just fine.....
>
> To expand the bandwidth, you can run 2 wires in parallel.....just
taping them together every so
> often would not really make enough difference to be worth the
effort. Spacing them apart
> would...how much depends on the amount of spacing between the
wires. This is from my

> experience.....I am not even close to being an antenna expert, nor
do I play one on TV (or
> anywhere else).
>
> Mel
> N7OKL
>

2656. Re: Feed Arrangement for Operating the Loop as a Vertical Antenna

Yahoo group: SkyWires
Date: 2007-10-04 22:44:54 UTC
From: denisnh
Topic: 2643 Message: 2656

Thanks again, Erik! From what you wrote and the research I've done, I decided to forget about the vertical radiator and go with a full wave 18g loop and 16g homebrew ladder line (I have all this on hand). Guess I'm fickle. LOL

What I really dread is the cutting. The trees in my backyard are so dense that I'll have to get the chainsaw out and do some serious cutting. I did read about one guy who shot an arrow right over the trees with some fishing string attached, then pulled his wire right over the tops of the trees for his antenna. That scares me a bit. Not to mention that running enough power could start a fire! But it seems to work for him and he mentioned that once in a while he'll pull the wire one way or the other to compensate for any areas that are chafed through.

Thanks,
Denis

--- In SkyWires@yahoogroups.com, Erik Weaver <erik@...> wrote:
>
> Hi Denis (I thought "Denisnh" was a unusual name! heheh)....
>
> Comments in body below....
>
> ...snip...
>
> > The curves for parallel lines all hug the bottom of the
> > chart where the favorable SWR and other factors are, while the
coax
> > lines soar skyward surprisingly fast, which concurs with your
post.
>
> Cebik's web pages are filled with useful information -- time there
is
> well spent. The rapid rise of losses in coax under high swr
conditions
> is in sharp contrast to the low losses generally found in balanced
> ("parallel") feed line. It is one of the major differences between
them.
> About the only negative that comes to mind with balanced feed line
is
> the need to carefully route it; so it isn't practical in all cases.
>
> Here's something else to consider....
>
> Remember first the rare "special case" where impedance is the same

> everywhere in the antenna system (XCVR, transmission line, antenna,
> etc). With the exception of a tiny loss of energy as electrons rub
> against one another (this loss due to friction is usually
insignificant
> in the typical amateur radio installation), nearly all the RF
("Radio
> Frequency") energy generated by the XCVR radiates from the antenna
as
> radio waves. This is our goal of course.
>
> By the way, I usually speak in terms of transmitting a radio signal
and
> trying to send it out into the world (our "Hello World!" message),
but
> the efficiencies (or lack thereof) work exactly the same in
reverse. In
> other words, the antenna has the same gain (or loss) as a receiving
> antenna, as it does when transmitting. So our rare special case
antenna
> will also deliver all the RF energy it collects to the receiver
(less
> friction/heat lost to move the electrons -- which can never be
avoided
> in the real world).
>
> Now when the impedance is one value on the transmission line (and
it
> doesn't matter what kind of transmission line), and the impedance
of the
> antenna is a different value, some RF energy is reflected off the
> antenna feed point, back to the XCVR. How much is reflected depends
upon
> how great the difference is between the impedances.
>
> There is a difference in behavior at the antenna feed point between
a
> coax fed antenna and a parallel line fed antenna.
>
> Balanced (parallel) line only offers a two-way path between the
antenna
> and the XCVR. Coax may offer a third pathway -- along the outside
of the
> shielding (aka "braid") of the coax. This is because the higher the
> frequency of alternating current (like RF) the less deeply the RF
> penetrates into the conductor -- this is called "skin effect". RF
> doesn't penetrate very deeply into the conductor; it travels along
the
> outer-most surface, shallow enough in fact that one wave of energy
can
> travel along the inner surface of the coax shielding while a second

wave
> travels along the outside surface of the same coax shielding, and
the
> two will never meet. Therefore, coax can offer three conductors to
RF:
> along the inner conductor; along the inside of the coax shielding;
and
> along the outside of the coax shielding. We desire the first two
paths,
> but we do not (usually) benefit from RF flowing on the outside of
the
> coax shield.
>
> Since balanced (parallel conductors) transmission line (aka feed
line)
> is constructed of only two wires (which may be either stranded or
solid
> wire), the reflected wave (that energy which is reflecting from the
> antenna feed point, back to the XCVR) has only one return path
available
> to it -- it returns ("reflects") back along the same conductor that
it
> originally traversed. This is a simple condition, and no "balun"
(more
> accurately "bal-bal" for "balanced-to-balanced" in this case) is
> required to maintain the desired energy pathway between the XCVR
and
> antenna.
>
> ("Balun" is a conjunction of "balanced" and "unbalanced"
identifying a
> transition from a balanced transmission line to an unbalanced line.
> "Unun" identifies transitioning from "unbalanced" to "unbalanced"
line.
> "Balbal" identifies transitioning from "balanced" to "balanced"
line.
> Depending upon the design, this transformation may occur at a
number of
> different ratios, of which 1:1 and 4:1 are the most commonly used.)
>
> This simple two-way path is not always the case when using coax. If
the
> impedance mismatch is great enough, some fraction of the RF will
find an
> easier pathway flowing along the outside of the coax shielding.
This can
> cause problems such as RFI (Radio Frequency Interference) and
inaccurate
> readings on our meters (which are designed under the assumption RF
will

> travel along two paths, not three). Suffering a bad case of "RF on
the
> feed line" may cause RFI to affect other electronics in the area,
> provide false swr readings, and cause "RF bite" on our microphone.
This
> is often caused by RF radiating off the outside of the coax,
instead of
> the antenna. (Although in some cases problems may exist even when
feed
> line radiation has been eliminated. RFI can be a difficult puzzle
to
> solve.)
>
> Enter the balun. By "wrapping" the coax with a much greater
impedance
> than the antenna feed point, we keep any stray RF from moving onto
the
> outside of the coax shielding. (Targeting a much greater impedance
on
> the outside of the coax than inside it.) To the degree this is
> successful, RF may only travel onto the antenna, or back along the
> inside of the coax to the XCVR. (On either the inside of the
shielding
> or along the surface of the center conductor. No RF travels along
the
> core of the center conductor, due to skin effect.)
>
> Once again we have only two pathways for the RF to travel allowing
our
> equipment and antenna system to behave as intended, and within
> predictable parameters. This is why a balun may be useful at the
feed
> point of an antenna when using coax transmission line. It is also
why,
> unless the coax impedance is very close to equaling the antenna's
> impedance where they meet (the feed point) a feed point balun is
> advisable when using coax.
>
> Reflection, re-reflection, and re-re-reflection....
>
> Recall the transmitted RF wave traveling along the transmission
line to
> the antenna feed point, and not finding a perfectly equal
impedance,
> some bounced back toward the XCVR in the original direction.
>
> Now the reflected wave races toward the XCVR. Some of it was
absorbed by
> the antenna, and some has been lost in the transmission line
> (heat/friction). So it isn't exactly at the same impedance when it

> started, and it has been altered in other ways too. Namely
the "phase"
> of either the voltage or current has been shifted. To learn more
about
> this, "Reflections II" by Walter Maxwell W2DU is a great book!
Highly
> recommended! If you see one at a hamfest, buy it!
>
> We'll skip over exactly what and why this change takes place
(entire
> books have been written about just that!), but the RF wave is
different
> than when it left the XCVR, and as a result, it will "bounce" (or
> re-reflect) off the XCVR, and move in the original direction again.
It
> is re-reflected back toward the antenna feed point.
>
> The re-reflection point will be the transmatch instead of the XCVR
if a
> transmatch is being utilized. Either way, the RF wave will bounce
back
> and forth, reflecting, re-reflecting, and re-re-reflecting, and so
on,
> until it either all eventually escapes out the antenna or is
absorbed as
> heat/friction in the transmission line. (In truth, it is always the
sum
> of both events -- what isn't eventually changed into heat in the
> transmission line escapes the antenna as radiated RF.)
>
> As the swr increases, and as the inherent loss of the transmission
line
> increases (lower in balanced line; higher in coax), more of the RF
> energy is lost as unproductive heat/friction, and less is available
to
> radiate from the antenna as a useful radio signal.
>
> This is why high swr on balanced feed line isn't all that bad. Most
of
> the RF energy will eventually "bounce" out of the antenna anyway.
It
> doesn't really matter if it makes it out the very first trip, on
the
> sixth, or 16th. Radiated is radiated. The person receiving your
radio
> signal will never know if they are hearing the very first wave or a
> re-reflected wave. It just doesn't matter after the energy escapes
the
> antenna.
>

> Escaping the antenna is the trick!
>
> And that is where coax may not work well in the same situation.
Coax,
> suffering much greater losses to the RF as it traverses along it
> ("attenuation"), simply absorbs too much of the RF as it bounces
back
> and forth, especially under high swr conditions. There isn't much
left
> to escape out the antenna.
>
> All of which leads to the generalized conclusion that wire antenna
> elements fed by balanced transmission line, operate very
efficiently
> even under high swr conditions. That is why these types of antennas
> (from dipoles to loops) have built a reputation as practical multi-
band
> solutions for many amateur radio operators. The only stumbling
block is
> transforming their wide ranges of impedance into something close to
a
> nominal 50-Ohms resistive (meaning little or no reactance) to match
our
> "modern" (meaning non-tube) XCVRs. And that is precisely what a
> transmatch is designed to accomplish.
>
>
>
>
> > All my HF antenna experience is in
> > receive only antennas for shortwave. I've been dragging my feet on
> > getting my General Class license but finally decided to go for it
> > this month. Of course, I had masterd 5 wpm CW just in time for
that
> > requirement to be abolished. :-)
>
>
> Heheh, yes, that sounds just about right! ;) Welcome to HF! And
welcome
> to the world of transmitting antennas. They can be a lot of fun!
>
>
>
> > Some people seem to put all their faith in the modeling software.
> > Whatever works for them, but I would never take a computer model
as
> > being 100% accurate. To me, the model really has to be built in 3D
> > to prove it works.
> ...snip...
>

> Precisely! It can save a lot of time by eliminating very bad or
very
> unlikely designs, but it is almost impossible to fully model the
> environment in which the antenna will be built. So you have to
actually
> build it and test it at some point. This is like other rules of
thumb.
> Take any of the "formulas" for determining the proper length of
antenna
> elements. They all say to start too long and slowing trim it to a
proper
> match.
>
> Whether a formula for a simple dipole, or a computer model of a
loop or
> beam, the idea isn't to make the perfect antenna on paper and then
> reproduce it exactly in the real world. It is to "get close" and
> possibly avoid some time lost in fiddling around. Beams are a good
> example. You can play with the modeling software and try out
different
> element combinations and get an idea of the resulting envelopes and
feed
> point impedances. This saves a lot of time, but ultimately you have
> build it and tune it to your exact site.
>
>
> > ...snip... What the heck though, and after
> > reading your reply, I believe I will go with the 40 meter loop and
> > orient it as a horizontal with paralell feedline.
>
> Adding a transmatch (aka antenna tuner) between your XCVR and
antenna
> will most likely allow this to become a very usable multi-band
antenna.
>
> Every antenna displays its own range of impedances, and these vary
on
> each band. (This "impedance" is more properly called "complex
impedance"
> because it includes some reactance.) Very low impedances are
typically
> difficult for many transmatches to "match," but any extreme value
of
> complex impedance may fall outside the range which a given
transmatch
> can "match." ("Match" means transforming the existing complex
impedance,
> on the antenna-side of the transmatch, into an impedance (with
little or
> no reactance) close to that which the XCVR is designed to work

into.)
>
> But there are workarounds, such as matching stubs, and other
solutions.
> (See below.)
>
>
> > Regarding running the line into the shack, shorting the wires and
> > connecting them to the rig, there are a few reasons I can't do
this.
> > For one, there are children and unknowing people in the area that
> > may get zapped if they are able to touch the wires. My ham
station
> > (or what's left of it) is in my basement office. I need to run
the
> > line vertically to about 8' above the ground, make the short at
that
> > point, and install a matching network either on a pole or tree in
a
> > PVC junction box. The ground wire would go there also, and then I
> > need run the ground and an insulated feedwire the remaining
distance
> > to the ground, bury it and slip it through the side of the house
> > into the shack.
> >
>
>
> If you are married to the idea of having the vertical option, this
may
> be true. You might consider a simple 30-amp automotive relay too.
Put
> 12-vdc to it and remotely control that shorting switch.
>
> I'm not sure I'm picturing this properly. Where is the antenna feed
> point in relation to your shack? Pretty much right above it, or 50-
feet
> distance after you get outside the house?
>
> I'm wondering if we're talking about a longer run from the shack to
the
> antenna feed point, like 50- to 100-feet or more, or a much shorter
run
> like 20- or 30-feet?
>
> Also, consider getting outside in as short a run as possible, and
making
> a longer run of ladder line to get to the antenna feed point. I had
one
> dipole for which I ran 300-Ohm twin lead transmission line half way
> around my house under the overhang of the roof.

>
>
> > That's what I need to research next: Building a matching unit.
>
> There are two different kinds of impedance matching devices. One is
> fixed, and the other is variable. Each has a number of different
designs
> that may be implemented.
>
> Fixed impedance matching devices work extremely well with
> single-frequency antenna systems. If broad enough they can work
> reasonably well for an entire amateur radio band. But I doubt
you'll
> find a single fixed impedance matching solution for all bands.
>
> There are a couple options that come to mind to get around this
> limitation....
>
> Easiest is to use a variable impedance matching device instead. A
> transmatch ("antenna tuner") in other words.
>
> But that is not the only way to transform impedance with some
> variability. You could make a set of "matching stubs" which are
> typically lengths of coax cut to a specific size and either shorted
or
> left open on the far end, with the other end connected to the
antenna
> system using a "T" connector. If you have enough of these you could
> switch in the proper one to alter the impedance being presented to
your
> XCVR to within a range acceptable to it, thus allowing it to load
the
> antenna system without causing your XCVR damage.
>
> Similar to this is using a number of lengths of coax to once again
alter
> the impedance presented to the XCVR. Rather than connecting these
with a
> "T" connector, instead you simply add or subtract them from the
total
> length of transmission line. This in turn alters the
impedance "seen" by
> the XCVR.
>
> Of these, the simplest and easiest solution to implement is using a
> transmatch. Then if you do find a certain range of frequencies that
you
> still cannot match on a given band, add a 1/8-wavelength (WL)
length of
> transmission line (between your transmatch and antenna) and see if

you
> can then match your system. If not, add another 1/8-WL, and try
again.
> After you add 8 of these 1/8-WL lengths of transmission line you
will be
> right back where you started (having added one full wavelength of
> transmission line). In many cases, one of these will shift the
impedance
> "seen" by your transmatch enough to allow it to work.
>
> Picture a one full sine wave, running horizontally left-to-right,
which
> represents one full wavelength. As you travel up and down and up
again
> along this sine wave, you are moving through changing values of
> impedance. (The actual values will be different for each frequency,
of
> course.) Once you get to the end of one sine wave, and begin the
next
> sine wave, the pattern repeats, and continues to do so until you
reach
> the end of the transmission line (at the antenna feed point,
transmatch,
> XCVR, amplifier, etc).
>
> Now imagine a pair of horizontal lines, one somewhere between the
middle
> of the sine wave and the tippy-top, and the second one somewhere
between
> the middle of the sine wave and the very bottom. The area between
these
> lines, crossing through the center-line, represents the range for
which
> your transmatch will successfully transform the existing impedance
(that
> falls between your two lines) into something fairly close to 50-
Ohms,
> zero reactance. The area of the sine wave curve above and below
these
> two lines is beyond your transmatch's ability to "tune your
antenna."
>
> Pick a point at the very tippy-top of the sine wave. Your
transmatch
> cannot transform that impedance. By adding a short section of coax
> (between the antenna and the transmatch) you effectively move that
point
> forward along the sine wave curve some distance. If that point now
falls
> somewhere between your two lines, the transmatch can transform that

> impedance into something your XCVR will load into: in popular
parlance,
> the antenna is now "tuned."
>
> If that point did not move far enough, and it still lies above the
upper
> line, you will have to add another short section of coax to move
that
> point ever farther along the sine wave curve. In the example I used
> above you have 8 short pieces of coax, each 1/8-wavelength long, so
if
> you end up adding all eight pieces, you are right back where you
> started. At some point you will find a value of impedance with
which
> your transmatch can work, or you will have determined that
transmatch is
> unable to tune that antenna system at that frequency.
>
> (Adding or subtracting 1/8-WL sections is a reasonable tactic,
which is
> why I cite that as an example. You only have to remember those
lengths
> are (1) electrical lengths, not physical lengths; and (2) a 1/8-WL
piece
> of coax for 20-meters, will be close to a 2/8 (or 1/4) wavelength
piece
> of coax on 10-meters, and only a 1/16th WL on 40-meters.)
>
>
>
> > Wouldn't running the vertical radiators into the shack introduce a
> > lot of RF there?
>
> Yes, if they are in fact radiating RF, that is likely. The idea is
to
> avoid that from happening if they are supposed to be feed line, and
if
> you do want to use them as vertical antenna elements, they only
radiate
> where you wish to do so.
>
> There are two basic kinds of transmission line: coax and balanced.
If
> using coax, refer back up to the discussion about the "third path"
for
> RF to travel along the outside of the coax shielding. If that takes
> place, then yes, you may experience a lot of RFI. If not, there
should
> not be any problem. This is exactly where coax excels! Coil it, sit
on

> it, tape it to a copper water pipe, if the RF is contained inside
the
> inner-side of the shielding you will be fine.
>
> This means using a properly designed balun at the antenna feed
point,
> and properly transforming impedance at your XCVR. If the antenna
has a
> properly working balun (so not RF gets on the outside of the coax
at the
> antenna feed point) but you have a large impedance mismatch at the
XCVR,
> you will allow RF to escape onto the coax there, and for the same
> reasons as it may do so at the antenna feed point. If you put a
second
> properly designed balun at the XCVR feed point, it won't hurt
anything,
> and if the impedance should become unbalanced for some reason, it
will
> isolate the coax feed line.
>
> It is also possible at some frequencies the coax will interact with
your
> antenna. This may occur if it is of a proper length to be a
harmonic of
> the RF, for example.
>
> Balanced line will eliminate this RFI problem, however, since you
are
> routing this inside and through a building it is quite likely at
one or
> more points it will become unbalanced, and then your problem will
be
> even worse. At that point it will be an antenna element. Generally
not
> the goal of transmission line! ;)
>
> *IF* you can ensure a minimum of one-widths distance (more is
better --
> see first email) from everything, this may then work. But that is
> unlikely. So using balanced transmission line indoors isn't
generally a
> good choice. (Which is why so many people use coax indoors, of
course.)
>
> There is a third option. Use coax in a different configuration.
This is
> described in your ARRL Antenna Book. You will cut two (exactly)
equal
> lengths of coax. If you are using parallel line outside to feed

your
> antenna, use the highest impedance coax you can find. The highest
I've
> found online at the larger coax dealers was 125-Ohms. But if you
can
> only get 50- or 75-Ohm, go ahead and use that. It won't be the end
of
> the world or anything!
>
> Now, tape these two lengths of coax together, or use cable ties,
etc.
> This doesn't affect how it will work, but does make it easier to
handle.
> You will use the two inner conductors as balanced parallel feed
line. At
> each end solder the shielding together. On the outdoor-end you will
> leave this shielding "floating" (not connected to anything other
than
> each other -- but do weather proof them so no water gets inside the
> coax). Indoors in your shack you will connect the shielding to your
> station ground. Connect the two inner conductors exactly as you
would
> any other balanced parallel transmission line. You have created a
> shielded balanced line! This can be routed as if it were coax.
Losses
> will be greater than with normal balanced line, but if the length
of the
> run isn't too long it shouldn't be excessively high.
>
> If you have a remote transmatch and match impedance outdoors
between
> this coax-shielded-balanced line and the regular open line it
should
> have pretty low loss (because the impedance can be closely matched
to
> what both the paired-coax and XCVR are designed to work into).
>
> The easiest way to get through a building, however, is to just use
a
> high quality, low-loss coax and keep that run as short as possible.
> Refer back to those tables to calculate the loss at various
frequencies.
>
> Those are your major options, and each of them if done correctly,
should
> not cause RFI problems.
>
>
> > I'm also wondering about the effect of having two
> > vertical radiating elements so close together and the effect they

> > would have on each other.
>
>
> Radiating? Or parallel conductors??
>
> Radiating elements do of course interact with one another. That is
how
> beams work. If you mean parallel conductors, the best plan is not
allow
> them to radiate.
>
> If you mean as radiating elements in a vertical antenna, study the
> Antenna Book in the section they discuss phased vertical elements.
As I
> recall when they are quite close together the envelopes mostly
overlap
> and there isn't much "phasing" taking place (no directivity, etc).
IF
> I recall this correctly I don't think you will need worry about
them
> adversely affecting one another. They should mostly behave as one
> vertical element on the HF bands.
>
>
> > Another thought would be to have a pulley
> > located at the feedpoint where I could quickly lower the antenna
and
> > switch to coax for the vertical element and back to paralell
> > feedlines for loop operation, but that may be a lot more trouble
than
> > it's worth.
>
>
> I'm too lazy for that! :) It is beginning to sound like work. Your
> mileage may vary.
>
>
>
> > One other thing to mention is that I have a decent antenna tuner.
>
>
> Good news! I suggest using it! :)
>
> Connect it at your station with whatever length of coax best fits
to
> your XCVR. That is the proper length for that coax. You want it
short so
> you're not tripping over it, but not so short it is a problem to
get to
> the back of your XCVR or any of the other connections.

>
> You see, coming out of the back of your transmatch and going to
your
> XCVR (if the transmatch is properly adjusted) the impedance will be
very
> close to that which the XCVR is designed to work into. We haven't
> mentioned this, but I am assuming you have a "modern" transistor-
based
> XCVR. (If you are using a tube-based XCVR much of what I have said
will
> be somewhere between wrong and just unnecessary.) This means your
XCVR
> wants to "load into" something close to 50-Ohms. So use 50-Ohm coax
to
> connect the transmatch and XCVR and you will have nearly a
perfectly
> matched impedance between them, at the designed impedance of the
coax,
> so therefore there will be almost no loss along that length of
coax, and
> it can be any length you desire, and not affect the impedance as a
> result of its length. (Within reason -- if you use a mile of coax,
even
> the small losses will accumulate over such a long distance to
adversely
> affect the system.)
>
> This is because all the impedances are the same (the coax, and both
> "loads" on either side of it -- in this case the transmatch on one
side
> and the XCVR on the other). Therefore you can take a long length of
> coax, measure the impedance, and you will find the same impedance
at any
> other point along that coax. It is experiencing that "rare special
> condition" spoken of earlier.
>
> So we now know there will not be any appreciable loss going from
the
> XCVR to the transmatch. We also know once we get outside and onto
the
> balanced (parallel) transmission line, there will be only minimal
> losses. So the only "tricky" part is getting from the indoor
transmatch
> to that balanced line outdoors.
>
> By the way, if you use insulated 450-Ohm ladder line as your
outdoor
> parallel transmission line, that should eliminate the issue of kids
> grabbing the line. Especially, if as you say, this is 8-feet or so
above

> the ground and pretty out-of-sight, out-of-mind.
>
> You have not said how far the distance is between your shack and
the
> proposed antenna feed point. 50-feet? 500-feet? There is a world of
> difference between these. If you are talking about less then 100-
feet,
> I'd just buy really good low-loss coax (RG-213, LMR-400, Beldon
9913, or
> better -- something like that) and route it outside, and connect to
my
> ladder line there.
>
> Here's some typical losses for 100-feet of coax (double the losses
for
> 200-feet and cut i in half for 50-feet):
>
> COAX
> Loss RG-174 RG-58 RG-8X RG-213 RG-6 RF-9913
> 1MHz 1.9dB 0.4dB 0.5dB 0.2dB 0.2dB 0.2dB
> 10MHz 3.3dB 1.4dB 1.0dB 0.6dB 0.6dB 0.4dB
> 50MHz 6.6dB 3.3dB 2.5dB 1.6dB 1.4dB 0.9dB
> SOURCE: http://www.radiobooks.com/products/techinfo/coaxloss.htm
>
> Attenuation (Loss, dB per 100 feet)
> COAX: 30-MHz: 50-MHz:
> RG-174 5.5 6.6
> RG-58 2.5 4.1
> RG-8X 2.0 2.1
> RG-213 1.2 1.6
> LMR-400 0.7 0.9
> 9913 0.8 1.5
> SOURCE: http://www.universal-
radio.com/catalog/cable/coaxperf.html#atten
>
> You will note there are some minor differences in sources, but they
> generally agree. To really know for certain you have to measure
your
> coax. There can be differences between production runs.
>
> Still, if you buy 9913 and use 100-feet of it, you are somewhere
around
> 1-dB or so of loss (as we know, this will be worse as swr climbs,
so
> take that into account as well). As you may recall, a 3-dB loss is
a
> reduction of half your power: 100-watts becomes 50-watts.
>
> If you are only talking about a 30-foot or a 50-foot run the losses
will

> be less. So if you use coax to get outside, and you are using the
> transmatch indoors and you want a multi-band antenna, do try to
keep the
> coax run as short as possible. We know you'll have 8- to 10-feet of
coax
> to get up away from the kids. Add to this whatever length is
required to
> reach your transmatch. Then you can calculate various losses for
each
> band at various degrees of mismatch.
>
>
> > How this would work with a matching network is something else
I'll
> > have to research. Putting the tuner outside is not practical.
Ideas,
> > anyone?
>
>
> That will work. You can use more than one impedance matching system
at
> once. The end result is simply a sum of the interactions. We do so
all
> the time anyway because transmission line itself is transforming
> impedance. In fact, one way to think of a transmatch is as a big
> variable length of coax shoved into a tiny black box! ;)
>
> As I see it, your biggest issue is getting out of the basement and
> 8-feet above earth. That is where it seems you are most likely to
suffer
> the greatest losses. If you use coax, then high swr will hurt. It
you
> use ladder line --if that is possible-- you have to be very certain
it
> remains balanced. Or use shielded balanced line. It is made
> commercially, so the larger transmission line suppliers may carry
it, or
> know where you can order it.
>
> But if you are able to exit your house quite close to your station,
and
> the antenna feed point is pretty much right above your station, you
are
> only talking about a coax run of about 20-feet (8-ft above earth; 8-
ft
> ceiling; a foot or so to clear the wall/floor). That isn't a
terribly
> long run of coax, and results should be pleasant.
>
>

> >
> > Thanks again for the info, Erik!
>
> Sure thing. Happy to help.
> 73-Erik n0ew
>
> END OF REPLY
> # # #

2657. Re: [SkyWires] Re: Feed Arrangement for Operating the Loop as a Vertical Antenna

Yahoo group: SkyWires
Date: 2007-10-04 23:27:37 UTC
From: Erik Weaver
Topic: 2643 Message: 2657

Hi Denis,

An atlatl is another option:

http://www.n0ew.org/k0s/atlatl/

This really seems to work well and it is pretty cheap. My friend and I didn't get up over 100-feet, but I think we got every bit of 50-feet height into the tree.

If you really want another 'project' you might think about building an air gun:

http://www.n0ew.org/k0s/air_gun/

Have fun!
Erik

denisnh wrote:
> Thanks again, Erik! From what you wrote and the research I've done,
> I decided to forget about the vertical radiator and go with a full
> wave 18g loop and 16g homebrew ladder line (I have all this on
> hand). Guess I'm fickle. LOL
>
> What I really dread is the cutting. The trees in my backyard are so
> dense that I'll have to get the chainsaw out and do some serious
> cutting. I did read about one guy who shot an arrow right over the
> trees with some fishing string attached, then pulled his wire right
> over the tops of the trees for his antenna. That scares me a bit.
> Not to mention that running enough power could start a fire! But it
> seems to work for him and he mentioned that once in a while he'll
> pull the wire one way or the other to compensate for any areas that
> are chafed through.
>
> Thanks,
> Denis
>
> --- In SkyWires@yahoogroups.com, Erik Weaver <erik@...> wrote:
>> Hi Denis (I thought "Denisnh" was a unusual name! heheh)....
>>
>> Comments in body below....
>>
>> ...snip...
>>
>> > The curves for parallel lines all hug the bottom of the

>>> chart where the favorable SWR and other factors are, while the
> coax
>>> lines soar skyward surprisingly fast, which concurs with your
> post.
>> Cebik's web pages are filled with useful information -- time there
> is
>> well spent. The rapid rise of losses in coax under high swr
> conditions
>> is in sharp contrast to the low losses generally found in balanced
>> ("parallel") feed line. It is one of the major differences between
> them.
>> About the only negative that comes to mind with balanced feed line
> is
>> the need to carefully route it; so it isn't practical in all cases.
>>
>> Here's something else to consider....
>>
>> Remember first the rare "special case" where impedance is the same
>> everywhere in the antenna system (XCVR, transmission line, antenna,
>> etc). With the exception of a tiny loss of energy as electrons rub
>> against one another (this loss due to friction is usually
> insignificant
>> in the typical amateur radio installation), nearly all the RF
> ("Radio
>> Frequency") energy generated by the XCVR radiates from the antenna
> as
>> radio waves. This is our goal of course.
>>
>> By the way, I usually speak in terms of transmitting a radio signal
> and
>> trying to send it out into the world (our "Hello World!" message),
> but
>> the efficiencies (or lack thereof) work exactly the same in
> reverse. In
>> other words, the antenna has the same gain (or loss) as a receiving
>> antenna, as it does when transmitting. So our rare special case
> antenna
>> will also deliver all the RF energy it collects to the receiver
> (less
>> friction/heat lost to move the electrons -- which can never be
> avoided
>> in the real world).
>>
>> Now when the impedance is one value on the transmission line (and
> it
>> doesn't matter what kind of transmission line), and the impedance
> of the
>> antenna is a different value, some RF energy is reflected off the
>> antenna feed point, back to the XCVR. How much is reflected depends
> upon

>> how great the difference is between the impedances.
>>
>> There is a difference in behavior at the antenna feed point between
> a
>> coax fed antenna and a parallel line fed antenna.
>>
>> Balanced (parallel) line only offers a two-way path between the
> antenna
>> and the XCVR. Coax may offer a third pathway -- along the outside
> of the
>> shielding (aka "braid") of the coax. This is because the higher the
>> frequency of alternating current (like RF) the less deeply the RF
>> penetrates into the conductor -- this is called "skin effect". RF
>> doesn't penetrate very deeply into the conductor; it travels along
> the
>> outer-most surface, shallow enough in fact that one wave of energy
> can
>> travel along the inner surface of the coax shielding while a second
> wave
>> travels along the outside surface of the same coax shielding, and
> the
>> two will never meet. Therefore, coax can offer three conductors to
> RF:
>> along the inner conductor; along the inside of the coax shielding;
> and
>> along the outside of the coax shielding. We desire the first two
> paths,
>> but we do not (usually) benefit from RF flowing on the outside of
> the
>> coax shield.
>>
>> Since balanced (parallel conductors) transmission line (aka feed
> line)
>> is constructed of only two wires (which may be either stranded or
> solid
>> wire), the reflected wave (that energy which is reflecting from the
>> antenna feed point, back to the XCVR) has only one return path
> available
>> to it -- it returns ("reflects") back along the same conductor that
> it
>> originally traversed. This is a simple condition, and no "balun"
> (more
>> accurately "bal-bal" for "balanced-to-balanced" in this case) is
>> required to maintain the desired energy pathway between the XCVR
> and
>> antenna.
>>
>> ("Balun" is a conjunction of "balanced" and "unbalanced"
> identifying a
>> transition from a balanced transmission line to an unbalanced line.

>> "Unun" identifies transitioning from "unbalanced" to "unbalanced"
> line.
>> "Balbal" identifies transitioning from "balanced" to "balanced"
> line.
>> Depending upon the design, this transformation may occur at a
> number of
>> different ratios, of which 1:1 and 4:1 are the most commonly used.)
>>
>> This simple two-way path is not always the case when using coax. If
> the
>> impedance mismatch is great enough, some fraction of the RF will
> find an
>> easier pathway flowing along the outside of the coax shielding.
> This can
>> cause problems such as RFI (Radio Frequency Interference) and
> inaccurate
>> readings on our meters (which are designed under the assumption RF
> will
>> travel along two paths, not three). Suffering a bad case of "RF on
> the
>> feed line" may cause RFI to affect other electronics in the area,
>> provide false swr readings, and cause "RF bite" on our microphone.
> This
>> is often caused by RF radiating off the outside of the coax,
> instead of
>> the antenna. (Although in some cases problems may exist even when
> feed
>> line radiation has been eliminated. RFI can be a difficult puzzle
> to
>> solve.)
>>
>> Enter the balun. By "wrapping" the coax with a much greater
> impedance
>> than the antenna feed point, we keep any stray RF from moving onto
> the
>> outside of the coax shielding. (Targeting a much greater impedance
> on
>> the outside of the coax than inside it.) To the degree this is
>> successful, RF may only travel onto the antenna, or back along the
>> inside of the coax to the XCVR. (On either the inside of the
> shielding
>> or along the surface of the center conductor. No RF travels along
> the
>> core of the center conductor, due to skin effect.)
>>
>> Once again we have only two pathways for the RF to travel allowing
> our
>> equipment and antenna system to behave as intended, and within
>> predictable parameters. This is why a balun may be useful at the
> feed

>> point of an antenna when using coax transmission line. It is also
> why,
>> unless the coax impedance is very close to equaling the antenna's
>> impedance where they meet (the feed point) a feed point balun is
>> advisable when using coax.
>>
>> Reflection, re-reflection, and re-re-reflection....
>>
>> Recall the transmitted RF wave traveling along the transmission
> line to
>> the antenna feed point, and not finding a perfectly equal
> impedance,
>> some bounced back toward the XCVR in the original direction.
>>
>> Now the reflected wave races toward the XCVR. Some of it was
> absorbed by
>> the antenna, and some has been lost in the transmission line
>> (heat/friction). So it isn't exactly at the same impedance when it
>> started, and it has been altered in other ways too. Namely
> the "phase"
>> of either the voltage or current has been shifted. To learn more
> about
>> this, "Reflections II" by Walter Maxwell W2DU is a great book!
> Highly
>> recommended! If you see one at a hamfest, buy it!
>>
>> We'll skip over exactly what and why this change takes place
> (entire
>> books have been written about just that!), but the RF wave is
> different
>> than when it left the XCVR, and as a result, it will "bounce" (or
>> re-reflect) off the XCVR, and move in the original direction again.
> It
>> is re-reflected back toward the antenna feed point.
>>
>> The re-reflection point will be the transmatch instead of the XCVR
> if a
>> transmatch is being utilized. Either way, the RF wave will bounce
> back
>> and forth, reflecting, re-reflecting, and re-re-reflecting, and so
> on,
>> until it either all eventually escapes out the antenna or is
> absorbed as
>> heat/friction in the transmission line. (In truth, it is always the
> sum
>> of both events -- what isn't eventually changed into heat in the
>> transmission line escapes the antenna as radiated RF.)
>>
>> As the swr increases, and as the inherent loss of the transmission
> line

>> increases (lower in balanced line; higher in coax), more of the RF
>> energy is lost as unproductive heat/friction, and less is available
> to
>> radiate from the antenna as a useful radio signal.
>>
>> This is why high swr on balanced feed line isn't all that bad. Most
> of
>> the RF energy will eventually "bounce" out of the antenna anyway.
> It
>> doesn't really matter if it makes it out the very first trip, on
> the
>> sixth, or 16th. Radiated is radiated. The person receiving your
> radio
>> signal will never know if they are hearing the very first wave or a
>> re-reflected wave. It just doesn't matter after the energy escapes
> the
>> antenna.
>>
>> Escaping the antenna is the trick!
>>
>> And that is where coax may not work well in the same situation.
> Coax,
>> suffering much greater losses to the RF as it traverses along it
>> ("attenuation"), simply absorbs too much of the RF as it bounces
> back
>> and forth, especially under high swr conditions. There isn't much
> left
>> to escape out the antenna.
>>
>> All of which leads to the generalized conclusion that wire antenna
>> elements fed by balanced transmission line, operate very
> efficiently
>> even under high swr conditions. That is why these types of antennas
>> (from dipoles to loops) have built a reputation as practical multi-
> band
>> solutions for many amateur radio operators. The only stumbling
> block is
>> transforming their wide ranges of impedance into something close to
> a
>> nominal 50-Ohms resistive (meaning little or no reactance) to match
> our
>> "modern" (meaning non-tube) XCVRs. And that is precisely what a
>> transmatch is designed to accomplish.
>>
>>
>>
>>
>>> All my HF antenna experience is in
>>> receive only antennas for shortwave. I've been dragging my feet on
>>> getting my General Class license but finally decided to go for it

>>> this month. Of course, I had masterd 5 wpm CW just in time for
> that
>>> requirement to be abolished. :-)
>>
>> Heheh, yes, that sounds just about right! ;) Welcome to HF! And
> welcome
>> to the world of transmitting antennas. They can be a lot of fun!
>>
>>
>>
>>> Some people seem to put all their faith in the modeling software.
>>> Whatever works for them, but I would never take a computer model
> as
>>> being 100% accurate. To me, the model really has to be built in 3D
>>> to prove it works.
>> ...snip...
>>
>> Precisely! It can save a lot of time by eliminating very bad or
> very
>> unlikely designs, but it is almost impossible to fully model the
>> environment in which the antenna will be built. So you have to
> actually
>> build it and test it at some point. This is like other rules of
> thumb.
>> Take any of the "formulas" for determining the proper length of
> antenna
>> elements. They all say to start too long and slowing trim it to a
> proper
>> match.
>>
>> Whether a formula for a simple dipole, or a computer model of a
> loop or
>> beam, the idea isn't to make the perfect antenna on paper and then
>> reproduce it exactly in the real world. It is to "get close" and
>> possibly avoid some time lost in fiddling around. Beams are a good
>> example. You can play with the modeling software and try out
> different
>> element combinations and get an idea of the resulting envelopes and
> feed
>> point impedances. This saves a lot of time, but ultimately you have
>> build it and tune it to your exact site.
>>
>>
>>> ...snip... What the heck though, and after
>>> reading your reply, I believe I will go with the 40 meter loop and
>>> orient it as a horizontal with paralell feedline.
>> Adding a transmatch (aka antenna tuner) between your XCVR and
> antenna
>> will most likely allow this to become a very usable multi-band
> antenna.

>> Every antenna displays its own range of impedances, and these vary
> on
>> each band. (This "impedance" is more properly called "complex
> impedance"
>> because it includes some reactance.) Very low impedances are
> typically
>> difficult for many transmatches to "match," but any extreme value
> of
>> complex impedance may fall outside the range which a given
> transmatch
>> can "match." ("Match" means transforming the existing complex
> impedance,
>> on the antenna-side of the transmatch, into an impedance (with
> little or
>> no reactance) close to that which the XCVR is designed to work
> into.)
>> But there are workarounds, such as matching stubs, and other
> solutions.
>> (See below.)
>>
>>
>>> Regarding running the line into the shack, shorting the wires and
>>> connecting them to the rig, there are a few reasons I can't do
> this.
>>> For one, there are children and unknowing people in the area that
>>> may get zapped if they are able to touch the wires. My ham
> station
>>> (or what's left of it) is in my basement office. I need to run
> the
>>> line vertically to about 8' above the ground, make the short at
> that
>>> point, and install a matching network either on a pole or tree in
> a
>>> PVC junction box. The ground wire would go there also, and then I
>>> need run the ground and an insulated feedwire the remaining
> distance
>>> to the ground, bury it and slip it through the side of the house
>>> into the shack.
>>>
>>
>> If you are married to the idea of having the vertical option, this
> may
>> be true. You might consider a simple 30-amp automotive relay too.
> Put
>> 12-vdc to it and remotely control that shorting switch.
>>
>> I'm not sure I'm picturing this properly. Where is the antenna feed
>> point in relation to your shack? Pretty much right above it, or 50-
> feet
>> distance after you get outside the house?

>>
>> I'm wondering if we're talking about a longer run from the shack to
> the
>> antenna feed point, like 50- to 100-feet or more, or a much shorter
> run
>> like 20- or 30-feet?
>>
>> Also, consider getting outside in as short a run as possible, and
> making
>> a longer run of ladder line to get to the antenna feed point. I had
> one
>> dipole for which I ran 300-Ohm twin lead transmission line half way
>> around my house under the overhang of the roof.
>>
>>
>>> That's what I need to research next: Building a matching unit.
>> There are two different kinds of impedance matching devices. One is
>> fixed, and the other is variable. Each has a number of different
> designs
>> that may be implemented.
>>
>> Fixed impedance matching devices work extremely well with
>> single-frequency antenna systems. If broad enough they can work
>> reasonably well for an entire amateur radio band. But I doubt
> you'll
>> find a single fixed impedance matching solution for all bands.
>>
>> There are a couple options that come to mind to get around this
>> limitation....
>>
>> Easiest is to use a variable impedance matching device instead. A
>> transmatch ("antenna tuner") in other words.
>>
>> But that is not the only way to transform impedance with some
>> variability. You could make a set of "matching stubs" which are
>> typically lengths of coax cut to a specific size and either shorted
> or
>> left open on the far end, with the other end connected to the
> antenna
>> system using a "T" connector. If you have enough of these you could
>> switch in the proper one to alter the impedance being presented to
> your
>> XCVR to within a range acceptable to it, thus allowing it to load
> the
>> antenna system without causing your XCVR damage.
>>
>> Similar to this is using a number of lengths of coax to once again
> alter
>> the impedance presented to the XCVR. Rather than connecting these
> with a

>> "T" connector, instead you simply add or subtract them from the
> total
>> length of transmission line. This in turn alters the
> impedance "seen" by
>> the XCVR.
>>
>> Of these, the simplest and easiest solution to implement is using a
>> transmatch. Then if you do find a certain range of frequencies that
> you
>> still cannot match on a given band, add a 1/8-wavelength (WL)
> length of
>> transmission line (between your transmatch and antenna) and see if
> you
>> can then match your system. If not, add another 1/8-WL, and try
> again.
>> After you add 8 of these 1/8-WL lengths of transmission line you
> will be
>> right back where you started (having added one full wavelength of
>> transmission line). In many cases, one of these will shift the
> impedance
>> "seen" by your transmatch enough to allow it to work.
>>
>> Picture a one full sine wave, running horizontally left-to-right,
> which
>> represents one full wavelength. As you travel up and down and up
> again
>> along this sine wave, you are moving through changing values of
>> impedance. (The actual values will be different for each frequency,
> of
>> course.) Once you get to the end of one sine wave, and begin the
> next
>> sine wave, the pattern repeats, and continues to do so until you
> reach
>> the end of the transmission line (at the antenna feed point,
> transmatch,
>> XCVR, amplifier, etc).
>>
>> Now imagine a pair of horizontal lines, one somewhere between the
> middle
>> of the sine wave and the tippy-top, and the second one somewhere
> between
>> the middle of the sine wave and the very bottom. The area between
> these
>> lines, crossing through the center-line, represents the range for
> which
>> your transmatch will successfully transform the existing impedance
> (that
>> falls between your two lines) into something fairly close to 50-
> Ohms,
>> zero reactance. The area of the sine wave curve above and below

> these
>> two lines is beyond your transmatch's ability to "tune your
> antenna."
>> Pick a point at the very tippy-top of the sine wave. Your
> transmatch
>> cannot transform that impedance. By adding a short section of coax
>> (between the antenna and the transmatch) you effectively move that
> point
>> forward along the sine wave curve some distance. If that point now
> falls
>> somewhere between your two lines, the transmatch can transform that
>> impedance into something your XCVR will load into: in popular
> parlance,
>> the antenna is now "tuned."
>>
>> If that point did not move far enough, and it still lies above the
> upper
>> line, you will have to add another short section of coax to move
> that
>> point ever farther along the sine wave curve. In the example I used
>> above you have 8 short pieces of coax, each 1/8-wavelength long, so
> if
>> you end up adding all eight pieces, you are right back where you
>> started. At some point you will find a value of impedance with
> which
>> your transmatch can work, or you will have determined that
> transmatch is
>> unable to tune that antenna system at that frequency.
>>
>> (Adding or subtracting 1/8-WL sections is a reasonable tactic,
> which is
>> why I cite that as an example. You only have to remember those
> lengths
>> are (1) electrical lengths, not physical lengths; and (2) a 1/8-WL
> piece
>> of coax for 20-meters, will be close to a 2/8 (or 1/4) wavelength
> piece
>> of coax on 10-meters, and only a 1/16th WL on 40-meters.)
>>
>>
>>
>>> Wouldn't running the vertical radiators into the shack introduce a
>>> lot of RF there?
>> Yes, if they are in fact radiating RF, that is likely. The idea is
> to
>> avoid that from happening if they are supposed to be feed line, and
> if
>> you do want to use them as vertical antenna elements, they only
> radiate
>> where you wish to do so.

>>
>> There are two basic kinds of transmission line: coax and balanced.
> If
>> using coax, refer back up to the discussion about the "third path"
> for
>> RF to travel along the outside of the coax shielding. If that takes
>> place, then yes, you may experience a lot of RFI. If not, there
> should
>> not be any problem. This is exactly where coax excels! Coil it, sit
> on
>> it, tape it to a copper water pipe, if the RF is contained inside
> the
>> inner-side of the shielding you will be fine.
>>
>> This means using a properly designed balun at the antenna feed
> point,
>> and properly transforming impedance at your XCVR. If the antenna
> has a
>> properly working balun (so not RF gets on the outside of the coax
> at the
>> antenna feed point) but you have a large impedance mismatch at the
> XCVR,
>> you will allow RF to escape onto the coax there, and for the same
>> reasons as it may do so at the antenna feed point. If you put a
> second
>> properly designed balun at the XCVR feed point, it won't hurt
> anything,
>> and if the impedance should become unbalanced for some reason, it
> will
>> isolate the coax feed line.
>>
>> It is also possible at some frequencies the coax will interact with
> your
>> antenna. This may occur if it is of a proper length to be a
> harmonic of
>> the RF, for example.
>>
>> Balanced line will eliminate this RFI problem, however, since you
> are
>> routing this inside and through a building it is quite likely at
> one or
>> more points it will become unbalanced, and then your problem will
> be
>> even worse. At that point it will be an antenna element. Generally
> not
>> the goal of transmission line! ;)
>>
>> *IF* you can ensure a minimum of one-widths distance (more is
> better --
>> see first email) from everything, this may then work. But that is

>> unlikely. So using balanced transmission line indoors isn't
> generally a
>> good choice. (Which is why so many people use coax indoors, of
> course.)
>> There is a third option. Use coax in a different configuration.
> This is
>> described in your ARRL Antenna Book. You will cut two (exactly)
> equal
>> lengths of coax. If you are using parallel line outside to feed
> your
>> antenna, use the highest impedance coax you can find. The highest
> I've
>> found online at the larger coax dealers was 125-Ohms. But if you
> can
>> only get 50- or 75-Ohm, go ahead and use that. It won't be the end
> of
>> the world or anything!
>>
>> Now, tape these two lengths of coax together, or use cable ties,
> etc.
>> This doesn't affect how it will work, but does make it easier to
> handle.
>> You will use the two inner conductors as balanced parallel feed
> line. At
>> each end solder the shielding together. On the outdoor-end you will
>> leave this shielding "floating" (not connected to anything other
> than
>> each other -- but do weather proof them so no water gets inside the
>> coax). Indoors in your shack you will connect the shielding to your
>> station ground. Connect the two inner conductors exactly as you
> would
>> any other balanced parallel transmission line. You have created a
>> shielded balanced line! This can be routed as if it were coax.
> Losses
>> will be greater than with normal balanced line, but if the length
> of the
>> run isn't too long it shouldn't be excessively high.
>>
>> If you have a remote transmatch and match impedance outdoors
> between
>> this coax-shielded-balanced line and the regular open line it
> should
>> have pretty low loss (because the impedance can be closely matched
> to
>> what both the paired-coax and XCVR are designed to work into).
>>
>> The easiest way to get through a building, however, is to just use
> a
>> high quality, low-loss coax and keep that run as short as possible.
>> Refer back to those tables to calculate the loss at various

> frequencies.
>> Those are your major options, and each of them if done correctly,
> should
>> not cause RFI problems.
>>
>>
>>> I'm also wondering about the effect of having two
>>> vertical radiating elements so close together and the effect they
>>> would have on each other.
>>
>> Radiating? Or parallel conductors??
>>
>> Radiating elements do of course interact with one another. That is
> how
>> beams work. If you mean parallel conductors, the best plan is not
> allow
>> them to radiate.
>>
>> If you mean as radiating elements in a vertical antenna, study the
>> Antenna Book in the section they discuss phased vertical elements.
> As I
>> recall when they are quite close together the envelopes mostly
> overlap
>> and there isn't much "phasing" taking place (no directivity, etc).
> *IF*
>> I recall this correctly I don't think you will need worry about
> them
>> adversely affecting one another. They should mostly behave as one
>> vertical element on the HF bands.
>>
>>
>>> Another thought would be to have a pulley
>>> located at the feedpoint where I could quickly lower the antenna
> and
>>> switch to coax for the vertical element and back to paralell
>>> feedlines for loop operation, but that may be a lot more trouble
> than
>>> it's worth.
>>
>> I'm too lazy for that! :) It is beginning to sound like work. Your
>> mileage may vary.
>>
>>
>>
>>> One other thing to mention is that I have a decent antenna tuner.
>>
>> Good news! I suggest using it! :)
>>
>> Connect it at your station with whatever length of coax best fits
> to

>> your XCVR. That is the proper length for that coax. You want it
> short so
>> you're not tripping over it, but not so short it is a problem to
> get to
>> the back of your XCVR or any of the other connections.
>>
>> You see, coming out of the back of your transmatch and going to
> your
>> XCVR (if the transmatch is properly adjusted) the impedance will be
> very
>> close to that which the XCVR is designed to work into. We haven't
>> mentioned this, but I am assuming you have a "modern" transistor-
> based
>> XCVR. (If you are using a tube-based XCVR much of what I have said
> will
>> be somewhere between wrong and just unnecessary.) This means your
> XCVR
>> wants to "load into" something close to 50-Ohms. So use 50-Ohm coax
> to
>> connect the transmatch and XCVR and you will have nearly a
> perfectly
>> matched impedance between them, at the designed impedance of the
> coax,
>> so therefore there will be almost no loss along that length of
> coax, and
>> it can be any length you desire, and not affect the impedance as a
>> result of its length. (Within reason -- if you use a mile of coax,
> even
>> the small losses will accumulate over such a long distance to
> adversely
>> affect the system.)
>>
>> This is because all the impedances are the same (the coax, and both
>> "loads" on either side of it -- in this case the transmatch on one
> side
>> and the XCVR on the other). Therefore you can take a long length of
>> coax, measure the impedance, and you will find the same impedance
> at any
>> other point along that coax. It is experiencing that "rare special
>> condition" spoken of earlier.
>>
>> So we now know there will not be any appreciable loss going from
> the
>> XCVR to the transmatch. We also know once we get outside and onto
> the
>> balanced (parallel) transmission line, there will be only minimal
>> losses. So the only "tricky" part is getting from the indoor
> transmatch
>> to that balanced line outdoors.
>>

>> By the way, if you use insulated 450-Ohm ladder line as your
> outdoor
>> parallel transmission line, that should eliminate the issue of kids
>> grabbing the line. Especially, if as you say, this is 8-feet or so
> above
>> the ground and pretty out-of-sight, out-of-mind.
>>
>> You have not said how far the distance is between your shack and
> the
>> proposed antenna feed point. 50-feet? 500-feet? There is a world of
>> difference between these. If you are talking about less then 100-
> feet,
>> I'd just buy really good low-loss coax (RG-213, LMR-400, Beldon
> 9913, or
>> better -- something like that) and route it outside, and connect to
> my
>> ladder line there.
>>
>> Here's some typical losses for 100-feet of coax (double the losses
> for
>> 200-feet and cut i in half for 50-feet):
>>
>> COAX
>> Loss RG-174 RG-58 RG-8X RG-213 RG-6 RF-9913
>> 1MHz 1.9dB 0.4dB 0.5dB 0.2dB 0.2dB 0.2dB
>> 10MHz 3.3dB 1.4dB 1.0dB 0.6dB 0.6dB 0.4dB
>> 50MHz 6.6dB 3.3dB 2.5dB 1.6dB 1.4dB 0.9dB
>> SOURCE: http://www.radiobooks.com/products/techinfo/coaxloss.htm
>>
>> Attenuation (Loss, dB per 100 feet)
>> COAX: 30-MHz: 50-MHz:
>> RG-174 5.5 6.6
>> RG-58 2.5 4.1
>> RG-8X 2.0 2.1
>> RG-213 1.2 1.6
>> LMR-400 0.7 0.9
>> 9913 0.8 1.5
>> SOURCE: http://www.universal-
> radio.com/catalog/cable/coaxperf.html#atten
>> You will note there are some minor differences in sources, but they
>> generally agree. To really know for certain you have to measure
> your
>> coax. There can be differences between production runs.
>>
>> Still, if you buy 9913 and use 100-feet of it, you are somewhere
> around
>> 1-dB or so of loss (as we know, this will be worse as swr climbs,
> so
>> take that into account as well). As you may recall, a 3-dB loss is
> a

>> reduction of half your power: 100-watts becomes 50-watts.
>>
>> If you are only talking about a 30-foot or a 50-foot run the losses
> will
>> be less. So if you use coax to get outside, and you are using the
>> transmatch indoors and you want a multi-band antenna, do try to
> keep the
>> coax run as short as possible. We know you'll have 8- to 10-feet of
> coax
>> to get up away from the kids. Add to this whatever length is
> required to
>> reach your transmatch. Then you can calculate various losses for
> each
>> band at various degrees of mismatch.
>>
>>
>>> How this would work with a matching network is something else
> I'll
>>> have to research. Putting the tuner outside is not practical.
> Ideas,
>>> anyone?
>>
>> That will work. You can use more than one impedance matching system
> at
>> once. The end result is simply a sum of the interactions. We do so
> all
>> the time anyway because transmission line itself is transforming
>> impedance. In fact, one way to think of a transmatch is as a big
>> variable length of coax shoved into a tiny black box! ;)
>>
>> As I see it, your biggest issue is getting out of the basement and
>> 8-feet above earth. That is where it seems you are most likely to
> suffer
>> the greatest losses. If you use coax, then high swr will hurt. It
> you
>> use ladder line --if that is possible-- you have to be very certain
> it
>> remains balanced. Or use shielded balanced line. It is made
>> commercially, so the larger transmission line suppliers may carry
> it, or
>> know where you can order it.
>>
>> But if you are able to exit your house quite close to your station,
> and
>> the antenna feed point is pretty much right above your station, you
> are
>> only talking about a coax run of about 20-feet (8-ft above earth; 8-
> ft
>> ceiling; a foot or so to clear the wall/floor). That isn't a
> terribly

>> long run of coax, and results should be pleasant.
>>
>>
>>> Thanks again for the info, Erik!
>> Sure thing. Happy to help.
>> 73-Erik n0ew
>>
>> END OF REPLY
>> # # #
>
>
>
>
>
> Yahoo! Groups Links
>
>
>

2658. Re: Using 2 Smaller Gauge Wires in Place of Large Gauge Wires

Yahoo group: SkyWires
Date: 2007-10-05 14:54:18 UTC
From: lazysenior
Topic: 2642 Message: 2658

--- In SkyWires@yahoogroups.com, "denisnh" <denisnh@...> wrote:

> I realize heavier wire does have more bandwith, Besides that, how
> much performance would I lose if running a single 18g wire in place
> of 12g? If I were to run 2 wires side by side to simulate a heavier
> gauge wire, is it just a simple matter of taping it together every
> few feet? How about if it's twisted together kind of like a twisted
> pair? I'll be running 200 watts at the most for transmitter power.
>
> Thanks,
> Denis
>

Do not not worry about the performance factor OR the Bandwidth. 18ga will perform as well as 12 ga. BUT think about this:

12 ga wire is MUCH stronger than 18 ga wire. I would never use 18 ga wire for an antenna.Not strong enough ESPECIALLY if you use trees for support. I have used 16 ga for antennas. No more 16 ga for me.16 ga wire antennas don't stay up in the air.

Right now my 280 ft loop is made of 12 ga stranded soft drawn insulated thhn wire. Been up for 3 yrs and thru much wind. Very Strong. However.
12 ga wire is heavy for long spans like loop antennas It will sag. The next time I put up a loop it will be 14 ga stranded wire. It is lighter than 12 ga but still plenty strong.

Use 14 ga or bigger stranded copper wire. Use stranded open wire feeders. The antenna will stay up long after that 18 ga antenna is laying on the ground.

Stan K9IUQ

2659. Re: [SkyWires] Re: Using 2 Smaller Gauge Wires in Place of Large Gauge Wires

Yahoo group: SkyWires
Date: 2007-10-05 15:05:19 UTC
From: Dean
Topic: 2642 Message: 2659

You may try to talk to your local power company..
Better if it is a muni company.
They may have some scrap line wire they could sell as scrap. This
would make a cheep and very strong antenna.
Most of it is not that heavy. 10 - 8 gauge. If you used strong
rope it would stay up for years and years..
73 W5GXL
Dean
dean@...

On Oct 5, 2007, at 9:54 AM, lazysenior wrote:

> --- In SkyWires@yahoogroups.com, "denisnh" <denisnh@...> wrote:
>
> > I realize heavier wire does have more bandwith, Besides that, how
> > much performance would I lose if running a single 18g wire in place
> > of 12g? If I were to run 2 wires side by side to simulate a heavier
> > gauge wire, is it just a simple matter of taping it together every
> > few feet? How about if it's twisted together kind of like a twisted
> > pair? I'll be running 200 watts at the most for transmitter power.
> >
> > Thanks,
> > Denis
> >
>
> Do not not worry about the performance factor OR the Bandwidth. 18ga
> will perform as well as 12 ga. BUT think about this:
>
> 12 ga wire is MUCH stronger than 18 ga wire. I would never use 18 ga
> wire for an antenna.Not strong enough ESPECIALLY if you use trees for
> support. I have used 16 ga for antennas. No more 16 ga for me.16 ga
> wire antennas don't stay up in the air.
>
> Right now my 280 ft loop is made of 12 ga stranded soft drawn
> insulated thhn wire. Been up for 3 yrs and thru much wind. Very
> Strong. However.
> 12 ga wire is heavy for long spans like loop antennas It will sag. The
> next time I put up a loop it will be 14 ga stranded wire. It is
> lighter than 12 ga but still plenty strong.
>
> Use 14 ga or bigger stranded copper wire. Use stranded open wire
> feeders. The antenna will stay up long after that 18 ga antenna is
> laying on the ground.
>

> Stan K9IUQ
>
>
>

2660. Re: [SkyWires] Re: Using 2 Smaller Gauge Wires in Place of Large Gauge Wires

Yahoo group: SkyWires
Date: 2007-10-05 15:11:36 UTC
From: Earl Needham
Topic: 2642 Message: 2660

At 09:05 10/5/2007, Dean wrote:
>You may try to talk to your local power company..
>Better if it is a muni company.
>They may have some scrap line wire they could sell as scrap. This
>would make a cheep and very strong antenna.
>Most of it is not that heavy. 10 - 8 gauge. If you used strong
>rope it would stay up for years and years..

I'm going just the opposite way -- I'm currently using
18-gauge Radio Shack speaker wire. Unrolled it from the spool,
separated it into two single wires, connected one end, and now I have
about 110' of wire connected to my Icom AH-4. Works pretty well, too.

I guess it's been up for a year or so. I have plans to
replace it with #12 stranded and tinned, but as with all things
"hobby" it has to wait.

7 3
Earl

KD5XB -- Earl Needham
Clovis, New Mexico DM84jk
http://groups.yahoo.com/group/cw_bugs
Quoting from the Coast Guard: ZUT

2661. Re: Using 2 Smaller Gauge Wires in Place of Large Gauge Wires

Yahoo group: SkyWires
Date: 2007-10-05 16:53:10 UTC
From: denisnh
Topic: 2642 Message: 2661

--- In SkyWires@yahoogroups.com, "lazysenior" <lazysenior@...> wrote:
>
> --- In SkyWires@yahoogroups.com, "denisnh" <denisnh@> wrote:
>
> > I realize heavier wire does have more bandwith, Besides that,
how
> > much performance would I lose if running a single 18g wire in
place
> > of 12g? If I were to run 2 wires side by side to simulate a
heavier
> > gauge wire, is it just a simple matter of taping it together
every
> > few feet? How about if it's twisted together kind of like a
twisted
> > pair? I'll be running 200 watts at the most for transmitter
power.
> >
> > Thanks,
> > Denis
> >
>
> Do not not worry about the performance factor OR the Bandwidth. 18ga
> will perform as well as 12 ga. BUT think about this:
>
> 12 ga wire is MUCH stronger than 18 ga wire. I would never use 18 ga
> wire for an antenna.Not strong enough ESPECIALLY if you use trees
for
> support. I have used 16 ga for antennas. No more 16 ga for me.16 ga
> wire antennas don't stay up in the air.
>
> Right now my 280 ft loop is made of 12 ga stranded soft drawn
> insulated thhn wire. Been up for 3 yrs and thru much wind. Very
> Strong. However.
> 12 ga wire is heavy for long spans like loop antennas It will sag.
The
> next time I put up a loop it will be 14 ga stranded wire. It is
> lighter than 12 ga but still plenty strong.
>
> Use 14 ga or bigger stranded copper wire. Use stranded open wire
> feeders. The antenna will stay up long after that 18 ga antenna is
> laying on the ground.
>
> Stan K9IUQ
>
Thanks for the info, Stan. I had mentioned in another post that this

stuff is designed for industrial use in hostile environments. My bro-in-law got a bunch of wire when his company went out of business and he gave some to my son and I. It was used to wire high temperature semiconductor processing furnaces.

To say it's tough is an understatement. I've used it in the past to make shortwave antennas and there is one longwire antenna which runs close to 300' I put up 3 years ago. It's still there, shows no sign of giving up, and will probably be there for years to come.

If it was the garden variety stuff from a local consumer supplier, I wouldn't use the 18g. But I have no doubt that this stuff will last a long, long time. It has no perceivable stretch to it. The wire is silver but does not look like stainless steel. It worked great for shortwave antennas.

I also have a bunch of cable/sat TV coax. I was wondering if this was run as a wire antenna, using JUST the shield, how it would work. It's pretty thick stuff, and has a heavy foil shield and braid over that. Anybody know if this would work?

Antennas like the bazooka short the coax and center conductor at various places. If I were to use just the shield as a radiator, would it be treated as a single wire conductor or would the dielectric and center conductor cause it to behave differently?

Thanks,
Denis

2662. Re: Feed Arrangement for Operating the Loop as a Vertical Antenna

Yahoo group: SkyWires
Date: 2007-10-05 17:10:11 UTC
From: denisnh
Topic: 2643 Message: 2662

Hi Erik. The Atlatl looks very cool! What I've been using is a sling shot with "high powered" latex bands. A half ounce fishing sinker is then attached to some Spider Wire fishing string spooled onto a spinning reel. I have a huge pine tree that's 80' tall and I can get the line right over it with that setup. I set up an inverted-V there.

I also have an 80# pistol crossbow, and I modify the little bolt by removing the tip, placing a small weight in place of the tip and drilling a hole at the end of the shaft for the same fishing setup I mentoned above. That works even better but I don't take it out much since it looks rather ominous if the neighbors happen to get a glimpse of it.

I have some relatives in Canada, one of which owns a farm. When visiting, I like to erect a temporary antenna for use during my stay. I was surprised to find out that sling shots are illegal in that area, and the pistol crossbow is definitely illegal. I had figured a light bow but the atlatl looks very promising. As for the air gun, can you imagine the looks on the faces of the customs agents trying to get something like that across the border. Yikes!

Thanks,
Denis

--- In SkyWires@yahoogroups.com, Erik Weaver <erik@...> wrote:
>
> Hi Denis,
>
> An atlatl is another option:
>
> http://www.n0ew.org/k0s/atlatl/
>
> This really seems to work well and it is pretty cheap. My friend
and I
> didn't get up over 100-feet, but I think we got every bit of 50-
feet
> height into the tree.
>
> If you really want another 'project' you might think about building
an
> air gun:
>
> http://www.n0ew.org/k0s/air_gun/
>
> Have fun!

> Erik
>
> denisnh wrote:
> > Thanks again, Erik! From what you wrote and the research I've
done,
> > I decided to forget about the vertical radiator and go with a
full
> > wave 18g loop and 16g homebrew ladder line (I have all this on
> > hand). Guess I'm fickle. LOL
> >
> > What I really dread is the cutting. The trees in my backyard are
so
> > dense that I'll have to get the chainsaw out and do some serious
> > cutting. I did read about one guy who shot an arrow right over
the
> > trees with some fishing string attached, then pulled his wire
right
> > over the tops of the trees for his antenna. That scares me a
bit.
> > Not to mention that running enough power could start a fire! But
it
> > seems to work for him and he mentioned that once in a while he'll
> > pull the wire one way or the other to compensate for any areas
that
> > are chafed through.
> >
> > Thanks,
> > Denis
> >
> > --- In SkyWires@yahoogroups.com, Erik Weaver <erik@> wrote:
> >> Hi Denis (I thought "Denisnh" was a unusual name! heheh)....
> >>
> >> Comments in body below....
> >>
> >> ...snip...
> >>
> >> > The curves for parallel lines all hug the bottom of the
> >>> chart where the favorable SWR and other factors are, while the
> > coax
> >>> lines soar skyward surprisingly fast, which concurs with your
> > post.
> >> Cebik's web pages are filled with useful information -- time
there
> > is
> >> well spent. The rapid rise of losses in coax under high swr
> > conditions
> >> is in sharp contrast to the low losses generally found in
balanced
> >> ("parallel") feed line. It is one of the major differences
between

> > them.
> >> About the only negative that comes to mind with balanced feed
line
> > is
> >> the need to carefully route it; so it isn't practical in all
cases.
> >>
> >> Here's something else to consider....
> >>
> >> Remember first the rare "special case" where impedance is the
same
> >> everywhere in the antenna system (XCVR, transmission line,
antenna,
> >> etc). With the exception of a tiny loss of energy as electrons
rub
> >> against one another (this loss due to friction is usually
> > insignificant
> >> in the typical amateur radio installation), nearly all the RF
> > ("Radio
> >> Frequency") energy generated by the XCVR radiates from the
antenna
> > as
> >> radio waves. This is our goal of course.
> >>
> >> By the way, I usually speak in terms of transmitting a radio
signal
> > and
> >> trying to send it out into the world (our "Hello World!"
message),
> > but
> >> the efficiencies (or lack thereof) work exactly the same in
> > reverse. In
> >> other words, the antenna has the same gain (or loss) as a
receiving
> >> antenna, as it does when transmitting. So our rare special case
> > antenna
> >> will also deliver all the RF energy it collects to the receiver
> > (less
> >> friction/heat lost to move the electrons -- which can never be
> > avoided
> >> in the real world).
> >>
> >> Now when the impedance is one value on the transmission line
(and
> > it
> >> doesn't matter what kind of transmission line), and the
impedance
> > of the
> >> antenna is a different value, some RF energy is reflected off
the

> >> antenna feed point, back to the XCVR. How much is reflected
depends
> > upon
> >> how great the difference is between the impedances.
> >>
> >> There is a difference in behavior at the antenna feed point
between
> > a
> >> coax fed antenna and a parallel line fed antenna.
> >>
> >> Balanced (parallel) line only offers a two-way path between the
> > antenna
> >> and the XCVR. Coax may offer a third pathway -- along the
outside
> > of the
> >> shielding (aka "braid") of the coax. This is because the higher
the
> >> frequency of alternating current (like RF) the less deeply the
RF
> >> penetrates into the conductor -- this is called "skin effect".
RF
> >> doesn't penetrate very deeply into the conductor; it travels
along
> > the
> >> outer-most surface, shallow enough in fact that one wave of
energy
> > can
> >> travel along the inner surface of the coax shielding while a
second
> > wave
> >> travels along the outside surface of the same coax shielding,
and
> > the
> >> two will never meet. Therefore, coax can offer three conductors
to
> > RF:
> >> along the inner conductor; along the inside of the coax
shielding;
> > and
> >> along the outside of the coax shielding. We desire the first two
> > paths,
> >> but we do not (usually) benefit from RF flowing on the outside
of
> > the
> >> coax shield.
> >>
> >> Since balanced (parallel conductors) transmission line (aka feed
> > line)
> >> is constructed of only two wires (which may be either stranded
or

> > solid
> >> wire), the reflected wave (that energy which is reflecting from
the
> >> antenna feed point, back to the XCVR) has only one return path
> > available
> >> to it -- it returns ("reflects") back along the same conductor
that
> > it
> >> originally traversed. This is a simple condition, and no "balun"
> > (more
> >> accurately "bal-bal" for "balanced-to-balanced" in this case) is
> >> required to maintain the desired energy pathway between the XCVR
> > and
> >> antenna.
> >>
> >> ("Balun" is a conjunction of "balanced" and "unbalanced"
> > identifying a
> >> transition from a balanced transmission line to an unbalanced
line.
> >> "Unun" identifies transitioning from "unbalanced"
to "unbalanced"
> > line.
> >> "Balbal" identifies transitioning from "balanced" to "balanced"
> > line.
> >> Depending upon the design, this transformation may occur at a
> > number of
> >> different ratios, of which 1:1 and 4:1 are the most commonly
used.)
> >>
> >> This simple two-way path is not always the case when using coax.
If
> > the
> >> impedance mismatch is great enough, some fraction of the RF will
> > find an
> >> easier pathway flowing along the outside of the coax shielding.
> > This can
> >> cause problems such as RFI (Radio Frequency Interference) and
> > inaccurate
> >> readings on our meters (which are designed under the assumption
RF
> > will
> >> travel along two paths, not three). Suffering a bad case of "RF
on
> > the
> >> feed line" may cause RFI to affect other electronics in the
area,
> >> provide false swr readings, and cause "RF bite" on our
microphone.
> > This
> >> is often caused by RF radiating off the outside of the coax,

> > instead of
> >> the antenna. (Although in some cases problems may exist even
when
> > feed
> >> line radiation has been eliminated. RFI can be a difficult
puzzle
> > to
> >> solve.)
> >>
> >> Enter the balun. By "wrapping" the coax with a much greater
> > impedance
> >> than the antenna feed point, we keep any stray RF from moving
onto
> > the
> >> outside of the coax shielding. (Targeting a much greater
impedance
> > on
> >> the outside of the coax than inside it.) To the degree this is
> >> successful, RF may only travel onto the antenna, or back along
the
> >> inside of the coax to the XCVR. (On either the inside of the
> > shielding
> >> or along the surface of the center conductor. No RF travels
along
> > the
> >> core of the center conductor, due to skin effect.)
> >>
> >> Once again we have only two pathways for the RF to travel
allowing
> > our
> >> equipment and antenna system to behave as intended, and within
> >> predictable parameters. This is why a balun may be useful at the
> > feed
> >> point of an antenna when using coax transmission line. It is
also
> > why,
> >> unless the coax impedance is very close to equaling the
antenna's
> >> impedance where they meet (the feed point) a feed point balun is
> >> advisable when using coax.
> >>
> >> Reflection, re-reflection, and re-re-reflection....
> >>
> >> Recall the transmitted RF wave traveling along the transmission
> > line to
> >> the antenna feed point, and not finding a perfectly equal
> > impedance,
> >> some bounced back toward the XCVR in the original direction.
> >>
> >> Now the reflected wave races toward the XCVR. Some of it was

> > absorbed by
> >> the antenna, and some has been lost in the transmission line
> >> (heat/friction). So it isn't exactly at the same impedance when
it
> >> started, and it has been altered in other ways too. Namely
> > the "phase"
> >> of either the voltage or current has been shifted. To learn more
> > about
> >> this, "Reflections II" by Walter Maxwell W2DU is a great book!
> > Highly
> >> recommended! If you see one at a hamfest, buy it!
> >>
> >> We'll skip over exactly what and why this change takes place
> > (entire
> >> books have been written about just that!), but the RF wave is
> > different
> >> than when it left the XCVR, and as a result, it will "bounce"
(or
> >> re-reflect) off the XCVR, and move in the original direction
again.
> > It
> >> is re-reflected back toward the antenna feed point.
> >>
> >> The re-reflection point will be the transmatch instead of the
XCVR
> > if a
> >> transmatch is being utilized. Either way, the RF wave will
bounce
> > back
> >> and forth, reflecting, re-reflecting, and re-re-reflecting, and
so
> > on,
> >> until it either all eventually escapes out the antenna or is
> > absorbed as
> >> heat/friction in the transmission line. (In truth, it is always
the
> > sum
> >> of both events -- what isn't eventually changed into heat in the
> >> transmission line escapes the antenna as radiated RF.)
> >>
> >> As the swr increases, and as the inherent loss of the
transmission
> > line
> >> increases (lower in balanced line; higher in coax), more of the
RF
> >> energy is lost as unproductive heat/friction, and less is
available
> > to
> >> radiate from the antenna as a useful radio signal.
> >>

> >> This is why high swr on balanced feed line isn't all that bad.
Most
> > of
> >> the RF energy will eventually "bounce" out of the antenna
anyway.
> > It
> >> doesn't really matter if it makes it out the very first trip, on
> > the
> >> sixth, or 16th. Radiated is radiated. The person receiving your
> > radio
> >> signal will never know if they are hearing the very first wave
or a
> >> re-reflected wave. It just doesn't matter after the energy
escapes
> > the
> >> antenna.
> >>
> >> Escaping the antenna is the trick!
> >>
> >> And that is where coax may not work well in the same situation.
> > Coax,
> >> suffering much greater losses to the RF as it traverses along it
> >> ("attenuation"), simply absorbs too much of the RF as it bounces
> > back
> >> and forth, especially under high swr conditions. There isn't
much
> > left
> >> to escape out the antenna.
> >>
> >> All of which leads to the generalized conclusion that wire
antenna
> >> elements fed by balanced transmission line, operate very
> > efficiently
> >> even under high swr conditions. That is why these types of
antennas
> >> (from dipoles to loops) have built a reputation as practical
multi-
> > band
> >> solutions for many amateur radio operators. The only stumbling
> > block is
> >> transforming their wide ranges of impedance into something close
to
> > a
> >> nominal 50-Ohms resistive (meaning little or no reactance) to
match
> > our
> >> "modern" (meaning non-tube) XCVRs. And that is precisely what a
> >> transmatch is designed to accomplish.
> >>
> >>

> >>
> >>
> >>> All my HF antenna experience is in
> >>> receive only antennas for shortwave. I've been dragging my feet
on
> >>> getting my General Class license but finally decided to go for
it
> >>> this month. Of course, I had masterd 5 wpm CW just in time for
> > that
> >>> requirement to be abolished. :-)
> >>
> >> Heheh, yes, that sounds just about right! ;) Welcome to HF! And
> > welcome
> >> to the world of transmitting antennas. They can be a lot of fun!
> >>
> >>
> >>
> >>> Some people seem to put all their faith in the modeling
software.
> >>> Whatever works for them, but I would never take a computer
model
> > as
> >>> being 100% accurate. To me, the model really has to be built in
3D
> >>> to prove it works.
> >> ...snip...
> >>
> >> Precisely! It can save a lot of time by eliminating very bad or
> > very
> >> unlikely designs, but it is almost impossible to fully model the
> >> environment in which the antenna will be built. So you have to
> > actually
> >> build it and test it at some point. This is like other rules of
> > thumb.
> >> Take any of the "formulas" for determining the proper length of
> > antenna
> >> elements. They all say to start too long and slowing trim it to
a
> > proper
> >> match.
> >>
> >> Whether a formula for a simple dipole, or a computer model of a
> > loop or
> >> beam, the idea isn't to make the perfect antenna on paper and
then
> >> reproduce it exactly in the real world. It is to "get close" and
> >> possibly avoid some time lost in fiddling around. Beams are a
good
> >> example. You can play with the modeling software and try out
> > different

> >> element combinations and get an idea of the resulting envelopes
and
> > feed
> >> point impedances. This saves a lot of time, but ultimately you
have
> >> build it and tune it to your exact site.
> >>
> >>
> >>> ...snip... What the heck though, and after
> >>> reading your reply, I believe I will go with the 40 meter loop
and
> >>> orient it as a horizontal with paralell feedline.
> >> Adding a transmatch (aka antenna tuner) between your XCVR and
> > antenna
> >> will most likely allow this to become a very usable multi-band
> > antenna.
> >> Every antenna displays its own range of impedances, and these
vary
> > on
> >> each band. (This "impedance" is more properly called "complex
> > impedance"
> >> because it includes some reactance.) Very low impedances are
> > typically
> >> difficult for many transmatches to "match," but any extreme
value
> > of
> >> complex impedance may fall outside the range which a given
> > transmatch
> >> can "match." ("Match" means transforming the existing complex
> > impedance,
> >> on the antenna-side of the transmatch, into an impedance (with
> > little or
> >> no reactance) close to that which the XCVR is designed to work
> > into.)
> >> But there are workarounds, such as matching stubs, and other
> > solutions.
> >> (See below.)
> >>
> >>
> >>> Regarding running the line into the shack, shorting the wires
and
> >>> connecting them to the rig, there are a few reasons I can't do
> > this.
> >>> For one, there are children and unknowing people in the area
that
> >>> may get zapped if they are able to touch the wires. My ham
> > station
> >>> (or what's left of it) is in my basement office. I need to run
> > the
> >>> line vertically to about 8' above the ground, make the short at

> > that
> >>> point, and install a matching network either on a pole or tree
in
> > a
> >>> PVC junction box. The ground wire would go there also, and then
I
> >>> need run the ground and an insulated feedwire the remaining
> > distance
> >>> to the ground, bury it and slip it through the side of the
house
> >>> into the shack.
> >>>
> >>
> >> If you are married to the idea of having the vertical option,
this
> > may
> >> be true. You might consider a simple 30-amp automotive relay
too.
> > Put
> >> 12-vdc to it and remotely control that shorting switch.
> >>
> >> I'm not sure I'm picturing this properly. Where is the antenna
feed
> >> point in relation to your shack? Pretty much right above it, or
50-
> > feet
> >> distance after you get outside the house?
> >>
> >> I'm wondering if we're talking about a longer run from the shack
to
> > the
> >> antenna feed point, like 50- to 100-feet or more, or a much
shorter
> > run
> >> like 20- or 30-feet?
> >>
> >> Also, consider getting outside in as short a run as possible,
and
> > making
> >> a longer run of ladder line to get to the antenna feed point. I
had
> > one
> >> dipole for which I ran 300-Ohm twin lead transmission line half
way
> >> around my house under the overhang of the roof.
> >>
> >>

2663. Re: [SkyWires] Re: Using 2 Smaller Gauge Wires in Place of Large Gauge Wires

Yahoo group: SkyWires
Date: 2007-10-06 03:14:27 UTC
From: Erik Weaver
Topic: 2642 Message: 2663

I had a 14-ga stranded copper "antenna wire" loop antenna up for about 3 or 4 years. I think I may have gotten it at The Wire Man. Or maybe Davis RF.

The antenna wire never broke. The garage door springs I used to connect it to my (3) trees broke (two of the three, a couple years apart -- garage door springs are NOT good for this use -- next time I think I'll go to the local big truck stop and get the springs the truck drivers use to keep tension on their air lines behind the cab of their tuck).

73-Erik n0ew

2664. Re: [SkyWires] Re: Feed Arrangement for Operating the Loop as a Vertical Antenna

Yahoo group: SkyWires
Date: 2007-10-06 04:10:28 UTC
From: Erik Weaver
Topic: 2643 Message: 2664

Heeheh, hi Denis,

Ya, I can easily imagine some 'lost time' trying to cross the border with various weapons. If you follow the various lists, or perhaps search their archives, you'll find many things are considered weapons, and some of those that are not required a fishing license. The guys with the guns figure if you have any fishing gear you need that permit. Or a fine. Of course, you can always come back and try arguing with a judge later on...

Arrows, crossbow (whether handheld or "industrial" strength), small pieces of lead (sinkers) moving at rapid velocities all incur a certain level of risk, if not illegality. A tennis ball on the other hand seems about as "warm and fuzzy" as we can get in this messed up PC-crazy world.

Besides, the atlatl is quite cool! Did you check out the international competitions? Neat stuff! A very old technology, assisting us with very modern technology. If only Ug and Grog had known when they invented it! :)

It is a doggie toy for throwing tennis balls. Everyone either has a dog, may be getting a dog, or visiting a friend who has a dog. So you can always carry one of these. They are just plastic, very light to carry, and even fun to play with! Buy extra tennis balls because you'll lose some just flinging them around :) My friend and I lost one or two that day, for exactly that reason!

You may want to get two of the atlatl's so you can play catch.

Have fun!
Erik

denisnh wrote:
> Hi Erik. The Atlatl looks very cool! What I've been using is a
> sling shot with "high powered" latex bands. A half ounce fishing
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>>> wave 18g loop and 16g homebrew ladder line (I have all this on
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>>> them.
>>>> About the only negative that comes to mind with balanced feed
> line
>>> is
>>>> the need to carefully route it; so it isn't practical in all
> cases.
>>>> Here's something else to consider....
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>>>> Remember first the rare "special case" where impedance is the
> same
>>>> everywhere in the antenna system (XCVR, transmission line,
> antenna,
>>>> etc). With the exception of a tiny loss of energy as electrons
> rub
>>>> against one another (this loss due to friction is usually
>>> insignificant
>>>> in the typical amateur radio installation), nearly all the RF
>>> ("Radio
>>>> Frequency") energy generated by the XCVR radiates from the

> antenna
>>> as
>>>> radio waves. This is our goal of course.
>>>>
>>>> By the way, I usually speak in terms of transmitting a radio
> signal
>>> and
>>>> trying to send it out into the world (our "Hello World!"
> message),
>>> but
>>>> the efficiencies (or lack thereof) work exactly the same in
>>> reverse. In
>>>> other words, the antenna has the same gain (or loss) as a
> receiving
>>>> antenna, as it does when transmitting. So our rare special case
>>> antenna
>>>> will also deliver all the RF energy it collects to the receiver
>>> (less
>>>> friction/heat lost to move the electrons -- which can never be
>>> avoided
>>>> in the real world).
>>>>
>>>> Now when the impedance is one value on the transmission line
> (and
>>> it
>>>> doesn't matter what kind of transmission line), and the
> impedance
>>> of the
>>>> antenna is a different value, some RF energy is reflected off
> the
>>>> antenna feed point, back to the XCVR. How much is reflected
> depends
>>> upon
>>>> how great the difference is between the impedances.
>>>>
>>>> There is a difference in behavior at the antenna feed point
> between
>>> a
>>>> coax fed antenna and a parallel line fed antenna.
>>>>
>>>> Balanced (parallel) line only offers a two-way path between the
>>> antenna
>>>> and the XCVR. Coax may offer a third pathway -- along the
> outside
>>> of the
>>>> shielding (aka "braid") of the coax. This is because the higher
> the
>>>> frequency of alternating current (like RF) the less deeply the
> RF
>>>> penetrates into the conductor -- this is called "skin effect".

> RF
>>>> doesn't penetrate very deeply into the conductor; it travels
> along
>>> the
>>>> outer-most surface, shallow enough in fact that one wave of
> energy
>>> can
>>>> travel along the inner surface of the coax shielding while a
> second
>>> wave
>>>> travels along the outside surface of the same coax shielding,
> and
>>> the
>>>> two will never meet. Therefore, coax can offer three conductors
> to
>>> RF:
>>>> along the inner conductor; along the inside of the coax
> shielding;
>>> and
>>>> along the outside of the coax shielding. We desire the first two
>>> paths,
>>>> but we do not (usually) benefit from RF flowing on the outside
> of
>>> the
>>>> coax shield.
>>>>
>>>> Since balanced (parallel conductors) transmission line (aka feed
>>> line)
>>>> is constructed of only two wires (which may be either stranded
> or
>>> solid
>>>> wire), the reflected wave (that energy which is reflecting from
> the
>>>> antenna feed point, back to the XCVR) has only one return path
>>> available
>>>> to it -- it returns ("reflects") back along the same conductor
> that
>>> it
>>>> originally traversed. This is a simple condition, and no "balun"
>>> (more
>>>> accurately "bal-bal" for "balanced-to-balanced" in this case) is
>>>> required to maintain the desired energy pathway between the XCVR
>>> and
>>>> antenna.
>>>>
>>>> ("Balun" is a conjunction of "balanced" and "unbalanced"
>>> identifying a
>>>> transition from a balanced transmission line to an unbalanced
> line.
>>>> "Unun" identifies transitioning from "unbalanced"

> to "unbalanced"
>>> line.
>>>> "Balbal" identifies transitioning from "balanced" to "balanced"
>>> line.
>>>> Depending upon the design, this transformation may occur at a
>>> number of
>>>> different ratios, of which 1:1 and 4:1 are the most commonly
> used.)
>>>> This simple two-way path is not always the case when using coax.
> If
>>> the
>>>> impedance mismatch is great enough, some fraction of the RF will
>>> find an
>>>> easier pathway flowing along the outside of the coax shielding.
>>> This can
>>>> cause problems such as RFI (Radio Frequency Interference) and
>>> inaccurate
>>>> readings on our meters (which are designed under the assumption
> RF
>>> will
>>>> travel along two paths, not three). Suffering a bad case of "RF
> on
>>> the
>>>> feed line" may cause RFI to affect other electronics in the
> area,
>>>> provide false swr readings, and cause "RF bite" on our
> microphone.
>>> This
>>>> is often caused by RF radiating off the outside of the coax,
>>> instead of
>>>> the antenna. (Although in some cases problems may exist even
> when
>>> feed
>>>> line radiation has been eliminated. RFI can be a difficult
> puzzle
>>> to
>>>> solve.)
>>>>
>>>> Enter the balun. By "wrapping" the coax with a much greater
>>> impedance
>>>> than the antenna feed point, we keep any stray RF from moving
> onto
>>> the
>>>> outside of the coax shielding. (Targeting a much greater
> impedance
>>> on
>>>> the outside of the coax than inside it.) To the degree this is
>>>> successful, RF may only travel onto the antenna, or back along
> the
>>>> inside of the coax to the XCVR. (On either the inside of the

>>> shielding
>>>> or along the surface of the center conductor. No RF travels
> along
>>> the
>>>> core of the center conductor, due to skin effect.)
>>>>
>>>> Once again we have only two pathways for the RF to travel
> allowing
>>> our
>>>> equipment and antenna system to behave as intended, and within
>>>> predictable parameters. This is why a balun may be useful at the
>>> feed
>>>> point of an antenna when using coax transmission line. It is
> also
>>> why,
>>>> unless the coax impedance is very close to equaling the
> antenna's
>>>> impedance where they meet (the feed point) a feed point balun is
>>>> advisable when using coax.
>>>>
>>>> Reflection, re-reflection, and re-re-reflection....
>>>>
>>>> Recall the transmitted RF wave traveling along the transmission
>>> line to
>>>> the antenna feed point, and not finding a perfectly equal
>>> impedance,
>>>> some bounced back toward the XCVR in the original direction.
>>>>
>>>> Now the reflected wave races toward the XCVR. Some of it was
>>> absorbed by
>>>> the antenna, and some has been lost in the transmission line
>>>> (heat/friction). So it isn't exactly at the same impedance when
> it
>>>> started, and it has been altered in other ways too. Namely
>>> the "phase"
>>>> of either the voltage or current has been shifted. To learn more
>>> about
>>>> this, "Reflections II" by Walter Maxwell W2DU is a great book!
>>> Highly
>>>> recommended! If you see one at a hamfest, buy it!
>>>>
>>>> We'll skip over exactly what and why this change takes place
>>> (entire
>>>> books have been written about just that!), but the RF wave is
>>> different
>>>> than when it left the XCVR, and as a result, it will "bounce"
> (or
>>>> re-reflect) off the XCVR, and move in the original direction
> again.
>>> It

>>>> is re-reflected back toward the antenna feed point.
>>>>
>>>> The re-reflection point will be the transmatch instead of the
> XCVR
>>> if a
>>>> transmatch is being utilized. Either way, the RF wave will
> bounce
>>> back
>>>> and forth, reflecting, re-reflecting, and re-re-reflecting, and
> so
>>> on,
>>>> until it either all eventually escapes out the antenna or is
>>> absorbed as
>>>> heat/friction in the transmission line. (In truth, it is always
> the
>>> sum
>>>> of both events -- what isn't eventually changed into heat in the
>>>> transmission line escapes the antenna as radiated RF.)
>>>>
>>>> As the swr increases, and as the inherent loss of the
> transmission
>>> line
>>>> increases (lower in balanced line; higher in coax), more of the
> RF
>>>> energy is lost as unproductive heat/friction, and less is
> available
>>> to
>>>> radiate from the antenna as a useful radio signal.
>>>>
>>>> This is why high swr on balanced feed line isn't all that bad.
> Most
>>> of
>>>> the RF energy will eventually "bounce" out of the antenna
> anyway.
>>> It
>>>> doesn't really matter if it makes it out the very first trip, on
>>> the
>>>> sixth, or 16th. Radiated is radiated. The person receiving your
>>> radio
>>>> signal will never know if they are hearing the very first wave
> or a
>>>> re-reflected wave. It just doesn't matter after the energy
> escapes
>>> the
>>>> antenna.
>>>>
>>>> Escaping the antenna is the trick!
>>>>
>>>> And that is where coax may not work well in the same situation.
>>> Coax,

>>>> suffering much greater losses to the RF as it traverses along it
>>>> ("attenuation"), simply absorbs too much of the RF as it bounces
>>> back
>>>> and forth, especially under high swr conditions. There isn't
> much
>>> left
>>>> to escape out the antenna.
>>>>
>>>> All of which leads to the generalized conclusion that wire
> antenna
>>>> elements fed by balanced transmission line, operate very
>>> efficiently
>>>> even under high swr conditions. That is why these types of
> antennas
>>>> (from dipoles to loops) have built a reputation as practical
> multi-
>>> band
>>>> solutions for many amateur radio operators. The only stumbling
>>> block is
>>>> transforming their wide ranges of impedance into something close
> to
>>> a
>>>> nominal 50-Ohms resistive (meaning little or no reactance) to
> match
>>> our
>>>> "modern" (meaning non-tube) XCVRs. And that is precisely what a
>>>> transmatch is designed to accomplish.
>>>>
>>>>
>>>>
>>>>
>>>>> All my HF antenna experience is in
>>>>> receive only antennas for shortwave. I've been dragging my feet
> on
>>>>> getting my General Class license but finally decided to go for
> it
>>>>> this month. Of course, I had masterd 5 wpm CW just in time for
>>> that
>>>>> requirement to be abolished. :-)
>>>> Heheh, yes, that sounds just about right! ;) Welcome to HF! And
>>> welcome
>>>> to the world of transmitting antennas. They can be a lot of fun!
>>>>
>>>>
>>>>
>>>>> Some people seem to put all their faith in the modeling
> software.
>>>>> Whatever works for them, but I would never take a computer
> model
>>> as

>>>>> being 100% accurate. To me, the model really has to be built in
> 3D
>>>>> to prove it works.
>>>> ...snip...
>>>>
>>>> Precisely! It can save a lot of time by eliminating very bad or
>>> very
>>>> unlikely designs, but it is almost impossible to fully model the
>>>> environment in which the antenna will be built. So you have to
>>> actually
>>>> build it and test it at some point. This is like other rules of
>>> thumb.
>>>> Take any of the "formulas" for determining the proper length of
>>> antenna
>>>> elements. They all say to start too long and slowing trim it to
> a
>>> proper
>>>> match.
>>>>
>>>> Whether a formula for a simple dipole, or a computer model of a
>>> loop or
>>>> beam, the idea isn't to make the perfect antenna on paper and
> then
>>>> reproduce it exactly in the real world. It is to "get close" and
>>>> possibly avoid some time lost in fiddling around. Beams are a
> good
>>>> example. You can play with the modeling software and try out
>>> different
>>>> element combinations and get an idea of the resulting envelopes
> and
>>> feed
>>>> point impedances. This saves a lot of time, but ultimately you
> have
>>>> build it and tune it to your exact site.
>>>>
>>>>
>>>>> ...snip... What the heck though, and after
>>>>> reading your reply, I believe I will go with the 40 meter loop
> and
>>>>> orient it as a horizontal with paralell feedline.
>>>> Adding a transmatch (aka antenna tuner) between your XCVR and
>>> antenna
>>>> will most likely allow this to become a very usable multi-band
>>> antenna.
>>>> Every antenna displays its own range of impedances, and these
> vary
>>> on
>>>> each band. (This "impedance" is more properly called "complex
>>> impedance"
>>>> because it includes some reactance.) Very low impedances are

>>> typically
>>>> difficult for many transmatches to "match," but any extreme
> value
>>> of
>>>> complex impedance may fall outside the range which a given
>>> transmatch
>>>> can "match." ("Match" means transforming the existing complex
>>> impedance,
>>>> on the antenna-side of the transmatch, into an impedance (with
>>> little or
>>>> no reactance) close to that which the XCVR is designed to work
>>> into.)
>>>> But there are workarounds, such as matching stubs, and other
>>> solutions.
>>>> (See below.)
>>>>
>>>>
>>>>> Regarding running the line into the shack, shorting the wires
> and
>>>>> connecting them to the rig, there are a few reasons I can't do
>>> this.
>>>>> For one, there are children and unknowing people in the area
> that
>>>>> may get zapped if they are able to touch the wires. My ham
>>> station
>>>>> (or what's left of it) is in my basement office. I need to run
>>> the
>>>>> line vertically to about 8' above the ground, make the short at
>>> that
>>>>> point, and install a matching network either on a pole or tree
> in
>>> a
>>>>> PVC junction box. The ground wire would go there also, and then
> I
>>>>> need run the ground and an insulated feedwire the remaining
>>> distance
>>>>> to the ground, bury it and slip it through the side of the
> house
>>>>> into the shack.
>>>>>
>>>> If you are married to the idea of having the vertical option,
> this
>>> may
>>>> be true. You might consider a simple 30-amp automotive relay
> too.
>>> Put
>>>> 12-vdc to it and remotely control that shorting switch.
>>>>
>>>> I'm not sure I'm picturing this properly. Where is the antenna
> feed

>>>> point in relation to your shack? Pretty much right above it, or
> 50-
>>> feet
>>>> distance after you get outside the house?
>>>>
>>>> I'm wondering if we're talking about a longer run from the shack
> to
>>> the
>>>> antenna feed point, like 50- to 100-feet or more, or a much
> shorter
>>> run
>>>> like 20- or 30-feet?
>>>>
>>>> Also, consider getting outside in as short a run as possible,
> and
>>> making
>>>> a longer run of ladder line to get to the antenna feed point. I
> had
>>> one
>>>> dipole for which I ran 300-Ohm twin lead transmission line half
> way
>>>> around my house under the overhang of the roof.
>>>>
>>>>
>
>
>
>
>
> Yahoo! Groups Links
>
>
>

2665. Re: Using 2 Smaller Gauge Wires in Place of Large Gauge Wires

Yahoo group: SkyWires
Date: 2007-10-06 10:47:34 UTC
From: denisnh
Topic: 2642 Message: 2665

Thanks again, Stan. I mentioned this in another post. (Maybe it
should be a new topic). Do you know of anyone who has used coax for
an antenna wire using only the shield/braid? I'm wondering if it will
behave like a large diameter wire if the center conductor is not
connected in any way? Any ideas? RG-6 is pretty thick stuff. I
suspect the dielectric may cause problems or perhaps even some
parasitic side effects from the center conductor and I don't think
software modeling will will show up much.

Thanks,
Denis

--- In SkyWires@yahoogroups.com, "lazysenior" <lazysenior@...> wrote:
>
> --- In SkyWires@yahoogroups.com, "denisnh" <denisnh@> wrote:
>
> > I realize heavier wire does have more bandwith, Besides that, how
> > much performance would I lose if running a single 18g wire in place
> > of 12g? If I were to run 2 wires side by side to simulate a heavier
> > gauge wire, is it just a simple matter of taping it together every
> > few feet? How about if it's twisted together kind of like a twisted
> > pair? I'll be running 200 watts at the most for transmitter power.
> >
> > Thanks,
> > Denis
> >
>
> Do not not worry about the performance factor OR the Bandwidth. 18ga
> will perform as well as 12 ga. BUT think about this:
>
> 12 ga wire is MUCH stronger than 18 ga wire. I would never use 18 ga
> wire for an antenna.Not strong enough ESPECIALLY if you use trees for
> support. I have used 16 ga for antennas. No more 16 ga for me.16 ga
> wire antennas don't stay up in the air.
>
> Right now my 280 ft loop is made of 12 ga stranded soft drawn
> insulated thhn wire. Been up for 3 yrs and thru much wind. Very
> Strong. However.
> 12 ga wire is heavy for long spans like loop antennas It will sag. The
> next time I put up a loop it will be 14 ga stranded wire. It is
> lighter than 12 ga but still plenty strong.
>
> Use 14 ga or bigger stranded copper wire. Use stranded open wire
> feeders. The antenna will stay up long after that 18 ga antenna is
> laying on the ground.

>
> Stan K9IUQ
>

2666. Re: Feed Arrangement for Operating the Loop as a Vertical Antenna

Yahoo group: SkyWires
Date: 2007-10-06 14:27:17 UTC
From: denisnh
Topic: 2643 Message: 2666

HAH! Warm and Fuzzy, huh? As in tennis ball.... Ohh you're good.
Your analogies fit together like the stones of the great pyramid of
Giza. LOL

Erik, I assume you get the Atlatl at pet stores?

By the way, I'm probably driving everyone nuts with this question but
it just won't stop surfacing in my mind for further analysis. :-)

The idea of using a coax with the shield only as a large diameter
radiating wire antenna. Any thoughts?

Thanks,
Denis

--- In SkyWires@yahoogroups.com, Erik Weaver <erik@...> wrote:
>
> Heeheh, hi Denis,
>
> Ya, I can easily imagine some 'lost time' trying to cross the border
> with various weapons. If you follow the various lists, or perhaps
search
> their archives, you'll find many things are considered weapons, and
some
> of those that are not required a fishing license. The guys with the
guns
> figure if you have any fishing gear you need that permit. Or a fine. Of
> course, you can always come back and try arguing with a judge later
on...
>
> Arrows, crossbow (whether handheld or "industrial" strength), small
> pieces of lead (sinkers) moving at rapid velocities all incur a certain
> level of risk, if not illegality. A tennis ball on the other hand seems
> about as "warm and fuzzy" as we can get in this messed up PC-crazy
world.
>
> Besides, the atlatl is quite cool! Did you check out the international
> competitions? Neat stuff! A very old technology, assisting us with very
> modern technology. If only Ug and Grog had known when they invented
it! :)
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> It is a doggie toy for throwing tennis balls. Everyone either has a
dog,
> may be getting a dog, or visiting a friend who has a dog. So you can
> always carry one of these. They are just plastic, very light to carry,
> and even fun to play with! Buy extra tennis balls because you'll lose

> some just flinging them around :) My friend and I lost one or two that
> day, for exactly that reason!
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> You may want to get two of the atlatl's so you can play catch.
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> Have fun!
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> > area, and the pistol crossbow is definitely illegal. I had figured a
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> >> If you really want another 'project' you might think about building
> > an
> >> air gun:

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> >> Have fun!
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> >>> Thanks again, Erik! From what you wrote and the research I've
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> >>>> radio waves. This is our goal of course.
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> >>>> By the way, I usually speak in terms of transmitting a radio
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> >>> but
> >>>> the efficiencies (or lack thereof) work exactly the same in
> >>> reverse. In
> >>>> other words, the antenna has the same gain (or loss) as a
> > receiving
> >>>> antenna, as it does when transmitting. So our rare special case
> >>> antenna
> >>>> will also deliver all the RF energy it collects to the receiver
> >>> (less
> >>>> friction/heat lost to move the electrons -- which can never be
> >>> avoided
> >>>> in the real world).
> >>>>
> >>>> Now when the impedance is one value on the transmission line
> > (and
> >>> it
> >>>> doesn't matter what kind of transmission line), and the
> > impedance

> >>> of the
> >>>> antenna is a different value, some RF energy is reflected off
> > the
> >>>> antenna feed point, back to the XCVR. How much is reflected
> > depends
> >>> upon
> >>>> how great the difference is between the impedances.
> >>>>
> >>>> There is a difference in behavior at the antenna feed point
> > between
> >>> a
> >>>> coax fed antenna and a parallel line fed antenna.
> >>>>
> >>>> Balanced (parallel) line only offers a two-way path between the
> >>> antenna
> >>>> and the XCVR. Coax may offer a third pathway -- along the
> > outside
> >>> of the
> >>>> shielding (aka "braid") of the coax. This is because the higher
> > the
> >>>> frequency of alternating current (like RF) the less deeply the
> > RF
> >>>> penetrates into the conductor -- this is called "skin effect".
> > RF
> >>>> doesn't penetrate very deeply into the conductor; it travels
> > along
> >>> the
> >>>> outer-most surface, shallow enough in fact that one wave of
> > energy
> >>> can
> >>>> travel along the inner surface of the coax shielding while a
> > second
> >>> wave
> >>>> travels along the outside surface of the same coax shielding,
> > and
> >>> the
> >>>> two will never meet. Therefore, coax can offer three conductors
> > to
> >>> RF:
> >>>> along the inner conductor; along the inside of the coax
> > shielding;
> >>> and
> >>>> along the outside of the coax shielding. We desire the first two
> >>> paths,
> >>>> but we do not (usually) benefit from RF flowing on the outside
> > of
> >>> the
> >>>> coax shield.
> >>>>
> >>>> Since balanced (parallel conductors) transmission line (aka feed

> >>> line)
> >>>> is constructed of only two wires (which may be either stranded
> > or
> >>> solid
> >>>> wire), the reflected wave (that energy which is reflecting from
> > the
> >>>> antenna feed point, back to the XCVR) has only one return path
> >>> available
> >>>> to it -- it returns ("reflects") back along the same conductor
> > that
> >>> it
> >>>> originally traversed. This is a simple condition, and no "balun"
> >>> (more
> >>>> accurately "bal-bal" for "balanced-to-balanced" in this case) is
> >>>> required to maintain the desired energy pathway between the XCVR
> >>> and
> >>>> antenna.
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> >>>> ("Balun" is a conjunction of "balanced" and "unbalanced"
> >>> identifying a
> >>>> transition from a balanced transmission line to an unbalanced
> > line.
> >>>> "Unun" identifies transitioning from "unbalanced"
> > to "unbalanced"
> >>> line.
> >>>> "Balbal" identifies transitioning from "balanced" to "balanced"
> >>> line.
> >>>> Depending upon the design, this transformation may occur at a
> >>> number of
> >>>> different ratios, of which 1:1 and 4:1 are the most commonly
> > used.)
> >>>> This simple two-way path is not always the case when using coax.
> > If
> >>> the
> >>>> impedance mismatch is great enough, some fraction of the RF will
> >>> find an
> >>>> easier pathway flowing along the outside of the coax shielding.
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> >>>> cause problems such as RFI (Radio Frequency Interference) and
> >>> inaccurate
> >>>> readings on our meters (which are designed under the assumption
> > RF
> >>> will
> >>>> travel along two paths, not three). Suffering a bad case of "RF
> > on
> >>> the
> >>>> feed line" may cause RFI to affect other electronics in the
> > area,
> >>>> provide false swr readings, and cause "RF bite" on our
> > microphone.

> >>> This
> >>>> is often caused by RF radiating off the outside of the coax,
> >>> instead of
> >>>> the antenna. (Although in some cases problems may exist even
> > when
> >>> feed
> >>>> line radiation has been eliminated. RFI can be a difficult
> > puzzle
> >>> to
> >>>> solve.)
> >>>>
> >>>> Enter the balun. By "wrapping" the coax with a much greater
> >>> impedance
> >>>> than the antenna feed point, we keep any stray RF from moving
> > onto
> >>> the
> >>>> outside of the coax shielding. (Targeting a much greater
> > impedance
> >>> on
> >>>> the outside of the coax than inside it.) To the degree this is
> >>>> successful, RF may only travel onto the antenna, or back along
> > the
> >>>> inside of the coax to the XCVR. (On either the inside of the
> >>> shielding
> >>>> or along the surface of the center conductor. No RF travels
> > along
> >>> the
> >>>> core of the center conductor, due to skin effect.)
> >>>>
> >>>> Once again we have only two pathways for the RF to travel
> > allowing
> >>> our
> >>>> equipment and antenna system to behave as intended, and within
> >>>> predictable parameters. This is why a balun may be useful at the
> >>> feed
> >>>> point of an antenna when using coax transmission line. It is
> > also
> >>> why,
> >>>> unless the coax impedance is very close to equaling the
> > antenna's
> >>>> impedance where they meet (the feed point) a feed point balun is
> >>>> advisable when using coax.
> >>>>
> >>>> Reflection, re-reflection, and re-re-reflection....
> >>>>
> >>>> Recall the transmitted RF wave traveling along the transmission
> >>> line to
> >>>> the antenna feed point, and not finding a perfectly equal
> >>> impedance,
> >>>> some bounced back toward the XCVR in the original direction.

> >>>>
> >>>> Now the reflected wave races toward the XCVR. Some of it was
> >>> absorbed by
> >>>> the antenna, and some has been lost in the transmission line
> >>>> (heat/friction). So it isn't exactly at the same impedance when
> > it
> >>>> started, and it has been altered in other ways too. Namely
> >>> the "phase"
> >>>> of either the voltage or current has been shifted. To learn more
> >>> about
> >>>> this, "Reflections II" by Walter Maxwell W2DU is a great book!
> >>> Highly
> >>>> recommended! If you see one at a hamfest, buy it!
> >>>>
> >>>> We'll skip over exactly what and why this change takes place
> >>> (entire
> >>>> books have been written about just that!), but the RF wave is
> >>> different
> >>>> than when it left the XCVR, and as a result, it will "bounce"
> > (or
> >>>> re-reflect) off the XCVR, and move in the original direction
> > again.
> >>> It
> >>>> is re-reflected back toward the antenna feed point.
> >>>>
> >>>> The re-reflection point will be the transmatch instead of the
> > XCVR
> >>> if a
> >>>> transmatch is being utilized. Either way, the RF wave will
> > bounce
> >>> back
> >>>> and forth, reflecting, re-reflecting, and re-re-reflecting, and
> > so
> >>> on,
> >>>> until it either all eventually escapes out the antenna or is
> >>> absorbed as
> >>>> heat/friction in the transmission line. (In truth, it is always
> > the
> >>> sum
> >>>> of both events -- what isn't eventually changed into heat in the
> >>>> transmission line escapes the antenna as radiated RF.)
> >>>>
> >>>> As the swr increases, and as the inherent loss of the
> > transmission
> >>> line
> >>>> increases (lower in balanced line; higher in coax), more of the
> > RF
> >>>> energy is lost as unproductive heat/friction, and less is
> > available
> >>> to

> >>>> radiate from the antenna as a useful radio signal.
> >>>>
> >>>> This is why high swr on balanced feed line isn't all that bad.
> > Most
> >>> of
> >>>> the RF energy will eventually "bounce" out of the antenna
> > anyway.
> >>> It
> >>>> doesn't really matter if it makes it out the very first trip, on
> >>> the
> >>>> sixth, or 16th. Radiated is radiated. The person receiving your
> >>> radio
> >>>> signal will never know if they are hearing the very first wave
> > or a
> >>>> re-reflected wave. It just doesn't matter after the energy
> > escapes
> >>> the
> >>>> antenna.
> >>>>
> >>>> Escaping the antenna is the trick!
> >>>>
> >>>> And that is where coax may not work well in the same situation.
> >>> Coax,
> >>>> suffering much greater losses to the RF as it traverses along it
> >>>> ("attenuation"), simply absorbs too much of the RF as it bounces
> >>> back
> >>>> and forth, especially under high swr conditions. There isn't
> > much
> >>> left
> >>>> to escape out the antenna.
> >>>>
> >>>> All of which leads to the generalized conclusion that wire
> > antenna
> >>>> elements fed by balanced transmission line, operate very
> >>> efficiently
> >>>> even under high swr conditions. That is why these types of
> > antennas
> >>>> (from dipoles to loops) have built a reputation as practical
> > multi-
> >>> band
> >>>> solutions for many amateur radio operators. The only stumbling
> >>> block is
> >>>> transforming their wide ranges of impedance into something close
> > to
> >>> a
> >>>> nominal 50-Ohms resistive (meaning little or no reactance) to
> > match
> >>> our
> >>>> "modern" (meaning non-tube) XCVRs. And that is precisely what a
> >>>> transmatch is designed to accomplish.

> >>>>
> >>>>
> >>>>
> >>>>
> >>>>> All my HF antenna experience is in
> >>>>> receive only antennas for shortwave. I've been dragging my feet
> > on
> >>>>> getting my General Class license but finally decided to go for
> > it
> >>>>> this month. Of course, I had masterd 5 wpm CW just in time for
> >>> that
> >>>>> requirement to be abolished. :-)
> >>>> Heheh, yes, that sounds just about right! ;) Welcome to HF! And
> >>> welcome
> >>>> to the world of transmitting antennas. They can be a lot of fun!
> >>>>
> >>>>
> >>>>
> >>>>> Some people seem to put all their faith in the modeling
> > software.
> >>>>> Whatever works for them, but I would never take a computer
> > model
> >>> as
> >>>>> being 100% accurate. To me, the model really has to be built in
> > 3D
> >>>>> to prove it works.
> >>>> ...snip...
> >>>>
> >>>> Precisely! It can save a lot of time by eliminating very bad or
> >>> very
> >>>> unlikely designs, but it is almost impossible to fully model the
> >>>> environment in which the antenna will be built. So you have to
> >>> actually
> >>>> build it and test it at some point. This is like other rules of
> >>> thumb.
> >>>> Take any of the "formulas" for determining the proper length of
> >>> antenna
> >>>> elements. They all say to start too long and slowing trim it to
> > a
> >>> proper
> >>>> match.
> >>>>
> >>>> Whether a formula for a simple dipole, or a computer model of a
> >>> loop or
> >>>> beam, the idea isn't to make the perfect antenna on paper and
> > then
> >>>> reproduce it exactly in the real world. It is to "get close" and
> >>>> possibly avoid some time lost in fiddling around. Beams are a
> > good
> >>>> example. You can play with the modeling software and try out

> >>> different
> >>>> element combinations and get an idea of the resulting envelopes
> > and
> >>> feed
> >>>> point impedances. This saves a lot of time, but ultimately you
> > have
> >>>> build it and tune it to your exact site.
> >>>>
> >>>>
> >>>>> ...snip... What the heck though, and after
> >>>>> reading your reply, I believe I will go with the 40 meter loop
> > and
> >>>>> orient it as a horizontal with paralell feedline.
> >>>> Adding a transmatch (aka antenna tuner) between your XCVR and
> >>> antenna
> >>>> will most likely allow this to become a very usable multi-band
> >>> antenna.
> >>>> Every antenna displays its own range of impedances, and these
> > vary
> >>> on
> >>>> each band. (This "impedance" is more properly called "complex
> >>> impedance"
> >>>> because it includes some reactance.) Very low impedances are
> >>> typically
> >>>> difficult for many transmatches to "match," but any extreme
> > value
> >>> of
> >>>> complex impedance may fall outside the range which a given
> >>> transmatch
> >>>> can "match." ("Match" means transforming the existing complex
> >>> impedance,
> >>>> on the antenna-side of the transmatch, into an impedance (with
> >>> little or
> >>>> no reactance) close to that which the XCVR is designed to work
> >>> into.)
> >>>> But there are workarounds, such as matching stubs, and other
> >>> solutions.
> >>>> (See below.)
> >>>>
> >>>>
> >>>>> Regarding running the line into the shack, shorting the wires
> > and
> >>>>> connecting them to the rig, there are a few reasons I can't do
> >>> this.
> >>>>> For one, there are children and unknowing people in the area
> > that
> >>>>> may get zapped if they are able to touch the wires. My ham
> >>> station
> >>>>> (or what's left of it) is in my basement office. I need to run
> >>> the

> >>>>> line vertically to about 8' above the ground, make the short at
> >>> that
> >>>>> point, and install a matching network either on a pole or tree
> > in
> >>> a
> >>>>> PVC junction box. The ground wire would go there also, and then
> > I
> >>>>> need run the ground and an insulated feedwire the remaining
> >>> distance
> >>>>> to the ground, bury it and slip it through the side of the
> > house
> >>>>> into the shack.
> >>>>>
> >>>> If you are married to the idea of having the vertical option,
> > this
> >>> may
> >>>> be true. You might consider a simple 30-amp automotive relay
> > too.
> >>> Put
> >>>> 12-vdc to it and remotely control that shorting switch.
> >>>>
> >>>> I'm not sure I'm picturing this properly. Where is the antenna
> > feed
> >>>> point in relation to your shack? Pretty much right above it, or
> > 50-
> >>> feet
> >>>> distance after you get outside the house?
> >>>>
> >>>> I'm wondering if we're talking about a longer run from the shack
> > to
> >>> the
> >>>> antenna feed point, like 50- to 100-feet or more, or a much
> > shorter
> >>> run
> >>>> like 20- or 30-feet?
> >>>>
> >>>> Also, consider getting outside in as short a run as possible,
> > and
> >>> making
> >>>> a longer run of ladder line to get to the antenna feed point. I
> > had
> >>> one
> >>>> dipole for which I ran 300-Ohm twin lead transmission line half
> > way
> >>>> around my house under the overhang of the roof.
> >>>>
> >>>>
> > >
> > >
> > >

> >
> >
> > Yahoo! Groups Links
> >
> >
> >
>

2667. Re: Feed Arrangement for Operating the Loop as a Vertical Antenna

Yahoo group: SkyWires
Date: 2007-10-06 14:34:10 UTC
From: denisnh
Topic: 2643 Message: 2667

Oh, regarding the crossing the Canadian border with questionable objects. This is off topic but I'll try to keep it short. When my son was a boy, we used to build and launch model rockets together. Then I came across a magazine, "High Powered Rocketry" ironically published in Canada. So I had my eye on an eight footer with composite engines that would go up and up. I called customs and asked them if I could assemble the rocket and take it across into Canada where there is a lot of launching room. No way to launch something like that in Northern New England. The customs guy said, "Sure, no problem." Then I asked about the engines and he said, "absolutely not! They are considered explosives!" HUH??? Turns out the composite engine manufacturer is in the U.S. and they send the engines off to Canada in plain boxes and about 2/3 of their shipments get through. The rest are intercepted by customs at the customer's expense. Go figure....

Regards,
Denis

--- In SkyWires@yahoogroups.com, Erik Weaver <erik@...> wrote:
>
> Heeheh, hi Denis,
>
> Ya, I can easily imagine some 'lost time' trying to cross the border
> with various weapons. If you follow the various lists, or perhaps
search
> their archives, you'll find many things are considered weapons, and
some
> of those that are not required a fishing license. The guys with the
guns
> figure if you have any fishing gear you need that permit. Or a fine. Of
> course, you can always come back and try arguing with a judge later
on...
>
> Arrows, crossbow (whether handheld or "industrial" strength), small
> pieces of lead (sinkers) moving at rapid velocities all incur a certain
> level of risk, if not illegality. A tennis ball on the other hand seems
> about as "warm and fuzzy" as we can get in this messed up PC-crazy
world.
>
> Besides, the atlatl is quite cool! Did you check out the international
> competitions? Neat stuff! A very old technology, assisting us with very
> modern technology. If only Ug and Grog had known when they invented
it! :)
>

> It is a doggie toy for throwing tennis balls. Everyone either has a
dog,
> may be getting a dog, or visiting a friend who has a dog. So you can
> always carry one of these. They are just plastic, very light to carry,
> and even fun to play with! Buy extra tennis balls because you'll lose
> some just flinging them around :) My friend and I lost one or two that
> day, for exactly that reason!
>
> You may want to get two of the atlatl's so you can play catch.
>
> Have fun!
> Erik
>
> denisnh wrote:
> > Hi Erik. The Atlatl looks very cool! What I've been using is a
> > sling shot with "high powered" latex bands. A half ounce fishing
> > sinker is then attached to some Spider Wire fishing string spooled
> > onto a spinning reel. I have a huge pine tree that's 80' tall and I
> > can get the line right over it with that setup. I set up an inverted-
> > V there.
> >
> > I also have an 80# pistol crossbow, and I modify the little bolt by
> > removing the tip, placing a small weight in place of the tip and
> > drilling a hole at the end of the shaft for the same fishing setup I
> > mentoned above. That works even better but I don't take it out much
> > since it looks rather ominous if the neighbors happen to get a
> > glimpse of it.
> >
> > I have some relatives in Canada, one of which owns a farm. When
> > visiting, I like to erect a temporary antenna for use during my stay.
> > I was surprised to find out that sling shots are illegal in that
> > area, and the pistol crossbow is definitely illegal. I had figured a
> > light bow but the atlatl looks very promising. As for the air gun,
> > can you imagine the looks on the faces of the customs agents trying
> > to get something like that across the border. Yikes!
> >
> > Thanks,
> > Denis
> >
> > --- In SkyWires@yahoogroups.com, Erik Weaver <erik@> wrote:
> >> Hi Denis,
> >>
> >> An atlatl is another option:
> >>
> >> http://www.n0ew.org/k0s/atlatl/
> >>
> >> This really seems to work well and it is pretty cheap. My friend
> > and I
> >> didn't get up over 100-feet, but I think we got every bit of 50-
> > feet

> >> height into the tree.
> >>
> >> If you really want another 'project' you might think about building
> > an
> >> air gun:
> >>
> >> http://www.n0ew.org/k0s/air_gun/
> >>
> >> Have fun!
> >> Erik
> >>
> >> denisnh wrote:
> >>> Thanks again, Erik! From what you wrote and the research I've
> > done,
> >>> I decided to forget about the vertical radiator and go with a
> > full
> >>> wave 18g loop and 16g homebrew ladder line (I have all this on
> >>> hand). Guess I'm fickle. LOL
> >>>
> >>> What I really dread is the cutting. The trees in my backyard are
> > so
> >>> dense that I'll have to get the chainsaw out and do some serious
> >>> cutting. I did read about one guy who shot an arrow right over
> > the
> >>> trees with some fishing string attached, then pulled his wire
> > right
> >>> over the tops of the trees for his antenna. That scares me a
> > bit.
> >>> Not to mention that running enough power could start a fire! But
> > it
> >>> seems to work for him and he mentioned that once in a while he'll
> >>> pull the wire one way or the other to compensate for any areas
> > that
> >>> are chafed through.
> >>>
> >>> Thanks,
> >>> Denis
> >>>
> >>> --- In SkyWires@yahoogroups.com, Erik Weaver <erik@> wrote:
> >>>> Hi Denis (I thought "Denisnh" was a unusual name! heheh)....
> >>>>
> >>>> Comments in body below....
> >>>>
> >>>> ...snip...
> >>>>
> >>>> > The curves for parallel lines all hug the bottom of the
> >>>>> chart where the favorable SWR and other factors are, while the
> >>> coax
> >>>>> lines soar skyward surprisingly fast, which concurs with your
> >>> post.

> >>>> Cebik's web pages are filled with useful information -- time
> > there
> >>> is
> >>>> well spent. The rapid rise of losses in coax under high swr
> >>> conditions
> >>>> is in sharp contrast to the low losses generally found in
> > balanced
> >>>> ("parallel") feed line. It is one of the major differences
> > between
> >>> them.
> >>>> About the only negative that comes to mind with balanced feed
> > line
> >>> is
> >>>> the need to carefully route it; so it isn't practical in all
> > cases.
> >>>> Here's something else to consider....
> >>>>
> >>>> Remember first the rare "special case" where impedance is the
> > same
> >>>> everywhere in the antenna system (XCVR, transmission line,
> > antenna,
> >>>> etc). With the exception of a tiny loss of energy as electrons
> > rub
> >>>> against one another (this loss due to friction is usually
> >>> insignificant
> >>>> in the typical amateur radio installation), nearly all the RF
> >>> ("Radio
> >>>> Frequency") energy generated by the XCVR radiates from the
> > antenna
> >>> as
> >>>> radio waves. This is our goal of course.
> >>>>
> >>>> By the way, I usually speak in terms of transmitting a radio
> > signal
> >>> and
> >>>> trying to send it out into the world (our "Hello World!"
> > message),
> >>> but
> >>>> the efficiencies (or lack thereof) work exactly the same in
> >>> reverse. In
> >>>> other words, the antenna has the same gain (or loss) as a
> > receiving
> >>>> antenna, as it does when transmitting. So our rare special case
> >>> antenna
> >>>> will also deliver all the RF energy it collects to the receiver
> >>> (less
> >>>> friction/heat lost to move the electrons -- which can never be
> >>> avoided
> >>>> in the real world).
> >>>>

> >>>> Now when the impedance is one value on the transmission line
> > (and
> >>> it
> >>>> doesn't matter what kind of transmission line), and the
> > impedance
> >>> of the
> >>>> antenna is a different value, some RF energy is reflected off
> > the
> >>>> antenna feed point, back to the XCVR. How much is reflected
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> >>> upon
> >>>> how great the difference is between the impedances.
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> > outside
> >>> of the
> >>>> shielding (aka "braid") of the coax. This is because the higher
> > the
> >>>> frequency of alternating current (like RF) the less deeply the
> > RF
> >>>> penetrates into the conductor -- this is called "skin effect".
> > RF
> >>>> doesn't penetrate very deeply into the conductor; it travels
> > along
> >>> the
> >>>> outer-most surface, shallow enough in fact that one wave of
> > energy
> >>> can
> >>>> travel along the inner surface of the coax shielding while a
> > second
> >>> wave
> >>>> travels along the outside surface of the same coax shielding,
> > and
> >>> the
> >>>> two will never meet. Therefore, coax can offer three conductors
> > to
> >>> RF:
> >>>> along the inner conductor; along the inside of the coax
> > shielding;
> >>> and
> >>>> along the outside of the coax shielding. We desire the first two
> >>> paths,
> >>>> but we do not (usually) benefit from RF flowing on the outside

> > of
> >>> the
> >>>> coax shield.
> >>>>
> >>>> Since balanced (parallel conductors) transmission line (aka feed
> >>> line)
> >>>> is constructed of only two wires (which may be either stranded
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> >>> solid
> >>>> wire), the reflected wave (that energy which is reflecting from
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> >>>> antenna feed point, back to the XCVR) has only one return path
> >>> available
> >>>> to it -- it returns ("reflects") back along the same conductor
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> >>>> originally traversed. This is a simple condition, and no "balun"
> >>> (more
> >>>> accurately "bal-bal" for "balanced-to-balanced" in this case) is
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> >>>> ("Balun" is a conjunction of "balanced" and "unbalanced"
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> >>> number of
> >>>> different ratios, of which 1:1 and 4:1 are the most commonly
> > used.)
> >>>> This simple two-way path is not always the case when using coax.
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> >>>> impedance mismatch is great enough, some fraction of the RF will
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> >>>> readings on our meters (which are designed under the assumption
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> >>>> inside of the coax to the XCVR. (On either the inside of the
> >>> shielding
> >>>> or along the surface of the center conductor. No RF travels
> > along
> >>> the
> >>>> core of the center conductor, due to skin effect.)
> >>>>
> >>>> Once again we have only two pathways for the RF to travel
> > allowing
> >>> our
> >>>> equipment and antenna system to behave as intended, and within
> >>>> predictable parameters. This is why a balun may be useful at the
> >>> feed
> >>>> point of an antenna when using coax transmission line. It is
> > also
> >>> why,
> >>>> unless the coax impedance is very close to equaling the
> > antenna's
> >>>> impedance where they meet (the feed point) a feed point balun is
> >>>> advisable when using coax.
> >>>>
> >>>> Reflection, re-reflection, and re-re-reflection....
> >>>>

> >>>> Recall the transmitted RF wave traveling along the transmission
> >>> line to
> >>>> the antenna feed point, and not finding a perfectly equal
> >>> impedance,
> >>>> some bounced back toward the XCVR in the original direction.
> >>>>
> >>>> Now the reflected wave races toward the XCVR. Some of it was
> >>> absorbed by
> >>>> the antenna, and some has been lost in the transmission line
> >>>> (heat/friction). So it isn't exactly at the same impedance when
> > it
> >>>> started, and it has been altered in other ways too. Namely
> >>> the "phase"
> >>>> of either the voltage or current has been shifted. To learn more
> >>> about
> >>>> this, "Reflections II" by Walter Maxwell W2DU is a great book!
> >>> Highly
> >>>> recommended! If you see one at a hamfest, buy it!
> >>>>
> >>>> We'll skip over exactly what and why this change takes place
> >>> (entire
> >>>> books have been written about just that!), but the RF wave is
> >>> different
> >>>> than when it left the XCVR, and as a result, it will "bounce"
> > (or
> >>>> re-reflect) off the XCVR, and move in the original direction
> > again.
> >>> It
> >>>> is re-reflected back toward the antenna feed point.
> >>>>
> >>>> The re-reflection point will be the transmatch instead of the
> > XCVR
> >>> if a
> >>>> transmatch is being utilized. Either way, the RF wave will
> > bounce
> >>> back
> >>>> and forth, reflecting, re-reflecting, and re-re-reflecting, and
> > so
> >>> on,
> >>>> until it either all eventually escapes out the antenna or is
> >>> absorbed as
> >>>> heat/friction in the transmission line. (In truth, it is always
> > the
> >>> sum
> >>>> of both events -- what isn't eventually changed into heat in the
> >>>> transmission line escapes the antenna as radiated RF.)
> >>>>
> >>>> As the swr increases, and as the inherent loss of the
> > transmission
> >>> line

> >>>> increases (lower in balanced line; higher in coax), more of the
> > RF
> >>>> energy is lost as unproductive heat/friction, and less is
> > available
> >>> to
> >>>> radiate from the antenna as a useful radio signal.
> >>>>
> >>>> This is why high swr on balanced feed line isn't all that bad.
> > Most
> >>> of
> >>>> the RF energy will eventually "bounce" out of the antenna
> > anyway.
> >>> It
> >>>> doesn't really matter if it makes it out the very first trip, on
> >>> the
> >>>> sixth, or 16th. Radiated is radiated. The person receiving your
> >>> radio
> >>>> signal will never know if they are hearing the very first wave
> > or a
> >>>> re-reflected wave. It just doesn't matter after the energy
> > escapes
> >>> the
> >>>> antenna.
> >>>>
> >>>> Escaping the antenna is the trick!
> >>>>
> >>>> And that is where coax may not work well in the same situation.
> >>> Coax,
> >>>> suffering much greater losses to the RF as it traverses along it
> >>>> ("attenuation"), simply absorbs too much of the RF as it bounces
> >>> back
> >>>> and forth, especially under high swr conditions. There isn't
> > much
> >>> left
> >>>> to escape out the antenna.
> >>>>
> >>>> All of which leads to the generalized conclusion that wire
> > antenna
> >>>> elements fed by balanced transmission line, operate very
> >>> efficiently
> >>>> even under high swr conditions. That is why these types of
> > antennas
> >>>> (from dipoles to loops) have built a reputation as practical
> > multi-
> >>> band
> >>>> solutions for many amateur radio operators. The only stumbling
> >>> block is
> >>>> transforming their wide ranges of impedance into something close
> > to
> >>> a

> >>>> nominal 50-Ohms resistive (meaning little or no reactance) to
> > match
> >>> our
> >>>> "modern" (meaning non-tube) XCVRs. And that is precisely what a
> >>>> transmatch is designed to accomplish.
> >>>>
> >>>>
> >>>>
> >>>>
> >>>>> All my HF antenna experience is in
> >>>>> receive only antennas for shortwave. I've been dragging my feet
> > on
> >>>>> getting my General Class license but finally decided to go for
> > it
> >>>>> this month. Of course, I had masterd 5 wpm CW just in time for
> >>> that
> >>>>> requirement to be abolished. :-)
> >>>> Heheh, yes, that sounds just about right! ;) Welcome to HF! And
> >>> welcome
> >>>> to the world of transmitting antennas. They can be a lot of fun!
> >>>>
> >>>>
> >>>>
> >>>>> Some people seem to put all their faith in the modeling
> > software.
> >>>>> Whatever works for them, but I would never take a computer
> > model
> >>> as
> >>>>> being 100% accurate. To me, the model really has to be built in
> > 3D
> >>>>> to prove it works.
> >>>> ...snip...
> >>>>
> >>>> Precisely! It can save a lot of time by eliminating very bad or
> >>> very
> >>>> unlikely designs, but it is almost impossible to fully model the
> >>>> environment in which the antenna will be built. So you have to
> >>> actually
> >>>> build it and test it at some point. This is like other rules of
> >>> thumb.
> >>>> Take any of the "formulas" for determining the proper length of
> >>> antenna
> >>>> elements. They all say to start too long and slowing trim it to
> > a
> >>> proper
> >>>> match.
> >>>>
> >>>> Whether a formula for a simple dipole, or a computer model of a
> >>> loop or
> >>>> beam, the idea isn't to make the perfect antenna on paper and

> > then
> >>>> reproduce it exactly in the real world. It is to "get close" and
> >>>> possibly avoid some time lost in fiddling around. Beams are a
> > good
> >>>> example. You can play with the modeling software and try out
> >>> different
> >>>> element combinations and get an idea of the resulting envelopes
> > and
> >>> feed
> >>>> point impedances. This saves a lot of time, but ultimately you
> > have
> >>>> build it and tune it to your exact site.
> >>>>
> >>>>
> >>>>> ...snip... What the heck though, and after
> >>>>> reading your reply, I believe I will go with the 40 meter loop
> > and
> >>>>> orient it as a horizontal with paralell feedline.
> >>>> Adding a transmatch (aka antenna tuner) between your XCVR and
> >>> antenna
> >>>> will most likely allow this to become a very usable multi-band
> >>> antenna.
> >>>> Every antenna displays its own range of impedances, and these
> > vary
> >>> on
> >>>> each band. (This "impedance" is more properly called "complex
> >>> impedance"
> >>>> because it includes some reactance.) Very low impedances are
> >>> typically
> >>>> difficult for many transmatches to "match," but any extreme
> > value
> >>> of
> >>>> complex impedance may fall outside the range which a given
> >>> transmatch
> >>>> can "match." ("Match" means transforming the existing complex
> >>> impedance,
> >>>> on the antenna-side of the transmatch, into an impedance (with
> >>> little or
> >>>> no reactance) close to that which the XCVR is designed to work
> >>> into.)
> >>>> But there are workarounds, such as matching stubs, and other
> >>> solutions.
> >>>> (See below.)
> >>>>
> >>>>
> >>>>> Regarding running the line into the shack, shorting the wires
> > and
> >>>>> connecting them to the rig, there are a few reasons I can't do
> >>> this.
> >>>>> For one, there are children and unknowing people in the area

> > that
> >>>>> may get zapped if they are able to touch the wires. My ham
> >>> station
> >>>>> (or what's left of it) is in my basement office. I need to run
> >>> the
> >>>>> line vertically to about 8' above the ground, make the short at
> >>> that
> >>>>> point, and install a matching network either on a pole or tree
> > in
> >>> a
> >>>>> PVC junction box. The ground wire would go there also, and then
> > I
> >>>>> need run the ground and an insulated feedwire the remaining
> >>> distance
> >>>>> to the ground, bury it and slip it through the side of the
> > house
> >>>>> into the shack.
> >>>>>
> >>>> If you are married to the idea of having the vertical option,
> > this
> >>> may
> >>>> be true. You might consider a simple 30-amp automotive relay
> > too.
> >>> Put
> >>>> 12-vdc to it and remotely control that shorting switch.
> >>>>
> >>>> I'm not sure I'm picturing this properly. Where is the antenna
> > feed
> >>>> point in relation to your shack? Pretty much right above it, or
> > 50-
> >>> feet
> >>>> distance after you get outside the house?
> >>>>
> >>>> I'm wondering if we're talking about a longer run from the shack
> > to
> >>> the
> >>>> antenna feed point, like 50- to 100-feet or more, or a much
> > shorter
> >>> run
> >>>> like 20- or 30-feet?
> >>>>
> >>>> Also, consider getting outside in as short a run as possible,
> > and
> >>> making
> >>>> a longer run of ladder line to get to the antenna feed point. I
> > had
> >>> one
> >>>> dipole for which I ran 300-Ohm twin lead transmission line half
> > way
> >>>> around my house under the overhang of the roof.

> >>>>
> >>>>
> >
> >
> >
> >
> >
> > Yahoo! Groups Links
> >
> >
> >
>

2668. Re: [SkyWires] Re: Feed Arrangement for Operating the Loop as a Vertical Antenna

Yahoo group: SkyWires
Date: 2007-10-06 14:36:35 UTC
From: Earl Needham
Topic: 2643 Message: 2668

At 08:27 10/6/2007, denisnh wrote:
>The idea of using a coax with the shield only as a large diameter
>radiating wire antenna. Any thoughts?

I think you could cut the coax the length of a regular
dipole and connect the shield to the center conductor at each end of
the segments and run it as a regular dipole. That would be
simple. As for using just the shield NOT connected to the center
conductor -- well, I think you might have trouble keeping the shield
totally disconnected from the center conductor -- keeping them from
touching -- and beyond that, I don't think it would operate any
differently, but that's just my gut feeling. I've never tried it.

7 3
Earl

KD5XB -- Earl Needham
Clovis, New Mexico DM84jk
http://groups.yahoo.com/group/cw_bugs
Quoting from the Coast Guard: ZUT

2669. Re: Feed Arrangement for Operating the Loop as a Vertical Antenna

Yahoo group: SkyWires
Date: 2007-10-06 14:39:52 UTC
From: denisnh
Topic: 2643 Message: 2669

Oh, another thing that can be an advantage with the atlatl is if you
have a dog that fetches. My dog is an excellent Frisbee dog and goes
after anything. He's part coon hound and very fast with long legs.
When setting up a wire, I can just make like I'm playing with my dog
by slinging ordinary tennis balls until I'm sure nobody is looking and
grab the tennis ball with the leader string attached and sling that up
into the tree. I just hope my dog doesn't climb the tree after it.
Make for a nice diversion for a "covert" project. :-)

--- In SkyWires@yahoogroups.com, Erik Weaver <erik@...> wrote:
>
> Heeheh, hi Denis,
>
> Ya, I can easily imagine some 'lost time' trying to cross the border
> with various weapons. If you follow the various lists, or perhaps
search
> their archives, you'll find many things are considered weapons, and
some
> of those that are not required a fishing license. The guys with the
guns
> figure if you have any fishing gear you need that permit. Or a fine. Of
> course, you can always come back and try arguing with a judge later
on...
>
> Arrows, crossbow (whether handheld or "industrial" strength), small
> pieces of lead (sinkers) moving at rapid velocities all incur a certain
> level of risk, if not illegality. A tennis ball on the other hand seems
> about as "warm and fuzzy" as we can get in this messed up PC-crazy
world.
>
> Besides, the atlatl is quite cool! Did you check out the international
> competitions? Neat stuff! A very old technology, assisting us with very
> modern technology. If only Ug and Grog had known when they invented
it! :)
>
> It is a doggie toy for throwing tennis balls. Everyone either has a
dog,
> may be getting a dog, or visiting a friend who has a dog. So you can
> always carry one of these. They are just plastic, very light to carry,
> and even fun to play with! Buy extra tennis balls because you'll lose
> some just flinging them around :) My friend and I lost one or two that
> day, for exactly that reason!
>
> You may want to get two of the atlatl's so you can play catch.
>

> Have fun!
> Erik
>
> denisnh wrote:
> > Hi Erik. The Atlatl looks very cool! What I've been using is a
> > sling shot with "high powered" latex bands. A half ounce fishing
> > sinker is then attached to some Spider Wire fishing string spooled
> > onto a spinning reel. I have a huge pine tree that's 80' tall and I
> > can get the line right over it with that setup. I set up an inverted-
> > V there.
> >
> > I also have an 80# pistol crossbow, and I modify the little bolt by
> > removing the tip, placing a small weight in place of the tip and
> > drilling a hole at the end of the shaft for the same fishing setup I
> > mentoned above. That works even better but I don't take it out much
> > since it looks rather ominous if the neighbors happen to get a
> > glimpse of it.
> >
> > I have some relatives in Canada, one of which owns a farm. When
> > visiting, I like to erect a temporary antenna for use during my stay.
> > I was surprised to find out that sling shots are illegal in that
> > area, and the pistol crossbow is definitely illegal. I had figured a
> > light bow but the atlatl looks very promising. As for the air gun,
> > can you imagine the looks on the faces of the customs agents trying
> > to get something like that across the border. Yikes!
> >
> > Thanks,
> > Denis
> >
> > --- In SkyWires@yahoogroups.com, Erik Weaver <erik@> wrote:
> >> Hi Denis,
> >>
> >> An atlatl is another option:
> >>
> >> http://www.n0ew.org/k0s/atlatl/
> >>
> >> This really seems to work well and it is pretty cheap. My friend
> > and I
> >> didn't get up over 100-feet, but I think we got every bit of 50-
> > feet
> >> height into the tree.
> >>
> >> If you really want another 'project' you might think about building
> > an
> >> air gun:
> >>
> >> http://www.n0ew.org/k0s/air_gun/
> >>
> >> Have fun!
> >> Erik

> >>
> >> denisnh wrote:
> >>> Thanks again, Erik! From what you wrote and the research I've
> > done,
> >>> I decided to forget about the vertical radiator and go with a
> > full
> >>> wave 18g loop and 16g homebrew ladder line (I have all this on
> >>> hand). Guess I'm fickle. LOL
> >>>
> >>> What I really dread is the cutting. The trees in my backyard are
> > so
> >>> dense that I'll have to get the chainsaw out and do some serious
> >>> cutting. I did read about one guy who shot an arrow right over
> > the
> >>> trees with some fishing string attached, then pulled his wire
> > right
> >>> over the tops of the trees for his antenna. That scares me a
> > bit.
> >>> Not to mention that running enough power could start a fire! But
> > it
> >>> seems to work for him and he mentioned that once in a while he'll
> >>> pull the wire one way or the other to compensate for any areas
> > that
> >>> are chafed through.
> >>>
> >>> Thanks,
> >>> Denis
> >>>
> >>> --- In SkyWires@yahoogroups.com, Erik Weaver <erik@> wrote:
> >>>> Hi Denis (I thought "Denisnh" was a unusual name! heheh)....
> >>>>
> >>>> Comments in body below....
> >>>>
> >>>> ...snip...
> >>>>
> >>>> > The curves for parallel lines all hug the bottom of the
> >>>>> chart where the favorable SWR and other factors are, while the
> >>> coax
> >>>>> lines soar skyward surprisingly fast, which concurs with your
> >>> post.
> >>>> Cebik's web pages are filled with useful information -- time
> > there
> >>> is
> >>>> well spent. The rapid rise of losses in coax under high swr
> >>> conditions
> >>>> is in sharp contrast to the low losses generally found in
> > balanced
> >>>> ("parallel") feed line. It is one of the major differences
> > between
> >>> them.

> >>>> About the only negative that comes to mind with balanced feed
> > line
> >>> is
> >>>> the need to carefully route it; so it isn't practical in all
> > cases.
> >>>> Here's something else to consider....
> >>>>
> >>>> Remember first the rare "special case" where impedance is the
> > same
> >>>> everywhere in the antenna system (XCVR, transmission line,
> > antenna,
> >>>> etc). With the exception of a tiny loss of energy as electrons
> > rub
> >>>> against one another (this loss due to friction is usually
> >>> insignificant
> >>>> in the typical amateur radio installation), nearly all the RF
> >>> ("Radio
> >>>> Frequency") energy generated by the XCVR radiates from the
> > antenna
> >>> as
> >>>> radio waves. This is our goal of course.
> >>>>
> >>>> By the way, I usually speak in terms of transmitting a radio
> > signal
> >>> and
> >>>> trying to send it out into the world (our "Hello World!"
> > message),
> >>> but
> >>>> the efficiencies (or lack thereof) work exactly the same in
> >>> reverse. In
> >>>> other words, the antenna has the same gain (or loss) as a
> > receiving
> >>>> antenna, as it does when transmitting. So our rare special case
> >>> antenna
> >>>> will also deliver all the RF energy it collects to the receiver
> >>> (less
> >>>> friction/heat lost to move the electrons -- which can never be
> >>> avoided
> >>>> in the real world).
> >>>>
> >>>> Now when the impedance is one value on the transmission line
> > (and
> >>> it
> >>>> doesn't matter what kind of transmission line), and the
> > impedance
> >>> of the
> >>>> antenna is a different value, some RF energy is reflected off
> > the
> >>>> antenna feed point, back to the XCVR. How much is reflected
> > depends

> >>> upon
> >>>> how great the difference is between the impedances.
> >>>>
> >>>> There is a difference in behavior at the antenna feed point
> > between
> >>> a
> >>>> coax fed antenna and a parallel line fed antenna.
> >>>>
> >>>> Balanced (parallel) line only offers a two-way path between the
> >>> antenna
> >>>> and the XCVR. Coax may offer a third pathway -- along the
> > outside
> >>> of the
> >>>> shielding (aka "braid") of the coax. This is because the higher
> > the
> >>>> frequency of alternating current (like RF) the less deeply the
> > RF
> >>>> penetrates into the conductor -- this is called "skin effect".
> > RF
> >>>> doesn't penetrate very deeply into the conductor; it travels
> > along
> >>> the
> >>>> outer-most surface, shallow enough in fact that one wave of
> > energy
> >>> can
> >>>> travel along the inner surface of the coax shielding while a
> > second
> >>> wave
> >>>> travels along the outside surface of the same coax shielding,
> > and
> >>> the
> >>>> two will never meet. Therefore, coax can offer three conductors
> > to
> >>> RF:
> >>>> along the inner conductor; along the inside of the coax
> > shielding;
> >>> and
> >>>> along the outside of the coax shielding. We desire the first two
> >>> paths,
> >>>> but we do not (usually) benefit from RF flowing on the outside
> > of
> >>> the
> >>>> coax shield.
> >>>>
> >>>> Since balanced (parallel conductors) transmission line (aka feed
> >>> line)
> >>>> is constructed of only two wires (which may be either stranded
> > or
> >>> solid
> >>>> wire), the reflected wave (that energy which is reflecting from

> > the
> >>>> antenna feed point, back to the XCVR) has only one return path
> >>> available
> >>>> to it -- it returns ("reflects") back along the same conductor
> > that
> >>> it
> >>>> originally traversed. This is a simple condition, and no "balun"
> >>> (more
> >>>> accurately "bal-bal" for "balanced-to-balanced" in this case) is
> >>>> required to maintain the desired energy pathway between the XCVR
> >>> and
> >>>> antenna.
> >>>>
> >>>> ("Balun" is a conjunction of "balanced" and "unbalanced"
> >>> identifying a
> >>>> transition from a balanced transmission line to an unbalanced
> > line.
> >>>> "Unun" identifies transitioning from "unbalanced"
> > to "unbalanced"
> >>> line.
> >>>> "Balbal" identifies transitioning from "balanced" to "balanced"
> >>> line.
> >>>> Depending upon the design, this transformation may occur at a
> >>> number of
> >>>> different ratios, of which 1:1 and 4:1 are the most commonly
> > used.)
> >>>> This simple two-way path is not always the case when using coax.
> > If
> >>> the
> >>>> impedance mismatch is great enough, some fraction of the RF will
> >>> find an
> >>>> easier pathway flowing along the outside of the coax shielding.
> >>> This can
> >>>> cause problems such as RFI (Radio Frequency Interference) and
> >>> inaccurate
> >>>> readings on our meters (which are designed under the assumption
> > RF
> >>> will
> >>>> travel along two paths, not three). Suffering a bad case of "RF
> > on
> >>> the
> >>>> feed line" may cause RFI to affect other electronics in the
> > area,
> >>>> provide false swr readings, and cause "RF bite" on our
> > microphone.
> >>> This
> >>>> is often caused by RF radiating off the outside of the coax,
> >>> instead of
> >>>> the antenna. (Although in some cases problems may exist even
> > when

> >>> feed
> >>>> line radiation has been eliminated. RFI can be a difficult
> > puzzle
> >>> to
> >>>> solve.)
> >>>>
> >>>> Enter the balun. By "wrapping" the coax with a much greater
> >>> impedance
> >>>> than the antenna feed point, we keep any stray RF from moving
> > onto
> >>> the
> >>>> outside of the coax shielding. (Targeting a much greater
> > impedance
> >>> on
> >>>> the outside of the coax than inside it.) To the degree this is
> >>>> successful, RF may only travel onto the antenna, or back along
> > the
> >>>> inside of the coax to the XCVR. (On either the inside of the
> >>> shielding
> >>>> or along the surface of the center conductor. No RF travels
> > along
> >>> the
> >>>> core of the center conductor, due to skin effect.)
> >>>>
> >>>> Once again we have only two pathways for the RF to travel
> > allowing
> >>> our
> >>>> equipment and antenna system to behave as intended, and within
> >>>> predictable parameters. This is why a balun may be useful at the
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> >>>> point of an antenna when using coax transmission line. It is
> > also
> >>> why,
> >>>> unless the coax impedance is very close to equaling the
> > antenna's
> >>>> impedance where they meet (the feed point) a feed point balun is
> >>>> advisable when using coax.
> >>>>
> >>>> Reflection, re-reflection, and re-re-reflection....
> >>>>
> >>>> Recall the transmitted RF wave traveling along the transmission
> >>> line to
> >>>> the antenna feed point, and not finding a perfectly equal
> >>> impedance,
> >>>> some bounced back toward the XCVR in the original direction.
> >>>>
> >>>> Now the reflected wave races toward the XCVR. Some of it was
> >>> absorbed by
> >>>> the antenna, and some has been lost in the transmission line
> >>>> (heat/friction). So it isn't exactly at the same impedance when

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> >>> the "phase"
> >>>> of either the voltage or current has been shifted. To learn more
> >>> about
> >>>> this, "Reflections II" by Walter Maxwell W2DU is a great book!
> >>> Highly
> >>>> recommended! If you see one at a hamfest, buy it!
> >>>>
> >>>> We'll skip over exactly what and why this change takes place
> >>> (entire
> >>>> books have been written about just that!), but the RF wave is
> >>> different
> >>>> than when it left the XCVR, and as a result, it will "bounce"
> > (or
> >>>> re-reflect) off the XCVR, and move in the original direction
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> >>>> transmatch is being utilized. Either way, the RF wave will
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> >>>> and forth, reflecting, re-reflecting, and re-re-reflecting, and
> > so
> >>> on,
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> >>> absorbed as
> >>>> heat/friction in the transmission line. (In truth, it is always
> > the
> >>> sum
> >>>> of both events -- what isn't eventually changed into heat in the
> >>>> transmission line escapes the antenna as radiated RF.)
> >>>>
> >>>> As the swr increases, and as the inherent loss of the
> > transmission
> >>> line
> >>>> increases (lower in balanced line; higher in coax), more of the
> > RF
> >>>> energy is lost as unproductive heat/friction, and less is
> > available
> >>> to
> >>>> radiate from the antenna as a useful radio signal.
> >>>>
> >>>> This is why high swr on balanced feed line isn't all that bad.
> > Most
> >>> of

> >>>> the RF energy will eventually "bounce" out of the antenna
> > anyway.
> >>> It
> >>>> doesn't really matter if it makes it out the very first trip, on
> >>> the
> >>>> sixth, or 16th. Radiated is radiated. The person receiving your
> >>> radio
> >>>> signal will never know if they are hearing the very first wave
> > or a
> >>>> re-reflected wave. It just doesn't matter after the energy
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> >>> the
> >>>> antenna.
> >>>>
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> >>>>
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> >>> Coax,
> >>>> suffering much greater losses to the RF as it traverses along it
> >>>> ("attenuation"), simply absorbs too much of the RF as it bounces
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> >>>> to escape out the antenna.
> >>>>
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> >>>> elements fed by balanced transmission line, operate very
> >>> efficiently
> >>>> even under high swr conditions. That is why these types of
> > antennas
> >>>> (from dipoles to loops) have built a reputation as practical
> > multi-
> >>> band
> >>>> solutions for many amateur radio operators. The only stumbling
> >>> block is
> >>>> transforming their wide ranges of impedance into something close
> > to
> >>> a
> >>>> nominal 50-Ohms resistive (meaning little or no reactance) to
> > match
> >>> our
> >>>> "modern" (meaning non-tube) XCVRs. And that is precisely what a
> >>>> transmatch is designed to accomplish.
> >>>>
> >>>>
> >>>>
> >>>>
> >>>>> All my HF antenna experience is in

> >>>>> receive only antennas for shortwave. I've been dragging my feet
> > on
> >>>>> getting my General Class license but finally decided to go for
> > it
> >>>>> this month. Of course, I had masterd 5 wpm CW just in time for
> >>> that
> >>>>> requirement to be abolished. :-)
> >>>> Heheh, yes, that sounds just about right! ;) Welcome to HF! And
> >>> welcome
> >>>> to the world of transmitting antennas. They can be a lot of fun!
> >>>>
> >>>>
> >>>>
> >>>>> Some people seem to put all their faith in the modeling
> > software.
> >>>>> Whatever works for them, but I would never take a computer
> > model
> >>> as
> >>>>> being 100% accurate. To me, the model really has to be built in
> > 3D
> >>>>> to prove it works.
> >>>> ...snip...
> >>>>
> >>>> Precisely! It can save a lot of time by eliminating very bad or
> >>> very
> >>>> unlikely designs, but it is almost impossible to fully model the
> >>>> environment in which the antenna will be built. So you have to
> >>> actually
> >>>> build it and test it at some point. This is like other rules of
> >>> thumb.
> >>>> Take any of the "formulas" for determining the proper length of
> >>> antenna
> >>>> elements. They all say to start too long and slowing trim it to
> > a
> >>> proper
> >>>> match.
> >>>>
> >>>> Whether a formula for a simple dipole, or a computer model of a
> >>> loop or
> >>>> beam, the idea isn't to make the perfect antenna on paper and
> > then
> >>>> reproduce it exactly in the real world. It is to "get close" and
> >>>> possibly avoid some time lost in fiddling around. Beams are a
> > good
> >>>> example. You can play with the modeling software and try out
> >>> different
> >>>> element combinations and get an idea of the resulting envelopes
> > and
> >>> feed
> >>>> point impedances. This saves a lot of time, but ultimately you

> > have
> >>>> build it and tune it to your exact site.
> >>>>
> >>>>
> >>>>> ...snip... What the heck though, and after
> >>>>> reading your reply, I believe I will go with the 40 meter loop
> > and
> >>>>> orient it as a horizontal with paralell feedline.
> >>>> Adding a transmatch (aka antenna tuner) between your XCVR and
> >>> antenna
> >>>> will most likely allow this to become a very usable multi-band
> >>> antenna.
> >>>> Every antenna displays its own range of impedances, and these
> > vary
> >>> on
> >>>> each band. (This "impedance" is more properly called "complex
> >>> impedance"
> >>>> because it includes some reactance.) Very low impedances are
> >>> typically
> >>>> difficult for many transmatches to "match," but any extreme
> > value
> >>> of
> >>>> complex impedance may fall outside the range which a given
> >>> transmatch
> >>>> can "match." ("Match" means transforming the existing complex
> >>> impedance,
> >>>> on the antenna-side of the transmatch, into an impedance (with
> >>> little or
> >>>> no reactance) close to that which the XCVR is designed to work
> >>> into.)
> >>>> But there are workarounds, such as matching stubs, and other
> >>> solutions.
> >>>> (See below.)
> >>>>
> >>>>
> >>>>> Regarding running the line into the shack, shorting the wires
> > and
> >>>>> connecting them to the rig, there are a few reasons I can't do
> >>> this.
> >>>>> For one, there are children and unknowing people in the area
> > that
> >>>>> may get zapped if they are able to touch the wires. My ham
> >>> station
> >>>>> (or what's left of it) is in my basement office. I need to run
> >>> the
> >>>>> line vertically to about 8' above the ground, make the short at
> >>> that
> >>>>> point, and install a matching network either on a pole or tree
> > in
> >>> a

> >>>>> PVC junction box. The ground wire would go there also, and then
> > I
> >>>>> need run the ground and an insulated feedwire the remaining
> >>> distance
> >>>>> to the ground, bury it and slip it through the side of the
> > house
> >>>>> into the shack.
> >>>>>
> >>>> If you are married to the idea of having the vertical option,
> > this
> >>> may
> >>>> be true. You might consider a simple 30-amp automotive relay
> > too.
> >>> Put
> >>>> 12-vdc to it and remotely control that shorting switch.
> >>>>
> >>>> I'm not sure I'm picturing this properly. Where is the antenna
> > feed
> >>>> point in relation to your shack? Pretty much right above it, or
> > 50-
> >>> feet
> >>>> distance after you get outside the house?
> >>>>
> >>>> I'm wondering if we're talking about a longer run from the shack
> > to
> >>> the
> >>>> antenna feed point, like 50- to 100-feet or more, or a much
> > shorter
> >>> run
> >>>> like 20- or 30-feet?
> >>>>
> >>>> Also, consider getting outside in as short a run as possible,
> > and
> >>> making
> >>>> a longer run of ladder line to get to the antenna feed point. I
> > had
> >>> one
> >>>> dipole for which I ran 300-Ohm twin lead transmission line half
> > way
> >>>> around my house under the overhang of the roof.
> >>>>
> >>>>
> >
> >
> >
> >
> >
> > Yahoo! Groups Links
> >
> >

> >
>

2670. RE: [SkyWires] Re: Feed Arrangement for Operating the Loop as a Vertical Antenna

Yahoo group: SkyWires
Date: 2007-10-06 14:44:42 UTC
From: ag0k@ag0k.com
Topic: 2643 Message: 2670
Attachments: 1 described; binary payloads are missing from this source WARC

Maybe wearing a camo garment would help
hide you in your covert operation...
Smile

Grace, Peace, and Joy, be yours,

Rev. W. Clinton Stockton, pastor
Andrews Presbyterian Church
104 S. Rosemary Ave
Andrews, SC 29510
<mailto:pastor@...>
pastor@...
Office 843 264 5596
Manse 843 264 8756
Cellphone 843 325-9760

-----Original Message-----
From: SkyWires@yahoogroups.com
[mailto:SkyWires@yahoogroups.com] On
Behalf Of denisnh
Sent: Saturday, October 06, 2007 10:40
AM
To: SkyWires@yahoogroups.com
Subject: [SkyWires] Re: Feed Arrangement
for Operating the Loop as a Vertical
Antenna

Oh, another thing that can be an
advantage with the atlatl is if you
have a dog that fetches. My dog is an
excellent Frisbee dog and goes
after anything. He's part coon hound and
very fast with long legs.
When setting up a wire, I can just make
like I'm playing with my dog
by slinging ordinary tennis balls until
I'm sure nobody is looking and
grab the tennis ball with the leader
string attached and sling that up
into the tree. I just hope my dog
doesn't climb the tree after it.
Make for a nice diversion for a "covert"
project. :-)

--- In SkyWires@yahoogroup
<mailto:SkyWires%40yahoogroups.com>
s.com, Erik Weaver <erik@...> wrote:
>
> Heeheh, hi Denis,
>
> Ya, I can easily imagine some 'lost
time' trying to cross the border
> with various weapons. If you follow
the various lists, or perhaps
search
> their archives, you'll find many
things are considered weapons, and
some
> of those that are not required a
fishing license. The guys with the
guns
> figure if you have any fishing gear
you need that permit. Or a fine. Of
> course, you can always come back and
try arguing with a judge later
on...
>
> Arrows, crossbow (whether handheld or
"industrial" strength), small
> pieces of lead (sinkers) moving at
rapid velocities all incur a certain
> level of risk, if not illegality. A
tennis ball on the other hand seems
> about as "warm and fuzzy" as we can
get in this messed up PC-crazy
world.
>
> Besides, the atlatl is quite cool! Did
you check out the international
> competitions? Neat stuff! A very old
technology, assisting us with very
> modern technology. If only Ug and Grog
had known when they invented
it! :)
>
> It is a doggie toy for throwing tennis
balls. Everyone either has a
dog,
> may be getting a dog, or visiting a
friend who has a dog. So you can
> always carry one of these. They are
just plastic, very light to carry,
> and even fun to play with! Buy extra
tennis balls because you'll lose
> some just flinging them around :) My

friend and I lost one or two that
> day, for exactly that reason!
>
> You may want to get two of the
atlatl's so you can play catch.
>
> Have fun!
> Erik
>
> denisnh wrote:
> > Hi Erik. The Atlatl looks very cool!
What I've been using is a
> > sling shot with "high powered" latex
bands. A half ounce fishing
> > sinker is then attached to some
Spider Wire fishing string spooled
> > onto a spinning reel. I have a huge
pine tree that's 80' tall and I
> > can get the line right over it with
that setup. I set up an inverted-
> > V there.
> >
> > I also have an 80# pistol crossbow,
and I modify the little bolt by
> > removing the tip, placing a small
weight in place of the tip and
> > drilling a hole at the end of the
shaft for the same fishing setup I
> > mentoned above. That works even
better but I don't take it out much
> > since it looks rather ominous if the
neighbors happen to get a
> > glimpse of it.
> >
> > I have some relatives in Canada, one
of which owns a farm. When
> > visiting, I like to erect a
temporary antenna for use during my
stay.
> > I was surprised to find out that
sling shots are illegal in that
> > area, and the pistol crossbow is
definitely illegal. I had figured a
> > light bow but the atlatl looks very
promising. As for the air gun,
> > can you imagine the looks on the
faces of the customs agents trying
> > to get something like that across
the border. Yikes!
> >

> > Thanks,
> > Denis
> >
> > --- In SkyWires@yahoogroup
<mailto:SkyWires%40yahoogroups.com>
s.com, Erik Weaver <erik@> wrote:
> >> Hi Denis,
> >>
> >> An atlatl is another option:
> >>
> >> http://www.n0ew.
<http://www.n0ew.org/k0s/atlatl/>
org/k0s/atlatl/
> >>
> >> This really seems to work well and
it is pretty cheap. My friend
> > and I
> >> didn't get up over 100-feet, but I
think we got every bit of 50-
> > feet
> >> height into the tree.
> >>
> >> If you really want another
'project' you might think about building

> > an
> >> air gun:
> >>
> >> http://www.n0ew.
<http://www.n0ew.org/k0s/air_gun/>
org/k0s/air_gun/
> >>
> >> Have fun!
> >> Erik
> >>
> >> denisnh wrote:
> >>> Thanks again, Erik! From what you
wrote and the research I've
> > done,
> >>> I decided to forget about the
vertical radiator and go with a
> > full
> >>> wave 18g loop and 16g homebrew
ladder line (I have all this on
> >>> hand). Guess I'm fickle. LOL
> >>>
> >>> What I really dread is the
cutting. The trees in my backyard are
> > so
> >>> dense that I'll have to get the

chainsaw out and do some serious
> >>> cutting. I did read about one guy
who shot an arrow right over
> > the
> >>> trees with some fishing string
attached, then pulled his wire
> > right
> >>> over the tops of the trees for his
antenna. That scares me a
> > bit.
> >>> Not to mention that running enough
power could start a fire! But
> > it
> >>> seems to work for him and he
mentioned that once in a while he'll
> >>> pull the wire one way or the other
to compensate for any areas
> > that
> >>> are chafed through.
> >>>
> >>> Thanks,
> >>> Denis
> >>>
> >>> --- In SkyWires@yahoogroup
<mailto:SkyWires%40yahoogroups.com>
s.com, Erik Weaver <erik@> wrote:
> >>>> Hi Denis (I thought "Denisnh" was
a unusual name! heheh)....
> >>>>
> >>>> Comments in body below....
> >>>>
> >>>> ...snip...
> >>>>
> >>>> > The curves for parallel lines
all hug the bottom of the
> >>>>> chart where the favorable SWR
and other factors are, while the
> >>> coax
> >>>>> lines soar skyward surprisingly
fast, which concurs with your
> >>> post.
> >>>> Cebik's web pages are filled with
useful information -- time
> > there
> >>> is
> >>>> well spent. The rapid rise of
losses in coax under high swr
> >>> conditions
> >>>> is in sharp contrast to the low
losses generally found in

> > balanced
> >>>> ("parallel") feed line. It is one
of the major differences
> > between
> >>> them.
> >>>> About the only negative that
comes to mind with balanced feed
> > line
> >>> is
> >>>> the need to carefully route it;
so it isn't practical in all
> > cases.
> >>>> Here's something else to
consider....
> >>>>
> >>>> Remember first the rare "special
case" where impedance is the
> > same
> >>>> everywhere in the antenna system
(XCVR, transmission line,
> > antenna,
> >>>> etc). With the exception of a
tiny loss of energy as electrons
> > rub
> >>>> against one another (this loss
due to friction is usually
> >>> insignificant
> >>>> in the typical amateur radio
installation), nearly all the RF
> >>> ("Radio
> >>>> Frequency") energy generated by
the XCVR radiates from the
> > antenna
> >>> as
> >>>> radio waves. This is our goal of
course.
> >>>>
> >>>> By the way, I usually speak in
terms of transmitting a radio
> > signal
> >>> and
> >>>> trying to send it out into the
world (our "Hello World!"
> > message),
> >>> but
> >>>> the efficiencies (or lack
thereof) work exactly the same in
> >>> reverse. In
> >>>> other words, the antenna has the
same gain (or loss) as a

> > receiving
> >>>> antenna, as it does when
transmitting. So our rare special case
> >>> antenna
> >>>> will also deliver all the RF
energy it collects to the receiver
> >>> (less
> >>>> friction/heat lost to move the
electrons -- which can never be
> >>> avoided
> >>>> in the real world).
> >>>>
> >>>> Now when the impedance is one
value on the transmission line
> > (and
> >>> it
> >>>> doesn't matter what kind of
transmission line), and the
> > impedance
> >>> of the
> >>>> antenna is a different value,
some RF energy is reflected off
> > the
> >>>> antenna feed point, back to the
XCVR. How much is reflected
> > depends
> >>> upon
> >>>> how great the difference is
between the impedances.
> >>>>
> >>>> There is a difference in behavior
at the antenna feed point
> > between
> >>> a
> >>>> coax fed antenna and a parallel
line fed antenna.
> >>>>
> >>>> Balanced (parallel) line only
offers a two-way path between the
> >>> antenna
> >>>> and the XCVR. Coax may offer a
third pathway -- along the
> > outside
> >>> of the
> >>>> shielding (aka "braid") of the
coax. This is because the higher
> > the
> >>>> frequency of alternating current
(like RF) the less deeply the
> > RF

> >>>> penetrates into the conductor --
this is called "skin effect".
> > RF
> >>>> doesn't penetrate very deeply
into the conductor; it travels
> > along
> >>> the
> >>>> outer-most surface, shallow
enough in fact that one wave of
> > energy
> >>> can
> >>>> travel along the inner surface of
the coax shielding while a
> > second
> >>> wave
> >>>> travels along the outside surface
of the same coax shielding,
> > and
> >>> the
> >>>> two will never meet. Therefore,
coax can offer three conductors
> > to
> >>> RF:
> >>>> along the inner conductor; along
the inside of the coax
> > shielding;
> >>> and
> >>>> along the outside of the coax
shielding. We desire the first two
> >>> paths,
> >>>> but we do not (usually) benefit
from RF flowing on the outside
> > of
> >>> the
> >>>> coax shield.
> >>>>
> >>>> Since balanced (parallel
conductors) transmission line (aka feed
> >>> line)
> >>>> is constructed of only two wires
(which may be either stranded
> > or
> >>> solid
> >>>> wire), the reflected wave (that
energy which is reflecting from
> > the
> >>>> antenna feed point, back to the
XCVR) has only one return path
> >>> available
> >>>> to it -- it returns ("reflects")

back along the same conductor
> > that
> >>> it
> >>>> originally traversed. This is a
simple condition, and no "balun"
> >>> (more
> >>>> accurately "bal-bal" for
"balanced-to-balanced" in this case) is
> >>>> required to maintain the desired
energy pathway between the XCVR
> >>> and
> >>>> antenna.
> >>>>
> >>>> ("Balun" is a conjunction of
"balanced" and "unbalanced"
> >>> identifying a
> >>>> transition from a balanced
transmission line to an unbalanced
> > line.
> >>>> "Unun" identifies transitioning
from "unbalanced"
> > to "unbalanced"
> >>> line.
> >>>> "Balbal" identifies transitioning
from "balanced" to "balanced"
> >>> line.
> >>>> Depending upon the design, this
transformation may occur at a
> >>> number of
> >>>> different ratios, of which 1:1
and 4:1 are the most commonly
> > used.)
> >>>> This simple two-way path is not
always the case when using coax.
> > If
> >>> the
> >>>> impedance mismatch is great
enough, some fraction of the RF will
> >>> find an
> >>>> easier pathway flowing along the
outside of the coax shielding.
> >>> This can
> >>>> cause problems such as RFI (Radio
Frequency Interference) and
> >>> inaccurate
> >>>> readings on our meters (which are
designed under the assumption
> > RF
> >>> will
> >>>> travel along two paths, not

three). Suffering a bad case of "RF
> > on
> >>> the
> >>>> feed line" may cause RFI to
affect other electronics in the
> > area,
> >>>> provide false swr readings, and
cause "RF bite" on our
> > microphone.
> >>> This
> >>>> is often caused by RF radiating
off the outside of the coax,
> >>> instead of
> >>>> the antenna. (Although in some
cases problems may exist even
> > when
> >>> feed
> >>>> line radiation has been
eliminated. RFI can be a difficult
> > puzzle
> >>> to
> >>>> solve.)
> >>>>
> >>>> Enter the balun. By "wrapping"
the coax with a much greater
> >>> impedance
> >>>> than the antenna feed point, we
keep any stray RF from moving
> > onto
> >>> the
> >>>> outside of the coax shielding.
(Targeting a much greater
> > impedance
> >>> on
> >>>> the outside of the coax than
inside it.) To the degree this is
> >>>> successful, RF may only travel
onto the antenna, or back along
> > the
> >>>> inside of the coax to the XCVR.
(On either the inside of the
> >>> shielding
> >>>> or along the surface of the
center conductor. No RF travels
> > along
> >>> the
> >>>> core of the center conductor, due
to skin effect.)
> >>>>
> >>>> Once again we have only two

pathways for the RF to travel
> > allowing
> >>> our
> >>>> equipment and antenna system to
behave as intended, and within
> >>>> predictable parameters. This is
why a balun may be useful at the
> >>> feed
> >>>> point of an antenna when using
coax transmission line. It is
> > also
> >>> why,
> >>>> unless the coax impedance is very
close to equaling the
> > antenna's
> >>>> impedance where they meet (the
feed point) a feed point balun is
> >>>> advisable when using coax.
> >>>>
> >>>> Reflection, re-reflection, and
re-re-reflection....
> >>>>
> >>>> Recall the transmitted RF wave
traveling along the transmission
> >>> line to
> >>>> the antenna feed point, and not
finding a perfectly equal
> >>> impedance,
> >>>> some bounced back toward the XCVR
in the original direction.
> >>>>
> >>>> Now the reflected wave races
toward the XCVR. Some of it was
> >>> absorbed by
> >>>> the antenna, and some has been
lost in the transmission line
> >>>> (heat/friction). So it isn't
exactly at the same impedance when
> > it
> >>>> started, and it has been altered
in other ways too. Namely
> >>> the "phase"
> >>>> of either the voltage or current
has been shifted. To learn more
> >>> about
> >>>> this, "Reflections II" by Walter
Maxwell W2DU is a great book!
> >>> Highly
> >>>> recommended! If you see one at a
hamfest, buy it!

> >>>>
> >>>> We'll skip over exactly what and
why this change takes place
> >>> (entire
> >>>> books have been written about
just that!), but the RF wave is
> >>> different
> >>>> than when it left the XCVR, and
as a result, it will "bounce"
> > (or
> >>>> re-reflect) off the XCVR, and
move in the original direction
> > again.
> >>> It
> >>>> is re-reflected back toward the
antenna feed point.
> >>>>
> >>>> The re-reflection point will be
the transmatch instead of the
> > XCVR
> >>> if a
> >>>> transmatch is being utilized.
Either way, the RF wave will
> > bounce
> >>> back
> >>>> and forth, reflecting,
re-reflecting, and re-re-reflecting, and

> > so
> >>> on,
> >>>> until it either all eventually
escapes out the antenna or is
> >>> absorbed as
> >>>> heat/friction in the transmission
line. (In truth, it is always
> > the
> >>> sum
> >>>> of both events -- what isn't
eventually changed into heat in the
> >>>> transmission line escapes the
antenna as radiated RF.)
> >>>>
> >>>> As the swr increases, and as the
inherent loss of the
> > transmission
> >>> line
> >>>> increases (lower in balanced
line; higher in coax), more of the
> > RF
> >>>> energy is lost as unproductive

heat/friction, and less is
> > available
> >>> to
> >>>> radiate from the antenna as a
useful radio signal.
> >>>>
> >>>> This is why high swr on balanced
feed line isn't all that bad.
> > Most
> >>> of
> >>>> the RF energy will eventually
"bounce" out of the antenna
> > anyway.
> >>> It
> >>>> doesn't really matter if it makes
it out the very first trip, on
> >>> the
> >>>> sixth, or 16th. Radiated is
radiated. The person receiving your
> >>> radio
> >>>> signal will never know if they
are hearing the very first wave
> > or a
> >>>> re-reflected wave. It just
doesn't matter after the energy
> > escapes
> >>> the
> >>>> antenna.
> >>>>
> >>>> Escaping the antenna is the
trick!
> >>>>
> >>>> And that is where coax may not
work well in the same situation.
> >>> Coax,
> >>>> suffering much greater losses to
the RF as it traverses along it
> >>>> ("attenuation"), simply absorbs
too much of the RF as it bounces
> >>> back
> >>>> and forth, especially under high
swr conditions. There isn't
> > much
> >>> left
> >>>> to escape out the antenna.
> >>>>
> >>>> All of which leads to the
generalized conclusion that wire
> > antenna
> >>>> elements fed by balanced

transmission line, operate very
> >>> efficiently
> >>>> even under high swr conditions.
That is why these types of
> > antennas
> >>>> (from dipoles to loops) have
built a reputation as practical
> > multi-
> >>> band
> >>>> solutions for many amateur radio
operators. The only stumbling
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> > to
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> >>> our
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> >>>>
> >>>>
> >>>>
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> >>>>> requirement to be abolished. :-)
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about right! ;) Welcome to HF! And
> >>> welcome
> >>>> to the world of transmitting
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> >>>>
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> >>>>> Whatever works for them, but I
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> > good
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modeling software and try out
> >>> different
> >>>> element combinations and get an
idea of the resulting envelopes
> > and
> >>> feed
> >>>> point impedances. This saves a

lot of time, but ultimately you
> > have
> >>>> build it and tune it to your
exact site.
> >>>>
> >>>>
> >>>>> ...snip... What the heck though,
and after
> >>>>> reading your reply, I believe I
will go with the 40 meter loop
> > and
> >>>>> orient it as a horizontal with
paralell feedline.
> >>>> Adding a transmatch (aka antenna
tuner) between your XCVR and
> >>> antenna
> >>>> will most likely allow this to
become a very usable multi-band
> >>> antenna.
> >>>> Every antenna displays its own
range of impedances, and these
> > vary
> >>> on
> >>>> each band. (This "impedance" is
more properly called "complex
> >>> impedance"
> >>>> because it includes some
reactance.) Very low impedances are
> >>> typically
> >>>> difficult for many transmatches
to "match," but any extreme
> > value
> >>> of
> >>>> complex impedance may fall
outside the range which a given
> >>> transmatch
> >>>> can "match." ("Match" means
transforming the existing complex
> >>> impedance,
> >>>> on the antenna-side of the
transmatch, into an impedance (with
> >>> little or
> >>>> no reactance) close to that which
the XCVR is designed to work
> >>> into.)
> >>>> But there are workarounds, such
as matching stubs, and other
> >>> solutions.
> >>>> (See below.)
> >>>>

> >>>>
> >>>>> Regarding running the line into
the shack, shorting the wires
> > and
> >>>>> connecting them to the rig,
there are a few reasons I can't do
> >>> this.
> >>>>> For one, there are children and
unknowing people in the area
> > that
> >>>>> may get zapped if they are able
to touch the wires. My ham
> >>> station
> >>>>> (or what's left of it) is in my
basement office. I need to run
> >>> the
> >>>>> line vertically to about 8'
above the ground, make the short at
> >>> that
> >>>>> point, and install a matching
network either on a pole or tree
> > in
> >>> a
> >>>>> PVC junction box. The ground
wire would go there also, and then
> > I
> >>>>> need run the ground and an
insulated feedwire the remaining
> >>> distance
> >>>>> to the ground, bury it and slip
it through the side of the
> > house
> >>>>> into the shack.
> >>>>>
> >>>> If you are married to the idea of
having the vertical option,
> > this
> >>> may
> >>>> be true. You might consider a
simple 30-amp automotive relay
> > too.
> >>> Put
> >>>> 12-vdc to it and remotely control
that shorting switch.
> >>>>
> >>>> I'm not sure I'm picturing this
properly. Where is the antenna
> > feed
> >>>> point in relation to your shack?
Pretty much right above it, or

> > 50-
> >>> feet
> >>>> distance after you get outside
the house?
> >>>>
> >>>> I'm wondering if we're talking
about a longer run from the shack
> > to
> >>> the
> >>>> antenna feed point, like 50- to
100-feet or more, or a much
> > shorter
> >>> run
> >>>> like 20- or 30-feet?
> >>>>
> >>>> Also, consider getting outside in
as short a run as possible,
> > and
> >>> making
> >>>> a longer run of ladder line to
get to the antenna feed point. I
> > had
> >>> one
> >>>> dipole for which I ran 300-Ohm
twin lead transmission line half
> > way
> >>>> around my house under the
overhang of the roof.
> >>>>
> >>>>
> >
> >
> >
> >
> >
> > Yahoo! Groups Links
> >
> >
> >
>

2671. Re: Feed Arrangement for Operating the Loop as a Vertical Antenna

Yahoo group: SkyWires
Date: 2007-10-06 14:46:06 UTC
From: denisnh
Topic: 2643 Message: 2671

Thanks Earl. Just saw your reply after posting more requests for advice on this. Now that you mention it, the dielectric in RG-6 is some pretty sorry looking foam. Your response made me realize that this inferior dielectric will eventually get warn away and short the center conductor with the shield. Maybe I'll try a small vertical loop as a test benchmark and see how it does. Of course there may be a way to heat up the center conductor using high current DC and pulling it out as the dielectric melts. But with three hundred feet of cable??? Nah, bad idea.

--- In SkyWires@yahoogroups.com, Earl Needham <needhame1@...> wrote:
>
> At 08:27 10/6/2007, denisnh wrote:
> >The idea of using a coax with the shield only as a large diameter
> >radiating wire antenna. Any thoughts?
>
> I think you could cut the coax the length of a regular
> dipole and connect the shield to the center conductor at each end of
> the segments and run it as a regular dipole. That would be
> simple. As for using just the shield NOT connected to the center
> conductor -- well, I think you might have trouble keeping the shield
> totally disconnected from the center conductor -- keeping them from
> touching -- and beyond that, I don't think it would operate any
> differently, but that's just my gut feeling. I've never tried it.
>
> 7 3
> Earl
>
> KD5XB -- Earl Needham
> Clovis, New Mexico DM84jk
> http://groups.yahoo.com/group/cw_bugs
> Quoting from the Coast Guard: ZUT
>

2672. Re: Feed Arrangement for Operating the Loop as a Vertical Antenna

Yahoo group: SkyWires
Date: 2007-10-06 15:02:03 UTC
From: denisnh
Topic: 2643 Message: 2672

Hi Reverend. I just never got used to setting up wire antennas and how it must look to casual observers. I mean, putting up big, heavy copper wires that conduct a lot of current must make some onlookers a little edgy and I tend to try and be a good neighbor. On the other hand, if you tell them what it's for, they start blaming you for everything from TVI to crop circles. I could always say it's a geomagnetic disturbance sensor that I'm helping my college daughter with as a school climate project. :-) I do have a weather station on my roof so that would fit in nicely with my "cover". LOL (You know, that just might work!)

Most of the people here are pretty cool. There is one neighbor to the side of me, though, and the nosy #*@%$*& people just can't mind my own business. It's pretty rural and wooded here, but I can hear them talking away about what I'm doing as if I can't hear them. I usually make a comment regarding their conversation and give a cordial wave as I head back into the house. I already have five attachment points to this loop with at least two more to go so it's looking pretty involved.

Let's face it, running heavy copper wires through trees does look pretty scary to some folks. If they came over to ask about it I would just tell them it's an MW receiving antenna for MW. But they just watch thinking I can't hear or see them. It get's pretty annoying and I have absolutely nothing in common with these folks.

Night time deployment of antennas always turns into a disaster. Leader strings and ropes get tangled or broken and and can't get a good aim on that fork at the top of the tree.

What are ya gonna do. :-)

--- In SkyWires@yahoogroups.com, <ag0k@...> wrote:
>
> Maybe wearing a camo garment would help
> hide you in your covert operation...
> Smile
>
>
> Grace, Peace, and Joy, be yours,
>
> Rev. W. Clinton Stockton, pastor
> Andrews Presbyterian Church
> 104 S. Rosemary Ave
> Andrews, SC 29510
> <mailto:pastor@...>
> pastor@...

> Office 843 264 5596
> Manse 843 264 8756
> Cellphone 843 325-9760
>
>
>
> -----Original Message-----
> From: SkyWires@yahoogroups.com
> [mailto:SkyWires@yahoogroups.com] On
> Behalf Of denisnh
> Sent: Saturday, October 06, 2007 10:40
> AM
> To: SkyWires@yahoogroups.com
> Subject: [SkyWires] Re: Feed Arrangement
> for Operating the Loop as a Vertical
> Antenna
>
>
>
> Oh, another thing that can be an
> advantage with the atlatl is if you
> have a dog that fetches. My dog is an
> excellent Frisbee dog and goes
> after anything. He's part coon hound and
> very fast with long legs.
> When setting up a wire, I can just make
> like I'm playing with my dog
> by slinging ordinary tennis balls until
> I'm sure nobody is looking and
> grab the tennis ball with the leader
> string attached and sling that up
> into the tree. I just hope my dog
> doesn't climb the tree after it.
> Make for a nice diversion for a "covert"
> project. :-)
>
> --- In SkyWires@yahoogroup
> <mailto:SkyWires%40yahoogroups.com>
> s.com, Erik Weaver <erik@> wrote:
> >
> > Heeheh, hi Denis,
> >
> > Ya, I can easily imagine some 'lost
> time' trying to cross the border
> > with various weapons. If you follow
> the various lists, or perhaps
> search
> > their archives, you'll find many
> things are considered weapons, and
> some

> > of those that are not required a
> fishing license. The guys with the
> guns
> > figure if you have any fishing gear
> you need that permit. Or a fine. Of
> > course, you can always come back and
> try arguing with a judge later
> on...
> >
> > Arrows, crossbow (whether handheld or
> "industrial" strength), small
> > pieces of lead (sinkers) moving at
> rapid velocities all incur a certain
> > level of risk, if not illegality. A
> tennis ball on the other hand seems
> > about as "warm and fuzzy" as we can
> get in this messed up PC-crazy
> world.
> >
> > Besides, the atlatl is quite cool! Did
> you check out the international
> > competitions? Neat stuff! A very old
> technology, assisting us with very
> > modern technology. If only Ug and Grog
> had known when they invented
> it! :)
> >
> > It is a doggie toy for throwing tennis
> balls. Everyone either has a
> dog,
> > may be getting a dog, or visiting a
> friend who has a dog. So you can
> > always carry one of these. They are
> just plastic, very light to carry,
> > and even fun to play with! Buy extra
> tennis balls because you'll lose
> > some just flinging them around :) My
> friend and I lost one or two that
> > day, for exactly that reason!
> >
> > You may want to get two of the
> atlatl's so you can play catch.
> >
> > Have fun!
> > Erik
> >
> > denisnh wrote:
> > > Hi Erik. The Atlatl looks very cool!
> What I've been using is a
> > > sling shot with "high powered" latex

> bands. A half ounce fishing
> > > sinker is then attached to some
> Spider Wire fishing string spooled
> > > onto a spinning reel. I have a huge
> pine tree that's 80' tall and I
> > > can get the line right over it with
> that setup. I set up an inverted-
> > > V there.
> > >
> > > I also have an 80# pistol crossbow,
> and I modify the little bolt by
> > > removing the tip, placing a small
> weight in place of the tip and
> > > drilling a hole at the end of the
> shaft for the same fishing setup I
> > > mentoned above. That works even
> better but I don't take it out much
> > > since it looks rather ominous if the
> neighbors happen to get a
> > > glimpse of it.
> > >
> > > I have some relatives in Canada, one
> of which owns a farm. When
> > > visiting, I like to erect a
> temporary antenna for use during my
> stay.
> > > I was surprised to find out that
> sling shots are illegal in that
> > > area, and the pistol crossbow is
> definitely illegal. I had figured a
> > > light bow but the atlatl looks very
> promising. As for the air gun,
> > > can you imagine the looks on the
> faces of the customs agents trying
> > > to get something like that across
> the border. Yikes!
> > >
> > > Thanks,
> > > Denis
> > >
> > > --- In SkyWires@yahoogroup
> <mailto:SkyWires%40yahoogroups.com>
> s.com, Erik Weaver <erik@> wrote:
> > >> Hi Denis,
> > >>
> > >> An atlatl is another option:
> > >>
> > >> http://www.n0ew.
> <http://www.n0ew.org/k0s/atlatl/>
> org/k0s/atlatl/

> > >>
> > >> This really seems to work well and
> it is pretty cheap. My friend
> > > and I
> > >> didn't get up over 100-feet, but I
> think we got every bit of 50-
> > > feet
> > >> height into the tree.
> > >>
> > >> If you really want another
> 'project' you might think about building
>
> > > an
> > >> air gun:
> > >>
> > >> http://www.n0ew.
> <http://www.n0ew.org/k0s/air_gun/>
> org/k0s/air_gun/
> > >>
> > >> Have fun!
> > >> Erik
> > >>
> > >> denisnh wrote:
> > >>> Thanks again, Erik! From what you
> wrote and the research I've
> > > done,
> > >>> I decided to forget about the
> vertical radiator and go with a
> > > full
> > >>> wave 18g loop and 16g homebrew
> ladder line (I have all this on
> > >>> hand). Guess I'm fickle. LOL
> > >>>
> > >>> What I really dread is the
> cutting. The trees in my backyard are
> > > so
> > >>> dense that I'll have to get the
> chainsaw out and do some serious
> > >>> cutting. I did read about one guy
> who shot an arrow right over
> > > the
> > >>> trees with some fishing string
> attached, then pulled his wire
> > > right
> > >>> over the tops of the trees for his
> antenna. That scares me a
> > > bit.
> > >>> Not to mention that running enough
> power could start a fire! But
> > > it

> > >>> seems to work for him and he
> mentioned that once in a while he'll
> > >>> pull the wire one way or the other
> to compensate for any areas
> > > that
> > >>> are chafed through.
> > >>>
> > >>> Thanks,
> > >>> Denis
> > >>>
> > >>> --- In SkyWires@yahoogroup
> <mailto:SkyWires%40yahoogroups.com>
> s.com, Erik Weaver <erik@> wrote:
> > >>>> Hi Denis (I thought "Denisnh" was
> a unusual name! heheh)....
> > >>>>
> > >>>> Comments in body below....
> > >>>>
> > >>>> ...snip...
> > >>>>
> > >>>> > The curves for parallel lines
> all hug the bottom of the
> > >>>>> chart where the favorable SWR
> and other factors are, while the
> > >>> coax
> > >>>>> lines soar skyward surprisingly
> fast, which concurs with your
> > >>> post.
> > >>>> Cebik's web pages are filled with
> useful information -- time
> > > there
> > >>> is
> > >>>> well spent. The rapid rise of
> losses in coax under high swr
> > >>> conditions
> > >>>> is in sharp contrast to the low
> losses generally found in
> > > balanced
> > >>>> ("parallel") feed line. It is one
> of the major differences
> > > between
> > >>> them.
> > >>>> About the only negative that
> comes to mind with balanced feed
> > > line
> > >>> is
> > >>>> the need to carefully route it;
> so it isn't practical in all
> > > cases.
> > >>>> Here's something else to

> consider....
> > >>>>
> > >>>> Remember first the rare "special
> case" where impedance is the
> > > same
> > >>>> everywhere in the antenna system
> (XCVR, transmission line,
> > > antenna,
> > >>>> etc). With the exception of a
> tiny loss of energy as electrons
> > > rub
> > >>>> against one another (this loss
> due to friction is usually
> > >>> insignificant
> > >>>> in the typical amateur radio
> installation), nearly all the RF
> > >>> ("Radio
> > >>>> Frequency") energy generated by
> the XCVR radiates from the
> > > antenna
> > >>> as
> > >>>> radio waves. This is our goal of
> course.
> > >>>>
> > >>>> By the way, I usually speak in
> terms of transmitting a radio
> > > signal
> > >>> and
> > >>>> trying to send it out into the
> world (our "Hello World!"
> > > message),
> > >>> but
> > >>>> the efficiencies (or lack
> thereof) work exactly the same in
> > >>> reverse. In
> > >>>> other words, the antenna has the
> same gain (or loss) as a
> > > receiving
> > >>>> antenna, as it does when
> transmitting. So our rare special case
> > >>> antenna
> > >>>> will also deliver all the RF
> energy it collects to the receiver
> > >>> (less
> > >>>> friction/heat lost to move the
> electrons -- which can never be
> > >>> avoided
> > >>>> in the real world).
> > >>>>
> > >>>> Now when the impedance is one

> value on the transmission line
> > > (and
> > >>> it
> > >>>> doesn't matter what kind of
> transmission line), and the
> > > impedance
> > >>> of the
> > >>>> antenna is a different value,
> some RF energy is reflected off
> > > the
> > >>>> antenna feed point, back to the
> XCVR. How much is reflected
> > > depends
> > >>> upon
> > >>>> how great the difference is
> between the impedances.
> > >>>>
> > >>>> There is a difference in behavior
> at the antenna feed point
> > > between
> > >>> a
> > >>>> coax fed antenna and a parallel
> line fed antenna.
> > >>>>
> > >>>> Balanced (parallel) line only
> offers a two-way path between the
> > >>> antenna
> > >>>> and the XCVR. Coax may offer a
> third pathway -- along the
> > > outside
> > >>> of the
> > >>>> shielding (aka "braid") of the
> coax. This is because the higher
> > > the
> > >>>> frequency of alternating current
> (like RF) the less deeply the
> > > RF
> > >>>> penetrates into the conductor --
> this is called "skin effect".
> > > RF
> > >>>> doesn't penetrate very deeply
> into the conductor; it travels
> > > along
> > >>> the
> > >>>> outer-most surface, shallow
> enough in fact that one wave of
> > > energy
> > >>> can
> > >>>> travel along the inner surface of
> the coax shielding while a

> > > second
> > >>> wave
> > >>>> travels along the outside surface
> of the same coax shielding,
> > > and
> > >>> the
> > >>>> two will never meet. Therefore,
> coax can offer three conductors
> > > to
> > >>> RF:
> > >>>> along the inner conductor; along
> the inside of the coax
> > > shielding;
> > >>> and
> > >>>> along the outside of the coax
> shielding. We desire the first two
> > >>> paths,
> > >>>> but we do not (usually) benefit
> from RF flowing on the outside
> > > of
> > >>> the
> > >>>> coax shield.
> > >>>>
> > >>>> Since balanced (parallel
> conductors) transmission line (aka feed
> > >>> line)
> > >>>> is constructed of only two wires
> (which may be either stranded
> > > or
> > >>> solid
> > >>>> wire), the reflected wave (that
> energy which is reflecting from
> > > the
> > >>>> antenna feed point, back to the
> XCVR) has only one return path
> > >>> available
> > >>>> to it -- it returns ("reflects")
> back along the same conductor
> > > that
> > >>> it
> > >>>> originally traversed. This is a
> simple condition, and no "balun"
> > >>> (more
> > >>>> accurately "bal-bal" for
> "balanced-to-balanced" in this case) is
> > >>>> required to maintain the desired
> energy pathway between the XCVR
> > >>> and
> > >>>> antenna.
> > >>>>

> > >>>> ("Balun" is a conjunction of
> "balanced" and "unbalanced"
> > >>> identifying a
> > >>>> transition from a balanced
> transmission line to an unbalanced
> > > line.
> > >>>> "Unun" identifies transitioning
> from "unbalanced"
> > > to "unbalanced"
> > >>> line.
> > >>>> "Balbal" identifies transitioning
> from "balanced" to "balanced"
> > >>> line.
> > >>>> Depending upon the design, this
> transformation may occur at a
> > >>> number of
> > >>>> different ratios, of which 1:1
> and 4:1 are the most commonly
> > > used.)
> > >>>> This simple two-way path is not
> always the case when using coax.
> > > If
> > >>> the
> > >>>> impedance mismatch is great
> enough, some fraction of the RF will
> > >>> find an
> > >>>> easier pathway flowing along the
> outside of the coax shielding.
> > >>> This can
> > >>>> cause problems such as RFI (Radio
> Frequency Interference) and
> > >>> inaccurate
> > >>>> readings on our meters (which are
> designed under the assumption
> > > RF
> > >>> will
> > >>>> travel along two paths, not
> three). Suffering a bad case of "RF
> > > on
> > >>> the
> > >>>> feed line" may cause RFI to
> affect other electronics in the
> > > area,
> > >>>> provide false swr readings, and
> cause "RF bite" on our
> > > microphone.
> > >>> This
> > >>>> is often caused by RF radiating
> off the outside of the coax,
> > >>> instead of

> > >>>> the antenna. (Although in some
> cases problems may exist even
> > > when
> > >>> feed
> > >>>> line radiation has been
> eliminated. RFI can be a difficult
> > > puzzle
> > >>> to
> > >>>> solve.)
> > >>>>
> > >>>> Enter the balun. By "wrapping"
> the coax with a much greater
> > >>> impedance
> > >>>> than the antenna feed point, we
> keep any stray RF from moving
> > > onto
> > >>> the
> > >>>> outside of the coax shielding.
> (Targeting a much greater
> > > impedance
> > >>> on
> > >>>> the outside of the coax than
> inside it.) To the degree this is
> > >>>> successful, RF may only travel
> onto the antenna, or back along
> > > the
> > >>>> inside of the coax to the XCVR.
> (On either the inside of the
> > >>> shielding
> > >>>> or along the surface of the
> center conductor. No RF travels
> > > along
> > >>> the
> > >>>> core of the center conductor, due
> to skin effect.)
> > >>>>
> > >>>> Once again we have only two
> pathways for the RF to travel
> > > allowing
> > >>> our
> > >>>> equipment and antenna system to
> behave as intended, and within
> > >>>> predictable parameters. This is
> why a balun may be useful at the
> > >>> feed
> > >>>> point of an antenna when using
> coax transmission line. It is
> > > also
> > >>> why,
> > >>>> unless the coax impedance is very

> close to equaling the
> > > antenna's
> > >>>> impedance where they meet (the
> feed point) a feed point balun is
> > >>>> advisable when using coax.
> > >>>>
> > >>>> Reflection, re-reflection, and
> re-re-reflection....
> > >>>>
> > >>>> Recall the transmitted RF wave
> traveling along the transmission
> > >>> line to
> > >>>> the antenna feed point, and not
> finding a perfectly equal
> > >>> impedance,
> > >>>> some bounced back toward the XCVR
> in the original direction.
> > >>>>
> > >>>> Now the reflected wave races
> toward the XCVR. Some of it was
> > >>> absorbed by
> > >>>> the antenna, and some has been
> lost in the transmission line
> > >>>> (heat/friction). So it isn't
> exactly at the same impedance when
> > > it
> > >>>> started, and it has been altered
> in other ways too. Namely
> > >>> the "phase"
> > >>>> of either the voltage or current
> has been shifted. To learn more
> > >>> about
> > >>>> this, "Reflections II" by Walter
> Maxwell W2DU is a great book!
> > >>> Highly
> > >>>> recommended! If you see one at a
> hamfest, buy it!
> > >>>>
> > >>>> We'll skip over exactly what and
> why this change takes place
> > >>> (entire
> > >>>> books have been written about
> just that!), but the RF wave is
> > >>> different
> > >>>> than when it left the XCVR, and
> as a result, it will "bounce"
> > > (or
> > >>>> re-reflect) off the XCVR, and
> move in the original direction
> > > again.

> > >>> It
> > >>>> is re-reflected back toward the
> antenna feed point.
> > >>>>
> > >>>> The re-reflection point will be
> the transmatch instead of the
> > > XCVR
> > >>> if a
> > >>>> transmatch is being utilized.
> Either way, the RF wave will
> > > bounce
> > >>> back
> > >>>> and forth, reflecting,
> re-reflecting, and re-re-reflecting, and
>
> > > so
> > >>> on,
> > >>>> until it either all eventually
> escapes out the antenna or is
> > >>> absorbed as
> > >>>> heat/friction in the transmission
> line. (In truth, it is always
> > > the
> > >>> sum
> > >>>> of both events -- what isn't
> eventually changed into heat in the
> > >>>> transmission line escapes the
> antenna as radiated RF.)
> > >>>>
> > >>>> As the swr increases, and as the
> inherent loss of the
> > > transmission
> > >>> line
> > >>>> increases (lower in balanced
> line; higher in coax), more of the
> > > RF
> > >>>> energy is lost as unproductive
> heat/friction, and less is
> > > available
> > >>> to
> > >>>> radiate from the antenna as a
> useful radio signal.
> > >>>>
> > >>>> This is why high swr on balanced
> feed line isn't all that bad.
> > > Most
> > >>> of
> > >>>> the RF energy will eventually
> "bounce" out of the antenna
> > > anyway.

> > >>> It
> > >>>> doesn't really matter if it makes
> it out the very first trip, on
> > >>> the
> > >>>> sixth, or 16th. Radiated is
> radiated. The person receiving your
> > >>> radio
> > >>>> signal will never know if they
> are hearing the very first wave
> > > or a
> > >>>> re-reflected wave. It just
> doesn't matter after the energy
> > > escapes
> > >>> the
> > >>>> antenna.
> > >>>>
> > >>>> Escaping the antenna is the
> trick!
> > >>>>
> > >>>> And that is where coax may not
> work well in the same situation.
> > >>> Coax,
> > >>>> suffering much greater losses to
> the RF as it traverses along it
> > >>>> ("attenuation"), simply absorbs
> too much of the RF as it bounces
> > >>> back
> > >>>> and forth, especially under high
> swr conditions. There isn't
> > > much
> > >>> left
> > >>>> to escape out the antenna.
> > >>>>
> > >>>> All of which leads to the
> generalized conclusion that wire
> > > antenna
> > >>>> elements fed by balanced
> transmission line, operate very
> > >>> efficiently
> > >>>> even under high swr conditions.
> That is why these types of
> > > antennas
> > >>>> (from dipoles to loops) have
> built a reputation as practical
> > > multi-
> > >>> band
> > >>>> solutions for many amateur radio
> operators. The only stumbling
> > >>> block is
> > >>>> transforming their wide ranges of

> impedance into something close
> > > to
> > >>> a
> > >>>> nominal 50-Ohms resistive
> (meaning little or no reactance) to
> > > match
> > >>> our
> > >>>> "modern" (meaning non-tube)
> XCVRs. And that is precisely what a
> > >>>> transmatch is designed to
> accomplish.
> > >>>>
> > >>>>
> > >>>>
> > >>>>
> > >>>>> All my HF antenna experience is
> in
> > >>>>> receive only antennas for
> shortwave. I've been dragging my feet
> > > on
> > >>>>> getting my General Class license
> but finally decided to go for
> > > it
> > >>>>> this month. Of course, I had
> masterd 5 wpm CW just in time for
> > >>> that
> > >>>>> requirement to be abolished. :-)
> > >>>> Heheh, yes, that sounds just
> about right! ;) Welcome to HF! And
> > >>> welcome
> > >>>> to the world of transmitting
> antennas. They can be a lot of fun!
> > >>>>
> > >>>>
> > >>>>
> > >>>>> Some people seem to put all
> their faith in the modeling
> > > software.
> > >>>>> Whatever works for them, but I
> would never take a computer
> > > model
> > >>> as
> > >>>>> being 100% accurate. To me, the
> model really has to be built in
> > > 3D
> > >>>>> to prove it works.
> > >>>> ...snip...
> > >>>>
> > >>>> Precisely! It can save a lot of
> time by eliminating very bad or

> > >>> very
> > >>>> unlikely designs, but it is
> almost impossible to fully model the
> > >>>> environment in which the antenna
> will be built. So you have to
> > >>> actually
> > >>>> build it and test it at some
> point. This is like other rules of
> > >>> thumb.
> > >>>> Take any of the "formulas" for
> determining the proper length of
> > >>> antenna
> > >>>> elements. They all say to start
> too long and slowing trim it to
> > > a
> > >>> proper
> > >>>> match.
> > >>>>
> > >>>> Whether a formula for a simple
> dipole, or a computer model of a
> > >>> loop or
> > >>>> beam, the idea isn't to make the
> perfect antenna on paper and
> > > then
> > >>>> reproduce it exactly in the real
> world. It is to "get close" and
> > >>>> possibly avoid some time lost in
> fiddling around. Beams are a
> > > good
> > >>>> example. You can play with the
> modeling software and try out
> > >>> different
> > >>>> element combinations and get an
> idea of the resulting envelopes
> > > and
> > >>> feed
> > >>>> point impedances. This saves a
> lot of time, but ultimately you
> > > have
> > >>>> build it and tune it to your
> exact site.
> > >>>>
> > >>>>
> > >>>>> ...snip... What the heck though,
> and after
> > >>>>> reading your reply, I believe I
> will go with the 40 meter loop
> > > and
> > >>>>> orient it as a horizontal with
> paralell feedline.

> > >>>> Adding a transmatch (aka antenna
> tuner) between your XCVR and
> > >>> antenna
> > >>>> will most likely allow this to
> become a very usable multi-band
> > >>> antenna.
> > >>>> Every antenna displays its own
> range of impedances, and these
> > > vary
> > >>> on
> > >>>> each band. (This "impedance" is
> more properly called "complex
> > >>> impedance"
> > >>>> because it includes some
> reactance.) Very low impedances are
> > >>> typically
> > >>>> difficult for many transmatches
> to "match," but any extreme
> > > value
> > >>> of
> > >>>> complex impedance may fall
> outside the range which a given
> > >>> transmatch
> > >>>> can "match." ("Match" means
> transforming the existing complex
> > >>> impedance,
> > >>>> on the antenna-side of the
> transmatch, into an impedance (with
> > >>> little or
> > >>>> no reactance) close to that which
> the XCVR is designed to work
> > >>> into.)
> > >>>> But there are workarounds, such
> as matching stubs, and other
> > >>> solutions.
> > >>>> (See below.)
> > >>>>
> > >>>>
> > >>>>> Regarding running the line into
> the shack, shorting the wires
> > > and
> > >>>>> connecting them to the rig,
> there are a few reasons I can't do
> > >>> this.
> > >>>>> For one, there are children and
> unknowing people in the area
> > > that
> > >>>>> may get zapped if they are able
> to touch the wires. My ham
> > >>> station

> > >>>>> (or what's left of it) is in my
> basement office. I need to run
> > >>> the
> > >>>>> line vertically to about 8'
> above the ground, make the short at
> > >>> that
> > >>>>> point, and install a matching
> network either on a pole or tree
> > > in
> > >>> a
> > >>>>> PVC junction box. The ground
> wire would go there also, and then
> > > I
> > >>>>> need run the ground and an
> insulated feedwire the remaining
> > >>> distance
> > >>>>> to the ground, bury it and slip
> it through the side of the
> > > house
> > >>>>> into the shack.
> > >>>>>
> > >>>> If you are married to the idea of
> having the vertical option,
> > > this
> > >>> may
> > >>>> be true. You might consider a
> simple 30-amp automotive relay
> > > too.
> > >>> Put
> > >>>> 12-vdc to it and remotely control
> that shorting switch.
> > >>>>
> > >>>> I'm not sure I'm picturing this
> properly. Where is the antenna
> > > feed
> > >>>> point in relation to your shack?
> Pretty much right above it, or
> > > 50-
> > >>> feet
> > >>>> distance after you get outside
> the house?
> > >>>>
> > >>>> I'm wondering if we're talking
> about a longer run from the shack
> > > to
> > >>> the
> > >>>> antenna feed point, like 50- to
> 100-feet or more, or a much
> > > shorter
> > >>> run

> > >>>> like 20- or 30-feet?
> > >>>>
> > >>>> Also, consider getting outside in
> as short a run as possible,
> > > and
> > >>> making
> > >>>> a longer run of ladder line to
> get to the antenna feed point. I
> > > had
> > >>> one
> > >>>> dipole for which I ran 300-Ohm
> twin lead transmission line half
> > > way
> > >>>> around my house under the
> overhang of the roof.
> > >>>>
> > >>>>
> > >
> > >
> > >
> > >
> > >
> > > Yahoo! Groups Links
> > >
> > >
> > >
> >
>

2673. Re: [SkyWires] Re: Feed Arrangement for Operating the Loop as a Vertical Antenna

Yahoo group: SkyWires
Date: 2007-10-06 15:28:02 UTC
From: Erik Weaver
Topic: 2643 Message: 2673

Hey Denis,

I haven't looked up your call, assuming I've seen it. I'm guessing you live in NH?

I do in fact have a fascination with the pyramids --who doesn't?-- so maybe I was involved in the project in a past life? Hope I was a whip wielder! ;)

Didn't my web page have the link where I got my atlatl? ......I'll be very disappointed if not...... Uh, yes, very first link at the top of the page:

http://www.chuckit.com/products/chuckit/chuckit.html

It is a doggie toy, so yes, I'd look in pet stores, especially if there are big ones near you, or you go there anyway. I ordered mine on-line however. I *think* I ordered my atlatl online at that "Chuckit" web site, but maybe it was a different on-line store. I recall the ordering and shipping all took place smoothly. I suggest clicking their "Contact Us" link and call them. They can either take an order over the phone or tell you if there is a pet store close to you. If you Google "Chuckit dog toy" I expect you'll get plenty of usable hits. (You do -- I just did anyway, each of the first three I look at allowed me to order it on-line, and they are only a little over $10. Cheap at half the price!)

There are two versions, maybe three, with length being the major variable. Longer length equals greater force of course, and therefore greater tree-clearing height. I recommend one that is at least 2-ft long. I think mine is close to 2-1/2-feet long. 29-30 inches seems about right.

When you get your tennis balls or antenna launching you can use old 'dead' ones that are sometimes almost free at garage sales. Cut them open and put in some sand, lead singers (perhaps best--as you'll see when "loop string" time comes), or BBs, something like that to provide a little extra weight (*NOT* filled! -- you still have to chuck this thing 100-feet!) and then seal it with silicone or hot glue, something like that. If you leave a little loop of fishing line, etc, you'll have a handy little loop to tie your antenna lift-rope's "leader line" to, which is far easier than trying to tie a string around a round tennis ball! (The tie-loop is highly recommended!) ;)

I expect that discussion is part of the air gun page, or the links one that page. It does have some links showing what others have done.

The basic idea is to get a few onces of weight in the tennis ball, get a loop of string firmly inside the ball (or through it), and hanging outside the ball, that will be strong enough to take repeated "casting" and then launch with a light-weight "leader" string. This allows the ball to fly most effectively while reducing drag form the line, which is actually a major factor. Drag seems to increase on an exponential scale, so 1/2" rope is many times more difficult to launch than fishing line.

Then once you get the ball over the tree if it hasn't reached the ground you pull it up a foot or so and let go, and repeat until it works its way out of the tree. This is another reason to have weight inside the tennis ball. (Bright colored balls are nice at this time too.) I've made a "perfect" shot with one of those small crossbows but the bolt was too light to work it into reach. So it was for naught.

Once you have the tennis ball back in hand, tie a braided string to it and haul that over the tree. Then tie a rope to that string and pull your lifting rope over the tree, and your antenna is up! (On that end anyway.) It actually works quite well for reasonable heights. But you can most certainly achieve greater height with much less effort using the air gun. No question about that. However, that said, the atlatl is far easier to transport, has no moving parts, appears "warm and fuzzy" to the men with guns and badges, and will easily get the tennis ball over limbs 40- and 50-feet high in the tree. I am confident 100-feet isn't out of the question, but so far that has taken a some effort and practice, whereas getting that 40- and 50-feet height is almost as easy as tossing an orange into a trash can in the kitchen. It is almost a "gimme"!

Both methods are a lot of fun however, and I recommend both. But it sounds to me like the atlatl will serve your needs best. Canada and whatnot. Assuming you'll be pleased with easily reaching 40- and 50-foot tree limbs. I personally am. That is more height than many amateur radio home-antennas and quite acceptable for portable operations.

Coax as Antenna

Sure, that'll work well -- for a while anyway. It will be heavy however. Another consideration is weather, assuming it'll be outside. Coax shielding is assumed to be protected inside it's outer cover by design. It is made up of tiny inter-weaved strands of wire. Sounds like a lot of corrosion opportunity to me.

I think I'd rather try contacting my local utility company or coop first and see if they have any "drop" or used wire heading to the dump, and if you can get it for salvage price, or for free-for-the-hauling, thus saving them disposal fees. (Of course they may recycle and get the weight of the metal back -- that may depend if they are a government operation, who need not care about profit --that is what tax-payers and jack boots are for-- or a smaller coop trying to keep costs low.)

Take care and have fun!
Erik n0ew

PS: Visit this web page of mine and see if this special event sounds like fun to you -- my friend and I sponsor it every year over Memorial Day weekend (3-day weekend every Spring):

http://www.n0ew.org/k0s/

If "The Strange Antenna Challenge" sounds like fun, you have until May to plan your own "Satellite" special event if you like. You can do it solo, with a group of friends, or even as a club event and try to gain membership and/or media attention. Or, just listen for us that weekend and work us with your new HF antenna. We'll be the "K0S" special event station. Satellite stations have to use their call sign slash K0S (see FCC rules), and more do so each passing year! It is a lot of fun!! :)

denisnh wrote:
> HAH! Warm and Fuzzy, huh? As in tennis ball.... Ohh you're good.
> Your analogies fit together like the stones of the great pyramid of
> Giza. LOL
>
> Erik, I assume you get the Atlatl at pet stores?
>
> By the way, I'm probably driving everyone nuts with this question but
> it just won't stop surfacing in my mind for further analysis. :-)
>
> The idea of using a coax with the shield only as a large diameter
> radiating wire antenna. Any thoughts?
>
> Thanks,
> Denis
>
> --- In SkyWires@yahoogroups.com, Erik Weaver <erik@...> wrote:
>> Heeheh, hi Denis,
>>
>> Ya, I can easily imagine some 'lost time' trying to cross the border
>> with various weapons. If you follow the various lists, or perhaps
> search
>> their archives, you'll find many things are considered weapons, and
> some
>> of those that are not required a fishing license. The guys with the
> guns
>> figure if you have any fishing gear you need that permit. Or a fine. Of
>> course, you can always come back and try arguing with a judge later
> on...
>> Arrows, crossbow (whether handheld or "industrial" strength), small
>> pieces of lead (sinkers) moving at rapid velocities all incur a certain
>> level of risk, if not illegality. A tennis ball on the other hand seems
>> about as "warm and fuzzy" as we can get in this messed up PC-crazy
> world.
>> Besides, the atlatl is quite cool! Did you check out the international
>> competitions? Neat stuff! A very old technology, assisting us with very
>> modern technology. If only Ug and Grog had known when they invented
> it! :)

>> It is a doggie toy for throwing tennis balls. Everyone either has a
> dog,
>> may be getting a dog, or visiting a friend who has a dog. So you can
>> always carry one of these. They are just plastic, very light to carry,
>> and even fun to play with! Buy extra tennis balls because you'll lose
>> some just flinging them around :) My friend and I lost one or two that
>> day, for exactly that reason!
>>
>> You may want to get two of the atlatl's so you can play catch.
>>
>> Have fun!
>> Erik
>>
>> denisnh wrote:
>>> Hi Erik. The Atlatl looks very cool! What I've been using is a
>>> sling shot with "high powered" latex bands. A half ounce fishing
>>> sinker is then attached to some Spider Wire fishing string spooled
>>> onto a spinning reel. I have a huge pine tree that's 80' tall and I
>>> can get the line right over it with that setup. I set up an inverted-
>>> V there.
>>>
>>> I also have an 80# pistol crossbow, and I modify the little bolt by
>>> removing the tip, placing a small weight in place of the tip and
>>> drilling a hole at the end of the shaft for the same fishing setup I
>>> mentoned above. That works even better but I don't take it out much
>>> since it looks rather ominous if the neighbors happen to get a
>>> glimpse of it.
>>>
>>> I have some relatives in Canada, one of which owns a farm. When
>>> visiting, I like to erect a temporary antenna for use during my stay.
>>> I was surprised to find out that sling shots are illegal in that
>>> area, and the pistol crossbow is definitely illegal. I had figured a
>>> light bow but the atlatl looks very promising. As for the air gun,
>>> can you imagine the looks on the faces of the customs agents trying
>>> to get something like that across the border. Yikes!
>>>
>>> Thanks,
>>> Denis
>>>
>>> --- In SkyWires@yahoogroups.com, Erik Weaver <erik@> wrote:
>>>> Hi Denis,
>>>>
>>>> An atlatl is another option:
>>>>
>>>> http://www.n0ew.org/k0s/atlatl/
>>>>
>>>> This really seems to work well and it is pretty cheap. My friend
>>> and I
>>>> didn't get up over 100-feet, but I think we got every bit of 50-
>>> feet

>>>> height into the tree.
>>>>
>>>> If you really want another 'project' you might think about building
>>> an
>>>> air gun:
>>>>
>>>> http://www.n0ew.org/k0s/air_gun/
>>>>
>>>> Have fun!
>>>> Erik
>>>>
>>>> denisnh wrote:
>>>>> Thanks again, Erik! From what you wrote and the research I've
>>> done,
>>>>> I decided to forget about the vertical radiator and go with a
>>> full
>>>>> wave 18g loop and 16g homebrew ladder line (I have all this on
>>>>> hand). Guess I'm fickle. LOL
>>>>>
>>>>> What I really dread is the cutting. The trees in my backyard are
>>> so
>>>>> dense that I'll have to get the chainsaw out and do some serious
>>>>> cutting. I did read about one guy who shot an arrow right over
>>> the
>>>>> trees with some fishing string attached, then pulled his wire
>>> right
>>>>> over the tops of the trees for his antenna. That scares me a
>>> bit.
>>>>> Not to mention that running enough power could start a fire! But
>>> it
>>>>> seems to work for him and he mentioned that once in a while he'll
>>>>> pull the wire one way or the other to compensate for any areas
>>> that
>>>>> are chafed through.
>>>>>
>>>>> Thanks,
>>>>> Denis
>>>>>
>>>>> --- In SkyWires@yahoogroups.com, Erik Weaver <erik@> wrote:
>>>>>> Hi Denis (I thought "Denisnh" was a unusual name! heheh)....
>>>>>>
>>>>>> Comments in body below....
>>>>>>
>>>>>> ...snip...
>>>>>>
>>>>>> > The curves for parallel lines all hug the bottom of the
>>>>>>> chart where the favorable SWR and other factors are, while the
>>>>> coax
>>>>>>> lines soar skyward surprisingly fast, which concurs with your
>>>>> post.

>>>>>> Cebik's web pages are filled with useful information -- time
>>> there
>>>>> is
>>>>>> well spent. The rapid rise of losses in coax under high swr
>>>>> conditions
>>>>>> is in sharp contrast to the low losses generally found in
>>> balanced
>>>>>> ("parallel") feed line. It is one of the major differences
>>> between
>>>>> them.
>>>>>> About the only negative that comes to mind with balanced feed
>>> line
>>>>> is
>>>>>> the need to carefully route it; so it isn't practical in all
>>> cases.
>>>>>> Here's something else to consider....
>>>>>>
>>>>>> Remember first the rare "special case" where impedance is the
>>> same
>>>>>> everywhere in the antenna system (XCVR, transmission line,
>>> antenna,
>>>>>> etc). With the exception of a tiny loss of energy as electrons
>>> rub
>>>>>> against one another (this loss due to friction is usually
>>>>> insignificant
>>>>>> in the typical amateur radio installation), nearly all the RF
>>>>> ("Radio
>>>>>> Frequency") energy generated by the XCVR radiates from the
>>> antenna
>>>>> as
>>>>>> radio waves. This is our goal of course.
>>>>>>
>>>>>> By the way, I usually speak in terms of transmitting a radio
>>> signal
>>>>> and
>>>>>> trying to send it out into the world (our "Hello World!"
>>> message),
>>>>> but
>>>>>> the efficiencies (or lack thereof) work exactly the same in
>>>>> reverse. In
>>>>>> other words, the antenna has the same gain (or loss) as a
>>> receiving
>>>>>> antenna, as it does when transmitting. So our rare special case
>>>>> antenna
>>>>>> will also deliver all the RF energy it collects to the receiver
>>>>> (less
>>>>>> friction/heat lost to move the electrons -- which can never be
>>>>> avoided
>>>>>> in the real world).
>>>>>>

>>>>>> Now when the impedance is one value on the transmission line
>>> (and
>>>>> it
>>>>>> doesn't matter what kind of transmission line), and the
>>> impedance
>>>>> of the
>>>>>> antenna is a different value, some RF energy is reflected off
>>> the
>>>>>> antenna feed point, back to the XCVR. How much is reflected
>>> depends
>>>>> upon
>>>>>> how great the difference is between the impedances.
>>>>>>
>>>>>> There is a difference in behavior at the antenna feed point
>>> between
>>>>> a
>>>>>> coax fed antenna and a parallel line fed antenna.
>>>>>>
>>>>>> Balanced (parallel) line only offers a two-way path between the
>>>>> antenna
>>>>>> and the XCVR. Coax may offer a third pathway -- along the
>>> outside
>>>>> of the
>>>>>> shielding (aka "braid") of the coax. This is because the higher
>>> the
>>>>>> frequency of alternating current (like RF) the less deeply the
>>> RF
>>>>>> penetrates into the conductor -- this is called "skin effect".
>>> RF
>>>>>> doesn't penetrate very deeply into the conductor; it travels
>>> along
>>>>> the
>>>>>> outer-most surface, shallow enough in fact that one wave of
>>> energy
>>>>> can
>>>>>> travel along the inner surface of the coax shielding while a
>>> second
>>>>> wave
>>>>>> travels along the outside surface of the same coax shielding,
>>> and
>>>>> the
>>>>>> two will never meet. Therefore, coax can offer three conductors
>>> to
>>>>> RF:
>>>>>> along the inner conductor; along the inside of the coax
>>> shielding;
>>>>> and
>>>>>> along the outside of the coax shielding. We desire the first two
>>>>> paths,
>>>>>> but we do not (usually) benefit from RF flowing on the outside

>>> of
>>>>> the
>>>>>> coax shield.
>>>>>>
>>>>>> Since balanced (parallel conductors) transmission line (aka feed
>>>>> line)
>>>>>> is constructed of only two wires (which may be either stranded
>>> or
>>>>> solid
>>>>>> wire), the reflected wave (that energy which is reflecting from
>>> the
>>>>>> antenna feed point, back to the XCVR) has only one return path
>>>>> available
>>>>>> to it -- it returns ("reflects") back along the same conductor
>>> that
>>>>> it
>>>>>> originally traversed. This is a simple condition, and no "balun"
>>>>> (more
>>>>>> accurately "bal-bal" for "balanced-to-balanced" in this case) is
>>>>>> required to maintain the desired energy pathway between the XCVR
>>>>> and
>>>>>> antenna.
>>>>>>
>>>>>> ("Balun" is a conjunction of "balanced" and "unbalanced"
>>>>> identifying a
>>>>>> transition from a balanced transmission line to an unbalanced
>>> line.
>>>>>> "Unun" identifies transitioning from "unbalanced"
>>> to "unbalanced"
>>>>> line.
>>>>>> "Balbal" identifies transitioning from "balanced" to "balanced"
>>>>> line.
>>>>>> Depending upon the design, this transformation may occur at a
>>>>> number of
>>>>>> different ratios, of which 1:1 and 4:1 are the most commonly
>>> used.)
>>>>>> This simple two-way path is not always the case when using coax.
>>> If
>>>>> the
>>>>>> impedance mismatch is great enough, some fraction of the RF will
>>>>> find an
>>>>>> easier pathway flowing along the outside of the coax shielding.
>>>>> This can
>>>>>> cause problems such as RFI (Radio Frequency Interference) and
>>>>> inaccurate
>>>>>> readings on our meters (which are designed under the assumption
>>> RF
>>>>> will
>>>>>> travel along two paths, not three). Suffering a bad case of "RF
>>> on

>>>>> the
>>>>>> feed line" may cause RFI to affect other electronics in the
>>> area,
>>>>>> provide false swr readings, and cause "RF bite" on our
>>> microphone.
>>>>> This
>>>>>> is often caused by RF radiating off the outside of the coax,
>>>>> instead of
>>>>>> the antenna. (Although in some cases problems may exist even
>>> when
>>>>> feed
>>>>>> line radiation has been eliminated. RFI can be a difficult
>>> puzzle
>>>>> to
>>>>>> solve.)
>>>>>>
>>>>>> Enter the balun. By "wrapping" the coax with a much greater
>>>>> impedance
>>>>>> than the antenna feed point, we keep any stray RF from moving
>>> onto
>>>>> the
>>>>>> outside of the coax shielding. (Targeting a much greater
>>> impedance
>>>>> on
>>>>>> the outside of the coax than inside it.) To the degree this is
>>>>>> successful, RF may only travel onto the antenna, or back along
>>> the
>>>>>> inside of the coax to the XCVR. (On either the inside of the
>>>>> shielding
>>>>>> or along the surface of the center conductor. No RF travels
>>> along
>>>>> the
>>>>>> core of the center conductor, due to skin effect.)
>>>>>>
>>>>>> Once again we have only two pathways for the RF to travel
>>> allowing
>>>>> our
>>>>>> equipment and antenna system to behave as intended, and within
>>>>>> predictable parameters. This is why a balun may be useful at the
>>>>> feed
>>>>>> point of an antenna when using coax transmission line. It is
>>> also
>>>>> why,
>>>>>> unless the coax impedance is very close to equaling the
>>> antenna's
>>>>>> impedance where they meet (the feed point) a feed point balun is
>>>>>> advisable when using coax.
>>>>>>
>>>>>> Reflection, re-reflection, and re-re-reflection....
>>>>>>

>>>>>> Recall the transmitted RF wave traveling along the transmission
>>>>> line to
>>>>>> the antenna feed point, and not finding a perfectly equal
>>>>> impedance,
>>>>>> some bounced back toward the XCVR in the original direction.
>>>>>>
>>>>>> Now the reflected wave races toward the XCVR. Some of it was
>>>>> absorbed by
>>>>>> the antenna, and some has been lost in the transmission line
>>>>>> (heat/friction). So it isn't exactly at the same impedance when
>>> it
>>>>>> started, and it has been altered in other ways too. Namely
>>>>> the "phase"
>>>>>> of either the voltage or current has been shifted. To learn more
>>>>> about
>>>>>> this, "Reflections II" by Walter Maxwell W2DU is a great book!
>>>>> Highly
>>>>>> recommended! If you see one at a hamfest, buy it!
>>>>>>
>>>>>> We'll skip over exactly what and why this change takes place
>>>>> (entire
>>>>>> books have been written about just that!), but the RF wave is
>>>>> different
>>>>>> than when it left the XCVR, and as a result, it will "bounce"
>>> (or
>>>>>> re-reflect) off the XCVR, and move in the original direction
>>> again.
>>>>> It
>>>>>> is re-reflected back toward the antenna feed point.
>>>>>>
>>>>>> The re-reflection point will be the transmatch instead of the
>>> XCVR
>>>>> if a
>>>>>> transmatch is being utilized. Either way, the RF wave will
>>> bounce
>>>>> back
>>>>>> and forth, reflecting, re-reflecting, and re-re-reflecting, and
>>> so
>>>>> on,
>>>>>> until it either all eventually escapes out the antenna or is
>>>>> absorbed as
>>>>>> heat/friction in the transmission line. (In truth, it is always
>>> the
>>>>> sum
>>>>>> of both events -- what isn't eventually changed into heat in the
>>>>>> transmission line escapes the antenna as radiated RF.)
>>>>>>
>>>>>> As the swr increases, and as the inherent loss of the
>>> transmission
>>>>> line

>>>>>> increases (lower in balanced line; higher in coax), more of the
>>> RF
>>>>>> energy is lost as unproductive heat/friction, and less is
>>> available
>>>>> to
>>>>>> radiate from the antenna as a useful radio signal.
>>>>>>
>>>>>> This is why high swr on balanced feed line isn't all that bad.
>>> Most
>>>>> of
>>>>>> the RF energy will eventually "bounce" out of the antenna
>>> anyway.
>>>>> It
>>>>>> doesn't really matter if it makes it out the very first trip, on
>>>>> the
>>>>>> sixth, or 16th. Radiated is radiated. The person receiving your
>>>>> radio
>>>>>> signal will never know if they are hearing the very first wave
>>> or a
>>>>>> re-reflected wave. It just doesn't matter after the energy
>>> escapes
>>>>> the
>>>>>> antenna.
>>>>>>
>>>>>> Escaping the antenna is the trick!
>>>>>>
>>>>>> And that is where coax may not work well in the same situation.
>>>>> Coax,
>>>>>> suffering much greater losses to the RF as it traverses along it
>>>>>> ("attenuation"), simply absorbs too much of the RF as it bounces
>>>>> back
>>>>>> and forth, especially under high swr conditions. There isn't
>>> much
>>>>> left
>>>>>> to escape out the antenna.
>>>>>>
>>>>>> All of which leads to the generalized conclusion that wire
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>>>>>> elements fed by balanced transmission line, operate very
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>>>>>> even under high swr conditions. That is why these types of
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>>>>>> (from dipoles to loops) have built a reputation as practical
>>> multi-
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>>>>>> on the antenna-side of the transmatch, into an impedance (with
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>>>>>> no reactance) close to that which the XCVR is designed to work
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>>>>>> (See below.)
>>>>>>
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>>>>>>> Regarding running the line into the shack, shorting the wires
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>>>>>>> (or what's left of it) is in my basement office. I need to run
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>>>>>>> line vertically to about 8' above the ground, make the short at
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>>>>>>> PVC junction box. The ground wire would go there also, and then
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>>> Yahoo! Groups Links
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2674. Re: [SkyWires] Re: Feed Arrangement for Operating the Loop as a Vertical Antenna

Yahoo group: SkyWires
Date: 2007-10-06 15:30:30 UTC
From: Erik Weaver
Topic: 2643 Message: 2674

Perfect! Sounds like fun too.
Erik n0ew

denisnh wrote:
> Oh, another thing that can be an advantage with the atlatl is if you
> have a dog that fetches. My dog is an excellent Frisbee dog and goes
> after anything. He's part coon hound and very fast with long legs.
> When setting up a wire, I can just make like I'm playing with my dog
> by slinging ordinary tennis balls until I'm sure nobody is looking and
> grab the tennis ball with the leader string attached and sling that up
> into the tree. I just hope my dog doesn't climb the tree after it.
> Make for a nice diversion for a "covert" project. :-)
>
> --- In SkyWires@yahoogroups.com, Erik Weaver <erik@...> wrote:
>> Heeheh, hi Denis,
>>
>> Ya, I can easily imagine some 'lost time' trying to cross the border
>> with various weapons. If you follow the various lists, or perhaps
> search
>> their archives, you'll find many things are considered weapons, and
> some
>> of those that are not required a fishing license. The guys with the
> guns
>> figure if you have any fishing gear you need that permit. Or a fine. Of
>> course, you can always come back and try arguing with a judge later
> on...
>> Arrows, crossbow (whether handheld or "industrial" strength), small
>> pieces of lead (sinkers) moving at rapid velocities all incur a certain
>> level of risk, if not illegality. A tennis ball on the other hand seems
>> about as "warm and fuzzy" as we can get in this messed up PC-crazy
> world.
>> Besides, the atlatl is quite cool! Did you check out the international
>> competitions? Neat stuff! A very old technology, assisting us with very
>> modern technology. If only Ug and Grog had known when they invented
> it! :)
>> It is a doggie toy for throwing tennis balls. Everyone either has a
> dog,
>> may be getting a dog, or visiting a friend who has a dog. So you can
>> always carry one of these. They are just plastic, very light to carry,
>> and even fun to play with! Buy extra tennis balls because you'll lose
>> some just flinging them around :) My friend and I lost one or two that
>> day, for exactly that reason!
>>
>> You may want to get two of the atlatl's so you can play catch.

>>
>> Have fun!
>> Erik
>>
>> denisnh wrote:
>>> Hi Erik. The Atlatl looks very cool! What I've been using is a
>>> sling shot with "high powered" latex bands. A half ounce fishing
>>> sinker is then attached to some Spider Wire fishing string spooled
>>> onto a spinning reel. I have a huge pine tree that's 80' tall and I
>>> can get the line right over it with that setup. I set up an inverted-
>>> V there.
>>>
>>> I also have an 80# pistol crossbow, and I modify the little bolt by
>>> removing the tip, placing a small weight in place of the tip and
>>> drilling a hole at the end of the shaft for the same fishing setup I
>>> mentoned above. That works even better but I don't take it out much
>>> since it looks rather ominous if the neighbors happen to get a
>>> glimpse of it.
>>>
>>> I have some relatives in Canada, one of which owns a farm. When
>>> visiting, I like to erect a temporary antenna for use during my stay.
>>> I was surprised to find out that sling shots are illegal in that
>>> area, and the pistol crossbow is definitely illegal. I had figured a
>>> light bow but the atlatl looks very promising. As for the air gun,
>>> can you imagine the looks on the faces of the customs agents trying
>>> to get something like that across the border. Yikes!
>>>
>>> Thanks,
>>> Denis
>>>
>>> --- In SkyWires@yahoogroups.com, Erik Weaver <erik@> wrote:
>>>> Hi Denis,
>>>>
>>>> An atlatl is another option:
>>>>
>>>> http://www.n0ew.org/k0s/atlatl/
>>>>
>>>> This really seems to work well and it is pretty cheap. My friend
>>> and I
>>>> didn't get up over 100-feet, but I think we got every bit of 50-
>>> feet
>>>> height into the tree.
>>>>
>>>> If you really want another 'project' you might think about building
>>> an
>>>> air gun:
>>>>
>>>> http://www.n0ew.org/k0s/air_gun/
>>>>
>>>> Have fun!

>>>> Erik
>>>>
>>>> denisnh wrote:
>>>>> Thanks again, Erik! From what you wrote and the research I've
>>> done,
>>>>> I decided to forget about the vertical radiator and go with a
>>> full
>>>>> wave 18g loop and 16g homebrew ladder line (I have all this on
>>>>> hand). Guess I'm fickle. LOL
>>>>>
>>>>> What I really dread is the cutting. The trees in my backyard are
>>> so
>>>>> dense that I'll have to get the chainsaw out and do some serious
>>>>> cutting. I did read about one guy who shot an arrow right over
>>> the
>>>>> trees with some fishing string attached, then pulled his wire
>>> right
>>>>> over the tops of the trees for his antenna. That scares me a
>>> bit.
>>>>> Not to mention that running enough power could start a fire! But
>>> it
>>>>> seems to work for him and he mentioned that once in a while he'll
>>>>> pull the wire one way or the other to compensate for any areas
>>> that
>>>>> are chafed through.
>>>>>
>>>>> Thanks,
>>>>> Denis
>>>>>
>>>>> --- In SkyWires@yahoogroups.com, Erik Weaver <erik@> wrote:
>>>>>> Hi Denis (I thought "Denisnh" was a unusual name! heheh)....
>>>>>>
>>>>>> Comments in body below....
>>>>>>
>>>>>> ...snip...
>>>>>>
>>>>>> > The curves for parallel lines all hug the bottom of the
>>>>>>> chart where the favorable SWR and other factors are, while the
>>>>> coax
>>>>>>> lines soar skyward surprisingly fast, which concurs with your
>>>>> post.
>>>>>> Cebik's web pages are filled with useful information -- time
>>> there
>>>>> is
>>>>>> well spent. The rapid rise of losses in coax under high swr
>>>>> conditions
>>>>>> is in sharp contrast to the low losses generally found in
>>> balanced
>>>>>> ("parallel") feed line. It is one of the major differences
>>> between

>>>>> them.
>>>>>> About the only negative that comes to mind with balanced feed
>>> line
>>>>> is
>>>>>> the need to carefully route it; so it isn't practical in all
>>> cases.
>>>>>> Here's something else to consider....
>>>>>>
>>>>>> Remember first the rare "special case" where impedance is the
>>> same
>>>>>> everywhere in the antenna system (XCVR, transmission line,
>>> antenna,
>>>>>> etc). With the exception of a tiny loss of energy as electrons
>>> rub
>>>>>> against one another (this loss due to friction is usually
>>>>> insignificant
>>>>>> in the typical amateur radio installation), nearly all the RF
>>>>> ("Radio
>>>>>> Frequency") energy generated by the XCVR radiates from the
>>> antenna
>>>>> as
>>>>>> radio waves. This is our goal of course.
>>>>>>
>>>>>> By the way, I usually speak in terms of transmitting a radio
>>> signal
>>>>> and
>>>>>> trying to send it out into the world (our "Hello World!"
>>> message),
>>>>> but
>>>>>> the efficiencies (or lack thereof) work exactly the same in
>>>>> reverse. In
>>>>>> other words, the antenna has the same gain (or loss) as a
>>> receiving
>>>>>> antenna, as it does when transmitting. So our rare special case
>>>>> antenna
>>>>>> will also deliver all the RF energy it collects to the receiver
>>>>> (less
>>>>>> friction/heat lost to move the electrons -- which can never be
>>>>> avoided
>>>>>> in the real world).
>>>>>>
>>>>>> Now when the impedance is one value on the transmission line
>>> (and
>>>>> it
>>>>>> doesn't matter what kind of transmission line), and the
>>> impedance
>>>>> of the
>>>>>> antenna is a different value, some RF energy is reflected off
>>> the
>>>>>> antenna feed point, back to the XCVR. How much is reflected

>>> depends
>>>>> upon
>>>>>> how great the difference is between the impedances.
>>>>>>
>>>>>> There is a difference in behavior at the antenna feed point
>>> between
>>>>> a
>>>>>> coax fed antenna and a parallel line fed antenna.
>>>>>>
>>>>>> Balanced (parallel) line only offers a two-way path between the
>>>>> antenna
>>>>>> and the XCVR. Coax may offer a third pathway -- along the
>>> outside
>>>>> of the
>>>>>> shielding (aka "braid") of the coax. This is because the higher
>>> the
>>>>>> frequency of alternating current (like RF) the less deeply the
>>> RF
>>>>>> penetrates into the conductor -- this is called "skin effect".
>>> RF
>>>>>> doesn't penetrate very deeply into the conductor; it travels
>>> along
>>>>> the
>>>>>> outer-most surface, shallow enough in fact that one wave of
>>> energy
>>>>> can
>>>>>> travel along the inner surface of the coax shielding while a
>>> second
>>>>> wave
>>>>>> travels along the outside surface of the same coax shielding,
>>> and
>>>>> the
>>>>>> two will never meet. Therefore, coax can offer three conductors
>>> to
>>>>> RF:
>>>>>> along the inner conductor; along the inside of the coax
>>> shielding;
>>>>> and
>>>>>> along the outside of the coax shielding. We desire the first two
>>>>> paths,
>>>>>> but we do not (usually) benefit from RF flowing on the outside
>>> of
>>>>> the
>>>>>> coax shield.
>>>>>>
>>>>>> Since balanced (parallel conductors) transmission line (aka feed
>>>>> line)
>>>>>> is constructed of only two wires (which may be either stranded
>>> or
>>>>> solid

>>>>>> wire), the reflected wave (that energy which is reflecting from
>>> the
>>>>>> antenna feed point, back to the XCVR) has only one return path
>>>>> available
>>>>>> to it -- it returns ("reflects") back along the same conductor
>>> that
>>>>> it
>>>>>> originally traversed. This is a simple condition, and no "balun"
>>>>> (more
>>>>>> accurately "bal-bal" for "balanced-to-balanced" in this case) is
>>>>>> required to maintain the desired energy pathway between the XCVR
>>>>> and
>>>>>> antenna.
>>>>>>
>>>>>> ("Balun" is a conjunction of "balanced" and "unbalanced"
>>>>> identifying a
>>>>>> transition from a balanced transmission line to an unbalanced
>>> line.
>>>>>> "Unun" identifies transitioning from "unbalanced"
>>> to "unbalanced"
>>>>> line.
>>>>>> "Balbal" identifies transitioning from "balanced" to "balanced"
>>>>> line.
>>>>>> Depending upon the design, this transformation may occur at a
>>>>> number of
>>>>>> different ratios, of which 1:1 and 4:1 are the most commonly
>>> used.)
>>>>>> This simple two-way path is not always the case when using coax.
>>> If
>>>>> the
>>>>>> impedance mismatch is great enough, some fraction of the RF will
>>>>> find an
>>>>>> easier pathway flowing along the outside of the coax shielding.
>>>>> This can
>>>>>> cause problems such as RFI (Radio Frequency Interference) and
>>>>> inaccurate
>>>>>> readings on our meters (which are designed under the assumption
>>> RF
>>>>> will
>>>>>> travel along two paths, not three). Suffering a bad case of "RF
>>> on
>>>>> the
>>>>>> feed line" may cause RFI to affect other electronics in the
>>> area,
>>>>>> provide false swr readings, and cause "RF bite" on our
>>> microphone.
>>>>> This
>>>>>> is often caused by RF radiating off the outside of the coax,
>>>>> instead of
>>>>>> the antenna. (Although in some cases problems may exist even

>>> when
>>>>> feed
>>>>>> line radiation has been eliminated. RFI can be a difficult
>>> puzzle
>>>>> to
>>>>>> solve.)
>>>>>>
>>>>>> Enter the balun. By "wrapping" the coax with a much greater
>>>>> impedance
>>>>>> than the antenna feed point, we keep any stray RF from moving
>>> onto
>>>>> the
>>>>>> outside of the coax shielding. (Targeting a much greater
>>> impedance
>>>>> on
>>>>>> the outside of the coax than inside it.) To the degree this is
>>>>>> successful, RF may only travel onto the antenna, or back along
>>> the
>>>>>> inside of the coax to the XCVR. (On either the inside of the
>>>>> shielding
>>>>>> or along the surface of the center conductor. No RF travels
>>> along
>>>>> the
>>>>>> core of the center conductor, due to skin effect.)
>>>>>>
>>>>>> Once again we have only two pathways for the RF to travel
>>> allowing
>>>>> our
>>>>>> equipment and antenna system to behave as intended, and within
>>>>>> predictable parameters. This is why a balun may be useful at the
>>>>> feed
>>>>>> point of an antenna when using coax transmission line. It is
>>> also
>>>>> why,
>>>>>> unless the coax impedance is very close to equaling the
>>> antenna's
>>>>>> impedance where they meet (the feed point) a feed point balun is
>>>>>> advisable when using coax.
>>>>>>
>>>>>> Reflection, re-reflection, and re-re-reflection....
>>>>>>
>>>>>> Recall the transmitted RF wave traveling along the transmission
>>>>> line to
>>>>>> the antenna feed point, and not finding a perfectly equal
>>>>> impedance,
>>>>>> some bounced back toward the XCVR in the original direction.
>>>>>>
>>>>>> Now the reflected wave races toward the XCVR. Some of it was
>>>>> absorbed by
>>>>>> the antenna, and some has been lost in the transmission line

>>>>>> (heat/friction). So it isn't exactly at the same impedance when
>>> it
>>>>>> started, and it has been altered in other ways too. Namely
>>>>> the "phase"
>>>>>> of either the voltage or current has been shifted. To learn more
>>>>> about
>>>>>> this, "Reflections II" by Walter Maxwell W2DU is a great book!
>>>>> Highly
>>>>>> recommended! If you see one at a hamfest, buy it!
>>>>>>
>>>>>> We'll skip over exactly what and why this change takes place
>>>>> (entire
>>>>>> books have been written about just that!), but the RF wave is
>>>>> different
>>>>>> than when it left the XCVR, and as a result, it will "bounce"
>>> (or
>>>>>> re-reflect) off the XCVR, and move in the original direction
>>> again.
>>>>> It
>>>>>> is re-reflected back toward the antenna feed point.
>>>>>>
>>>>>> The re-reflection point will be the transmatch instead of the
>>> XCVR
>>>>> if a
>>>>>> transmatch is being utilized. Either way, the RF wave will
>>> bounce
>>>>> back
>>>>>> and forth, reflecting, re-reflecting, and re-re-reflecting, and
>>> so
>>>>> on,
>>>>>> until it either all eventually escapes out the antenna or is
>>>>> absorbed as
>>>>>> heat/friction in the transmission line. (In truth, it is always
>>> the
>>>>> sum
>>>>>> of both events -- what isn't eventually changed into heat in the
>>>>>> transmission line escapes the antenna as radiated RF.)
>>>>>>
>>>>>> As the swr increases, and as the inherent loss of the
>>> transmission
>>>>> line
>>>>>> increases (lower in balanced line; higher in coax), more of the
>>> RF
>>>>>> energy is lost as unproductive heat/friction, and less is
>>> available
>>>>> to
>>>>>> radiate from the antenna as a useful radio signal.
>>>>>>
>>>>>> This is why high swr on balanced feed line isn't all that bad.
>>> Most

>>>>> of
>>>>>> the RF energy will eventually "bounce" out of the antenna
>>> anyway.
>>>>> It
>>>>>> doesn't really matter if it makes it out the very first trip, on
>>>>> the
>>>>>> sixth, or 16th. Radiated is radiated. The person receiving your
>>>>> radio
>>>>>> signal will never know if they are hearing the very first wave
>>> or a
>>>>>> re-reflected wave. It just doesn't matter after the energy
>>> escapes
>>>>> the
>>>>>> antenna.
>>>>>>
>>>>>> Escaping the antenna is the trick!
>>>>>>
>>>>>> And that is where coax may not work well in the same situation.
>>>>> Coax,
>>>>>> suffering much greater losses to the RF as it traverses along it
>>>>>> ("attenuation"), simply absorbs too much of the RF as it bounces
>>>>> back
>>>>>> and forth, especially under high swr conditions. There isn't
>>> much
>>>>> left
>>>>>> to escape out the antenna.
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>>>>>> All of which leads to the generalized conclusion that wire
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2675. RE: [SkyWires] Re: Feed Arrangement for Operating the Loop as a Vertical Antenna

Yahoo group: SkyWires
Date: 2007-10-06 15:33:16 UTC
From: ag0k@ag0k.com
Topic: 2643 Message: 2675
Attachments: 1 described; binary payloads are missing from this source WARC

Dear Denisnh

I definitely know what you are talking
about.

My wife and I live in a church Manse
[parsonage].
After I got here in April and the
members were helping
me unload our stuff one of the deacons
asked about
my radios. He turned out to be a Tech
and by the
end of May he was so hooked by HF he
went and upgraded
to a general.

In any event, that deacon along with two
other deacons put
up a 135' Zepp fed with 450 ladder line
and a 144' loop which
I feed with 300 ohm twin lead. Both
antennas are constructed of
the 30% copper weld from the wireman.

Several members have come by the manse
to visit and the see
the radios and I advise them that I am a
ham radio operator.

The next question I get from them is
where is the Antenna.

I just love the 16 gauge copper weld.
Get it up high enough
and it seems to just disappear.

Good luck on your antenna projects.
73's Clint AGØK

Grace, Peace, and Joy, be yours,

Rev. W. Clinton Stockton, pastor
Andrews Presbyterian Church
104 S. Rosemary Ave

Andrews, SC 29510
<mailto:pastor@...>
pastor@...
Office 843 264 5596
Manse 843 264 8756
Cellphone 843 325-9760

2676. Re: [SkyWires] Re: Feed Arrangement for Operating the Loop as a Vertical Antenna

Yahoo group: SkyWires
Date: 2007-10-06 15:35:06 UTC
From: Erik Weaver
Topic: 2643 Message: 2676

My #14 copper stranded "antenna" wire did catch the light at first. But after it aged it was almost invisible. I *knew* where to look and I had trouble finding it. Others will have had similar experiences I'm sure. Of course, you still have to get through the "shinny" stage. Maybe you could leave a coil of it hanging on a tree over the winter and deploy late winter/early spring before the leaves get thick.

Erik n0ew

denisnh wrote:
> Hi Reverend. I just never got used to setting up wire antennas and
> how it must look to casual observers. I mean, putting up big, heavy
> copper wires that conduct a lot of current must make some onlookers a
> little edgy and I tend to try and be a good neighbor. On the other
> hand, if you tell them what it's for, they start blaming you for
> everything from TVI to crop circles. I could always say it's a
> geomagnetic disturbance sensor that I'm helping my college daughter
> with as a school climate project. :-) I do have a weather station on
> my roof so that would fit in nicely with my "cover". LOL (You know,
> that just might work!)
>
> Most of the people here are pretty cool. There is one neighbor to the
> side of me, though, and the nosy #*@%$*& people just can't mind my own
> business. It's pretty rural and wooded here, but I can hear them
> talking away about what I'm doing as if I can't hear them. I usually
> make a comment regarding their conversation and give a cordial wave as
> I head back into the house. I already have five attachment points to
> this loop with at least two more to go so it's looking pretty involved.
>
> Let's face it, running heavy copper wires through trees does look
> pretty scary to some folks. If they came over to ask about it I would
> just tell them it's an MW receiving antenna for MW. But they just
> watch thinking I can't hear or see them. It get's pretty annoying and
> I have absolutely nothing in common with these folks.
>
> Night time deployment of antennas always turns into a disaster.
> Leader strings and ropes get tangled or broken and and can't get a
> good aim on that fork at the top of the tree.
>
> What are ya gonna do. :-)
>
> --- In SkyWires@yahoogroups.com, <ag0k@...> wrote:
>> Maybe wearing a camo garment would help
>> hide you in your covert operation...

>> Smile
>>
>>
>> Grace, Peace, and Joy, be yours,
>>
>> Rev. W. Clinton Stockton, pastor
>> Andrews Presbyterian Church
>> 104 S. Rosemary Ave
>> Andrews, SC 29510
>> <mailto:pastor@...>
>> pastor@...
>> Office 843 264 5596
>> Manse 843 264 8756
>> Cellphone 843 325-9760
>>
>>
>>
>> -----Original Message-----
>> From: SkyWires@yahoogroups.com
>> [mailto:SkyWires@yahoogroups.com] On
>> Behalf Of denisnh
>> Sent: Saturday, October 06, 2007 10:40
>> AM
>> To: SkyWires@yahoogroups.com
>> Subject: [SkyWires] Re: Feed Arrangement
>> for Operating the Loop as a Vertical
>> Antenna
>>
>>
>>
>> Oh, another thing that can be an
>> advantage with the atlatl is if you
>> have a dog that fetches. My dog is an
>> excellent Frisbee dog and goes
>> after anything. He's part coon hound and
>> very fast with long legs.
>> When setting up a wire, I can just make
>> like I'm playing with my dog
>> by slinging ordinary tennis balls until
>> I'm sure nobody is looking and
>> grab the tennis ball with the leader
>> string attached and sling that up
>> into the tree. I just hope my dog
>> doesn't climb the tree after it.
>> Make for a nice diversion for a "covert"
>> project. :-)
>>
>> --- In SkyWires@yahoogroup
>> <mailto:SkyWires%40yahoogroups.com>
>> s.com, Erik Weaver <erik@> wrote:

>>> Heeheh, hi Denis,
>>>
>>> Ya, I can easily imagine some 'lost
>> time' trying to cross the border
>>> with various weapons. If you follow
>> the various lists, or perhaps
>> search
>>> their archives, you'll find many
>> things are considered weapons, and
>> some
>>> of those that are not required a
>> fishing license. The guys with the
>> guns
>>> figure if you have any fishing gear
>> you need that permit. Or a fine. Of
>>> course, you can always come back and
>> try arguing with a judge later
>> on...
>>> Arrows, crossbow (whether handheld or
>> "industrial" strength), small
>>> pieces of lead (sinkers) moving at
>> rapid velocities all incur a certain
>>> level of risk, if not illegality. A
>> tennis ball on the other hand seems
>>> about as "warm and fuzzy" as we can
>> get in this messed up PC-crazy
>> world.
>>> Besides, the atlatl is quite cool! Did
>> you check out the international
>>> competitions? Neat stuff! A very old
>> technology, assisting us with very
>>> modern technology. If only Ug and Grog
>> had known when they invented
>> it! :)
>>> It is a doggie toy for throwing tennis
>> balls. Everyone either has a
>> dog,
>>> may be getting a dog, or visiting a
>> friend who has a dog. So you can
>>> always carry one of these. They are
>> just plastic, very light to carry,
>>> and even fun to play with! Buy extra
>> tennis balls because you'll lose
>>> some just flinging them around :) My
>> friend and I lost one or two that
>>> day, for exactly that reason!
>>>
>>> You may want to get two of the
>> atlatl's so you can play catch.
>>> Have fun!

>>> Erik
>>>
>>> denisnh wrote:
>>>> Hi Erik. The Atlatl looks very cool!
>> What I've been using is a
>>>> sling shot with "high powered" latex
>> bands. A half ounce fishing
>>>> sinker is then attached to some
>> Spider Wire fishing string spooled
>>>> onto a spinning reel. I have a huge
>> pine tree that's 80' tall and I
>>>> can get the line right over it with
>> that setup. I set up an inverted-
>>>> V there.
>>>>
>>>> I also have an 80# pistol crossbow,
>> and I modify the little bolt by
>>>> removing the tip, placing a small
>> weight in place of the tip and
>>>> drilling a hole at the end of the
>> shaft for the same fishing setup I
>>>> mentoned above. That works even
>> better but I don't take it out much
>>>> since it looks rather ominous if the
>> neighbors happen to get a
>>>> glimpse of it.
>>>>
>>>> I have some relatives in Canada, one
>> of which owns a farm. When
>>>> visiting, I like to erect a
>> temporary antenna for use during my
>> stay.
>>>> I was surprised to find out that
>> sling shots are illegal in that
>>>> area, and the pistol crossbow is
>> definitely illegal. I had figured a
>>>> light bow but the atlatl looks very
>> promising. As for the air gun,
>>>> can you imagine the looks on the
>> faces of the customs agents trying
>>>> to get something like that across
>> the border. Yikes!
>>>> Thanks,
>>>> Denis
>>>>
>>>> --- In SkyWires@yahoogroup
>> <mailto:SkyWires%40yahoogroups.com>
>> s.com, Erik Weaver <erik@> wrote:
>>>>> Hi Denis,
>>>>>

>>>>> An atlatl is another option:
>>>>>
>>>>> http://www.n0ew.
>> <http://www.n0ew.org/k0s/atlatl/>
>> org/k0s/atlatl/
>>>>> This really seems to work well and
>> it is pretty cheap. My friend
>>>> and I
>>>>> didn't get up over 100-feet, but I
>> think we got every bit of 50-
>>>> feet
>>>>> height into the tree.
>>>>>
>>>>> If you really want another
>> 'project' you might think about building
>>
>>>> an
>>>>> air gun:
>>>>>
>>>>> http://www.n0ew.
>> <http://www.n0ew.org/k0s/air_gun/>
>> org/k0s/air_gun/
>>>>> Have fun!
>>>>> Erik
>>>>>
>>>>> denisnh wrote:
>>>>>> Thanks again, Erik! From what you
>> wrote and the research I've
>>>> done,
>>>>>> I decided to forget about the
>> vertical radiator and go with a
>>>> full
>>>>>> wave 18g loop and 16g homebrew
>> ladder line (I have all this on
>>>>>> hand). Guess I'm fickle. LOL
>>>>>>
>>>>>> What I really dread is the
>> cutting. The trees in my backyard are
>>>> so
>>>>>> dense that I'll have to get the
>> chainsaw out and do some serious
>>>>>> cutting. I did read about one guy
>> who shot an arrow right over
>>>> the
>>>>>> trees with some fishing string
>> attached, then pulled his wire
>>>> right
>>>>>> over the tops of the trees for his
>> antenna. That scares me a
>>>> bit.

>>>>>> Not to mention that running enough
>> power could start a fire! But
>>>> it
>>>>>> seems to work for him and he
>> mentioned that once in a while he'll
>>>>>> pull the wire one way or the other
>> to compensate for any areas
>>>> that
>>>>>> are chafed through.
>>>>>>
>>>>>> Thanks,
>>>>>> Denis
>>>>>>
>>>>>> --- In SkyWires@yahoogroup
>> <mailto:SkyWires%40yahoogroups.com>
>> s.com, Erik Weaver <erik@> wrote:
>>>>>>> Hi Denis (I thought "Denisnh" was
>> a unusual name! heheh)....
>>>>>>> Comments in body below....
>>>>>>>
>>>>>>> ...snip...
>>>>>>>
>>>>>>>> The curves for parallel lines
>> all hug the bottom of the
>>>>>>>> chart where the favorable SWR
>> and other factors are, while the
>>>>>> coax
>>>>>>>> lines soar skyward surprisingly
>> fast, which concurs with your
>>>>>> post.
>>>>>>> Cebik's web pages are filled with
>> useful information -- time
>>>> there
>>>>>> is
>>>>>>> well spent. The rapid rise of
>> losses in coax under high swr
>>>>>> conditions
>>>>>>> is in sharp contrast to the low
>> losses generally found in
>>>> balanced
>>>>>>> ("parallel") feed line. It is one
>> of the major differences
>>>> between
>>>>>> them.
>>>>>>> About the only negative that
>> comes to mind with balanced feed
>>>> line
>>>>>> is
>>>>>>> the need to carefully route it;
>> so it isn't practical in all

>>>> cases.
>>>>>>> Here's something else to
>> consider....
>>>>>>> Remember first the rare "special
>> case" where impedance is the
>>>> same
>>>>>>> everywhere in the antenna system
>> (XCVR, transmission line,
>>>> antenna,
>>>>>>> etc). With the exception of a
>> tiny loss of energy as electrons
>>>> rub
>>>>>>> against one another (this loss
>> due to friction is usually
>>>>>> insignificant
>>>>>>> in the typical amateur radio
>> installation), nearly all the RF
>>>>>> ("Radio
>>>>>>> Frequency") energy generated by
>> the XCVR radiates from the
>>>> antenna
>>>>>> as
>>>>>>> radio waves. This is our goal of
>> course.
>>>>>>> By the way, I usually speak in
>> terms of transmitting a radio
>>>> signal
>>>>>> and
>>>>>>> trying to send it out into the
>> world (our "Hello World!"
>>>> message),
>>>>>> but
>>>>>>> the efficiencies (or lack
>> thereof) work exactly the same in
>>>>>> reverse. In
>>>>>>> other words, the antenna has the
>> same gain (or loss) as a
>>>> receiving
>>>>>>> antenna, as it does when
>> transmitting. So our rare special case
>>>>>> antenna
>>>>>>> will also deliver all the RF
>> energy it collects to the receiver
>>>>>> (less
>>>>>>> friction/heat lost to move the
>> electrons -- which can never be
>>>>>> avoided
>>>>>>> in the real world).
>>>>>>>
>>>>>>> Now when the impedance is one

>> value on the transmission line
>>>> (and
>>>>>> it
>>>>>>> doesn't matter what kind of
>> transmission line), and the
>>>> impedance
>>>>>> of the
>>>>>>> antenna is a different value,
>> some RF energy is reflected off
>>>> the
>>>>>>> antenna feed point, back to the
>> XCVR. How much is reflected
>>>> depends
>>>>>> upon
>>>>>>> how great the difference is
>> between the impedances.
>>>>>>> There is a difference in behavior
>> at the antenna feed point
>>>> between
>>>>>> a
>>>>>>> coax fed antenna and a parallel
>> line fed antenna.
>>>>>>> Balanced (parallel) line only
>> offers a two-way path between the
>>>>>> antenna
>>>>>>> and the XCVR. Coax may offer a
>> third pathway -- along the
>>>> outside
>>>>>> of the
>>>>>>> shielding (aka "braid") of the
>> coax. This is because the higher
>>>> the
>>>>>>> frequency of alternating current
>> (like RF) the less deeply the
>>>> RF
>>>>>>> penetrates into the conductor --
>> this is called "skin effect".
>>>> RF
>>>>>>> doesn't penetrate very deeply
>> into the conductor; it travels
>>>> along
>>>>>> the
>>>>>>> outer-most surface, shallow
>> enough in fact that one wave of
>>>> energy
>>>>>> can
>>>>>>> travel along the inner surface of
>> the coax shielding while a
>>>> second
>>>>>> wave

>>>>>>> travels along the outside surface
>> of the same coax shielding,
>>>> and
>>>>>> the
>>>>>>> two will never meet. Therefore,
>> coax can offer three conductors
>>>> to
>>>>>> RF:
>>>>>>> along the inner conductor; along
>> the inside of the coax
>>>> shielding;
>>>>>> and
>>>>>>> along the outside of the coax
>> shielding. We desire the first two
>>>>>> paths,
>>>>>>> but we do not (usually) benefit
>> from RF flowing on the outside
>>>> of
>>>>>> the
>>>>>>> coax shield.
>>>>>>>
>>>>>>> Since balanced (parallel
>> conductors) transmission line (aka feed
>>>>>> line)
>>>>>>> is constructed of only two wires
>> (which may be either stranded
>>>> or
>>>>>> solid
>>>>>>> wire), the reflected wave (that
>> energy which is reflecting from
>>>> the
>>>>>>> antenna feed point, back to the
>> XCVR) has only one return path
>>>>>> available
>>>>>>> to it -- it returns ("reflects")
>> back along the same conductor
>>>> that
>>>>>> it
>>>>>>> originally traversed. This is a
>> simple condition, and no "balun"
>>>>>> (more
>>>>>>> accurately "bal-bal" for
>> "balanced-to-balanced" in this case) is
>>>>>>> required to maintain the desired
>> energy pathway between the XCVR
>>>>>> and
>>>>>>> antenna.
>>>>>>>
>>>>>>> ("Balun" is a conjunction of
>> "balanced" and "unbalanced"

>>>>>> identifying a
>>>>>>> transition from a balanced
>> transmission line to an unbalanced
>>>> line.
>>>>>>> "Unun" identifies transitioning
>> from "unbalanced"
>>>> to "unbalanced"
>>>>>> line.
>>>>>>> "Balbal" identifies transitioning
>> from "balanced" to "balanced"
>>>>>> line.
>>>>>>> Depending upon the design, this
>> transformation may occur at a
>>>>>> number of
>>>>>>> different ratios, of which 1:1
>> and 4:1 are the most commonly
>>>> used.)
>>>>>>> This simple two-way path is not
>> always the case when using coax.
>>>> If
>>>>>> the
>>>>>>> impedance mismatch is great
>> enough, some fraction of the RF will
>>>>>> find an
>>>>>>> easier pathway flowing along the
>> outside of the coax shielding.
>>>>>> This can
>>>>>>> cause problems such as RFI (Radio
>> Frequency Interference) and
>>>>>> inaccurate
>>>>>>> readings on our meters (which are
>> designed under the assumption
>>>> RF
>>>>>> will
>>>>>>> travel along two paths, not
>> three). Suffering a bad case of "RF
>>>> on
>>>>>> the
>>>>>>> feed line" may cause RFI to
>> affect other electronics in the
>>>> area,
>>>>>>> provide false swr readings, and
>> cause "RF bite" on our
>>>> microphone.
>>>>>> This
>>>>>>> is often caused by RF radiating
>> off the outside of the coax,
>>>>>> instead of
>>>>>>> the antenna. (Although in some
>> cases problems may exist even

>>>> when
>>>>>> feed
>>>>>>> line radiation has been
>> eliminated. RFI can be a difficult
>>>> puzzle
>>>>>> to
>>>>>>> solve.)
>>>>>>>
>>>>>>> Enter the balun. By "wrapping"
>> the coax with a much greater
>>>>>> impedance
>>>>>>> than the antenna feed point, we
>> keep any stray RF from moving
>>>> onto
>>>>>> the
>>>>>>> outside of the coax shielding.
>> (Targeting a much greater
>>>> impedance
>>>>>> on
>>>>>>> the outside of the coax than
>> inside it.) To the degree this is
>>>>>>> successful, RF may only travel
>> onto the antenna, or back along
>>>> the
>>>>>>> inside of the coax to the XCVR.
>> (On either the inside of the
>>>>>> shielding
>>>>>>> or along the surface of the
>> center conductor. No RF travels
>>>> along
>>>>>> the
>>>>>>> core of the center conductor, due
>> to skin effect.)
>>>>>>> Once again we have only two
>> pathways for the RF to travel
>>>> allowing
>>>>>> our
>>>>>>> equipment and antenna system to
>> behave as intended, and within
>>>>>>> predictable parameters. This is
>> why a balun may be useful at the
>>>>>> feed
>>>>>>> point of an antenna when using
>> coax transmission line. It is
>>>> also
>>>>>> why,
>>>>>>> unless the coax impedance is very
>> close to equaling the
>>>> antenna's
>>>>>>> impedance where they meet (the

>> feed point) a feed point balun is
>>>>>>> advisable when using coax.
>>>>>>>
>>>>>>> Reflection, re-reflection, and
>> re-re-reflection....
>>>>>>> Recall the transmitted RF wave
>> traveling along the transmission
>>>>>> line to
>>>>>>> the antenna feed point, and not
>> finding a perfectly equal
>>>>>> impedance,
>>>>>>> some bounced back toward the XCVR
>> in the original direction.
>>>>>>> Now the reflected wave races
>> toward the XCVR. Some of it was
>>>>>> absorbed by
>>>>>>> the antenna, and some has been
>> lost in the transmission line
>>>>>>> (heat/friction). So it isn't
>> exactly at the same impedance when
>>>> it
>>>>>>> started, and it has been altered
>> in other ways too. Namely
>>>>>> the "phase"
>>>>>>> of either the voltage or current
>> has been shifted. To learn more
>>>>>> about
>>>>>>> this, "Reflections II" by Walter
>> Maxwell W2DU is a great book!
>>>>>> Highly
>>>>>>> recommended! If you see one at a
>> hamfest, buy it!
>>>>>>> We'll skip over exactly what and
>> why this change takes place
>>>>>> (entire
>>>>>>> books have been written about
>> just that!), but the RF wave is
>>>>>> different
>>>>>>> than when it left the XCVR, and
>> as a result, it will "bounce"
>>>> (or
>>>>>>> re-reflect) off the XCVR, and
>> move in the original direction
>>>> again.
>>>>>> It
>>>>>>> is re-reflected back toward the
>> antenna feed point.
>>>>>>> The re-reflection point will be
>> the transmatch instead of the
>>>> XCVR

>>>>>> if a
>>>>>>> transmatch is being utilized.
>> Either way, the RF wave will
>>>> bounce
>>>>>> back
>>>>>>> and forth, reflecting,
>> re-reflecting, and re-re-reflecting, and
>>
>>>> so
>>>>>> on,
>>>>>>> until it either all eventually
>> escapes out the antenna or is
>>>>>> absorbed as
>>>>>>> heat/friction in the transmission
>> line. (In truth, it is always
>>>> the
>>>>>> sum
>>>>>>> of both events -- what isn't
>> eventually changed into heat in the
>>>>>>> transmission line escapes the
>> antenna as radiated RF.)
>>>>>>> As the swr increases, and as the
>> inherent loss of the
>>>> transmission
>>>>>> line
>>>>>>> increases (lower in balanced
>> line; higher in coax), more of the
>>>> RF
>>>>>>> energy is lost as unproductive
>> heat/friction, and less is
>>>> available
>>>>>> to
>>>>>>> radiate from the antenna as a
>> useful radio signal.
>>>>>>> This is why high swr on balanced
>> feed line isn't all that bad.
>>>> Most
>>>>>> of
>>>>>>> the RF energy will eventually
>> "bounce" out of the antenna
>>>> anyway.
>>>>>> It
>>>>>>> doesn't really matter if it makes
>> it out the very first trip, on
>>>>>> the
>>>>>>> sixth, or 16th. Radiated is
>> radiated. The person receiving your
>>>>>> radio
>>>>>>> signal will never know if they
>> are hearing the very first wave

>>>> or a
>>>>>>> re-reflected wave. It just
>> doesn't matter after the energy
>>>> escapes
>>>>>> the
>>>>>>> antenna.
>>>>>>>
>>>>>>> Escaping the antenna is the
>> trick!
>>>>>>> And that is where coax may not
>> work well in the same situation.
>>>>>> Coax,
>>>>>>> suffering much greater losses to
>> the RF as it traverses along it
>>>>>>> ("attenuation"), simply absorbs
>> too much of the RF as it bounces
>>>>>> back
>>>>>>> and forth, especially under high
>> swr conditions. There isn't
>>>> much
>>>>>> left
>>>>>>> to escape out the antenna.
>>>>>>>
>>>>>>> All of which leads to the
>> generalized conclusion that wire
>>>> antenna
>>>>>>> elements fed by balanced
>> transmission line, operate very
>>>>>> efficiently
>>>>>>> even under high swr conditions.
>> That is why these types of
>>>> antennas
>>>>>>> (from dipoles to loops) have
>> built a reputation as practical
>>>> multi-
>>>>>> band
>>>>>>> solutions for many amateur radio
>> operators. The only stumbling
>>>>>> block is
>>>>>>> transforming their wide ranges of
>> impedance into something close
>>>> to
>>>>>> a
>>>>>>> nominal 50-Ohms resistive
>> (meaning little or no reactance) to
>>>> match
>>>>>> our
>>>>>>> "modern" (meaning non-tube)
>> XCVRs. And that is precisely what a
>>>>>>> transmatch is designed to

>> accomplish.
>>>>>>>
>>>>>>>
>>>>>>>
>>>>>>>> All my HF antenna experience is
>> in
>>>>>>>> receive only antennas for
>> shortwave. I've been dragging my feet
>>>> on
>>>>>>>> getting my General Class license
>> but finally decided to go for
>>>> it
>>>>>>>> this month. Of course, I had
>> masterd 5 wpm CW just in time for
>>>>>> that
>>>>>>>> requirement to be abolished. :-)
>>>>>>> Heheh, yes, that sounds just
>> about right! ;) Welcome to HF! And
>>>>>> welcome
>>>>>>> to the world of transmitting
>> antennas. They can be a lot of fun!
>>>>>>>
>>>>>>>
>>>>>>>> Some people seem to put all
>> their faith in the modeling
>>>> software.
>>>>>>>> Whatever works for them, but I
>> would never take a computer
>>>> model
>>>>>> as
>>>>>>>> being 100% accurate. To me, the
>> model really has to be built in
>>>> 3D
>>>>>>>> to prove it works.
>>>>>>> ...snip...
>>>>>>>
>>>>>>> Precisely! It can save a lot of
>> time by eliminating very bad or
>>>>>> very
>>>>>>> unlikely designs, but it is
>> almost impossible to fully model the
>>>>>>> environment in which the antenna
>> will be built. So you have to
>>>>>> actually
>>>>>>> build it and test it at some
>> point. This is like other rules of
>>>>>> thumb.
>>>>>>> Take any of the "formulas" for
>> determining the proper length of
>>>>>> antenna

>>>>>>> elements. They all say to start
>> too long and slowing trim it to
>>>> a
>>>>>> proper
>>>>>>> match.
>>>>>>>
>>>>>>> Whether a formula for a simple
>> dipole, or a computer model of a
>>>>>> loop or
>>>>>>> beam, the idea isn't to make the
>> perfect antenna on paper and
>>>> then
>>>>>>> reproduce it exactly in the real
>> world. It is to "get close" and
>>>>>>> possibly avoid some time lost in
>> fiddling around. Beams are a
>>>> good
>>>>>>> example. You can play with the
>> modeling software and try out
>>>>>> different
>>>>>>> element combinations and get an
>> idea of the resulting envelopes
>>>> and
>>>>>> feed
>>>>>>> point impedances. This saves a
>> lot of time, but ultimately you
>>>> have
>>>>>>> build it and tune it to your
>> exact site.
>>>>>>>
>>>>>>>>> ...snip... What the heck though,
>> and after
>>>>>>>>> reading your reply, I believe I
>> will go with the 40 meter loop
>>>> and
>>>>>>>>> orient it as a horizontal with
>> paralell feedline.
>>>>>>> Adding a transmatch (aka antenna
>> tuner) between your XCVR and
>>>>>> antenna
>>>>>>> will most likely allow this to
>> become a very usable multi-band
>>>>>> antenna.
>>>>>>> Every antenna displays its own
>> range of impedances, and these
>>>> vary
>>>>>> on
>>>>>>> each band. (This "impedance" is
>> more properly called "complex
>>>>>> impedance"

>>>>>>> because it includes some
>> reactance.) Very low impedances are
>>>>>> typically
>>>>>>> difficult for many transmatches
>> to "match," but any extreme
>>>> value
>>>>>> of
>>>>>>> complex impedance may fall
>> outside the range which a given
>>>>>> transmatch
>>>>>>> can "match." ("Match" means
>> transforming the existing complex
>>>>>> impedance,
>>>>>>> on the antenna-side of the
>> transmatch, into an impedance (with
>>>>>> little or
>>>>>>> no reactance) close to that which
>> the XCVR is designed to work
>>>>>> into.)
>>>>>>> But there are workarounds, such
>> as matching stubs, and other
>>>>>> solutions.
>>>>>>> (See below.)
>>>>>>>
>>>>>>>
>>>>>>>> Regarding running the line into
>> the shack, shorting the wires
>>>> and
>>>>>>>> connecting them to the rig,
>> there are a few reasons I can't do
>>>>>> this.
>>>>>>>> For one, there are children and
>> unknowing people in the area
>>>> that
>>>>>>>> may get zapped if they are able
>> to touch the wires. My ham
>>>>>> station
>>>>>>>> (or what's left of it) is in my
>> basement office. I need to run
>>>>>> the
>>>>>>>> line vertically to about 8'
>> above the ground, make the short at
>>>>>> that
>>>>>>>> point, and install a matching
>> network either on a pole or tree
>>>> in
>>>>>> a
>>>>>>>> PVC junction box. The ground
>> wire would go there also, and then
>>>> I

>>>>>>>> need run the ground and an
>> insulated feedwire the remaining
>>>>>> distance
>>>>>>>> to the ground, bury it and slip
>> it through the side of the
>>>> house
>>>>>>>> into the shack.
>>>>>>>>
>>>>>>> If you are married to the idea of
>> having the vertical option,
>>>> this
>>>>>> may
>>>>>>> be true. You might consider a
>> simple 30-amp automotive relay
>>>> too.
>>>>>> Put
>>>>>>> 12-vdc to it and remotely control
>> that shorting switch.
>>>>>>> I'm not sure I'm picturing this
>> properly. Where is the antenna
>>>> feed
>>>>>>> point in relation to your shack?
>> Pretty much right above it, or
>>>> 50-
>>>>>> feet
>>>>>>> distance after you get outside
>> the house?
>>>>>>> I'm wondering if we're talking
>> about a longer run from the shack
>>>> to
>>>>>> the
>>>>>>> antenna feed point, like 50- to
>> 100-feet or more, or a much
>>>> shorter
>>>>>> run
>>>>>>> like 20- or 30-feet?
>>>>>>>
>>>>>>> Also, consider getting outside in
>> as short a run as possible,
>>>> and
>>>>>> making
>>>>>>> a longer run of ladder line to
>> get to the antenna feed point. I
>>>> had
>>>>>> one
>>>>>>> dipole for which I ran 300-Ohm
>> twin lead transmission line half
>>>> way
>>>>>>> around my house under the
>> overhang of the roof.

>>>>>>>
>>>>
>>>>
>>>>
>>>>
>>>> Yahoo! Groups Links
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>
> Yahoo! Groups Links
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2678. Re: Feed Arrangement for Operating the Loop as a Vertical Antenna

Yahoo group: SkyWires
Date: 2007-10-08 03:47:30 UTC
From: denisnh
Topic: 2643 Message: 2678

Hi Eric. Yeah, also speaker wire with the transparent insulation shows up amazingly well, especially when the sun shines off it.

I few years back, I set up the "Four Buck Antenna" in that big 80' pine about 75' from the house. I got some surplus #14 copper stranded with brown insulation at a great price from a surplus store and I bit the bullet and bought NEW 300 ohm twin lead, exterior grade, from radio shack. That twin lead is excellent by the way. It holds up very well and I've built some DCTL antennas from it that worked great also. I've actually placed a wooden X-frame to hold the loop open and hoisted them up in a nearby tree. I used them for receive only, but they were very quiet and actually seemed to have some gain, which is one beef I have regarding certain loops.

Anyway, getting back to the Four Buck Inverted-V, after I finished the installation, I would try to point it out to people visiting, and I could not for the life of me see it! We would have to walk closer and then I would scout for the wire-end insulators before I could finally find the antenna elements.

I also die good quality nylon ropes with ordinary fabric die (Ritt I think?, either black or brown, and they would disappear also. I've always wanted to try "tie-dyeing" rope with various camouflage colored dyes. If I can find some extra time, I may still try that. If it worked, that would be one really neat looking rope!

Erik, great idea on the strange antenna event. You ever listen to coast-to-coast AM radio, speaking of pyramids and past lives? I forgot to check, but is your email posted on your web site?

Thanks,
Denis

--- In SkyWires@yahoogroups.com, Erik Weaver <erik@...> wrote:
>
> My #14 copper stranded "antenna" wire did catch the light at first. But
> after it aged it was almost invisible. I *knew* where to look and I had
> trouble finding it. Others will have had similar experiences I'm sure.
> Of course, you still have to get through the "shinny" stage. Maybe you
> could leave a coil of it hanging on a tree over the winter and deploy
> late winter/early spring before the leaves get thick.
>
> Erik n0ew
>
> denisnh wrote:
> > Hi Reverend. I just never got used to setting up wire antennas and

> > how it must look to casual observers. I mean, putting up big, heavy
> > copper wires that conduct a lot of current must make some onlookers a
> > little edgy and I tend to try and be a good neighbor. On the other
> > hand, if you tell them what it's for, they start blaming you for
> > everything from TVI to crop circles. I could always say it's a
> > geomagnetic disturbance sensor that I'm helping my college daughter
> > with as a school climate project. :-) I do have a weather station on
> > my roof so that would fit in nicely with my "cover". LOL (You know,
> > that just might work!)
> >
> > Most of the people here are pretty cool. There is one neighbor to the
> > side of me, though, and the nosy #*@%$*& people just can't mind my own
> > business. It's pretty rural and wooded here, but I can hear them
> > talking away about what I'm doing as if I can't hear them. I usually
> > make a comment regarding their conversation and give a cordial wave as
> > I head back into the house. I already have five attachment points to
> > this loop with at least two more to go so it's looking pretty
involved.
> >
> > Let's face it, running heavy copper wires through trees does look
> > pretty scary to some folks. If they came over to ask about it I would
> > just tell them it's an MW receiving antenna for MW. But they just
> > watch thinking I can't hear or see them. It get's pretty annoying and
> > I have absolutely nothing in common with these folks.
> >
> > Night time deployment of antennas always turns into a disaster.
> > Leader strings and ropes get tangled or broken and and can't get a
> > good aim on that fork at the top of the tree.
> >
> > What are ya gonna do. :-)
> >
> > --- In SkyWires@yahoogroups.com, <ag0k@> wrote:
> >> Maybe wearing a camo garment would help
> >> hide you in your covert operation...
> >> Smile
> >>
> >>
> >> Grace, Peace, and Joy, be yours,
> >>
> >> Rev. W. Clinton Stockton, pastor
> >> Andrews Presbyterian Church
> >> 104 S. Rosemary Ave
> >> Andrews, SC 29510
> >> <mailto:pastor@>
> >> pastor@
> >> Office 843 264 5596
> >> Manse 843 264 8756
> >> Cellphone 843 325-9760
> >>
> >>

> >>
> >> -----Original Message-----
> >> From: SkyWires@yahoogroups.com
> >> [mailto:SkyWires@yahoogroups.com] On
> >> Behalf Of denisnh
> >> Sent: Saturday, October 06, 2007 10:40
> >> AM
> >> To: SkyWires@yahoogroups.com
> >> Subject: [SkyWires] Re: Feed Arrangement
> >> for Operating the Loop as a Vertical
> >> Antenna
> >>
> >>
> >>
> >> Oh, another thing that can be an
> >> advantage with the atlatl is if you
> >> have a dog that fetches. My dog is an
> >> excellent Frisbee dog and goes
> >> after anything. He's part coon hound and
> >> very fast with long legs.
> >> When setting up a wire, I can just make
> >> like I'm playing with my dog
> >> by slinging ordinary tennis balls until
> >> I'm sure nobody is looking and
> >> grab the tennis ball with the leader
> >> string attached and sling that up
> >> into the tree. I just hope my dog
> >> doesn't climb the tree after it.
> >> Make for a nice diversion for a "covert"
> >> project. :-)
> >>
> >> --- In SkyWires@yahoogroup
> >> <mailto:SkyWires%40yahoogroups.com>
> >> s.com, Erik Weaver <erik@> wrote:
> >>> Heeheh, hi Denis,
> >>>
> >>> Ya, I can easily imagine some 'lost
> >> time' trying to cross the border
> >>> with various weapons. If you follow
> >> the various lists, or perhaps
> >> search
> >>> their archives, you'll find many
> >> things are considered weapons, and
> >> some
> >>> of those that are not required a
> >> fishing license. The guys with the
> >> guns
> >>> figure if you have any fishing gear
> >> you need that permit. Or a fine. Of
> >>> course, you can always come back and

> >> try arguing with a judge later
> >> on...
> >>> Arrows, crossbow (whether handheld or
> >> "industrial" strength), small
> >>> pieces of lead (sinkers) moving at
> >> rapid velocities all incur a certain
> >>> level of risk, if not illegality. A
> >> tennis ball on the other hand seems
> >>> about as "warm and fuzzy" as we can
> >> get in this messed up PC-crazy
> >> world.
> >>> Besides, the atlatl is quite cool! Did
> >> you check out the international
> >>> competitions? Neat stuff! A very old
> >> technology, assisting us with very
> >>> modern technology. If only Ug and Grog
> >> had known when they invented
> >> it! :)
> >>> It is a doggie toy for throwing tennis
> >> balls. Everyone either has a
> >> dog,
> >>> may be getting a dog, or visiting a
> >> friend who has a dog. So you can
> >>> always carry one of these. They are
> >> just plastic, very light to carry,
> >>> and even fun to play with! Buy extra
> >> tennis balls because you'll lose
> >>> some just flinging them around :) My
> >> friend and I lost one or two that
> >>> day, for exactly that reason!
> >>>
> >>> You may want to get two of the
> >> atlatl's so you can play catch.
> >>> Have fun!
> >>> Erik
> >>>
> >>> denisnh wrote:
> >>>> Hi Erik. The Atlatl looks very cool!
> >> What I've been using is a
> >>>> sling shot with "high powered" latex
> >> bands. A half ounce fishing
> >>>> sinker is then attached to some
> >> Spider Wire fishing string spooled
> >>>> onto a spinning reel. I have a huge
> >> pine tree that's 80' tall and I
> >>>> can get the line right over it with
> >> that setup. I set up an inverted-
> >>>> V there.
> >>>>
> >>>> I also have an 80# pistol crossbow,

> >> and I modify the little bolt by
> >>>> removing the tip, placing a small
> >> weight in place of the tip and
> >>>> drilling a hole at the end of the
> >> shaft for the same fishing setup I
> >>>> mentoned above. That works even
> >> better but I don't take it out much
> >>>> since it looks rather ominous if the
> >> neighbors happen to get a
> >>>> glimpse of it.
> >>>>
> >>>> I have some relatives in Canada, one
> >> of which owns a farm. When
> >>>> visiting, I like to erect a
> >> temporary antenna for use during my
> >> stay.
> >>>> I was surprised to find out that
> >> sling shots are illegal in that
> >>>> area, and the pistol crossbow is
> >> definitely illegal. I had figured a
> >>>> light bow but the atlatl looks very
> >> promising. As for the air gun,
> >>>> can you imagine the looks on the
> >> faces of the customs agents trying
> >>>> to get something like that across
> >> the border. Yikes!
> >>>> Thanks,
> >>>> Denis
> >>>>
> >>>> --- In SkyWires@yahoogroup
> >> <mailto:SkyWires%40yahoogroups.com>
> >> s.com, Erik Weaver <erik@> wrote:
> >>>>> Hi Denis,
> >>>>>
> >>>>> An atlatl is another option:
> >>>>>
> >>>>> http://www.n0ew.
> >> <http://www.n0ew.org/k0s/atlatl/>
> >> org/k0s/atlatl/
> >>>>> This really seems to work well and
> >> it is pretty cheap. My friend
> >>>> and I
> >>>>> didn't get up over 100-feet, but I
> >> think we got every bit of 50-
> >>>> feet
> >>>>> height into the tree.
> >>>>>
> >>>>> If you really want another
> >> 'project' you might think about building
> >>

> >>>> an
> >>>>> air gun:
> >>>>>
> >>>>> http://www.n0ew.
> >> <http://www.n0ew.org/k0s/air_gun/>
> >> org/k0s/air_gun/
> >>>>> Have fun!
> >>>>> Erik
> >>>>>
> >>>>> denisnh wrote:
> >>>>>> Thanks again, Erik! From what you
> >> wrote and the research I've
> >>>> done,
> >>>>>> I decided to forget about the
> >> vertical radiator and go with a
> >>>> full
> >>>>>> wave 18g loop and 16g homebrew
> >> ladder line (I have all this on
> >>>>>> hand). Guess I'm fickle. LOL
> >>>>>>
> >>>>>> What I really dread is the
> >> cutting. The trees in my backyard are
> >>>> so
> >>>>>> dense that I'll have to get the
> >> chainsaw out and do some serious
> >>>>>> cutting. I did read about one guy
> >> who shot an arrow right over
> >>>> the
> >>>>>> trees with some fishing string
> >> attached, then pulled his wire
> >>>> right
> >>>>>> over the tops of the trees for his
> >> antenna. That scares me a
> >>>> bit.
> >>>>>> Not to mention that running enough
> >> power could start a fire! But
> >>>> it
> >>>>>> seems to work for him and he
> >> mentioned that once in a while he'll
> >>>>>> pull the wire one way or the other
> >> to compensate for any areas
> >>>> that
> >>>>>> are chafed through.
> >>>>>>
> >>>>>> Thanks,
> >>>>>> Denis
> >>>>>>
> >>>>>> --- In SkyWires@yahoogroup
> >> <mailto:SkyWires%40yahoogroups.com>
> >> s.com, Erik Weaver <erik@> wrote:

> >>>>>>> Hi Denis (I thought "Denisnh" was
> >> a unusual name! heheh)....
> >>>>>>> Comments in body below....
> >>>>>>>
> >>>>>>> ...snip...
> >>>>>>>
> >>>>>>>> The curves for parallel lines
> >> all hug the bottom of the
> >>>>>>>> chart where the favorable SWR
> >> and other factors are, while the
> >>>>>> coax
> >>>>>>>> lines soar skyward surprisingly
> >> fast, which concurs with your
> >>>>>> post.
> >>>>>>> Cebik's web pages are filled with
> >> useful information -- time
> >>>> there
> >>>>>> is
> >>>>>>> well spent. The rapid rise of
> >> losses in coax under high swr
> >>>>>> conditions
> >>>>>>> is in sharp contrast to the low
> >> losses generally found in
> >>>> balanced
> >>>>>>> ("parallel") feed line. It is one
> >> of the major differences
> >>>> between
> >>>>>> them.
> >>>>>>> About the only negative that
> >> comes to mind with balanced feed
> >>>> line
> >>>>>> is
> >>>>>>> the need to carefully route it;
> >> so it isn't practical in all
> >>>> cases.
> >>>>>>> Here's something else to
> >> consider....
> >>>>>>> Remember first the rare "special
> >> case" where impedance is the
> >>>> same
> >>>>>>> everywhere in the antenna system
> >> (XCVR, transmission line,
> >>>> antenna,
> >>>>>>> etc). With the exception of a
> >> tiny loss of energy as electrons
> >>>> rub
> >>>>>>> against one another (this loss
> >> due to friction is usually
> >>>>>> insignificant
> >>>>>>> in the typical amateur radio

> >> installation), nearly all the RF
> >>>>>> ("Radio
> >>>>>>> Frequency") energy generated by
> >> the XCVR radiates from the
> >>>> antenna
> >>>>>> as
> >>>>>>> radio waves. This is our goal of
> >> course.
> >>>>>>> By the way, I usually speak in
> >> terms of transmitting a radio
> >>>> signal
> >>>>>> and
> >>>>>>> trying to send it out into the
> >> world (our "Hello World!"
> >>>> message),
> >>>>>> but
> >>>>>>> the efficiencies (or lack
> >> thereof) work exactly the same in
> >>>>>> reverse. In
> >>>>>>> other words, the antenna has the
> >> same gain (or loss) as a
> >>>> receiving
> >>>>>>> antenna, as it does when
> >> transmitting. So our rare special case
> >>>>>> antenna
> >>>>>>> will also deliver all the RF
> >> energy it collects to the receiver
> >>>>>> (less
> >>>>>>> friction/heat lost to move the
> >> electrons -- which can never be
> >>>>>> avoided
> >>>>>>> in the real world).
> >>>>>>>
> >>>>>>> Now when the impedance is one
> >> value on the transmission line
> >>>> (and
> >>>>>> it
> >>>>>>> doesn't matter what kind of
> >> transmission line), and the
> >>>> impedance
> >>>>>> of the
> >>>>>>> antenna is a different value,
> >> some RF energy is reflected off
> >>>> the
> >>>>>>> antenna feed point, back to the
> >> XCVR. How much is reflected
> >>>> depends
> >>>>>> upon
> >>>>>>> how great the difference is
> >> between the impedances.

> >>>>>>> There is a difference in behavior
> >> at the antenna feed point
> >>>> between
> >>>>>> a
> >>>>>>> coax fed antenna and a parallel
> >> line fed antenna.
> >>>>>>> Balanced (parallel) line only
> >> offers a two-way path between the
> >>>>>> antenna
> >>>>>>> and the XCVR. Coax may offer a
> >> third pathway -- along the
> >>>> outside
> >>>>>> of the
> >>>>>>> shielding (aka "braid") of the
> >> coax. This is because the higher
> >>>> the
> >>>>>>> frequency of alternating current
> >> (like RF) the less deeply the
> >>>> RF
> >>>>>>> penetrates into the conductor --
> >> this is called "skin effect".
> >>>> RF
> >>>>>>> doesn't penetrate very deeply
> >> into the conductor; it travels
> >>>> along
> >>>>>> the
> >>>>>>> outer-most surface, shallow
> >> enough in fact that one wave of
> >>>> energy
> >>>>>> can
> >>>>>>> travel along the inner surface of
> >> the coax shielding while a
> >>>> second
> >>>>>> wave
> >>>>>>> travels along the outside surface
> >> of the same coax shielding,
> >>>> and
> >>>>>> the
> >>>>>>> two will never meet. Therefore,
> >> coax can offer three conductors
> >>>> to
> >>>>>> RF:
> >>>>>>> along the inner conductor; along
> >> the inside of the coax
> >>>> shielding;
> >>>>>> and
> >>>>>>> along the outside of the coax
> >> shielding. We desire the first two
> >>>>>> paths,
> >>>>>>> but we do not (usually) benefit

> >> from RF flowing on the outside
> >>>> of
> >>>>>> the
> >>>>>>> coax shield.
> >>>>>>>
> >>>>>>> Since balanced (parallel
> >> conductors) transmission line (aka feed
> >>>>>> line)
> >>>>>>> is constructed of only two wires
> >> (which may be either stranded
> >>>> or
> >>>>>> solid
> >>>>>>> wire), the reflected wave (that
> >> energy which is reflecting from
> >>>> the
> >>>>>>> antenna feed point, back to the
> >> XCVR) has only one return path
> >>>>>> available
> >>>>>>> to it -- it returns ("reflects")
> >> back along the same conductor
> >>>> that
> >>>>>> it
> >>>>>>> originally traversed. This is a
> >> simple condition, and no "balun"
> >>>>>> (more
> >>>>>>> accurately "bal-bal" for
> >> "balanced-to-balanced" in this case) is
> >>>>>>> required to maintain the desired
> >> energy pathway between the XCVR
> >>>>>> and
> >>>>>>> antenna.
> >>>>>>>
> >>>>>>> ("Balun" is a conjunction of
> >> "balanced" and "unbalanced"
> >>>>>> identifying a
> >>>>>>> transition from a balanced
> >> transmission line to an unbalanced
> >>>> line.
> >>>>>>> "Unun" identifies transitioning
> >> from "unbalanced"
> >>>> to "unbalanced"
> >>>>>> line.
> >>>>>>> "Balbal" identifies transitioning
> >> from "balanced" to "balanced"
> >>>>>> line.
> >>>>>>> Depending upon the design, this
> >> transformation may occur at a
> >>>>>> number of
> >>>>>>> different ratios, of which 1:1
> >> and 4:1 are the most commonly

> >>>> used.)
> >>>>>>> This simple two-way path is not
> >> always the case when using coax.
> >>>> If
> >>>>>> the
> >>>>>>> impedance mismatch is great
> >> enough, some fraction of the RF will
> >>>>>> find an
> >>>>>>> easier pathway flowing along the
> >> outside of the coax shielding.
> >>>>>> This can
> >>>>>>> cause problems such as RFI (Radio
> >> Frequency Interference) and
> >>>>>> inaccurate
> >>>>>>> readings on our meters (which are
> >> designed under the assumption
> >>>> RF
> >>>>>> will
> >>>>>>> travel along two paths, not
> >> three). Suffering a bad case of "RF
> >>>> on
> >>>>>> the
> >>>>>>> feed line" may cause RFI to
> >> affect other electronics in the
> >>>> area,
> >>>>>>> provide false swr readings, and
> >> cause "RF bite" on our
> >>>> microphone.
> >>>>>> This
> >>>>>>> is often caused by RF radiating
> >> off the outside of the coax,
> >>>>>> instead of
> >>>>>>> the antenna. (Although in some
> >> cases problems may exist even
> >>>> when
> >>>>>> feed
> >>>>>>> line radiation has been
> >> eliminated. RFI can be a difficult
> >>>> puzzle
> >>>>>> to
> >>>>>>> solve.)
> >>>>>>>
> >>>>>>> Enter the balun. By "wrapping"
> >> the coax with a much greater
> >>>>>> impedance
> >>>>>>> than the antenna feed point, we
> >> keep any stray RF from moving
> >>>> onto
> >>>>>> the
> >>>>>>> outside of the coax shielding.

> >> (Targeting a much greater
> >>>> impedance
> >>>>>> on
> >>>>>>> the outside of the coax than
> >> inside it.) To the degree this is
> >>>>>>> successful, RF may only travel
> >> onto the antenna, or back along
> >>>> the
> >>>>>>> inside of the coax to the XCVR.
> >> (On either the inside of the
> >>>>>> shielding
> >>>>>>> or along the surface of the
> >> center conductor. No RF travels
> >>>> along
> >>>>>> the
> >>>>>>> core of the center conductor, due
> >> to skin effect.)
> >>>>>>> Once again we have only two
> >> pathways for the RF to travel
> >>>> allowing
> >>>>>> our
> >>>>>>> equipment and antenna system to
> >> behave as intended, and within
> >>>>>>> predictable parameters. This is
> >> why a balun may be useful at the
> >>>>>> feed
> >>>>>>> point of an antenna when using
> >> coax transmission line. It is
> >>>> also
> >>>>>> why,
> >>>>>>> unless the coax impedance is very
> >> close to equaling the
> >>>> antenna's
> >>>>>>> impedance where they meet (the
> >> feed point) a feed point balun is
> >>>>>>> advisable when using coax.
> >>>>>>>
> >>>>>>> Reflection, re-reflection, and
> >> re-re-reflection....
> >>>>>>> Recall the transmitted RF wave
> >> traveling along the transmission
> >>>>>> line to
> >>>>>>> the antenna feed point, and not
> >> finding a perfectly equal
> >>>>>> impedance,
> >>>>>>> some bounced back toward the XCVR
> >> in the original direction.
> >>>>>>> Now the reflected wave races
> >> toward the XCVR. Some of it was
> >>>>>> absorbed by

> >>>>>>> the antenna, and some has been
> >> lost in the transmission line
> >>>>>>> (heat/friction). So it isn't
> >> exactly at the same impedance when
> >>>> it
> >>>>>>> started, and it has been altered
> >> in other ways too. Namely
> >>>>>> the "phase"
> >>>>>>> of either the voltage or current
> >> has been shifted. To learn more
> >>>>>> about
> >>>>>>> this, "Reflections II" by Walter
> >> Maxwell W2DU is a great book!
> >>>>>> Highly
> >>>>>>> recommended! If you see one at a
> >> hamfest, buy it!
> >>>>>>> We'll skip over exactly what and
> >> why this change takes place
> >>>>>> (entire
> >>>>>>> books have been written about
> >> just that!), but the RF wave is
> >>>>>> different
> >>>>>>> than when it left the XCVR, and
> >> as a result, it will "bounce"
> >>>> (or
> >>>>>>> re-reflect) off the XCVR, and
> >> move in the original direction
> >>>> again.
> >>>>>> It
> >>>>>>> is re-reflected back toward the
> >> antenna feed point.
> >>>>>>> The re-reflection point will be
> >> the transmatch instead of the
> >>>> XCVR
> >>>>>> if a
> >>>>>>> transmatch is being utilized.
> >> Either way, the RF wave will
> >>>> bounce
> >>>>>> back
> >>>>>>> and forth, reflecting,
> >> re-reflecting, and re-re-reflecting, and
> >>
> >>>> so
> >>>>>> on,
> >>>>>>> until it either all eventually
> >> escapes out the antenna or is
> >>>>>> absorbed as
> >>>>>>> heat/friction in the transmission
> >> line. (In truth, it is always
> >>>> the

> >>>>>> sum
> >>>>>>> of both events -- what isn't
> >> eventually changed into heat in the
> >>>>>>> transmission line escapes the
> >> antenna as radiated RF.)
> >>>>>>> As the swr increases, and as the
> >> inherent loss of the
> >>>> transmission
> >>>>>> line
> >>>>>>> increases (lower in balanced
> >> line; higher in coax), more of the
> >>>> RF
> >>>>>>> energy is lost as unproductive
> >> heat/friction, and less is
> >>>> available
> >>>>>> to
> >>>>>>> radiate from the antenna as a
> >> useful radio signal.
> >>>>>>> This is why high swr on balanced
> >> feed line isn't all that bad.
> >>>> Most
> >>>>>> of
> >>>>>>> the RF energy will eventually
> >> "bounce" out of the antenna
> >>>> anyway.
> >>>>>> It
> >>>>>>> doesn't really matter if it makes
> >> it out the very first trip, on
> >>>>>> the
> >>>>>>> sixth, or 16th. Radiated is
> >> radiated. The person receiving your
> >>>>>> radio
> >>>>>>> signal will never know if they
> >> are hearing the very first wave
> >>>> or a
> >>>>>>> re-reflected wave. It just
> >> doesn't matter after the energy
> >>>> escapes
> >>>>>> the
> >>>>>>> antenna.
> >>>>>>>
> >>>>>>> Escaping the antenna is the
> >> trick!
> >>>>>>> And that is where coax may not
> >> work well in the same situation.
> >>>>>> Coax,
> >>>>>>> suffering much greater losses to
> >> the RF as it traverses along it
> >>>>>>> ("attenuation"), simply absorbs
> >> too much of the RF as it bounces

> >>>>>> back
> >>>>>>> and forth, especially under high
> >> swr conditions. There isn't
> >>>> much
> >>>>>> left
> >>>>>>> to escape out the antenna.
> >>>>>>>
> >>>>>>> All of which leads to the
> >> generalized conclusion that wire
> >>>> antenna
> >>>>>>> elements fed by balanced
> >> transmission line, operate very
> >>>>>> efficiently
> >>>>>>> even under high swr conditions.
> >> That is why these types of
> >>>> antennas
> >>>>>>> (from dipoles to loops) have
> >> built a reputation as practical
> >>>> multi-
> >>>>>> band
> >>>>>>> solutions for many amateur radio
> >> operators. The only stumbling
> >>>>>> block is
> >>>>>>> transforming their wide ranges of
> >> impedance into something close
> >>>> to
> >>>>>> a
> >>>>>>> nominal 50-Ohms resistive
> >> (meaning little or no reactance) to
> >>>> match
> >>>>>> our
> >>>>>>> "modern" (meaning non-tube)
> >> XCVRs. And that is precisely what a
> >>>>>>> transmatch is designed to
> >> accomplish.
> >>>>>>>
> >>>>>>>
> >>>>>>>
> >>>>>>>> All my HF antenna experience is
> >> in
> >>>>>>>> receive only antennas for
> >> shortwave. I've been dragging my feet
> >>>> on
> >>>>>>>> getting my General Class license
> >> but finally decided to go for
> >>>> it
> >>>>>>>> this month. Of course, I had
> >> masterd 5 wpm CW just in time for
> >>>>>> that
> >>>>>>>> requirement to be abolished. :-)

> >>>>>>> Heheh, yes, that sounds just
> >> about right! ;) Welcome to HF! And
> >>>>>> welcome
> >>>>>>> to the world of transmitting
> >> antennas. They can be a lot of fun!
> >>>>>>>
> >>>>>>>
> >>>>>>>> Some people seem to put all
> >> their faith in the modeling
> >>>> software.
> >>>>>>>> Whatever works for them, but I
> >> would never take a computer
> >>>> model
> >>>>>> as
> >>>>>>>> being 100% accurate. To me, the
> >> model really has to be built in
> >>>> 3D
> >>>>>>>> to prove it works.
> >>>>>>> ...snip...
> >>>>>>>
> >>>>>>> Precisely! It can save a lot of
> >> time by eliminating very bad or
> >>>>>> very
> >>>>>>> unlikely designs, but it is
> >> almost impossible to fully model the
> >>>>>>> environment in which the antenna
> >> will be built. So you have to
> >>>>>> actually
> >>>>>>> build it and test it at some
> >> point. This is like other rules of
> >>>>>> thumb.
> >>>>>>> Take any of the "formulas" for
> >> determining the proper length of
> >>>>>> antenna
> >>>>>>> elements. They all say to start
> >> too long and slowing trim it to
> >>>> a
> >>>>>> proper
> >>>>>>> match.
> >>>>>>>
> >>>>>>> Whether a formula for a simple
> >> dipole, or a computer model of a
> >>>>>> loop or
> >>>>>>> beam, the idea isn't to make the
> >> perfect antenna on paper and
> >>>> then
> >>>>>>> reproduce it exactly in the real
> >> world. It is to "get close" and
> >>>>>>> possibly avoid some time lost in
> >> fiddling around. Beams are a

> >>>> good
> >>>>>>> example. You can play with the
> >> modeling software and try out
> >>>>>> different
> >>>>>>> element combinations and get an
> >> idea of the resulting envelopes
> >>>> and
> >>>>>> feed
> >>>>>>> point impedances. This saves a
> >> lot of time, but ultimately you
> >>>> have
> >>>>>>> build it and tune it to your
> >> exact site.
> >>>>>>>
> >>>>>>>> ...snip... What the heck though,
> >> and after
> >>>>>>>> reading your reply, I believe I
> >> will go with the 40 meter loop
> >>>> and
> >>>>>>>> orient it as a horizontal with
> >> paralell feedline.
> >>>>>>> Adding a transmatch (aka antenna
> >> tuner) between your XCVR and
> >>>>>> antenna
> >>>>>>> will most likely allow this to
> >> become a very usable multi-band
> >>>>>> antenna.
> >>>>>>> Every antenna displays its own
> >> range of impedances, and these
> >>>> vary
> >>>>>> on
> >>>>>>> each band. (This "impedance" is
> >> more properly called "complex
> >>>>>> impedance"
> >>>>>>> because it includes some
> >> reactance.) Very low impedances are
> >>>>>> typically
> >>>>>>> difficult for many transmatches
> >> to "match," but any extreme
> >>>> value
> >>>>>> of
> >>>>>>> complex impedance may fall
> >> outside the range which a given
> >>>>>> transmatch
> >>>>>>> can "match." ("Match" means
> >> transforming the existing complex
> >>>>>> impedance,
> >>>>>>> on the antenna-side of the
> >> transmatch, into an impedance (with
> >>>>>> little or

> >>>>>>> no reactance) close to that which
> >> the XCVR is designed to work
> >>>>>> into.)
> >>>>>>> But there are workarounds, such
> >> as matching stubs, and other
> >>>>>> solutions.
> >>>>>>> (See below.)
> >>>>>>>
> >>>>>>>
> >>>>>>>> Regarding running the line into
> >> the shack, shorting the wires
> >>>> and
> >>>>>>>> connecting them to the rig,
> >> there are a few reasons I can't do
> >>>>>> this.
> >>>>>>>> For one, there are children and
> >> unknowing people in the area
> >>>> that
> >>>>>>>> may get zapped if they are able
> >> to touch the wires. My ham
> >>>>>> station
> >>>>>>>> (or what's left of it) is in my
> >> basement office. I need to run
> >>>>>> the
> >>>>>>>> line vertically to about 8'
> >> above the ground, make the short at
> >>>>>> that
> >>>>>>>> point, and install a matching
> >> network either on a pole or tree
> >>>> in
> >>>>>> a
> >>>>>>>> PVC junction box. The ground
> >> wire would go there also, and then
> >>>> I
> >>>>>>>> need run the ground and an
> >> insulated feedwire the remaining
> >>>>>> distance
> >>>>>>>> to the ground, bury it and slip
> >> it through the side of the
> >>>> house
> >>>>>>>> into the shack.
> >>>>>>>>
> >>>>>>> If you are married to the idea of
> >> having the vertical option,
> >>>> this
> >>>>>> may
> >>>>>>> be true. You might consider a
> >> simple 30-amp automotive relay
> >>>> too.
> >>>>>> Put

> >>>>>>> 12-vdc to it and remotely control
> >> that shorting switch.
> >>>>>>> I'm not sure I'm picturing this
> >> properly. Where is the antenna
> >>>> feed
> >>>>>>> point in relation to your shack?
> >> Pretty much right above it, or
> >>>> 50-
> >>>>>> feet
> >>>>>>> distance after you get outside
> >> the house?
> >>>>>>> I'm wondering if we're talking
> >> about a longer run from the shack
> >>>> to
> >>>>>> the
> >>>>>>> antenna feed point, like 50- to
> >> 100-feet or more, or a much
> >>>> shorter
> >>>>>> run
> >>>>>>> like 20- or 30-feet?
> >>>>>>>
> >>>>>>> Also, consider getting outside in
> >> as short a run as possible,
> >>>> and
> >>>>>> making
> >>>>>>> a longer run of ladder line to
> >> get to the antenna feed point. I
> >>>> had
> >>>>>> one
> >>>>>>> dipole for which I ran 300-Ohm
> >> twin lead transmission line half
> >>>> way
> >>>>>>> around my house under the
> >> overhang of the roof.
> >>>>>>>
> >>>>
> >>>>
> >>>>
> >>>>
> >>>> Yahoo! Groups Links
> >>>>
> >>>>
> >>>>
> >
> >
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> >
> > Yahoo! Groups Links
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> >
> >
>

2679. Re: [SkyWires] Re: Feed Arrangement for Operating the Loop as a Vertical Antenna

Yahoo group: SkyWires
Date: 2007-10-08 05:49:57 UTC
From: Erik Weaver
Topic: 2643 Message: 2679

Hey Denis,

Yes, my email is on my web page.

Yes, I've been a big coast to coast fan for well over ten years. No one can top Art! Ian does a pretty good job. Noory not so much, but I have to put up with his poor skills to hear the good bits.

Erik

denisnh wrote:
> Hi Eric. Yeah, also speaker wire with the transparent insulation
> shows up amazingly well, especially when the sun shines off it.
>
> I few years back, I set up the "Four Buck Antenna" in that big 80'
> pine about 75' from the house. I got some surplus #14 copper stranded
> with brown insulation at a great price from a surplus store and I bit
> the bullet and bought NEW 300 ohm twin lead, exterior grade, from
> radio shack. That twin lead is excellent by the way. It holds up
> very well and I've built some DCTL antennas from it that worked great
> also. I've actually placed a wooden X-frame to hold the loop open and
> hoisted them up in a nearby tree. I used them for receive only, but
> they were very quiet and actually seemed to have some gain, which is
> one beef I have regarding certain loops.
>
> Anyway, getting back to the Four Buck Inverted-V, after I finished the
> installation, I would try to point it out to people visiting, and I
> could not for the life of me see it! We would have to walk closer and
> then I would scout for the wire-end insulators before I could finally
> find the antenna elements.
>
> I also die good quality nylon ropes with ordinary fabric die (Ritt I
> think?, either black or brown, and they would disappear also. I've
> always wanted to try "tie-dyeing" rope with various camouflage colored
> dyes. If I can find some extra time, I may still try that. If it
> worked, that would be one really neat looking rope!
>
> Erik, great idea on the strange antenna event. You ever listen to
> coast-to-coast AM radio, speaking of pyramids and past lives? I
> forgot to check, but is your email posted on your web site?
>
> Thanks,
> Denis
>
>

> --- In SkyWires@yahoogroups.com, Erik Weaver <erik@...> wrote:
>> My #14 copper stranded "antenna" wire did catch the light at first. But
>> after it aged it was almost invisible. I *knew* where to look and I had
>> trouble finding it. Others will have had similar experiences I'm sure.
>> Of course, you still have to get through the "shinny" stage. Maybe you
>> could leave a coil of it hanging on a tree over the winter and deploy
>> late winter/early spring before the leaves get thick.
>>
>> Erik n0ew
>>
>> denisnh wrote:
>>> Hi Reverend. I just never got used to setting up wire antennas and
>>> how it must look to casual observers. I mean, putting up big, heavy
>>> copper wires that conduct a lot of current must make some onlookers a
>>> little edgy and I tend to try and be a good neighbor. On the other
>>> hand, if you tell them what it's for, they start blaming you for
>>> everything from TVI to crop circles. I could always say it's a
>>> geomagnetic disturbance sensor that I'm helping my college daughter
>>> with as a school climate project. :-) I do have a weather station on
>>> my roof so that would fit in nicely with my "cover". LOL (You know,
>>> that just might work!)
>>>
>>> Most of the people here are pretty cool. There is one neighbor to the
>>> side of me, though, and the nosy #*@%$*& people just can't mind my own
>>> business. It's pretty rural and wooded here, but I can hear them
>>> talking away about what I'm doing as if I can't hear them. I usually
>>> make a comment regarding their conversation and give a cordial wave as
>>> I head back into the house. I already have five attachment points to
>>> this loop with at least two more to go so it's looking pretty
> involved.
>>> Let's face it, running heavy copper wires through trees does look
>>> pretty scary to some folks. If they came over to ask about it I would
>>> just tell them it's an MW receiving antenna for MW. But they just
>>> watch thinking I can't hear or see them. It get's pretty annoying and
>>> I have absolutely nothing in common with these folks.
>>>
>>> Night time deployment of antennas always turns into a disaster.
>>> Leader strings and ropes get tangled or broken and and can't get a
>>> good aim on that fork at the top of the tree.
>>>
>>> What are ya gonna do. :-)
>>>
>>> --- In SkyWires@yahoogroups.com, <ag0k@> wrote:
>>>> Maybe wearing a camo garment would help
>>>> hide you in your covert operation...
>>>> Smile
>>>>
>>>>
>>>> Grace, Peace, and Joy, be yours,
>>>>

>>>> Rev. W. Clinton Stockton, pastor
>>>> Andrews Presbyterian Church
>>>> 104 S. Rosemary Ave
>>>> Andrews, SC 29510
>>>> <mailto:pastor@>
>>>> pastor@
>>>> Office 843 264 5596
>>>> Manse 843 264 8756
>>>> Cellphone 843 325-9760
>>>>
>>>>
>>>>
>>>> -----Original Message-----
>>>> From: SkyWires@yahoogroups.com
>>>> [mailto:SkyWires@yahoogroups.com] On
>>>> Behalf Of denisnh
>>>> Sent: Saturday, October 06, 2007 10:40
>>>> AM
>>>> To: SkyWires@yahoogroups.com
>>>> Subject: [SkyWires] Re: Feed Arrangement
>>>> for Operating the Loop as a Vertical
>>>> Antenna
>>>>
>>>>
>>>>
>>>> Oh, another thing that can be an
>>>> advantage with the atlatl is if you
>>>> have a dog that fetches. My dog is an
>>>> excellent Frisbee dog and goes
>>>> after anything. He's part coon hound and
>>>> very fast with long legs.
>>>> When setting up a wire, I can just make
>>>> like I'm playing with my dog
>>>> by slinging ordinary tennis balls until
>>>> I'm sure nobody is looking and
>>>> grab the tennis ball with the leader
>>>> string attached and sling that up
>>>> into the tree. I just hope my dog
>>>> doesn't climb the tree after it.
>>>> Make for a nice diversion for a "covert"
>>>> project. :-)
>>>>
>>>> --- In SkyWires@yahoogroup
>>>> <mailto:SkyWires%40yahoogroups.com>
>>>> s.com, Erik Weaver <erik@> wrote:
>>>>> Heeheh, hi Denis,
>>>>>
>>>>> Ya, I can easily imagine some 'lost
>>>> time' trying to cross the border
>>>>> with various weapons. If you follow

>>>> the various lists, or perhaps
>>>> search
>>>>> their archives, you'll find many
>>>> things are considered weapons, and
>>>> some
>>>>> of those that are not required a
>>>> fishing license. The guys with the
>>>> guns
>>>>> figure if you have any fishing gear
>>>> you need that permit. Or a fine. Of
>>>>> course, you can always come back and
>>>> try arguing with a judge later
>>>> on...
>>>>> Arrows, crossbow (whether handheld or
>>>> "industrial" strength), small
>>>>> pieces of lead (sinkers) moving at
>>>> rapid velocities all incur a certain
>>>>> level of risk, if not illegality. A
>>>> tennis ball on the other hand seems
>>>>> about as "warm and fuzzy" as we can
>>>> get in this messed up PC-crazy
>>>> world.
>>>>> Besides, the atlatl is quite cool! Did
>>>> you check out the international
>>>>> competitions? Neat stuff! A very old
>>>> technology, assisting us with very
>>>>> modern technology. If only Ug and Grog
>>>> had known when they invented
>>>> it! :)
>>>>> It is a doggie toy for throwing tennis
>>>> balls. Everyone either has a
>>>> dog,
>>>>> may be getting a dog, or visiting a
>>>> friend who has a dog. So you can
>>>>> always carry one of these. They are
>>>> just plastic, very light to carry,
>>>>> and even fun to play with! Buy extra
>>>> tennis balls because you'll lose
>>>>> some just flinging them around :) My
>>>> friend and I lost one or two that
>>>>> day, for exactly that reason!
>>>>>
>>>>> You may want to get two of the
>>>> atlatl's so you can play catch.
>>>>> Have fun!
>>>>> Erik
>>>>>
>>>>> denisnh wrote:
>>>>>> Hi Erik. The Atlatl looks very cool!
>>>> What I've been using is a

>>>>>> sling shot with "high powered" latex
>>>> bands. A half ounce fishing
>>>>>> sinker is then attached to some
>>>> Spider Wire fishing string spooled
>>>>>> onto a spinning reel. I have a huge
>>>> pine tree that's 80' tall and I
>>>>>> can get the line right over it with
>>>> that setup. I set up an inverted-
>>>>>> V there.
>>>>>>
>>>>>> I also have an 80# pistol crossbow,
>>>> and I modify the little bolt by
>>>>>> removing the tip, placing a small
>>>> weight in place of the tip and
>>>>>> drilling a hole at the end of the
>>>> shaft for the same fishing setup I
>>>>>> mentoned above. That works even
>>>> better but I don't take it out much
>>>>>> since it looks rather ominous if the
>>>> neighbors happen to get a
>>>>>> glimpse of it.
>>>>>>
>>>>>> I have some relatives in Canada, one
>>>> of which owns a farm. When
>>>>>> visiting, I like to erect a
>>>> temporary antenna for use during my
>>>> stay.
>>>>>> I was surprised to find out that
>>>> sling shots are illegal in that
>>>>>> area, and the pistol crossbow is
>>>> definitely illegal. I had figured a
>>>>>> light bow but the atlatl looks very
>>>> promising. As for the air gun,
>>>>>> can you imagine the looks on the
>>>> faces of the customs agents trying
>>>>>> to get something like that across
>>>> the border. Yikes!
>>>>>> Thanks,
>>>>>> Denis
>>>>>>
>>>>>> --- In SkyWires@yahoogroup
>>>> <mailto:SkyWires%40yahoogroups.com>
>>>> s.com, Erik Weaver <erik@> wrote:
>>>>>>> Hi Denis,
>>>>>>>
>>>>>>> An atlatl is another option:
>>>>>>>
>>>>>>> http://www.n0ew.
>>>> <http://www.n0ew.org/k0s/atlatl/>
>>>> org/k0s/atlatl/

>>>>>>> This really seems to work well and
>>>> it is pretty cheap. My friend
>>>>>> and I
>>>>>>> didn't get up over 100-feet, but I
>>>> think we got every bit of 50-
>>>>>> feet
>>>>>>> height into the tree.
>>>>>>>
>>>>>>> If you really want another
>>>> 'project' you might think about building
>>>>
>>>>>> an
>>>>>>> air gun:
>>>>>>>
>>>>>>> http://www.n0ew.
>>>> <http://www.n0ew.org/k0s/air_gun/>
>>>> org/k0s/air_gun/
>>>>>>> Have fun!
>>>>>>> Erik
>>>>>>>
>>>>>>> denisnh wrote:
>>>>>>>> Thanks again, Erik! From what you
>>>> wrote and the research I've
>>>>>> done,
>>>>>>>> I decided to forget about the
>>>> vertical radiator and go with a
>>>>>> full
>>>>>>>> wave 18g loop and 16g homebrew
>>>> ladder line (I have all this on
>>>>>>>> hand). Guess I'm fickle. LOL
>>>>>>>>
>>>>>>>> What I really dread is the
>>>> cutting. The trees in my backyard are
>>>>>> so
>>>>>>>> dense that I'll have to get the
>>>> chainsaw out and do some serious
>>>>>>>> cutting. I did read about one guy
>>>> who shot an arrow right over
>>>>>> the
>>>>>>>> trees with some fishing string
>>>> attached, then pulled his wire
>>>>>> right
>>>>>>>> over the tops of the trees for his
>>>> antenna. That scares me a
>>>>>> bit.
>>>>>>>> Not to mention that running enough
>>>> power could start a fire! But
>>>>>> it
>>>>>>>> seems to work for him and he
>>>> mentioned that once in a while he'll

>>>>>>>> pull the wire one way or the other
>>>> to compensate for any areas
>>>>>> that
>>>>>>>> are chafed through.
>>>>>>>>
>>>>>>>> Thanks,
>>>>>>>> Denis
>>>>>>>>
>>>>>>>> --- In SkyWires@yahoogroup
>>>> <mailto:SkyWires%40yahoogroups.com>
>>>> s.com, Erik Weaver <erik@> wrote:
>>>>>>>>> Hi Denis (I thought "Denisnh" was
>>>> a unusual name! heheh)....
>>>>>>>>> Comments in body below....
>>>>>>>>>
>>>>>>>>> ...snip...
>>>>>>>>>
>>>>>>>>>> The curves for parallel lines
>>>> all hug the bottom of the
>>>>>>>>>> chart where the favorable SWR
>>>> and other factors are, while the
>>>>>>>> coax
>>>>>>>>>> lines soar skyward surprisingly
>>>> fast, which concurs with your
>>>>>>>> post.
>>>>>>>>> Cebik's web pages are filled with
>>>> useful information -- time
>>>>>>>> there
>>>>>>>> is
>>>>>>>>> well spent. The rapid rise of
>>>> losses in coax under high swr
>>>>>>>> conditions
>>>>>>>>> is in sharp contrast to the low
>>>> losses generally found in
>>>>>>>> balanced
>>>>>>>>> ("parallel") feed line. It is one
>>>> of the major differences
>>>>>>>> between
>>>>>>>> them.
>>>>>>>>> About the only negative that
>>>> comes to mind with balanced feed
>>>>>>>> line
>>>>>>>> is
>>>>>>>>> the need to carefully route it;
>>>> so it isn't practical in all
>>>>>>>> cases.
>>>>>>>>> Here's something else to
>>>> consider....
>>>>>>>>> Remember first the rare "special
>>>> case" where impedance is the

>>>>>> same
>>>>>>>>> everywhere in the antenna system
>>>> (XCVR, transmission line,
>>>>>> antenna,
>>>>>>>>> etc). With the exception of a
>>>> tiny loss of energy as electrons
>>>>>> rub
>>>>>>>>> against one another (this loss
>>>> due to friction is usually
>>>>>>>>> insignificant
>>>>>>>>> in the typical amateur radio
>>>> installation), nearly all the RF
>>>>>>>>> ("Radio
>>>>>>>>> Frequency") energy generated by
>>>> the XCVR radiates from the
>>>>>> antenna
>>>>>>>>> as
>>>>>>>>> radio waves. This is our goal of
>>>> course.
>>>>>>>>> By the way, I usually speak in
>>>> terms of transmitting a radio
>>>>>> signal
>>>>>>>>> and
>>>>>>>>> trying to send it out into the
>>>> world (our "Hello World!"
>>>>>> message),
>>>>>>>>> but
>>>>>>>>> the efficiencies (or lack
>>>> thereof) work exactly the same in
>>>>>>>>> reverse. In
>>>>>>>>> other words, the antenna has the
>>>> same gain (or loss) as a
>>>>>> receiving
>>>>>>>>> antenna, as it does when
>>>> transmitting. So our rare special case
>>>>>>>>> antenna
>>>>>>>>> will also deliver all the RF
>>>> energy it collects to the receiver
>>>>>>>>> (less
>>>>>>>>> friction/heat lost to move the
>>>> electrons -- which can never be
>>>>>>>>> avoided
>>>>>>>>> in the real world).
>>>>>>>>>
>>>>>>>>> Now when the impedance is one
>>>> value on the transmission line
>>>>>> (and
>>>>>>>>> it
>>>>>>>>> doesn't matter what kind of
>>>> transmission line), and the

>>>>>> impedance
>>>>>>>> of the
>>>>>>>>> antenna is a different value,
>>>> some RF energy is reflected off
>>>>>> the
>>>>>>>>> antenna feed point, back to the
>>>> XCVR. How much is reflected
>>>>>> depends
>>>>>>>> upon
>>>>>>>>> how great the difference is
>>>> between the impedances.
>>>>>>>>> There is a difference in behavior
>>>> at the antenna feed point
>>>>>> between
>>>>>>>> a
>>>>>>>>> coax fed antenna and a parallel
>>>> line fed antenna.
>>>>>>>>> Balanced (parallel) line only
>>>> offers a two-way path between the
>>>>>>>> antenna
>>>>>>>>> and the XCVR. Coax may offer a
>>>> third pathway -- along the
>>>>>> outside
>>>>>>>> of the
>>>>>>>>> shielding (aka "braid") of the
>>>> coax. This is because the higher
>>>>>> the
>>>>>>>>> frequency of alternating current
>>>> (like RF) the less deeply the
>>>>>> RF
>>>>>>>>> penetrates into the conductor --
>>>> this is called "skin effect".
>>>>>> RF
>>>>>>>>> doesn't penetrate very deeply
>>>> into the conductor; it travels
>>>>>> along
>>>>>>>> the
>>>>>>>>> outer-most surface, shallow
>>>> enough in fact that one wave of
>>>>>> energy
>>>>>>>> can
>>>>>>>>> travel along the inner surface of
>>>> the coax shielding while a
>>>>>> second
>>>>>>>> wave
>>>>>>>>> travels along the outside surface
>>>> of the same coax shielding,
>>>>>> and
>>>>>>>> the
>>>>>>>>> two will never meet. Therefore,

>>>> coax can offer three conductors
>>>>>> to
>>>>>>>> RF:
>>>>>>>>> along the inner conductor; along
>>>> the inside of the coax
>>>>>> shielding;
>>>>>>>> and
>>>>>>>>> along the outside of the coax
>>>> shielding. We desire the first two
>>>>>>>> paths,
>>>>>>>>> but we do not (usually) benefit
>>>> from RF flowing on the outside
>>>>>> of
>>>>>>>> the
>>>>>>>>> coax shield.
>>>>>>>>>
>>>>>>>>> Since balanced (parallel
>>>> conductors) transmission line (aka feed
>>>>>>>> line)
>>>>>>>>> is constructed of only two wires
>>>> (which may be either stranded
>>>>>> or
>>>>>>>> solid
>>>>>>>>> wire), the reflected wave (that
>>>> energy which is reflecting from
>>>>>> the
>>>>>>>>> antenna feed point, back to the
>>>> XCVR) has only one return path
>>>>>>>> available
>>>>>>>>> to it -- it returns ("reflects")
>>>> back along the same conductor
>>>>>> that
>>>>>>>> it
>>>>>>>>> originally traversed. This is a
>>>> simple condition, and no "balun"
>>>>>>>> (more
>>>>>>>>> accurately "bal-bal" for
>>>> "balanced-to-balanced" in this case) is
>>>>>>>>> required to maintain the desired
>>>> energy pathway between the XCVR
>>>>>>>> and
>>>>>>>>> antenna.
>>>>>>>>>
>>>>>>>>> ("Balun" is a conjunction of
>>>> "balanced" and "unbalanced"
>>>>>>>> identifying a
>>>>>>>>> transition from a balanced
>>>> transmission line to an unbalanced
>>>>>> line.
>>>>>>>>> "Unun" identifies transitioning

>>>> from "unbalanced"
>>>>>> to "unbalanced"
>>>>>>>> line.
>>>>>>>>> "Balbal" identifies transitioning
>>>> from "balanced" to "balanced"
>>>>>>>> line.
>>>>>>>>> Depending upon the design, this
>>>> transformation may occur at a
>>>>>>>> number of
>>>>>>>>> different ratios, of which 1:1
>>>> and 4:1 are the most commonly
>>>>>> used.)
>>>>>>>>> This simple two-way path is not
>>>> always the case when using coax.
>>>>>> If
>>>>>>>> the
>>>>>>>>> impedance mismatch is great
>>>> enough, some fraction of the RF will
>>>>>>>> find an
>>>>>>>>> easier pathway flowing along the
>>>> outside of the coax shielding.
>>>>>>>> This can
>>>>>>>>> cause problems such as RFI (Radio
>>>> Frequency Interference) and
>>>>>>>> inaccurate
>>>>>>>>> readings on our meters (which are
>>>> designed under the assumption
>>>>>> RF
>>>>>>>> will
>>>>>>>>> travel along two paths, not
>>>> three). Suffering a bad case of "RF
>>>>>> on
>>>>>>>> the
>>>>>>>>> feed line" may cause RFI to
>>>> affect other electronics in the
>>>>>> area,
>>>>>>>>> provide false swr readings, and
>>>> cause "RF bite" on our
>>>>>> microphone.
>>>>>>>> This
>>>>>>>>> is often caused by RF radiating
>>>> off the outside of the coax,
>>>>>>>> instead of
>>>>>>>>> the antenna. (Although in some
>>>> cases problems may exist even
>>>>>> when
>>>>>>>> feed
>>>>>>>>> line radiation has been
>>>> eliminated. RFI can be a difficult
>>>>>> puzzle

>>>>>>>> to
>>>>>>>>> solve.)
>>>>>>>>>
>>>>>>>>> Enter the balun. By "wrapping"
>>>> the coax with a much greater
>>>>>>>>> impedance
>>>>>>>>> than the antenna feed point, we
>>>> keep any stray RF from moving
>>>>>> onto
>>>>>>>>> the
>>>>>>>>> outside of the coax shielding.
>>>> (Targeting a much greater
>>>>>> impedance
>>>>>>>>> on
>>>>>>>>> the outside of the coax than
>>>> inside it.) To the degree this is
>>>>>>>>> successful, RF may only travel
>>>> onto the antenna, or back along
>>>>>> the
>>>>>>>>> inside of the coax to the XCVR.
>>>> (On either the inside of the
>>>>>>>>> shielding
>>>>>>>>> or along the surface of the
>>>> center conductor. No RF travels
>>>>>> along
>>>>>>>>> the
>>>>>>>>> core of the center conductor, due
>>>> to skin effect.)
>>>>>>>>> Once again we have only two
>>>> pathways for the RF to travel
>>>>>> allowing
>>>>>>>>> our
>>>>>>>>> equipment and antenna system to
>>>> behave as intended, and within
>>>>>>>>> predictable parameters. This is
>>>> why a balun may be useful at the
>>>>>>>>> feed
>>>>>>>>> point of an antenna when using
>>>> coax transmission line. It is
>>>>>> also
>>>>>>>>> why,
>>>>>>>>> unless the coax impedance is very
>>>> close to equaling the
>>>>>> antenna's
>>>>>>>>> impedance where they meet (the
>>>> feed point) a feed point balun is
>>>>>>>>> advisable when using coax.
>>>>>>>>>
>>>>>>>>> Reflection, re-reflection, and
>>>> re-re-reflection....

>>>>>>>>> Recall the transmitted RF wave
>>>> traveling along the transmission
>>>>>>>> line to
>>>>>>>>> the antenna feed point, and not
>>>> finding a perfectly equal
>>>>>>>> impedance,
>>>>>>>>> some bounced back toward the XCVR
>>>> in the original direction.
>>>>>>>>> Now the reflected wave races
>>>> toward the XCVR. Some of it was
>>>>>>>> absorbed by
>>>>>>>>> the antenna, and some has been
>>>> lost in the transmission line
>>>>>>>>> (heat/friction). So it isn't
>>>> exactly at the same impedance when
>>>>>> it
>>>>>>>>> started, and it has been altered
>>>> in other ways too. Namely
>>>>>>>> the "phase"
>>>>>>>>> of either the voltage or current
>>>> has been shifted. To learn more
>>>>>>>> about
>>>>>>>>> this, "Reflections II" by Walter
>>>> Maxwell W2DU is a great book!
>>>>>>>> Highly
>>>>>>>>> recommended! If you see one at a
>>>> hamfest, buy it!
>>>>>>>>> We'll skip over exactly what and
>>>> why this change takes place
>>>>>>>> (entire
>>>>>>>>> books have been written about
>>>> just that!), but the RF wave is
>>>>>>>> different
>>>>>>>>> than when it left the XCVR, and
>>>> as a result, it will "bounce"
>>>>>> (or
>>>>>>>>> re-reflect) off the XCVR, and
>>>> move in the original direction
>>>>>> again.
>>>>>>>> It
>>>>>>>>> is re-reflected back toward the
>>>> antenna feed point.
>>>>>>>>> The re-reflection point will be
>>>> the transmatch instead of the
>>>>>> XCVR
>>>>>>>> if a
>>>>>>>>> transmatch is being utilized.
>>>> Either way, the RF wave will
>>>>>> bounce
>>>>>>>> back

>>>>>>>>> and forth, reflecting,
>>>> re-reflecting, and re-re-reflecting, and
>>>>
>>>>>> so
>>>>>>>> on,
>>>>>>>>> until it either all eventually
>>>> escapes out the antenna or is
>>>>>>>> absorbed as
>>>>>>>>> heat/friction in the transmission
>>>> line. (In truth, it is always
>>>>>> the
>>>>>>>> sum
>>>>>>>>> of both events -- what isn't
>>>> eventually changed into heat in the
>>>>>>>>> transmission line escapes the
>>>> antenna as radiated RF.)
>>>>>>>>> As the swr increases, and as the
>>>> inherent loss of the
>>>>>> transmission
>>>>>>>> line
>>>>>>>>> increases (lower in balanced
>>>> line; higher in coax), more of the
>>>>>> RF
>>>>>>>>> energy is lost as unproductive
>>>> heat/friction, and less is
>>>>>> available
>>>>>>>> to
>>>>>>>>> radiate from the antenna as a
>>>> useful radio signal.
>>>>>>>>> This is why high swr on balanced
>>>> feed line isn't all that bad.
>>>>>> Most
>>>>>>>> of
>>>>>>>>> the RF energy will eventually
>>>> "bounce" out of the antenna
>>>>>> anyway.
>>>>>>>> It
>>>>>>>>> doesn't really matter if it makes
>>>> it out the very first trip, on
>>>>>>>> the
>>>>>>>>> sixth, or 16th. Radiated is
>>>> radiated. The person receiving your
>>>>>>>> radio
>>>>>>>>> signal will never know if they
>>>> are hearing the very first wave
>>>>>> or a
>>>>>>>>> re-reflected wave. It just
>>>> doesn't matter after the energy
>>>>>> escapes
>>>>>>>> the

>>>>>>>>> antenna.
>>>>>>>>>
>>>>>>>>> Escaping the antenna is the
>>>> trick!
>>>>>>>>> And that is where coax may not
>>>> work well in the same situation.
>>>>>>>>> Coax,
>>>>>>>>> suffering much greater losses to
>>>> the RF as it traverses along it
>>>>>>>>> ("attenuation"), simply absorbs
>>>> too much of the RF as it bounces
>>>>>>>>> back
>>>>>>>>> and forth, especially under high
>>>> swr conditions. There isn't
>>>>>> much
>>>>>>>>> left
>>>>>>>>> to escape out the antenna.
>>>>>>>>>
>>>>>>>>> All of which leads to the
>>>> generalized conclusion that wire
>>>>>> antenna
>>>>>>>>> elements fed by balanced
>>>> transmission line, operate very
>>>>>>>>> efficiently
>>>>>>>>> even under high swr conditions.
>>>> That is why these types of
>>>>>> antennas
>>>>>>>>> (from dipoles to loops) have
>>>> built a reputation as practical
>>>>>> multi-
>>>>>>>>> band
>>>>>>>>> solutions for many amateur radio
>>>> operators. The only stumbling
>>>>>>>>> block is
>>>>>>>>> transforming their wide ranges of
>>>> impedance into something close
>>>>>> to
>>>>>>>>> a
>>>>>>>>> nominal 50-Ohms resistive
>>>> (meaning little or no reactance) to
>>>>>> match
>>>>>>>>> our
>>>>>>>>> "modern" (meaning non-tube)
>>>> XCVRs. And that is precisely what a
>>>>>>>>> transmatch is designed to
>>>> accomplish.
>>>>>>>>>
>>>>>>>>>
>>>>>>>>>> All my HF antenna experience is
>>>> in

>>>>>>>>>> receive only antennas for
>>>> shortwave. I've been dragging my feet
>>>>>> on
>>>>>>>>>> getting my General Class license
>>>> but finally decided to go for
>>>>>> it
>>>>>>>>>> this month. Of course, I had
>>>> masterd 5 wpm CW just in time for
>>>>>>>> that
>>>>>>>>>> requirement to be abolished. :-)
>>>>>>>>> Heheh, yes, that sounds just
>>>> about right! ;) Welcome to HF! And
>>>>>>>> welcome
>>>>>>>>> to the world of transmitting
>>>> antennas. They can be a lot of fun!
>>>>>>>>>
>>>>>>>>>> Some people seem to put all
>>>> their faith in the modeling
>>>>>> software.
>>>>>>>>>> Whatever works for them, but I
>>>> would never take a computer
>>>>>> model
>>>>>>>> as
>>>>>>>>>> being 100% accurate. To me, the
>>>> model really has to be built in
>>>>>> 3D
>>>>>>>>>> to prove it works.
>>>>>>>>> ...snip...
>>>>>>>>>
>>>>>>>>> Precisely! It can save a lot of
>>>> time by eliminating very bad or
>>>>>>>> very
>>>>>>>>> unlikely designs, but it is
>>>> almost impossible to fully model the
>>>>>>>>> environment in which the antenna
>>>> will be built. So you have to
>>>>>>>> actually
>>>>>>>>> build it and test it at some
>>>> point. This is like other rules of
>>>>>>>> thumb.
>>>>>>>>> Take any of the "formulas" for
>>>> determining the proper length of
>>>>>>>> antenna
>>>>>>>>> elements. They all say to start
>>>> too long and slowing trim it to
>>>>>> a
>>>>>>>> proper
>>>>>>>>> match.
>>>>>>>>>
>>>>>>>>> Whether a formula for a simple

>>>> dipole, or a computer model of a
>>>>>>>> loop or
>>>>>>>>> beam, the idea isn't to make the
>>>> perfect antenna on paper and
>>>>>> then
>>>>>>>>> reproduce it exactly in the real
>>>> world. It is to "get close" and
>>>>>>>>> possibly avoid some time lost in
>>>> fiddling around. Beams are a
>>>>>> good
>>>>>>>>> example. You can play with the
>>>> modeling software and try out
>>>>>>>> different
>>>>>>>>> element combinations and get an
>>>> idea of the resulting envelopes
>>>>>> and
>>>>>>>> feed
>>>>>>>>> point impedances. This saves a
>>>> lot of time, but ultimately you
>>>>>> have
>>>>>>>>> build it and tune it to your
>>>> exact site.
>>>>>>>>>> ...snip... What the heck though,
>>>> and after
>>>>>>>>>> reading your reply, I believe I
>>>> will go with the 40 meter loop
>>>>>> and
>>>>>>>>>> orient it as a horizontal with
>>>> paralell feedline.
>>>>>>>>> Adding a transmatch (aka antenna
>>>> tuner) between your XCVR and
>>>>>>>> antenna
>>>>>>>>> will most likely allow this to
>>>> become a very usable multi-band
>>>>>>>> antenna.
>>>>>>>>> Every antenna displays its own
>>>> range of impedances, and these
>>>>>> vary
>>>>>>>> on
>>>>>>>>> each band. (This "impedance" is
>>>> more properly called "complex
>>>>>>>> impedance"
>>>>>>>>> because it includes some
>>>> reactance.) Very low impedances are
>>>>>>>> typically
>>>>>>>>> difficult for many transmatches
>>>> to "match," but any extreme
>>>>>> value
>>>>>>>> of
>>>>>>>>> complex impedance may fall

>>>> outside the range which a given
>>>>>>>> transmatch
>>>>>>>>> can "match." ("Match" means
>>>> transforming the existing complex
>>>>>>>> impedance,
>>>>>>>>> on the antenna-side of the
>>>> transmatch, into an impedance (with
>>>>>>>> little or
>>>>>>>>> no reactance) close to that which
>>>> the XCVR is designed to work
>>>>>>>> into.)
>>>>>>>>> But there are workarounds, such
>>>> as matching stubs, and other
>>>>>>>> solutions.
>>>>>>>>> (See below.)
>>>>>>>>>
>>>>>>>>>
>>>>>>>>>> Regarding running the line into
>>>> the shack, shorting the wires
>>>>>> and
>>>>>>>>>> connecting them to the rig,
>>>> there are a few reasons I can't do
>>>>>>>> this.
>>>>>>>>>> For one, there are children and
>>>> unknowing people in the area
>>>>>> that
>>>>>>>>>> may get zapped if they are able
>>>> to touch the wires. My ham
>>>>>>>> station
>>>>>>>>>> (or what's left of it) is in my
>>>> basement office. I need to run
>>>>>>>> the
>>>>>>>>>> line vertically to about 8'
>>>> above the ground, make the short at
>>>>>>>> that
>>>>>>>>>> point, and install a matching
>>>> network either on a pole or tree
>>>>>> in
>>>>>>>> a
>>>>>>>>>> PVC junction box. The ground
>>>> wire would go there also, and then
>>>>>> I
>>>>>>>>>> need run the ground and an
>>>> insulated feedwire the remaining
>>>>>>>> distance
>>>>>>>>>> to the ground, bury it and slip
>>>> it through the side of the
>>>>>> house
>>>>>>>>>> into the shack.
>>>>>>>>>>

>>>>>>>>> If you are married to the idea of
>>>> having the vertical option,
>>>>>> this
>>>>>>>> may
>>>>>>>>> be true. You might consider a
>>>> simple 30-amp automotive relay
>>>>>> too.
>>>>>>>> Put
>>>>>>>>> 12-vdc to it and remotely control
>>>> that shorting switch.
>>>>>>>>> I'm not sure I'm picturing this
>>>> properly. Where is the antenna
>>>>>> feed
>>>>>>>>> point in relation to your shack?
>>>> Pretty much right above it, or
>>>>>> 50-
>>>>>>>> feet
>>>>>>>>> distance after you get outside
>>>> the house?
>>>>>>>>> I'm wondering if we're talking
>>>> about a longer run from the shack
>>>>>> to
>>>>>>>> the
>>>>>>>>> antenna feed point, like 50- to
>>>> 100-feet or more, or a much
>>>>>> shorter
>>>>>>>> run
>>>>>>>>> like 20- or 30-feet?
>>>>>>>>>
>>>>>>>>> Also, consider getting outside in
>>>> as short a run as possible,
>>>>>> and
>>>>>>>> making
>>>>>>>>> a longer run of ladder line to
>>>> get to the antenna feed point. I
>>>>>> had
>>>>>>>> one
>>>>>>>>> dipole for which I ran 300-Ohm
>>>> twin lead transmission line half
>>>>>> way
>>>>>>>>> around my house under the
>>>> overhang of the roof.
>>>>>>
>>>>>>
>>>>>>
>>>>>> Yahoo! Groups Links
>>>>>>
>>>>>>
>>>>>>
>>>

>>>
>>>
>>>
>>> Yahoo! Groups Links
>>>
>>>
>>>
>
>
>
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>
> Yahoo! Groups Links
>
>
>

2680. Re: [SkyWires] Re: Feed Arrangement for Operating the Loop as a Vertical Antenna

Yahoo group: SkyWires
Date: 2007-10-09 18:36:18 UTC
From: WILLIAM STEFFEL
Topic: 2643 Message: 2680

Tell them what I tell my neighbors. It is a Hyperdimensional reflector so your space brothers can find you to take you home. The neighbors will avoid you like the plague. Dont forget to use the term "Hyperdimensional",it sounds scarey.
----- Original Message -----
From: denisnh
To: SkyWires@yahoogroups.com
Sent: Saturday, October 06, 2007 10:02 AM
Subject: [SkyWires] Re: Feed Arrangement for Operating the Loop as a Vertical Antenna

Hi Reverend. I just never got used to setting up wire antennas and how it must look to casual observers. I mean, putting up big, heavy copper wires that conduct a lot of current must make some onlookers a little edgy and I tend to try and be a good neighbor. On the other hand, if you tell them what it's for, they start blaming you for everything from TVI to crop circles. I could always say it's a geomagnetic disturbance sensor that I'm helping my college daughter with as a school climate project. :-) I do have a weather station on my roof so that would fit in nicely with my "cover". LOL (You know, that just might work!)

Most of the people here are pretty cool. There is one neighbor to the side of me, though, and the nosy #*@%$*& people just can't mind my own business. It's pretty rural and wooded here, but I can hear them talking away about what I'm doing as if I can't hear them. I usually make a comment regarding their conversation and give a cordial wave as I head back into the house. I already have five attachment points to this loop with at least two more to go so it's looking pretty involved.

Let's face it, running heavy copper wires through trees does look pretty scary to some folks. If they came over to ask about it I would just tell them it's an MW receiving antenna for MW. But they just watch thinking I can't hear or see them. It get's pretty annoying and I have absolutely nothing in common with these folks.

Night time deployment of antennas always turns into a disaster. Leader strings and ropes get tangled or broken and and can't get a good aim on that fork at the top of the tree.

What are ya gonna do. :-)

--- In SkyWires@yahoogroups.com, <ag0k@...> wrote:
>
> Maybe wearing a camo garment would help
> hide you in your covert operation...
> Smile

>
>
> Grace, Peace, and Joy, be yours,
>
> Rev. W. Clinton Stockton, pastor
> Andrews Presbyterian Church
> 104 S. Rosemary Ave
> Andrews, SC 29510
> <mailto:pastor@...>
> pastor@...
> Office 843 264 5596
> Manse 843 264 8756
> Cellphone 843 325-9760
>
>
>
> -----Original Message-----
> From: SkyWires@yahoogroups.com
> [mailto:SkyWires@yahoogroups.com] On
> Behalf Of denisnh
> Sent: Saturday, October 06, 2007 10:40
> AM
> To: SkyWires@yahoogroups.com
> Subject: [SkyWires] Re: Feed Arrangement
> for Operating the Loop as a Vertical
> Antenna
>
>
>
> Oh, another thing that can be an
> advantage with the atlatl is if you
> have a dog that fetches. My dog is an
> excellent Frisbee dog and goes
> after anything. He's part coon hound and
> very fast with long legs.
> When setting up a wire, I can just make
> like I'm playing with my dog
> by slinging ordinary tennis balls until
> I'm sure nobody is looking and
> grab the tennis ball with the leader
> string attached and sling that up
> into the tree. I just hope my dog
> doesn't climb the tree after it.
> Make for a nice diversion for a "covert"
> project. :-)
>
> --- In SkyWires@yahoogroup
> <mailto:SkyWires%40yahoogroups.com>
> s.com, Erik Weaver <erik@> wrote:
> >

> > Heeheh, hi Denis,
> >
> > Ya, I can easily imagine some 'lost
> time' trying to cross the border
> > with various weapons. If you follow
> the various lists, or perhaps
> search
> > their archives, you'll find many
> things are considered weapons, and
> some
> > of those that are not required a
> fishing license. The guys with the
> guns
> > figure if you have any fishing gear
> you need that permit. Or a fine. Of
> > course, you can always come back and
> try arguing with a judge later
> on...
> >
> > Arrows, crossbow (whether handheld or
> "industrial" strength), small
> > pieces of lead (sinkers) moving at
> rapid velocities all incur a certain
> > level of risk, if not illegality. A
> tennis ball on the other hand seems
> > about as "warm and fuzzy" as we can
> get in this messed up PC-crazy
> world.
> >
> > Besides, the atlatl is quite cool! Did
> you check out the international
> > competitions? Neat stuff! A very old
> technology, assisting us with very
> > modern technology. If only Ug and Grog
> had known when they invented
> it! :)
> >
> > It is a doggie toy for throwing tennis
> balls. Everyone either has a
> dog,
> > may be getting a dog, or visiting a
> friend who has a dog. So you can
> > always carry one of these. They are
> just plastic, very light to carry,
> > and even fun to play with! Buy extra
> tennis balls because you'll lose
> > some just flinging them around :) My
> friend and I lost one or two that
> > day, for exactly that reason!
> >

> > You may want to get two of the
> atlatl's so you can play catch.
> >
> > Have fun!
> > Erik
> >
> > denisnh wrote:
> > > Hi Erik. The Atlatl looks very cool!
> What I've been using is a
> > > sling shot with "high powered" latex
> bands. A half ounce fishing
> > > sinker is then attached to some
> Spider Wire fishing string spooled
> > > onto a spinning reel. I have a huge
> pine tree that's 80' tall and I
> > > can get the line right over it with
> that setup. I set up an inverted-
> > > V there.
> > >
> > > I also have an 80# pistol crossbow,
> and I modify the little bolt by
> > > removing the tip, placing a small
> weight in place of the tip and
> > > drilling a hole at the end of the
> shaft for the same fishing setup I
> > > mentoned above. That works even
> better but I don't take it out much
> > > since it looks rather ominous if the
> neighbors happen to get a
> > > glimpse of it.
> > >
> > > I have some relatives in Canada, one
> of which owns a farm. When
> > > visiting, I like to erect a
> temporary antenna for use during my
> stay.
> > > I was surprised to find out that
> sling shots are illegal in that
> > > area, and the pistol crossbow is
> definitely illegal. I had figured a
> > > light bow but the atlatl looks very
> promising. As for the air gun,
> > > can you imagine the looks on the
> faces of the customs agents trying
> > > to get something like that across
> the border. Yikes!
> > >
> > > Thanks,
> > > Denis
> > >

> > > --- In SkyWires@yahoogroup
> <mailto:SkyWires%40yahoogroups.com>
> s.com, Erik Weaver <erik@> wrote:
> > >> Hi Denis,
> > >>
> > >> An atlatl is another option:
> > >>
> > >> http://www.n0ew.
> <http://www.n0ew.org/k0s/atlatl/>
> org/k0s/atlatl/
> > >>
> > >> This really seems to work well and
> it is pretty cheap. My friend
> > > and I
> > >> didn't get up over 100-feet, but I
> think we got every bit of 50-
> > > feet
> > >> height into the tree.
> > >>
> > >> If you really want another
> 'project' you might think about building
>
> > > an
> > >> air gun:
> > >>
> > >> http://www.n0ew.
> <http://www.n0ew.org/k0s/air_gun/>
> org/k0s/air_gun/
> > >>
> > >> Have fun!
> > >> Erik
> > >>
> > >> denisnh wrote:
> > >>> Thanks again, Erik! From what you
> wrote and the research I've
> > > done,
> > >>> I decided to forget about the
> vertical radiator and go with a
> > > full
> > >>> wave 18g loop and 16g homebrew
> ladder line (I have all this on
> > >>> hand). Guess I'm fickle. LOL
> > >>>
> > >>> What I really dread is the
> cutting. The trees in my backyard are
> > > so
> > >>> dense that I'll have to get the
> chainsaw out and do some serious
> > >>> cutting. I did read about one guy
> who shot an arrow right over

> > > the
> > >>> trees with some fishing string
> attached, then pulled his wire
> > > right
> > >>> over the tops of the trees for his
> antenna. That scares me a
> > > bit.
> > >>> Not to mention that running enough
> power could start a fire! But
> > > it
> > >>> seems to work for him and he
> mentioned that once in a while he'll
> > >>> pull the wire one way or the other
> to compensate for any areas
> > > that
> > >>> are chafed through.
> > >>>
> > >>> Thanks,
> > >>> Denis
> > >>>
> > >>> --- In SkyWires@yahoogroup
> <mailto:SkyWires%40yahoogroups.com>
> s.com, Erik Weaver <erik@> wrote:
> > >>>> Hi Denis (I thought "Denisnh" was
> a unusual name! heheh)....
> > >>>>
> > >>>> Comments in body below....
> > >>>>
> > >>>> ...snip...
> > >>>>
> > >>>> > The curves for parallel lines
> all hug the bottom of the
> > >>>>> chart where the favorable SWR
> and other factors are, while the
> > >>> coax
> > >>>>> lines soar skyward surprisingly
> fast, which concurs with your
> > >>> post.
> > >>>> Cebik's web pages are filled with
> useful information -- time
> > > there
> > >>> is
> > >>>> well spent. The rapid rise of
> losses in coax under high swr
> > >>> conditions
> > >>>> is in sharp contrast to the low
> losses generally found in
> > > balanced
> > >>>> ("parallel") feed line. It is one
> of the major differences

> > > between
> > >>> them.
> > >>>> About the only negative that
> comes to mind with balanced feed
> > > line
> > >>> is
> > >>>> the need to carefully route it;
> so it isn't practical in all
> > > cases.
> > >>>> Here's something else to
> consider....
> > >>>>
> > >>>> Remember first the rare "special
> case" where impedance is the
> > > same
> > >>>> everywhere in the antenna system
> (XCVR, transmission line,
> > > antenna,
> > >>>> etc). With the exception of a
> tiny loss of energy as electrons
> > > rub
> > >>>> against one another (this loss
> due to friction is usually
> > >>> insignificant
> > >>>> in the typical amateur radio
> installation), nearly all the RF
> > >>> ("Radio
> > >>>> Frequency") energy generated by
> the XCVR radiates from the
> > > antenna
> > >>> as
> > >>>> radio waves. This is our goal of
> course.
> > >>>>
> > >>>> By the way, I usually speak in
> terms of transmitting a radio
> > > signal
> > >>> and
> > >>>> trying to send it out into the
> world (our "Hello World!"
> > > message),
> > >>> but
> > >>>> the efficiencies (or lack
> thereof) work exactly the same in
> > >>> reverse. In
> > >>>> other words, the antenna has the
> same gain (or loss) as a
> > > receiving
> > >>>> antenna, as it does when
> transmitting. So our rare special case

> > >>> antenna
> > >>>> will also deliver all the RF
> energy it collects to the receiver
> > >>> (less
> > >>>> friction/heat lost to move the
> electrons -- which can never be
> > >>> avoided
> > >>>> in the real world).
> > >>>>
> > >>>> Now when the impedance is one
> value on the transmission line
> > > (and
> > >>> it
> > >>>> doesn't matter what kind of
> transmission line), and the
> > > impedance
> > >>> of the
> > >>>> antenna is a different value,
> some RF energy is reflected off
> > > the
> > >>>> antenna feed point, back to the
> XCVR. How much is reflected
> > > depends
> > >>> upon
> > >>>> how great the difference is
> between the impedances.
> > >>>>
> > >>>> There is a difference in behavior
> at the antenna feed point
> > > between
> > >>> a
> > >>>> coax fed antenna and a parallel
> line fed antenna.
> > >>>>
> > >>>> Balanced (parallel) line only
> offers a two-way path between the
> > >>> antenna
> > >>>> and the XCVR. Coax may offer a
> third pathway -- along the
> > > outside
> > >>> of the
> > >>>> shielding (aka "braid") of the
> coax. This is because the higher
> > > the
> > >>>> frequency of alternating current
> (like RF) the less deeply the
> > > RF
> > >>>> penetrates into the conductor --
> this is called "skin effect".
> > > RF

> > >>>> doesn't penetrate very deeply
> into the conductor; it travels
> > > along
> > >>> the
> > >>>> outer-most surface, shallow
> enough in fact that one wave of
> > > energy
> > >>> can
> > >>>> travel along the inner surface of
> the coax shielding while a
> > > second
> > >>> wave
> > >>>> travels along the outside surface
> of the same coax shielding,
> > > and
> > >>> the
> > >>>> two will never meet. Therefore,
> coax can offer three conductors
> > > to
> > >>> RF:
> > >>>> along the inner conductor; along
> the inside of the coax
> > > shielding;
> > >>> and
> > >>>> along the outside of the coax
> shielding. We desire the first two
> > >>> paths,
> > >>>> but we do not (usually) benefit
> from RF flowing on the outside
> > > of
> > >>> the
> > >>>> coax shield.
> > >>>>
> > >>>> Since balanced (parallel
> conductors) transmission line (aka feed
> > >>> line)
> > >>>> is constructed of only two wires
> (which may be either stranded
> > > or
> > >>> solid
> > >>>> wire), the reflected wave (that
> energy which is reflecting from
> > > the
> > >>>> antenna feed point, back to the
> XCVR) has only one return path
> > >>> available
> > >>>> to it -- it returns ("reflects")
> back along the same conductor
> > > that
> > >>> it

> > >>>> originally traversed. This is a
> simple condition, and no "balun"
> > >>> (more
> > >>>> accurately "bal-bal" for
> "balanced-to-balanced" in this case) is
> > >>>> required to maintain the desired
> energy pathway between the XCVR
> > >>> and
> > >>>> antenna.
> > >>>>
> > >>>> ("Balun" is a conjunction of
> "balanced" and "unbalanced"
> > >>> identifying a
> > >>>> transition from a balanced
> transmission line to an unbalanced
> > > line.
> > >>>> "Unun" identifies transitioning
> from "unbalanced"
> > > to "unbalanced"
> > >>> line.
> > >>>> "Balbal" identifies transitioning
> from "balanced" to "balanced"
> > >>> line.
> > >>>> Depending upon the design, this
> transformation may occur at a
> > >>> number of
> > >>>> different ratios, of which 1:1
> and 4:1 are the most commonly
> > > used.)
> > >>>> This simple two-way path is not
> always the case when using coax.
> > > If
> > >>> the
> > >>>> impedance mismatch is great
> enough, some fraction of the RF will
> > >>> find an
> > >>>> easier pathway flowing along the
> outside of the coax shielding.
> > >>> This can
> > >>>> cause problems such as RFI (Radio
> Frequency Interference) and
> > >>> inaccurate
> > >>>> readings on our meters (which are
> designed under the assumption
> > > RF
> > >>> will
> > >>>> travel along two paths, not
> three). Suffering a bad case of "RF
> > > on
> > >>> the

> > >>>> feed line" may cause RFI to
> affect other electronics in the
> > > area,
> > >>>> provide false swr readings, and
> cause "RF bite" on our
> > > microphone.
> > >>> This
> > >>>> is often caused by RF radiating
> off the outside of the coax,
> > >>> instead of
> > >>>> the antenna. (Although in some
> cases problems may exist even
> > > when
> > >>> feed
> > >>>> line radiation has been
> eliminated. RFI can be a difficult
> > > puzzle
> > >>> to
> > >>>> solve.)
> > >>>>
> > >>>> Enter the balun. By "wrapping"
> the coax with a much greater
> > >>> impedance
> > >>>> than the antenna feed point, we
> keep any stray RF from moving
> > > onto
> > >>> the
> > >>>> outside of the coax shielding.
> (Targeting a much greater
> > > impedance
> > >>> on
> > >>>> the outside of the coax than
> inside it.) To the degree this is
> > >>>> successful, RF may only travel
> onto the antenna, or back along
> > > the
> > >>>> inside of the coax to the XCVR.
> (On either the inside of the
> > >>> shielding
> > >>>> or along the surface of the
> center conductor. No RF travels
> > > along
> > >>> the
> > >>>> core of the center conductor, due
> to skin effect.)
> > >>>>
> > >>>> Once again we have only two
> pathways for the RF to travel
> > > allowing
> > >>> our

> > >>>> equipment and antenna system to
> behave as intended, and within
> > >>>> predictable parameters. This is
> why a balun may be useful at the
> > >>> feed
> > >>>> point of an antenna when using
> coax transmission line. It is
> > > also
> > >>> why,
> > >>>> unless the coax impedance is very
> close to equaling the
> > > antenna's
> > >>>> impedance where they meet (the
> feed point) a feed point balun is
> > >>>> advisable when using coax.
> > >>>>
> > >>>> Reflection, re-reflection, and
> re-re-reflection....
> > >>>>
> > >>>> Recall the transmitted RF wave
> traveling along the transmission
> > >>> line to
> > >>>> the antenna feed point, and not
> finding a perfectly equal
> > >>> impedance,
> > >>>> some bounced back toward the XCVR
> in the original direction.
> > >>>>
> > >>>> Now the reflected wave races
> toward the XCVR. Some of it was
> > >>> absorbed by
> > >>>> the antenna, and some has been
> lost in the transmission line
> > >>>> (heat/friction). So it isn't
> exactly at the same impedance when
> > > it
> > >>>> started, and it has been altered
> in other ways too. Namely
> > >>> the "phase"
> > >>>> of either the voltage or current
> has been shifted. To learn more
> > >>> about
> > >>>> this, "Reflections II" by Walter
> Maxwell W2DU is a great book!
> > >>> Highly
> > >>>> recommended! If you see one at a
> hamfest, buy it!
> > >>>>
> > >>>> We'll skip over exactly what and
> why this change takes place

> > >>> (entire
> > >>>> books have been written about
> just that!), but the RF wave is
> > >>> different
> > >>>> than when it left the XCVR, and
> as a result, it will "bounce"
> > > (or
> > >>>> re-reflect) off the XCVR, and
> move in the original direction
> > > again.
> > >>> It
> > >>>> is re-reflected back toward the
> antenna feed point.
> > >>>>
> > >>>> The re-reflection point will be
> the transmatch instead of the
> > > XCVR
> > >>> if a
> > >>>> transmatch is being utilized.
> Either way, the RF wave will
> > > bounce
> > >>> back
> > >>>> and forth, reflecting,
> re-reflecting, and re-re-reflecting, and
>
> > > so
> > >>> on,
> > >>>> until it either all eventually
> escapes out the antenna or is
> > >>> absorbed as
> > >>>> heat/friction in the transmission
> line. (In truth, it is always
> > > the
> > >>> sum
> > >>>> of both events -- what isn't
> eventually changed into heat in the
> > >>>> transmission line escapes the
> antenna as radiated RF.)
> > >>>>
> > >>>> As the swr increases, and as the
> inherent loss of the
> > > transmission
> > >>> line
> > >>>> increases (lower in balanced
> line; higher in coax), more of the
> > > RF
> > >>>> energy is lost as unproductive
> heat/friction, and less is
> > > available
> > >>> to

> > >>>> radiate from the antenna as a
> useful radio signal.
> > >>>>
> > >>>> This is why high swr on balanced
> feed line isn't all that bad.
> > > Most
> > >>> of
> > >>>> the RF energy will eventually
> "bounce" out of the antenna
> > > anyway.
> > >>> It
> > >>>> doesn't really matter if it makes
> it out the very first trip, on
> > >>> the
> > >>>> sixth, or 16th. Radiated is
> radiated. The person receiving your
> > >>> radio
> > >>>> signal will never know if they
> are hearing the very first wave
> > > or a
> > >>>> re-reflected wave. It just
> doesn't matter after the energy
> > > escapes
> > >>> the
> > >>>> antenna.
> > >>>>
> > >>>> Escaping the antenna is the
> trick!
> > >>>>
> > >>>> And that is where coax may not
> work well in the same situation.
> > >>> Coax,
> > >>>> suffering much greater losses to
> the RF as it traverses along it
> > >>>> ("attenuation"), simply absorbs
> too much of the RF as it bounces
> > >>> back
> > >>>> and forth, especially under high
> swr conditions. There isn't
> > > much
> > >>> left
> > >>>> to escape out the antenna.
> > >>>>
> > >>>> All of which leads to the
> generalized conclusion that wire
> > > antenna
> > >>>> elements fed by balanced
> transmission line, operate very
> > >>> efficiently
> > >>>> even under high swr conditions.

> That is why these types of
> > > antennas
> > >>>> (from dipoles to loops) have
> built a reputation as practical
> > > multi-
> > >>> band
> > >>>> solutions for many amateur radio
> operators. The only stumbling
> > >>> block is
> > >>>> transforming their wide ranges of
> impedance into something close
> > > to
> > >>> a
> > >>>> nominal 50-Ohms resistive
> (meaning little or no reactance) to
> > > match
> > >>> our
> > >>>> "modern" (meaning non-tube)
> XCVRs. And that is precisely what a
> > >>>> transmatch is designed to
> accomplish.
> > >>>>
> > >>>>
> > >>>>
> > >>>>
> > >>>>> All my HF antenna experience is
> in
> > >>>>> receive only antennas for
> shortwave. I've been dragging my feet
> > > on
> > >>>>> getting my General Class license
> but finally decided to go for
> > > it
> > >>>>> this month. Of course, I had
> masterd 5 wpm CW just in time for
> > >>> that
> > >>>>> requirement to be abolished. :-)
> > >>>> Heheh, yes, that sounds just
> about right! ;) Welcome to HF! And
> > >>> welcome
> > >>>> to the world of transmitting
> antennas. They can be a lot of fun!
> > >>>>
> > >>>>
> > >>>>
> > >>>>> Some people seem to put all
> their faith in the modeling
> > > software.
> > >>>>> Whatever works for them, but I
> would never take a computer

> > > model
> > >>> as
> > >>>>> being 100% accurate. To me, the
> model really has to be built in
> > > 3D
> > >>>>> to prove it works.
> > >>>> ...snip...
> > >>>>
> > >>>> Precisely! It can save a lot of
> time by eliminating very bad or
> > >>> very
> > >>>> unlikely designs, but it is
> almost impossible to fully model the
> > >>>> environment in which the antenna
> will be built. So you have to
> > >>> actually
> > >>>> build it and test it at some
> point. This is like other rules of
> > >>> thumb.
> > >>>> Take any of the "formulas" for
> determining the proper length of
> > >>> antenna
> > >>>> elements. They all say to start
> too long and slowing trim it to
> > > a
> > >>> proper
> > >>>> match.
> > >>>>
> > >>>> Whether a formula for a simple
> dipole, or a computer model of a
> > >>> loop or
> > >>>> beam, the idea isn't to make the
> perfect antenna on paper and
> > > then
> > >>>> reproduce it exactly in the real
> world. It is to "get close" and
> > >>>> possibly avoid some time lost in
> fiddling around. Beams are a
> > > good
> > >>>> example. You can play with the
> modeling software and try out
> > >>> different
> > >>>> element combinations and get an
> idea of the resulting envelopes
> > > and
> > >>> feed
> > >>>> point impedances. This saves a
> lot of time, but ultimately you
> > > have
> > >>>> build it and tune it to your

> exact site.
> > >>>>
> > >>>>
> > >>>>> ...snip... What the heck though,
> and after
> > >>>>> reading your reply, I believe I
> will go with the 40 meter loop
> > > and
> > >>>>> orient it as a horizontal with
> paralell feedline.
> > >>>> Adding a transmatch (aka antenna
> tuner) between your XCVR and
> > >>> antenna
> > >>>> will most likely allow this to
> become a very usable multi-band
> > >>> antenna.
> > >>>> Every antenna displays its own
> range of impedances, and these
> > > vary
> > >>> on
> > >>>> each band. (This "impedance" is
> more properly called "complex
> > >>> impedance"
> > >>>> because it includes some
> reactance.) Very low impedances are
> > >>> typically
> > >>>> difficult for many transmatches
> to "match," but any extreme
> > > value
> > >>> of
> > >>>> complex impedance may fall
> outside the range which a given
> > >>> transmatch
> > >>>> can "match." ("Match" means
> transforming the existing complex
> > >>> impedance,
> > >>>> on the antenna-side of the
> transmatch, into an impedance (with
> > >>> little or
> > >>>> no reactance) close to that which
> the XCVR is designed to work
> > >>> into.)
> > >>>> But there are workarounds, such
> as matching stubs, and other
> > >>> solutions.
> > >>>> (See below.)
> > >>>>
> > >>>>
> > >>>>> Regarding running the line into
> the shack, shorting the wires

> > > and
> > >>>>> connecting them to the rig,
> there are a few reasons I can't do
> > >>> this.
> > >>>>> For one, there are children and
> unknowing people in the area
> > > that
> > >>>>> may get zapped if they are able
> to touch the wires. My ham
> > >>> station
> > >>>>> (or what's left of it) is in my
> basement office. I need to run
> > >>> the
> > >>>>> line vertically to about 8'
> above the ground, make the short at
> > >>> that
> > >>>>> point, and install a matching
> network either on a pole or tree
> > > in
> > >>> a
> > >>>>> PVC junction box. The ground
> wire would go there also, and then
> > > I
> > >>>>> need run the ground and an
> insulated feedwire the remaining
> > >>> distance
> > >>>>> to the ground, bury it and slip
> it through the side of the
> > > house
> > >>>>> into the shack.
> > >>>>>
> > >>>> If you are married to the idea of
> having the vertical option,
> > > this
> > >>> may
> > >>>> be true. You might consider a
> simple 30-amp automotive relay
> > > too.
> > >>> Put
> > >>>> 12-vdc to it and remotely control
> that shorting switch.
> > >>>>
> > >>>> I'm not sure I'm picturing this
> properly. Where is the antenna
> > > feed
> > >>>> point in relation to your shack?
> Pretty much right above it, or
> > > 50-
> > >>> feet
> > >>>> distance after you get outside

> the house?
> > >>>>
> > >>>> I'm wondering if we're talking
> about a longer run from the shack
> > > to
> > >>> the
> > >>>> antenna feed point, like 50- to
> 100-feet or more, or a much
> > > shorter
> > >>> run
> > >>>> like 20- or 30-feet?
> > >>>>
> > >>>> Also, consider getting outside in
> as short a run as possible,
> > > and
> > >>> making
> > >>>> a longer run of ladder line to
> get to the antenna feed point. I
> > > had
> > >>> one
> > >>>> dipole for which I ran 300-Ohm
> twin lead transmission line half
> > > way
> > >>>> around my house under the
> overhang of the roof.
> > >>>>
> > >>>>
> > >
> > >
> > >
> > >
> > >
> > > Yahoo! Groups Links
> > >
> > >
> > >
> >
>

2681. Re: Feed Arrangement for Operating the Loop as a Vertical Antenna

Yahoo group: SkyWires
Date: 2007-10-09 20:04:52 UTC
From: denisnh
Topic: 2643 Message: 2681

What a hoot! :-) Try to fit the word "Quantum" in there somewhere for added effect. Or if you don't mind being taken away by the guys with the white coats, tell them it's the Quantum Time Deflector Loop which is connected to your time machine.

I told my wife I would tell the neighbors that wire is a UFO Detector, but my wife said, "DON'T YOU DARE!". HA HA

--- In SkyWires@yahoogroups.com, "WILLIAM STEFFEL" <w.steffel@...> wrote:
>
> Tell them what I tell my neighbors. It is a Hyperdimensional reflector so your space brothers can find you to take you home. The neighbors will avoid you like the plague. Dont forget to use the term "Hyperdimensional",it sounds scarey.

2682. RE: [SkyWires] Re: Feed Arrangement for Operating the Loop as a Vertical Antenna

Yahoo group: SkyWires
Date: 2007-10-09 20:11:14 UTC
From: ag0k@ag0k.com
Topic: 2643 Message: 2682

Or Just say it is required by the
agency, and then refuse to say anything
else about it.
73's
AGØK
Clint

2683. Hi all i have just joined

Yahoo group: SkyWires
Date: 2007-10-10 16:20:45 UTC
From: thewonkydonky
Topic: 2683 Message: 2683

Hi all,just a few words i have just joined the message group,i am getting back into swl after a number of years away from the hobby,i have just bought a FRG-7 & yupiteru MTV-7100 to get started,i intend to use a long wire antenna for the frg-7,so when we get back from Wales i shall start work on it,so please try to bear with me if it seems like stupid questions that i ask
thankyou for letting me join your interesting group my new friends
thewonkydonky

2684. Re: [SkyWires] Hi all i have just joined

Yahoo group: SkyWires
Date: 2007-10-10 18:00:56 UTC
From: Dr.Ace Ratliff
Topic: 2683 Message: 2684

Welcome to the group.
All serious questions are valid, none are stupid.
Ace

----- Original Message -----
From: thewonkydonky
To: SkyWires@yahoogroups.com
Sent: Wednesday, October 10, 2007 12:20 PM
Subject: [SkyWires] Hi all i have just joined

Hi all,just a few words i have just joined the message group,i am getting back into swl after a number of years away from the hobby,i have just bought a FRG-7 & yupiteru MTV-7100 to get started,i intend to use a long wire antenna for the frg-7,so when we get back from Wales i shall start work on it,so please try to bear with me if it seems like stupid questions that i ask
thankyou for letting me join your interesting group my new friends
thewonkydonky

2685. Re: Hi all i have just joined

Yahoo group: SkyWires
Date: 2007-10-11 13:51:12 UTC
From: Christopher A. George
Topic: 2683 Message: 2685

Welcome also, and I agree, that there are no stupid questions. As an old Master Chief once told me while I was in the Navy " The only stupid question is the one you don't ask." So ask away.

2686. wanted

Yahoo group: SkyWires
Date: 2007-10-12 17:34:24 UTC
From: slowhandtwo
Topic: 2686 Message: 2686

I am looking for a PDL 2 if you have one for sale let me know.

contact: slowhandtwo@...

2687. Aluminum Wire

Yahoo group: SkyWires
Date: 2007-10-14 22:55:18 UTC
From: Steve Holman
Topic: 2687 Message: 2687

Hey Guys, I am building a 600+ft loop in the back patch, I have some copper wire on hand but this tends to strech. I have access to some aluminum fencing wire that is intended to be put up under tension and I also would have more than 600ft available to put up and therefore my loop could be bigger(Good!!)

What do you say, any comments?

I know that Copper conducts better but Aluminum is not far different and would allow more tension to reduce sag and streching. I have to keep the wire above the Farm Equipment

Steve
N5WDD

2689. Re: Aluminum Wire

Yahoo group: SkyWires
Date: 2007-10-15 11:51:32 UTC
From: lazysenior
Topic: 2687 Message: 2689

--- In SkyWires@yahoogroups.com, "Steve Holman" <fholmancop@...> wrote:
>
> Hey Guys, I am building a 600+ft loop in the back patch, I have some
> copper wire on hand but this tends to strech.

How do you plan on connecting your feedline? You got aluminum
feedline?? Copper won't solder to aluminum. I assume the aluminum
fencing is solid?

Solid wire, aluminum or copper is not good for antennas as it will
break from the flexing.

Get stranded insulated copper wire. Dont worry about stretch, use open
feeders instead of coax. I have been using common THHN stranded
insulated copper house wire for antennas. Never worry about stretch
cause it doesn't stretch much even on long loops. Its tuff stuff too,
never had an antenna break yet.

Keep your fencing wire for fencing.......

Stan K9IUQ

2690. Re: Using 2 Smaller Gauge Wires in Place of Large Gauge Wires

Yahoo group: SkyWires
Date: 2007-10-15 12:01:17 UTC
From: lazysenior
Topic: 2642 Message: 2690

--- In SkyWires@yahoogroups.com, "denisnh" <denisnh@...> wrote:
>
> Thanks again, Stan. I mentioned this in another post. (Maybe it
> should be a new topic). Do you know of anyone who has used coax for
> an antenna wire using only the shield/braid? I'm wondering if it will
> behave like a large diameter wire if the center conductor is not
> connected in any way? Any ideas? RG-6 is pretty thick stuff. I
> suspect the dielectric may cause problems or perhaps even some
> parasitic side effects from the center conductor and I don't think
> software modeling will will show up much.
>
> Thanks,
> Denis
>

There are 2 problems with using coax as antenna wire.
1. Coax is expen$ive
2. Coax is HEAVY

I really cant imagine a loop being made of coax, way too heavy

I once had a IAC 75 mtr Bazooka antenna which is made mostly of small diameter coax. Very heavy antenna. I had it supported in the center and it sagged badly anyway from the weight of the coax.

Stan K9IUQ

2691. Re: Aluminum Wire

Yahoo group: SkyWires
Date: 2007-10-15 14:34:20 UTC
From: Steve Holman
Topic: 2687 Message: 2691

--- In SkyWires@yahoogroups.com, "lazysenior" <lazysenior@...> wrote:
>
> --- In SkyWires@yahoogroups.com, "Steve Holman" <fholmancop@> wrote:
> >
> > Hey Guys, I am building a 600+ft loop in the back patch, I have some
> > copper wire on hand but this tends to strech.
>
> How do you plan on connecting your feedline? You got aluminum
> feedline?? Copper won't solder to aluminum. I assume the aluminum
> fencing is solid?
>
> Solid wire, aluminum or copper is not good for antennas as it will
> break from the flexing.
>
> Get stranded insulated copper wire. Dont worry about stretch, use open
> feeders instead of coax. I have been using common THHN stranded
> insulated copper house wire for antennas. Never worry about stretch
> cause it doesn't stretch much even on long loops. Its tuff stuff too,
> never had an antenna break yet.
>
> Keep your fencing wire for fencing.......
>
> Stan K9IUQ

Stan Thanks for the comments.

Actually Solder IT company makes a Solder for Copper/Aluminum Joining.
I was going to use some of that Product.
As for the solid Copper Itcome off the same roll of Wire I had up for
7 - 8 years as a long line SWL antenna before I got my License never
had any breaks, it just streached but it was just one long run. My
loop is in the open and has no tree limbs or Etc. to rub or cause
extra stress on the antenna. Best of all this is the Good Stuff (FREE)
and I have it. The Aluminum is available for 1300+ ft for $21+change
at Tractor Supply so I had thought of trying it. I have all my spare
change in the Supports right now so Buying a $45.00 Roll of THNN
Stranded wire is a bit much as I have a very strict budget on this
ant. I Had thought of using aluminum Fence wire as it would give me a
larger All Band Loop and Larger is Better you know (:

The Loop will be fed with a 100Ft of 450 Ohm Ladder line to a 1:1
balun and 5Ft of Coax into the Shack. It is supported at 8 Corners at
Aprox 30Ft by Grey PVC Conduit set at an angle that results in the
wire being under tension like a Draw String in a bag. I call it a Post
Tension Loop. I hope to have it finished in a week or so if I use the
Copper or 3 to 4 weeks if I move the Supports for the larger Aluminum

Loop.

We Shall See.

Steve
N5WDD

2692. Re: Aluminum Wire

Yahoo group: SkyWires
Date: 2007-10-15 15:11:00 UTC
From: Richard Zolla
Topic: 2687 Message: 2692

Good Luck Steve,

Let us know how it comes out, and better yet how it plays. Hi

Rick N6NKN

--- In SkyWires@yahoogroups.com, "Steve Holman" <fholmancop@...>
wrote:
>
> --- In SkyWires@yahoogroups.com, "lazysenior" <lazysenior@> wrote:
> >
> > --- In SkyWires@yahoogroups.com, "Steve Holman" <fholmancop@>
wrote:
> > >
> > > Hey Guys, I am building a 600+ft loop in the back patch, I have
some
> > > copper wire on hand but this tends to strech.
> >
> > How do you plan on connecting your feedline? You got aluminum
> > feedline?? Copper won't solder to aluminum. I assume the aluminum
> > fencing is solid?
> >
> > Solid wire, aluminum or copper is not good for antennas as it will
> > break from the flexing.
> >
> > Get stranded insulated copper wire. Dont worry about stretch, use
open
> > feeders instead of coax. I have been using common THHN stranded
> > insulated copper house wire for antennas. Never worry about
stretch
> > cause it doesn't stretch much even on long loops. Its tuff stuff
too,
> > never had an antenna break yet.
> >
> > Keep your fencing wire for fencing.......
> >
> > Stan K9IUQ
>
> Stan Thanks for the comments.
>
> Actually Solder IT company makes a Solder for Copper/Aluminum
Joining.
> I was going to use some of that Product.
> As for the solid Copper Itcome off the same roll of Wire I had up
for
> 7 - 8 years as a long line SWL antenna before I got my License never

> had any breaks, it just streached but it was just one long run. My
> loop is in the open and has no tree limbs or Etc. to rub or cause
> extra stress on the antenna. Best of all this is the Good Stuff
(FREE)
> and I have it. The Aluminum is available for 1300+ ft for $21+change
> at Tractor Supply so I had thought of trying it. I have all my spare
> change in the Supports right now so Buying a $45.00 Roll of THNN
> Stranded wire is a bit much as I have a very strict budget on this
> ant. I Had thought of using aluminum Fence wire as it would give me
a
> larger All Band Loop and Larger is Better you know (:
>
> The Loop will be fed with a 100Ft of 450 Ohm Ladder line to a 1:1
> balun and 5Ft of Coax into the Shack. It is supported at 8 Corners
at
> Aprox 30Ft by Grey PVC Conduit set at an angle that results in the
> wire being under tension like a Draw String in a bag. I call it a
Post
> Tension Loop. I hope to have it finished in a week or so if I use
the
> Copper or 3 to 4 weeks if I move the Supports for the larger
Aluminum
> Loop.
>
> We Shall See.
>
> Steve
> N5WDD
>

2693. Re: [SkyWires] Aluminum Wire

Yahoo group: SkyWires
Date: 2007-10-16 02:22:38 UTC
From: Ken Burchfield
Topic: 2687 Message: 2693

Hi Steve,
About 15 yrs ago I had a 500+ Rhombic antenna up made from electric fence wire(This was galvanize) the antenna worked well for me
Good Luck with the loop you put up.
73 Ken K5JXL

Give Packet Radio a try ....Mississippi.......145.010.......Simplex.......1200 Baud

----- Original Message ----
From: Steve Holman <fholmancop@...>
To: SkyWires@yahoogroups.com
Sent: Sunday, October 14, 2007 5:55:18 PM
Subject: [SkyWires] Aluminum Wire

Hey Guys, I am building a 600+ft loop in the back patch, I have some copper wire on hand but this tends to strech. I have access to some aluminum fencing wire that is intended to be put up under tension and I also would have more than 600ft available to put up and therefore my loop could be bigger(Good!!)

What do you say, any comments?

I know that Copper conducts better but Aluminum is not far different and would allow more tension to reduce sag and streching. I have to keep the wire above the Farm Equipment

Steve
N5WDD

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http://surveylink.yahoo.com/gmrs/yahoo_panel_invite.asp?a=7

2694. Re: Aluminum Wire

Yahoo group: SkyWires
Date: 2007-10-17 22:06:41 UTC
From: stevew8sb
Topic: 2687 Message: 2694

--- In SkyWires@yahoogroups.com, "Steve Holman" <fholmancop@...> wrote:
>
> Hey Guys, I am building a 600+ft loop in the back patch, I have some
> copper wire on hand but this tends to strech. I have access to some
> aluminum fencing wire that is intended to be put up under tension and
> I also would have more than 600ft available to put up and therefore my
> loop could be bigger(Good!!)
>
> What do you say, any comments?
>
> I know that Copper conducts better but Aluminum is not far different
> and would allow more tension to reduce sag and streching. I have to
> keep the wire above the Farm Equipment
>
> Steve
> N5WDD
>
For what it's worth, I've had very good luck with aluminum fence wire antennas. Served well throughout the year including winter, ice storms, etc. A quarter mile spool is reasonably priced at TSC or other farm stores and will make a lot of antenna!
As for feedline connection I used a mechanical connection (bolt, washers, nut) and coated it with no-ox grease used by the military and communications companies for ground connections etc.
Worked well for me, good luck on your's.
Steve
W8SB

2695. Re: [SkyWires] Re: Aluminum Wire

Yahoo group: SkyWires
Date: 2007-10-17 22:49:55 UTC
From: Jim Dunstan
Topic: 2687 Message: 2695

At 10:06 PM 10/17/2007 +0000, you wrote:

>--- In <mailto:SkyWires%40yahoogroups.com>SkyWires@yahoogroups.com, "Steve
>Holman" <fholmancop@...> wrote:
> >
> > Hey Guys, I am building a 600+ft loop in the back patch, I have some
> > copper wire on hand but this tends to strech. I have access to some
> > aluminum fencing wire that is intended to be put up under tension and
> > I also would have more than 600ft available to put up and therefore my
> > loop could be bigger(Good!!)
> >
> > What do you say, any comments?
> >
> > I know that Copper conducts better but Aluminum is not far different
> > and would allow more tension to reduce sag and streching. I have to
> > keep the wire above the Farm Equipment
> >
> > Steve
> > N5WDD
> >
>For what it's worth, I've had very good luck with aluminum fence wire
>antennas. Served well throughout the year including winter, ice
>storms, etc. A quarter mile spool is reasonably priced at TSC or
>other farm stores and will make a lot of antenna!
>As for feedline connection I used a mechanical connection (bolt,
>washers, nut) and coated it with no-ox grease used by the military and
>communications companies for ground connections etc.
>Worked well for me, good luck on your's.
>Steve
>W8SB

Hi,

Aluminium wire is very tempting .... light, strong, and relatively cheap. However the problem is in the connections .... especially connecting aluminium to copper. Aluminium was used for house wiring in the past ... in the 70's I believe, and was the cause of a lot of grief .... and is now banned in many jurisdictions. The problem was always in the connections. For practical reasons the most common connection either to other wires or devices is with some kind of pressure connector. I would check with your electrical supply house for specially designed (for aluminium) crimping devices and tools as well as no-ox grease.

My personal position on wire for antennas and or ground systems is to use the best wire, (copper) and best practices. Putting in a ground system or putting up a large wire antenna is a lot of work that I would not want to

revisit very often ... I want it to last with as little need for maintenance as possible hi hi .... best investments are for the long term hi hi.

73

Jim, VE3CI

2696. Re: [SkyWires] Re: Aluminum Wire

Yahoo group: SkyWires
Date: 2007-10-17 23:28:19 UTC
From: Donald Sanders
Topic: 2687 Message: 2696

I was in the local Home Depot and noticed that hanging on the
wall where the crimp lugs were in electrical were tubes of NO-OX
for about $5.00 a tube. I got a couple for refurbishing my verticals.

Healthfully yours,
Don W4BWS
----- Original Message -----
From: stevew8sb
To: SkyWires@yahoogroups.com
Sent: Wednesday, October 17, 2007 5:06 PM
Subject: [SkyWires] Re: Aluminum Wire

For what it's worth, I've had very good luck with aluminum fence wire
antennas. Served well throughout the year including winter, ice
storms, etc. A quarter mile spool is reasonably priced at TSC or
other farm stores and will make a lot of antenna!
As for feedline connection I used a mechanical connection (bolt,
washers, nut) and coated it with no-ox grease used by the military and
communications companies for ground connections etc.
Worked well for me, good luck on your's.
Steve
W8SB
Recent Activity
a.. 6New Members
Visit Your Group
Share Photos
Put your favorite

photos and

more online.

Real Food Group
on Yahoo! Groups

What does real food

mean to you?

Yahoo! Groups
Moderator Central

An online resource

for moderators.
.

2697. Re: [SkyWires] Re: Aluminum Wire

Yahoo group: SkyWires
Date: 2007-10-17 23:40:13 UTC
From: Donald Sanders
Topic: 2687 Message: 2697

I have used the aluminum wire for HF antennas and VHF beams.
I solder with the special compound from Solder-it to solder to the aluminum as well as nut-and-bolt and crimp lug with the No-Ox. Then seal the joint with weather seal compound. either the one from Rad Shack, the rubber self sealing tape or an old time sealer- DUCK Seal IIRC. I found some at Home Depot a few months ago. Have used it for many years. I apply it over the black plastic tape.

Healthfully yours,
Don W4BWS

2698. Re: [SkyWires] Re: Aluminum Wire

Yahoo group: SkyWires
Date: 2007-10-18 03:34:11 UTC
From: Dr.Ace Ratliff
Topic: 2687 Message: 2698

----- Original Message -----
From: Jim Dunstan
To: SkyWires@yahoogroups.com
Sent: Wednesday, October 17, 2007 6:49 PM
Subject: Re: [SkyWires] Re: Aluminum Wire

Aluminium wire is very tempting .... light, strong, and relatively cheap. However the problem is in the connections .... especially connecting aluminium to copper. Aluminium was used for house wiring in the past ... in the 70's I believe, and was the cause of a lot of grief .... and is now banned in many jurisdictions. The problem was always in the connections. For practical reasons the most common connection either to other wires or devices is with some kind of pressure connector. I would check with your electrical supply house for specially designed (for aluminium) crimping devices and tools as well as no-ox grease.

My personal position on wire for antennas and or ground systems is to use the best wire, (copper) and best practices. Putting in a ground system or putting up a large wire antenna is a lot of work that I would not want to revisit very often ... I want it to last with as little need for maintenance as possible hi hi .... best investments are for the long term hi hi.

73

Jim, VE3CI

Hi Jim and Everyone,

2699. Re: [SkyWires] Re: Aluminum Wire

Yahoo group: SkyWires
Date: 2007-10-18 16:01:47 UTC
From: Dr.Ace Ratliff
Topic: 2687 Message: 2699

I will try this again, my last message didn't post.

Hi Jim and Eveyone,
Aluminum wire was used in older mobile homes and was quite a problem. Many had electrical fires. My Mom owned one of these homes over 25 years ago. One outlet would make the wall board very hot. I would remove the outlet cover plate and tighten the electrical/mechanical wire connections but after a relatively short period of time the wall board would start getting hot again and I would need to tighten the electrical/mechanical wire connections again.
It was a never ending project.
I have since learned they had a repair method that worked well by crimping another type wire (possibly copper) to the end of the aluminum wire before it went under the brass screw.
73 all, Ace - WH2T

----- Original Message -----
From: Dr.Ace Ratliff
To: SkyWires@yahoogroups.com
Sent: Wednesday, October 17, 2007 11:34 PM
Subject: Re: [SkyWires] Re: Aluminum Wire

----- Original Message -----
From: Jim Dunstan
To: SkyWires@yahoogroups.com
Sent: Wednesday, October 17, 2007 6:49 PM
Subject: Re: [SkyWires] Re: Aluminum Wire

Aluminium wire is very tempting .... light, strong, and relatively cheap. However the problem is in the connections .... especially connecting aluminium to copper. Aluminium was used for house wiring in the past ... in the 70's I believe, and was the cause of a lot of grief .... and is now banned in many jurisdictions. The problem was always in the connections. For practical reasons the most common connection either to other wires or devices is with some kind of pressure connector. I would check with your electrical supply house for specially designed (for aluminium) crimping devices and tools as well as no-ox grease.

My personal position on wire for antennas and or ground systems is to use the best wire, (copper) and best practices. Putting in a ground system or putting up a large wire antenna is a lot of work that I would not want to revisit very often ... I want it to last with as little need for maintenance as possible hi hi .... best investments are for the long term hi hi.

73

Jim, VE3CI

2700. Re: [SkyWires] Re: Aluminum Wire

Yahoo group: SkyWires
Date: 2007-10-18 16:10:36 UTC
From: Dean
Topic: 2687 Message: 2700

This is and was very true...
But... With an antenna you are not running high current at joints.
So what does house wiring have to do with outside antennas?

Dean W5GXL
dean@...

On Oct 18, 2007, at 11:01 AM, Dr.Ace Ratliff wrote:

>
> I will try this again, my last message didn't post.
>
> Hi Jim and Eveyone,
> Aluminum wire was used in older mobile homes and was quite a
> problem. Many had electrical fires. My Mom owned one of these homes
> over 25 years ago. One outlet would make the wall board very hot. I
> would remove the outlet cover plate and tighten the electrical/
> mechanical wire connections but after a relatively short period of
> time the wall board would start getting hot again and I would need
> to tighten the electrical/mechanical wire connections again.
> It was a never ending project.
> I have since learned they had a repair method that worked well by
> crimping another type wire (possibly copper) to the end of the
> aluminum wire before it went under the brass screw.
> 73 all, Ace - WH2T
>

2701. Re: [SkyWires] Re: Aluminum Wire

Yahoo group: SkyWires
Date: 2007-10-18 18:10:05 UTC
From: Jim Dunstan
Topic: 2687 Message: 2701

At 11:10 AM 10/18/2007 -0500, you wrote:

>This is and was very true...
>But... With an antenna you are not running high current at joints. So
>what does house wiring have to do with outside antennas?
>
>Dean W5GXL

Hi Dean,

The experience with aluminium house wiring is simply illustrative of the problem with aluminium at contact surfaces and some of the solutions that experience generates ... (the out-of-doors environment with its heat, cold, wind, and rain, exacerbates the problem) . You are wrong about the current at antenna joints .... the current can be considerable. Take the simple example of feeding the wire antenna at a 50 ohm impedance point. If you use the simple formula of I = W/R you can calculate that 5 watts will produce .1 amp at the joint, 100 watts will produce 2 amps, and 1KW will produce 20 amps. I think I would treat the connections with care (I have actually seen joints blown to smithereens) hi hi.

Jim, VE3CI

2702. Re: Aluminum Wire

Yahoo group: SkyWires
Date: 2007-10-19 11:55:39 UTC
From: lazysenior
Topic: 2687 Message: 2702

--- In SkyWires@yahoogroups.com, Dean <dean@...> wrote:
>
> This is and was very true...
> But... With an antenna you are not running high current at joints.
> So what does house wiring have to do with outside antennas?
>
> Dean W5GXL
> dean@...
>

Indeed one can run VERY high current on an antenna at legal limit
levels.10 -20 amps is not uncommon depending on band, antenna etc.
Dont believe me?

Run your favorite antenna modeling software and get the actual figures....

Using aluminum wiring doesn't make sense to me for an antenna. However
there will always be those who take the cheep way...

Stan K9IUQ

2704. Re: [SkyWires] Aluminum Wire

Yahoo group: SkyWires
Date: 2007-10-19 14:22:43 UTC
From: schuetzen
Topic: 2687 Message: 2704

Steve Holman wrote:
> Hey Guys, I am building a 600+ft loop in the back patch, I have some
> copper wire on hand but this tends to strech. I have access to some
> aluminum fencing wire that is intended to be put up under tension and
> I also would have more than 600ft available to put up and therefore my
> loop could be bigger(Good!!)

ignore the comments here, just put it up. I am one of those who uses ARRL and inet sources - if it works, is comparable, you have it in your possession, PUT IT UP> let us know how it goes and how it works.

without people like you in the 20s - 50s, we would not know half the stuff we know now. Personally, I thank you for trying it out.

I am still thinking about my several rolls of dog fence wire. That stuff IS TUFF!!!

its guage must be about 32 but heck, it is something to spend a day outside in this nice weather.

cheers
chas k5dam

2705. Re: [SkyWires] Re: Aluminum Wire

Yahoo group: SkyWires
Date: 2007-10-19 15:21:01 UTC
From: Dean
Topic: 2687 Message: 2705

It will hold that current... Besides, You are talking RF Current...
not low 60 hz house current.
You worry about too much.
Just get it up and Try it...

Dean W5GXL
dean@...

On Oct 19, 2007, at 6:55 AM, lazysenior wrote:

> --- In SkyWires@yahoogroups.com, Dean <dean@...> wrote:
> >
> > This is and was very true...
> > But... With an antenna you are not running high current at joints.
> > So what does house wiring have to do with outside antennas?
> >
> > Dean W5GXL
> > dean@...
> >
>
> Indeed one can run VERY high current on an antenna at legal limit
> levels.10 -20 amps is not uncommon depending on band, antenna etc.
> Dont believe me?
>
> Run your favorite antenna modeling software and get the actual
> figures....
>
> Using aluminum wiring doesn't make sense to me for an antenna. However
> there will always be those who take the cheep way...
>
> Stan K9IUQ
>
>

2706. Re: Aluminum Wire

Yahoo group: SkyWires
Date: 2007-10-19 16:28:23 UTC
From: lazysenior
Topic: 2687 Message: 2706

--- In SkyWires@yahoogroups.com, Dean <dean@...> wrote:
>
> It will hold that current... Besides, You are talking RF Current...
> not low 60 hz house current.
> You worry about too much.
> Just get it up and Try it...
>
> Dean W5GXL
> dean@...

Since you seem to want to be an expert on current, please explain to us what difference the frequency makes or voltage makes when it comes to the current handling capacity of a wire???

I for one would like to know how 10 amps of current at 60hz differs from 10 amps of current at 14mhz.

I personally am not worrying. I use copper wire for all my wire antennas. I know from 47 years of experience that the antenna system is the most important part of a ham station. It is the LAST place I would cut corners to save a few dollars.

Putting up antennas, ESPECIALLY a loop takes planning and work. I would not jeopardize the performance OR longevity of any antenna just because I wanted to save a few $$$ on wire....

There will always be hams that will cut corners. These are the guys that use RG58 coax, aluminum fencing wire, dog fence wire,radioshack coax, clothes line rope for end support. These are the same fellows that put their 75 mtr antennas at 30 ft high, and load up that same 75 mtr antenna on 160 mtrs. And then blame propagation cuz no one can hear them.

Stan K9IUQ

2707. Re: Aluminum Wire

Yahoo group: SkyWires
Date: 2007-10-19 16:31:59 UTC
From: Richard Zolla
Topic: 2687 Message: 2707

Lighten up Stan.
It's a hobby remember.

Rick N6NKN

--- In SkyWires@yahoogroups.com, "lazysenior" <lazysenior@...> wrote:
>
> --- In SkyWires@yahoogroups.com, Dean <dean@> wrote:
> >
> > It will hold that current... Besides, You are talking RF
Current...
> > not low 60 hz house current.
> > You worry about too much.
> > Just get it up and Try it...
> >
> > Dean W5GXL
> > dean@
>
> Since you seem to want to be an expert on current, please explain to
> us what difference the frequency makes or voltage makes when it
comes
> to the current handling capacity of a wire???
>
> I for one would like to know how 10 amps of current at 60hz differs
> from 10 amps of current at 14mhz.
>
> I personally am not worrying. I use copper wire for all my wire
> antennas. I know from 47 years of experience that the antenna system
> is the most important part of a ham station. It is the LAST place I
> would cut corners to save a few dollars.
>
> Putting up antennas, ESPECIALLY a loop takes planning and work. I
> would not jeopardize the performance OR longevity of any antenna
just
> because I wanted to save a few $$$ on wire....
>
> There will always be hams that will cut corners. These are the guys
> that use RG58 coax, aluminum fencing wire, dog fence wire,radioshack
> coax, clothes line rope for end support. These are the same fellows
> that put their 75 mtr antennas at 30 ft high, and load up that same
75
> mtr antenna on 160 mtrs. And then blame propagation cuz no one can
> hear them.
>
> Stan K9IUQ

>

2708. Newbie Questions about a Skywire Design That is Low to the Ground

Yahoo group: SkyWires
Date: 2007-10-19 17:29:01 UTC
From: Karl
Topic: 2708 Message: 2708

I'm new to all this and could use some help. What do you think of my plan?

I live in a single storey house in an area where the CC&R's and the city make erecting an antenna difficult. In addition, I have no trees on my property.

What I do have is about 200 ft of perimeter to the house and wooden eves to which a wire antenna could be stapled. The house is not quite square but rectangular, measuring 47 ft x 51 ft.

All of this makes me think a skywire loop may be the way to go except that 200 ft is neither correct for a 40 meter loop (142ft) nor for an 80 meter loop (272ft). It is actually tuned to 5.1 MHz (59 meters) by L=1005/freq. How much of a problem will this be?

I'm thinking of using ladderline so I could access a range of bands. Unfortunately, the house is a single storey so the ladderline will only drop about 8 feet into the window of the shack. How big a problem is that?

I'll be using a Kenwood TS-440 with internal antenna tuner. Don't you think I will need an external one as well?

Thanks in advance for your thoughts.

2709. Re: [SkyWires] Re: Aluminum Wire

Yahoo group: SkyWires
Date: 2007-10-19 17:51:26 UTC
From: Dr.Ace Ratliff
Topic: 2687 Message: 2709

Hi Stan,
FYI:
at 60 Hz the current travels thru the entire wire. At RF Freqs there is "Skin Effect" the current only travels on the outside perimeter of the wire/conductor almost like it is a hollow pipe conductor.
73, Ace - WH2T

----- Original Message -----
From: lazysenior
To: SkyWires@yahoogroups.com
Sent: Friday, October 19, 2007 12:28 PM
Subject: [SkyWires] Re: Aluminum Wire

--- In SkyWires@yahoogroups.com, Dean <dean@...> wrote:
>
> It will hold that current... Besides, You are talking RF Current...
> not low 60 hz house current.
> You worry about too much.
> Just get it up and Try it...
>
> Dean W5GXL
> dean@...

Since you seem to want to be an expert on current, please explain to us what difference the frequency makes or voltage makes when it comes to the current handling capacity of a wire???

I for one would like to know how 10 amps of current at 60hz differs from 10 amps of current at 14mhz.

I personally am not worrying. I use copper wire for all my wire antennas. I know from 47 years of experience that the antenna system is the most important part of a ham station. It is the LAST place I would cut corners to save a few dollars.

Putting up antennas, ESPECIALLY a loop takes planning and work. I would not jeopardize the performance OR longevity of any antenna just because I wanted to save a few $$$ on wire....

There will always be hams that will cut corners. These are the guys that use RG58 coax, aluminum fencing wire, dog fence wire,radioshack coax, clothes line rope for end support. These are the same fellows that put their 75 mtr antennas at 30 ft high, and load up that same 75 mtr antenna on 160 mtrs. And then blame propagation cuz no one can hear them.

Stan K9IUQ

2710. Re: [SkyWires] Newbie Questions about a Skywire Design That is Low to the Ground

Yahoo group: SkyWires
Date: 2007-10-19 17:56:00 UTC
From: Dr.Ace Ratliff
Topic: 2708 Message: 2710

Hi Karl,
I think it will work well. Try it !
How will you transition from the ladder line to the Kenwood TS440 ?

SEE
http://www.bloomington.in.us/~wh2t/balun.html

73, Ace - WH2T

----- Original Message -----
From: Karl
To: SkyWires@yahoogroups.com
Sent: Friday, October 19, 2007 1:29 PM
Subject: [SkyWires] Newbie Questions about a Skywire Design That is Low to the Ground

I'm new to all this and could use some help. What do you think of my plan?

I live in a single storey house in an area where the CC&R's and the
city make erecting an antenna difficult. In addition, I have no trees
on my property.

What I do have is about 200 ft of perimeter to the house and wooden
eves to which a wire antenna could be stapled. The house is not quite
square but rectangular, measuring 47 ft x 51 ft.

All of this makes me think a skywire loop may be the way to go except
that 200 ft is neither correct for a 40 meter loop (142ft) nor for an
80 meter loop (272ft). It is actually tuned to 5.1 MHz (59 meters) by
L=1005/freq. How much of a problem will this be?

I'm thinking of using ladderline so I could access a range of bands.
Unfortunately, the house is a single storey so the ladderline will
only drop about 8 feet into the window of the shack. How big a problem
is that?

I'll be using a Kenwood TS-440 with internal antenna tuner. Don't you
think I will need an external one as well?

Thanks in advance for your thoughts.

2711. Re: [SkyWires] Newbie Questions about a Skywire Design That is Low to the Ground

Yahoo group: SkyWires
Date: 2007-10-19 18:20:48 UTC
From: larry allen
Topic: 2708 Message: 2711

Hi Karl...
Our ham radio club had a guest speaker recently for our version of your fcc... He gave us a suggestion regarding installing such things as towers... which made sence to me....
He suggestion was to start out small and simple... Remember ham radio is going to be, or should be, a life long hobby.. Don't try to put up a huge antenna right away...
Start out small and simple... Consider putting up a simple random wire first and let your neighbourhood get used to that first...
The following year, put un a single or two sections of tower but only put up a 2 meter ground plane antenna on it.... possibly you can attach the house end of your random wire antenna to it as well...
In short, avoid putting up large antennas during your first few years as an amateur.. Let your neighbourhood get used to you, as an amateur, slowly....
Larry ve3fxq

----- Original Message -----
From: "Karl" <kmgeneral@...>
To: <SkyWires@yahoogroups.com>
Sent: Friday, October 19, 2007 1:29 PM
Subject: [SkyWires] Newbie Questions about a Skywire Design That is Low to the Ground

I'm new to all this and could use some help. What do you think of my plan?

I live in a single storey house in an area where the CC&R's and the city make erecting an antenna difficult. In addition, I have no trees on my property.

What I do have is about 200 ft of perimeter to the house and wooden eves to which a wire antenna could be stapled. The house is not quite square but rectangular, measuring 47 ft x 51 ft.

All of this makes me think a skywire loop may be the way to go except that 200 ft is neither correct for a 40 meter loop (142ft) nor for an 80 meter loop (272ft). It is actually tuned to 5.1 MHz (59 meters) by L=1005/freq. How much of a problem will this be?

I'm thinking of using ladderline so I could access a range of bands. Unfortunately, the house is a single storey so the ladderline will only drop about 8 feet into the window of the shack. How big a problem is that?

I'll be using a Kenwood TS-440 with internal antenna tuner. Don't you think I will need an external one as well?

Thanks in advance for your thoughts.

2712. Re: [SkyWires] Re: Aluminum Wire

Yahoo group: SkyWires
Date: 2007-10-19 14:44:13 UTC
From: Vince Werber
Topic: 2687 Message: 2712

Ace,

You are totally correct about the skin effect that is why cable television companies go through the trouble of bonding copper to the outside surface of their aluminium coaxial lines (meaning the center conductor).

Back in the early 60's my brother and I use to build crystal sets with giant loops of aluminium wire... we found we didn't even need a crystal because that 'flakey white stuff' acted as the crystal! When we cleaned the wire up we needed the crystal... amazing discovery for us at that stage of learning really...

I have use aluminium as antennas many times but they must be cleaned often, if not they can give a mass of rectification (spurs and other garbage) on receive and TVI on transmit...

Sure build the antenna but be aware of the problems that might show up later down the line. I use number 8 copper for everything these days simply because I can AND I don't have the physical ability to search down and repair these types of problems... I also don't need TVI... And I simply don't trust the wide band finals in modern rigs as they beg for out of band signals...

73
vince
ka1iic

On Friday 19 October 2007 17:51, Dr.Ace Ratliff wrote:
> Hi Stan,
> FYI:
> at 60 Hz the current travels thru the entire wire. At RF Freqs there is
> "Skin Effect" the current only travels on the outside perimeter of the
> wire/conductor almost like it is a hollow pipe conductor. 73, Ace - WH2T
>
>
> ----- Original Message -----
> From: lazysenior
> To: SkyWires@yahoogroups.com
> Sent: Friday, October 19, 2007 12:28 PM
> Subject: [SkyWires] Re: Aluminum Wire
>
> --- In SkyWires@yahoogroups.com, Dean <dean@...> wrote:
> > It will hold that current... Besides, You are talking RF Current...
> > not low 60 hz house current.
> > You worry about too much.
> > Just get it up and Try it...

> >
> > Dean W5GXL
> > dean@...
>
> Since you seem to want to be an expert on current, please explain to
> us what difference the frequency makes or voltage makes when it comes
> to the current handling capacity of a wire???
>
> I for one would like to know how 10 amps of current at 60hz differs
> from 10 amps of current at 14mhz.
>
> I personally am not worrying. I use copper wire for all my wire
> antennas. I know from 47 years of experience that the antenna system
> is the most important part of a ham station. It is the LAST place I
> would cut corners to save a few dollars.
>
> Putting up antennas, ESPECIALLY a loop takes planning and work. I
> would not jeopardize the performance OR longevity of any antenna just
> because I wanted to save a few $$$ on wire....
>
> There will always be hams that will cut corners. These are the guys
> that use RG58 coax, aluminum fencing wire, dog fence wire,radioshack
> coax, clothes line rope for end support. These are the same fellows
> that put their 75 mtr antennas at 30 ft high, and load up that same 75
> mtr antenna on 160 mtrs. And then blame propagation cuz no one can
> hear them.
>
> Stan K9IUQ

2713. Re: [SkyWires] Newbie Questions about a Skywire Design That is Low to the Ground

Yahoo group: SkyWires
Date: 2007-10-19 19:15:43 UTC
From: Karl Moll
Topic: 2708 Message: 2713

Thanks Larry. I've had a J pole on the roof for about 6 months now so they've had some time to adjust. I really want to get started on HF.

larry allen wrote:
>
> Hi Karl...
> Our ham radio club had a guest speaker recently for our version of your
> fcc... He gave us a suggestion regarding installing such things as
> towers... which made sence to me....
> He suggestion was to start out small and simple... Remember ham radio is
> going to be, or should be, a life long hobby.. Don't try to put up a huge
> antenna right away...
> Start out small and simple... Consider putting up a simple random wire
> first and let your neighbourhood get used to that first...
> The following year, put un a single or two sections of tower but only put
> up a 2 meter ground plane antenna on it.... possibly you can attach the
> house end of your random wire antenna to it as well...
> In short, avoid putting up large antennas during your first few years as
> an amateur.. Let your neighbourhood get used to you, as an amateur,
> slowly....
> Larry ve3fxq
>
> ----- Original Message -----
> From: "Karl" <kmgeneral@... <mailto:kmgeneral%40sbcglobal.net>>
> To: <SkyWires@yahoogroups.com <mailto:SkyWires%40yahoogroups.com>>
> Sent: Friday, October 19, 2007 1:29 PM
> Subject: [SkyWires] Newbie Questions about a Skywire Design That is
> Low to
> the Ground
>
> I'm new to all this and could use some help. What do you think of my plan?
>
> I live in a single storey house in an area where the CC&R's and the
> city make erecting an antenna difficult. In addition, I have no trees
> on my property.
>
> What I do have is about 200 ft of perimeter to the house and wooden
> eves to which a wire antenna could be stapled. The house is not quite
> square but rectangular, measuring 47 ft x 51 ft.
>
> All of this makes me think a skywire loop may be the way to go except
> that 200 ft is neither correct for a 40 meter loop (142ft) nor for an
> 80 meter loop (272ft). It is actually tuned to 5.1 MHz (59 meters) by
> L=1005/freq. How much of a problem will this be?

>
> I'm thinking of using ladderline so I could access a range of bands.
> Unfortunately, the house is a single storey so the ladderline will
> only drop about 8 feet into the window of the shack. How big a problem
> is that?
>
> I'll be using a Kenwood TS-440 with internal antenna tuner. Don't you
> think I will need an external one as well?
>
> Thanks in advance for your thoughts.
>
>

2714. Re: [SkyWires] Newbie Questions about a Skywire Design That is Low to the Ground

Yahoo group: SkyWires
Date: 2007-10-19 19:16:50 UTC
From: Karl Moll
Topic: 2708 Message: 2714

Well, I think I need for you folks to tell me. I haven't a clue as to what's needed Thanks..

Dr.Ace Ratliff wrote:
>
> Hi Karl,
> I think it will work well. Try it !
> How will you transition from the ladder line to the Kenwood TS440 ?
>
> SEE
> http://www.bloomington.in.us/~wh2t/balun.html
> <http://www.bloomington.in.us/%7Ewh2t/balun.html>
>
> 73, Ace - WH2T
>
>
> ----- Original Message -----
> *From:* Karl <mailto:kmgeneral@...>
> *To:* SkyWires@yahoogroups.com <mailto:SkyWires@yahoogroups.com>
> *Sent:* Friday, October 19, 2007 1:29 PM
> *Subject:* [SkyWires] Newbie Questions about a Skywire Design That
> is Low to the Ground
>
> I'm new to all this and could use some help. What do you think of
> my plan?
>
> I live in a single storey house in an area where the CC&R's and the
> city make erecting an antenna difficult. In addition, I have no trees
> on my property.
>
> What I do have is about 200 ft of perimeter to the house and wooden
> eves to which a wire antenna could be stapled. The house is not quite
> square but rectangular, measuring 47 ft x 51 ft.
>
> All of this makes me think a skywire loop may be the way to go except
> that 200 ft is neither correct for a 40 meter loop (142ft) nor for an
> 80 meter loop (272ft). It is actually tuned to 5.1 MHz (59 meters) by
> L=1005/freq. How much of a problem will this be?
>
> I'm thinking of using ladderline so I could access a range of bands.
> Unfortunately, the house is a single storey so the ladderline will
> only drop about 8 feet into the window of the shack. How big a problem
> is that?
>

> I'll be using a Kenwood TS-440 with internal antenna tuner. Don't you
> think I will need an external one as well?
>
> Thanks in advance for your thoughts.
>
>

2715. Re: [SkyWires] Newbie Questions about a Skywire Design That is Low to the Ground

Yahoo group: SkyWires
Date: 2007-10-19 19:53:37 UTC
From: Erik Weaver
Topic: 2708 Message: 2715

Hi Karl,

Here's pitching my two-cents against the wall!.... As always, "your mileage may vary," heheh....

> What I do have is about 200 ft of perimeter to the house and wooden
> eves to which a wire antenna could be stapled. The house is not quite
> square but rectangular, measuring 47 ft x 51 ft.
>
> All of this makes me think a skywire loop may be the way to go except
> that 200 ft is neither correct for a 40 meter loop (142ft) nor for an
> 80 meter loop (272ft). It is actually tuned to 5.1 MHz (59 meters) by
> L=1005/freq. How much of a problem will this be?

I think you are right; I think you have a good candidate for an eave-loop antenna. Of course, you won't know for certain until you try it. If you work regional nets it may work pretty well for that on the lower bands (being low to the ground you'll get some NVIS effect). Sometime you might play around with laying wire on the ground under the loop. You may find that changes it somewhat. If you like the change, build flower boxes along the entire perimeter and line the bottoms with copper sheeting! ;) Pretty, effective, and it smells nice! Perfect! LOL

Don't worry about the rule-of-thumb formula. That doesn't take into account your building and the effects it will have upon the antenna system and radiation pattern it develops. Such things are nearly impossible to accurately model. You didn't mention if you had metal siding, but either way, I'd still try it!

Instead of worrying about formulas and what-not, try to identify obviously bad ideas and avoid them. (Such as running ladder line up along the metal downspout -- clearly *not* a recommended practice!)

You will be relying on the old "get as much wire in the air as you can" theory. As you increase the area of a loop antenna it generally works better for capturing radio signals. The closer it forms a circle the better, but a near square should be just fine, as are reasonably equal-sided triangles. There are differences between these options of course, and the ARRL Antenna Book is a good starting place to discover more about them, but the bottom line is that doesn't really matter to you. It sounds as if your options are severely limited.

(Although educating yourself is always a winning idea, and the Antenna Book is fun just to thumb through; especially what with winter coming!)

If you have an attic you can try stringing up wire there. Most likely the only vertical antenna you may get away with is a flagpole (which can work well, so you may want to deploy two antennas eventually -- but save that project to follow the spring rains so the soil is easier to work with).

And with the holidays upon us you have the perfect opportunity to run along the entire length and breadth of the house, stringing wire! Both Halloween and Christmas are valid candidates for holiday lights or other decorations. You'll just happen to be running a "special" wire too! ;)

> I'm thinking of using ladderline so I could access a range of bands.

Yes. Wise man!

However, do ensure it remains "balanced." This means no metal or magnetic materials nearby. "Nearby" means a minimum distance (preferably open air, with the fewest non-conductive supports needed to maintain stability in the weather) of "one-width" of the ladder line. Just lay a ruler on the ladder line and measure the outside distance from one wire to the other. If you have the common 450-Ohm ladder line that should be something like and inch or so. I've never measured mine, but that has to be in the ballpark.

That is the minimum; not optimum. If you can obtain several times this distance, that is better and worth doing. It is a exponential kind of thing, as opposed to a simple arithmetic slope. (Doubling the cleared distance may decrease ill effects by four times, for example.)

"Opposite and equal paths of current cancel radiation." Remember this from E-H wave discussion? This is the principal behind all balanced line. But if it gets too close to metal or a magnetic source, it will no longer be "equal and opposite," therefore it will cease being transmission line and instead become a radiating element of your antenna system. Not generally the goal when using ladder line ;)

> Unfortunately, the house is a single storey so the ladderline will
> only drop about 8 feet into the window of the shack. How big a problem
> is that?

Depends upon how you transition from the (properly supported and routed) outdoor ladder line through the window to your station. It cold be just fine or a train wreck with RF flying hither and yon, crackling into your TV and burning your lips should they contact a metal microphone. (If you use a mic.)

But there are plenty of good ways to make this transition. Fear not!

How far away is your station from the window in question? A few feet? Ten feet? Thirty feet? The "answer" is best modified for each solution.

If you are just a few feet away from the window then you can either get some high-quality low-loss coax and run the 5- or 10-feet with that coax. Run the coax out the window and into a balun designed to also

transition from coax/ladder. You'll suffer losses in the coax when the swr is high, but if it is a short run and really good coax that won't really matter.

("QEX" ran an interesting article in which it was suggested wiring a voltage and current balun in series provided the best of both worlds, with little to no ill side effects. I haven't experimented with this yet, so I won't comment further, but the story made good sense!)

If you are connecting to your station as balanced line, again take high-quality low-loss coax and make a balanced line out of it. Go to a reputable dealer, like Davis RF or The Coax Man (Google them if they aren't already bookmarked on your browser). Find as high a "characteristic Ohm" value as you can. It seems to me I saw one of them had 125-Ohm coax, and that was the highest I found. But I didn't call either one to ask if they had higher Ohm coax available. It wasn't the lowest-loss coax, but of a middling-high quality. I wouldn't plan to run it 50- or 100-feet!

The ARRL Antenna Book has a diagram showing how to hook this up.

Both lengths of coax are equal. Solder the shielding together at each end. Outdoors you do nothing with the shielding and just use the two center conductors exactly as if they were any other balanced line (except they are shielded, so you can run them through walls and what-not, just as you can regular shielded coax). Indoors, connect the shielding to your station ground.

(Which should in turn be connected to an outdoor ground rod, which in turn should (must be by the NEC) connected to the utility ground, and a chemical-burn is the best joining technique and will last essentially forever because it "welds" the dissimilar metals into one another -- seek a qualified electrician for all this work if you don't already know exactly what I am talking about. You may or may not need a permit. You may or may not be required by law to employ a licensed electrician. Call you attorney or city zoning/permits department for legal guidance.)

You use the highest-Ohm coax because its effective nominal Ohms will be half of whatever you start with.... 125-Ohms / 2 =~ 62.5-Ohms; 75/2 =~ 35-Ohms; 50/2 =~ 25-Ohms. The goal is to minimize the difference between your ladder line (most likely 300- or 450-Ohms) and what you create with coax. Some will recommend a 1:1 balun between the two types of balanced line. Unless you over-heat it, and provided it is designed properly for the frequencies for which you operate, it shouldn't hurt, and at higher frequencies it may even be beneficial. I'm not convinced you'll note any difference on the lower bands (40/80) but I'm far from a balun expert. The ARRL Antenna Book.... ;) You may also point your browser to http://www.cebik.com/ when seeking answer to questions such as these. Good info there! Highly recommended!

Or buy shielded balanced line and follow the manufacturer's instructions for proper use.

> I'll be using a Kenwood TS-440 with internal antenna tuner. Don't you
> think I will need an external one as well?

Maybe yes; maybe no. I'd lean toward the "yes" for all-band use. The reason is the wide range of complex impedance (simply meaning both "pure resistance" --the "good stuff" we like as hams!-- and reactance --resistance to alternating current, such as say, oh I don't know... *RF*!-- will both be present, and in wildly fluctuating ranges to boot, accompanied by drastic differences in both voltages and Ohms).

Whatever device is connected to the shack-side of this antenna system has to be able to deal with the upper/lower extremes of both voltage and Ohms. If not, either the device will be damaged or simply unable to "tune" the antenna system. ("Tune" means to obtain a successful transformation of complex impedance from what ever is presented to the device on the "antenna" side, and convert this into a range into which your XCVR is designed to operate into without damage.)

Built-in tuners are known to have smaller ranges of complex impedance conversion than stand-alone transmatches. You can use two transmatches in-line if you wish (a stand-alone transmatch and the internal tuner). Just pay attention to how each works. I'd only use a stand-alone with my XCVR's internal tuner if the stand-alone was either a manual, or an auto-tuner with a "lock" engaged. One variable at a time, please!

(I have in fact done this fairly often and have never experienced any trouble or harm to my equipment. You can use the stand-alone transmatch --almost always a manual design in my case-- to obtain an impedance match on the band you are using, and then use the XCVR's internal tuner to quickly and easily hope around inside that band. Works fine. You do incur slightly greater losses. Electricity heats metal as it moves through it. We cannot get around this, because this is the nature of moving electrons, but that represents a small loss. Greater losses can take place too. This is most common when really pushing the limits of your transmatch. For example, if the coil is not of sufficiently large physical size, it will have trouble matching a very low impedance (say 5- or 10-Ohms, for example). Losses increase (the "coil-Q" is inferior at that frequency) as compared to using the same transmatch at a different frequency, or using a transmatch designed to operate efficiently at that impedance.)

What was the question? :)

For this reason you may wish to keep on hand one or more extra lengths of transmission line (of the same type entering your impedance matching device on the antenna side). By altering the length of the transmission line, you will likely find some previously un-tunable frequencies can be successfully "tuned."

(Good candidates are lengths of transmission line that equal 1/8 and 1/4 of a wavelength ("WL") --electrical, not physical-- at/near the frequencies you are having trouble matching. Set them up so you can use them in any combination: either the 1/8- or 1/4-WL alone, or connected

together providing a 3/8-WL shift. Put away the slide rule -- you need just enough extra length of transmission line to shift the current "unmatchable" impedance within the "matchable" range of your transmatch.)

Staples?

You need not worry about them. Yes, little bits of metal "barb-wiring" your loop antenna is not a common commercial antenna design. Then again, actual barb wire fences have been successfully employed as antennas! You're loop will likely be just fine, so go ahead and just staple it to the wooden eaves. Of the things to worry about, this is not one.

A somewhat related idea, is the magnetic coil loop antenna. That is wrapping more than one turn around your house. I've not played with those so I will not comment, other than to say it is something you may wish to research.

Best of luck, have fun, and report back to us how it works!
73-Erik Weaver n0ew

2716. Re: [SkyWires] Newbie Questions about a Skywire Design That is Low to the Ground

Yahoo group: SkyWires
Date: 2007-10-19 20:21:52 UTC
From: Erik Weaver
Topic: 2708 Message: 2716

Karl Moll wrote:
> Well, I think I need for you folks to tell me. I haven't a clue as to
> what's needed Thanks..

IMPORTANT BIT:
---

1. Read your XCVR instruction manual. I've not used one like you have. Determine the safe ranges it will operate into (meaning "load impedance").

1(b). Especially determine if it has "idiot circuitry" -- a fail-safe that is supposed to cut back power (or sometimes turn off) the XCVR if you operate into a load that will damage it. I really like these! It leaves you free to experiment!

The remaining steps are less critical after those above this point have been found to be "idiot proof" (*Always* a good thing! Myself included! A man's got to know his limitations, and with radio antenna work, part of that is knowing where your worse-case misstep still cannot destroy your $1,000 or $2,000 XCVR!)

2. Buy the wire and ladder line, and coax if needed. Connectors, borrow step ladders, etc, etc. In other words get all the physical supplies together. If possible this includes a fellow ham to help, and ridicule you good naturedly when you do something silly! That's what friends are for!

2(b). Supplies such as wire/coax: buy too much, and always cut them off longer than you need. Aways, always, measure twice and cut once.

2(c). Put an ohm meter on your coax and ladder line before using it. You are simply testing for proper continuity. Ladder line, the two opposing wires are in fact an open circuit (pretty much a given! -- I hope!!), and each wire by itself is a closed circuit. Same with coax. Open circuit between the inner conductor and shielding. Closed circuit from one end's center conductor to the coax's opposite end center conductor. Test this remains true after installing _each_ end's connector. Now is the time to eliminate simple problems like these! (It is quite upsetting to stand there with a "bad" piece of coax and not knowing which end to cut off and re-do! This is where your 'friend' will laugh, perhaps --if you are fortunate-- doing a spit-take or shooting hot coffee out his nose, thus entertaining you for your price of admission!)

3. Start by your shack window. Start stapling up the wire (along with Halloween decorations if you are so inclined!), and continue all the way

around the house. Personally, I'd toss the free-end of my wire through the window, shut the window on it, and start from there. This pretty well ensures I'll have too much wire on that starting end.

4. Secure your loop wire and the ladder line to one another. Supporting them is key. Do not stress the connection itself, which is likely just soldered or wire-nutted together. Neither is a strong physical connection, but rather just an electrical connection.

5. Determine how to transition from the ladder line through the window, and do that. Keep the ladder line distance from metal things. Like aluminum window sashes! ;)

6. Hook up your ladder line (or coax, depending upon the preceding step) to your stand-alone transmatch. In turn, connect this to your XCVR.

7. Finish the station set up. Power supply, grounding, etc.

8. Test the XCVR into a dummy load. If all is well, measure your transmission line just before it connects to your transmatch. This is a loop antenna so it should show as a closed circuit.

9. If all is well, double check all your connections.

10. Fire 'er up Floe!

;)
Erik n0ew

2717. Re: [SkyWires] Newbie Questions about a Skywire Design That is Low to the Ground

Yahoo group: SkyWires
Date: 2007-10-19 20:41:10 UTC
From: Jim Dunstan
Topic: 2708 Message: 2717

At 05:29 PM 10/19/2007 +0000, you wrote:

>I'm new to all this and could use some help. What do you think of my plan?
>
>I live in a single storey house in an area where the CC&R's and the
>city make erecting an antenna difficult. In addition, I have no trees
>on my property.
>
>What I do have is about 200 ft of perimeter to the house and wooden
>eves to which a wire antenna could be stapled. The house is not quite
>square but rectangular, measuring 47 ft x 51 ft.
>
>All of this makes me think a skywire loop may be the way to go except
>that 200 ft is neither correct for a 40 meter loop (142ft) nor for an
>80 meter loop (272ft). It is actually tuned to 5.1 MHz (59 meters) by
>L=1005/freq. How much of a problem will this be?
>
>I'm thinking of using ladderline so I could access a range of bands.
>Unfortunately, the house is a single storey so the ladderline will
>only drop about 8 feet into the window of the shack. How big a problem
>is that?
>
>I'll be using a Kenwood TS-440 with internal antenna tuner. Don't you
>think I will need an external one as well?
>
>Thanks in advance for your thoughts.
>
>__

Hi Karl,

From what you describe you're antenna will be a 'stealth' horizontal loop 200' in diameter fed with a short length of balanced feed line (I would use 300 ohm TV line ... in keeping with the stealth aspect). The antenna should be easily tuned to just about any HF band with reasonably good efficiency. Since it will be quite low to the ground ... eg 10-15' it will be a bit of a cloud burner .... but not to worry. You will have no difficulty making all kinds of interesting contacts.

It will indeed need the antenna tuner since it is not naturally resonant on any particular band. The built in antenna tuners are not normally known for wide range capability. In any case you will need a balun to go from the balanced line to the unbalanced input of your tuner. Try the balun with your built in tuner and see what it will do. You can also try different lengths of feedline (roll up the excess). You may find your

tuner will get you on a couple of bands. You might also be able to borrow an external tuner in order to see how it will work with the balun.

Jim, VE3CI

2718. Re: Newbie Questions about a Skywire Design That is Low to the Ground

Yahoo group: SkyWires
Date: 2007-10-19 20:44:46 UTC
From: lazysenior
Topic: 2708 Message: 2718

--- In SkyWires@yahoogroups.com, "Karl" <kmgeneral@...> wrote:
>
> I'm new to all this and could use some help. What do you think of my plan?
>

It all depends what you want in an antenna. Are you interested in DX or talking to the guy in the next town? What bands are you wanting to use the antenna for?

You can easily model your low loop antenna with readily available (free) software. The results will tell you if putting up a (short)low loop will meet your goals.

If you are a DXer you will be disappointed with the performance of a low loop. A vertical would be much better suited for you.

Stan K9IUQ

2719. Re: [SkyWires] Newbie Questions about a Skywire Design That is Low to the Ground

Yahoo group: SkyWires
Date: 2007-10-19 20:04:26 UTC
From: Donald Sanders
Topic: 2708 Message: 2719

Larry, There are several choices for you.
1. you can make a loop and run the end over the roof instead
of along the eve on the end of the house.
2. You can make the antenna a dipole by running the wire like
a loop and putting an insulator in the center and at the ends.
I would make the ends about 10 feet apart.
3. get permission to install a flag pole and install a vertical like
the Force 12 that looks like a flag pole with coax underground.
Run a small gauge wire (Nr 24 to 30) from the house to the
pole for an endfed wire on 80 and 40.
4. Install a wind vane on one end of house about 5 feet up and a
similar pole at the other end. Run a wire from the shack up to
one pole and across to the other using fine gauge wire and
feed it like a random wire.
5. Install a TV antenna on the far end of the house from your
shack and run the feedline the length of the house above the
roof and feed that as an end fed wire. I understand, IIRC, that
the FCC ruling, while it did not include Amateur antennas it did
prevent the homeowners assn from prohibiting TV antennas.
6. Feed Nr 1 or 2 with ladder line and, Yes, use a balanced line tuner.
7. Feed Nr 1 or 2 with ladder line and a 4 to 1 balun and use your
auto tuner. You may find some freqs where your tuner will not
match since most won't handle over a 3 or 4 to one match.
8. Do like #2 and feed under the eves with a SGC auto tuner, or
similar type, for all bands. I did this at my house in Florida with
a similar situation.
9. Join a gym and do lots of exercise to work off your frustrations.

Healthfully yours,
Don W4BWS
----- Original Message -----
From: larry allen
To: SkyWires@yahoogroups.com
Sent: Friday, October 19, 2007 1:20 PM
Subject: Re: [SkyWires] Newbie Questions about a Skywire Design That is Low to the Ground

Hi Karl...
Our ham radio club had a guest speaker recently for our version of your
fcc... He gave us a suggestion regarding installing such things as
towers... which made sence to me....
He suggestion was to start out small and simple... Remember ham radio is
going to be, or should be, a life long hobby.. Don't try to put up a huge
antenna right away...
Start out small and simple... Consider putting up a simple random wire

first and let your neighbourhood get used to that first...
The following year, put un a single or two sections of tower but only put up a 2 meter ground plane antenna on it.... possibly you can attach the house end of your random wire antenna to it as well...
In short, avoid putting up large antennas during your first few years as an amateur.. Let your neighbourhood get used to you, as an amateur, slowly....
Larry ve3fxq

----- Original Message -----
From: "Karl" <kmgeneral@...>
To: <SkyWires@yahoogroups.com>
Sent: Friday, October 19, 2007 1:29 PM
Subject: [SkyWires] Newbie Questions about a Skywire Design That is Low to the Ground

I'm new to all this and could use some help. What do you think of my plan?

I live in a single storey house in an area where the CC&R's and the city make erecting an antenna difficult. In addition, I have no trees on my property.

What I do have is about 200 ft of perimeter to the house and wooden eves to which a wire antenna could be stapled. The house is not quite square but rectangular, measuring 47 ft x 51 ft.

All of this makes me think a skywire loop may be the way to go except that 200 ft is neither correct for a 40 meter loop (142ft) nor for an 80 meter loop (272ft). It is actually tuned to 5.1 MHz (59 meters) by L=1005/freq. How much of a problem will this be?

I'm thinking of using ladderline so I could access a range of bands. Unfortunately, the house is a single storey so the ladderline will only drop about 8 feet into the window of the shack. How big a problem is that?

I'll be using a Kenwood TS-440 with internal antenna tuner. Don't you think I will need an external one as well?

Thanks in advance for your thoughts.

2720. Re: Newbie Questions about a Skywire Design That is Low to the Ground

Yahoo group: SkyWires
Date: 2007-10-19 21:21:25 UTC
From: lazysenior
Topic: 2708 Message: 2720

--- In SkyWires@yahoogroups.com, "Karl" <kmgeneral@...> wrote:
>
> I'm new to all this and could use some help. What do you think of my plan?

> Thanks in advance for your thoughts.

Here is something else you should consider. RF Safety. Indeed it is your duty as an amateur licensee to do so.

You antenna as you described will be in close proximity to people in the house. The residents are going to be enclosed by an RF field. Check this out before you do anything. Remember a loop has gain over a dipole. Also the gain changes as you change bands.

http://n5xu.ece.utexas.edu/rfsafety/

If that worked ok for you then another consideration should be RFI. having an RF field this close to your house can cause problems with other electronic devices including your telephone. Are the other (non-ham) occupants willing to put up with this?

I am NOT trying to discourage you. But having done ham operations in similar situations to yours I know some of the pitfalls.

Stan K9IUQ

2721. Re: [SkyWires] Newbie Questions about a Skywire Design That is Low to the Ground

Yahoo group: SkyWires
Date: 2007-10-19 21:44:47 UTC
From: Karl Moll
Topic: 2708 Message: 2721

Wow, thanks Erik. I will read and re-read this many times as the days go by and I work on this antenna project. Lot's of valuable stuff!

Erik Weaver wrote:
>
> Hi Karl,
>
> Here's pitching my two-cents against the wall!.... As always, "your
> mileage may vary," heheh....
>
> > What I do have is about 200 ft of perimeter to the house and wooden
> > eves to which a wire antenna could be stapled. The house is not quite
> > square but rectangular, measuring 47 ft x 51 ft.
> >
> > All of this makes me think a skywire loop may be the way to go except
> > that 200 ft is neither correct for a 40 meter loop (142ft) nor for an
> > 80 meter loop (272ft). It is actually tuned to 5.1 MHz (59 meters) by
> > L=1005/freq. How much of a problem will this be?
>
> I think you are right; I think you have a good candidate for an
> eave-loop antenna. Of course, you won't know for certain until you try
> it. If you work regional nets it may work pretty well for that on the
> lower bands (being low to the ground you'll get some NVIS effect).
> Sometime you might play around with laying wire on the ground under the
> loop. You may find that changes it somewhat. If you like the change,
> build flower boxes along the entire perimeter and line the bottoms with
> copper sheeting! ;) Pretty, effective, and it smells nice! Perfect! LOL
>
> Don't worry about the rule-of-thumb formula. That doesn't take into
> account your building and the effects it will have upon the antenna
> system and radiation pattern it develops. Such things are nearly
> impossible to accurately model. You didn't mention if you had metal
> siding, but either way, I'd still try it!
>
> Instead of worrying about formulas and what-not, try to identify
> obviously bad ideas and avoid them. (Such as running ladder line up
> along the metal downspout -- clearly *not* a recommended practice!)
>
> You will be relying on the old "get as much wire in the air as you can"
> theory. As you increase the area of a loop antenna it generally works
> better for capturing radio signals. The closer it forms a circle the
> better, but a near square should be just fine, as are reasonably
> equal-sided triangles. There are differences between these options of
> course, and the ARRL Antenna Book is a good starting place to discover

> more about them, but the bottom line is that doesn't really matter to
> you. It sounds as if your options are severely limited.
>
> (Although educating yourself is always a winning idea, and the Antenna
> Book is fun just to thumb through; especially what with winter coming!)
>
> If you have an attic you can try stringing up wire there. Most likely
> the only vertical antenna you may get away with is a flagpole (which can
> work well, so you may want to deploy two antennas eventually -- but save
> that project to follow the spring rains so the soil is easier to work
> with).
>
> And with the holidays upon us you have the perfect opportunity to run
> along the entire length and breadth of the house, stringing wire! Both
> Halloween and Christmas are valid candidates for holiday lights or other
> decorations. You'll just happen to be running a "special" wire too! ;)
>
> > I'm thinking of using ladderline so I could access a range of bands.
>
> Yes. Wise man!
>
> However, do ensure it remains "balanced." This means no metal or
> magnetic materials nearby. "Nearby" means a minimum distance (preferably
> open air, with the fewest non-conductive supports needed to maintain
> stability in the weather) of "one-width" of the ladder line. Just lay a
> ruler on the ladder line and measure the outside distance from one wire
> to the other. If you have the common 450-Ohm ladder line that should be
> something like and inch or so. I've never measured mine, but that has to
> be in the ballpark.
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> That is the minimum; not optimum. If you can obtain several times this
> distance, that is better and worth doing. It is a exponential kind of
> thing, as opposed to a simple arithmetic slope. (Doubling the cleared
> distance may decrease ill effects by four times, for example.)
>
> "Opposite and equal paths of current cancel radiation." Remember this
> from E-H wave discussion? This is the principal behind all balanced
> line. But if it gets too close to metal or a magnetic source, it will no
> longer be "equal and opposite," therefore it will cease being
> transmission line and instead become a radiating element of your antenna
> system. Not generally the goal when using ladder line ;)
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> > Unfortunately, the house is a single storey so the ladderline will
> > only drop about 8 feet into the window of the shack. How big a problem
> > is that?
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> Depends upon how you transition from the (properly supported and routed)
> outdoor ladder line through the window to your station. It cold be just
> fine or a train wreck with RF flying hither and yon, crackling into your
> TV and burning your lips should they contact a metal microphone. (If you

> use a mic.)
>
> But there are plenty of good ways to make this transition. Fear not!
>
> How far away is your station from the window in question? A few feet?
> Ten feet? Thirty feet? The "answer" is best modified for each solution.
>
> If you are just a few feet away from the window then you can either get
> some high-quality low-loss coax and run the 5- or 10-feet with that
> coax. Run the coax out the window and into a balun designed to also
> transition from coax/ladder. You'll suffer losses in the coax when the
> swr is high, but if it is a short run and really good coax that won't
> really matter.
>
> ("QEX" ran an interesting article in which it was suggested wiring a
> voltage and current balun in series provided the best of both worlds,
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> yet, so I won't comment further, but the story made good sense!)
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> high-quality low-loss coax and make a balanced line out of it. Go to a
> reputable dealer, like Davis RF or The Coax Man (Google them if they
> aren't already bookmarked on your browser). Find as high a
> "characteristic Ohm" value as you can. It seems to me I saw one of them
> had 125-Ohm coax, and that was the highest I found. But I didn't call
> either one to ask if they had higher Ohm coax available. It wasn't the
> lowest-loss coax, but of a middling-high quality. I wouldn't plan to run
> it 50- or 100-feet!
>
> The ARRL Antenna Book has a diagram showing how to hook this up.
>
> Both lengths of coax are equal. Solder the shielding together at each
> end. Outdoors you do nothing with the shielding and just use the two
> center conductors exactly as if they were any other balanced line
> (except they are shielded, so you can run them through walls and
> what-not, just as you can regular shielded coax). Indoors, connect the
> shielding to your station ground.
>
> (Which should in turn be connected to an outdoor ground rod, which in
> turn should (must be by the NEC) connected to the utility ground, and a
> chemical-burn is the best joining technique and will last essentially
> forever because it "welds" the dissimilar metals into one another --
> seek a qualified electrician for all this work if you don't already know
> exactly what I am talking about. You may or may not need a permit. You
> may or may not be required by law to employ a licensed electrician. Call
> you attorney or city zoning/permits department for legal guidance.)
>
> You use the highest-Ohm coax because its effective nominal Ohms will be
> half of whatever you start with.... 125-Ohms / 2 =~ 62.5-Ohms; 75/2 =~
> 35-Ohms; 50/2 =~ 25-Ohms. The goal is to minimize the difference between

> your ladder line (most likely 300- or 450-Ohms) and what you create with
> coax. Some will recommend a 1:1 balun between the two types of balanced
> line. Unless you over-heat it, and provided it is designed properly for
> the frequencies for which you operate, it shouldn't hurt, and at higher
> frequencies it may even be beneficial. I'm not convinced you'll note any
> difference on the lower bands (40/80) but I'm far from a balun expert.
> The ARRL Antenna Book.... ;) You may also point your browser to
> http://www.cebik.com/ <http://www.cebik.com/> when seeking answer to
> questions such as these.
> Good info there! Highly recommended!
>
> Or buy shielded balanced line and follow the manufacturer's instructions
> for proper use.
>
> > I'll be using a Kenwood TS-440 with internal antenna tuner. Don't you
> > think I will need an external one as well?
>
> Maybe yes; maybe no. I'd lean toward the "yes" for all-band use. The
> reason is the wide range of complex impedance (simply meaning both "pure
> resistance" --the "good stuff" we like as hams!-- and reactance
> --resistance to alternating current, such as say, oh I don't know...
> *RF*!-- will both be present, and in wildly fluctuating ranges to boot,
> accompanied by drastic differences in both voltages and Ohms).
>
> Whatever device is connected to the shack-side of this antenna system
> has to be able to deal with the upper/lower extremes of both voltage and
> Ohms. If not, either the device will be damaged or simply unable to
> "tune" the antenna system. ("Tune" means to obtain a successful
> transformation of complex impedance from what ever is presented to the
> device on the "antenna" side, and convert this into a range into which
> your XCVR is designed to operate into without damage.)
>
> Built-in tuners are known to have smaller ranges of complex impedance
> conversion than stand-alone transmatches. You can use two transmatches
> in-line if you wish (a stand-alone transmatch and the internal tuner).
> Just pay attention to how each works. I'd only use a stand-alone with my
> XCVR's internal tuner if the stand-alone was either a manual, or an
> auto-tuner with a "lock" engaged. One variable at a time, please!
>
> (I have in fact done this fairly often and have never experienced any
> trouble or harm to my equipment. You can use the stand-alone transmatch
> --almost always a manual design in my case-- to obtain an impedance
> match on the band you are using, and then use the XCVR's internal tuner
> to quickly and easily hope around inside that band. Works fine. You do
> incur slightly greater losses. Electricity heats metal as it moves
> through it. We cannot get around this, because this is the nature of
> moving electrons, but that represents a small loss. Greater losses can
> take place too. This is most common when really pushing the limits of
> your transmatch. For example, if the coil is not of sufficiently large
> physical size, it will have trouble matching a very low impedance (say

> 5- or 10-Ohms, for example). Losses increase (the "coil-Q" is inferior
> at that frequency) as compared to using the same transmatch at a
> different frequency, or using a transmatch designed to operate
> efficiently at that impedance.)
>
> What was the question? :)
>
> For this reason you may wish to keep on hand one or more extra lengths
> of transmission line (of the same type entering your impedance matching
> device on the antenna side). By altering the length of the transmission
> line, you will likely find some previously un-tunable frequencies can be
> successfully "tuned."
>
> (Good candidates are lengths of transmission line that equal 1/8 and 1/4
> of a wavelength ("WL") --electrical, not physical-- at/near the
> frequencies you are having trouble matching. Set them up so you can use
> them in any combination: either the 1/8- or 1/4-WL alone, or connected
> together providing a 3/8-WL shift. Put away the slide rule -- you need
> just enough extra length of transmission line to shift the current
> "unmatchable" impedance within the "matchable" range of your transmatch.)
>
> Staples?
>
> You need not worry about them. Yes, little bits of metal "barb-wiring"
> your loop antenna is not a common commercial antenna design. Then again,
> actual barb wire fences have been successfully employed as antennas!
> You're loop will likely be just fine, so go ahead and just staple it to
> the wooden eaves. Of the things to worry about, this is not one.
>
> A somewhat related idea, is the magnetic coil loop antenna. That is
> wrapping more than one turn around your house. I've not played with
> those so I will not comment, other than to say it is something you may
> wish to research.
>
> Best of luck, have fun, and report back to us how it works!
> 73-Erik Weaver n0ew
>
>

2722. Re: [SkyWires] Newbie Questions about a Skywire Design That is Low to the Ground

Yahoo group: SkyWires
Date: 2007-10-19 22:14:54 UTC
From: Erik Weaver
Topic: 2708 Message: 2722

Thanks Karl,

You are very welcome. I hope you do well with your project and my info helps in some measure. I was serious about posting with your progress. It is always interesting to hear how people run into unanticipated issues and how the original --and sometimes new-- problems are solved!

Say, do you mind if I quote your comment? I have been considering gathering up email's such as this one that I have written over the years and placing them all into a single volume. Having such a heart-felt expression as your would be a nice touch.

If you do agree, please include your call sign in the rely.

In any event, be careful when you're up that ladder and have a ton of fun playing with your radio when it is up and running!

73-Erik Weaver n0ew

Karl Moll wrote:
> Wow, thanks Erik. I will read and re-read this many times as the days go
> by and I work on this antenna project. Lot's of valuable stuff!
>
> Erik Weaver wrote:
>>
>> Hi Karl,
>>
>> Here's pitching my two-cents against the wall!.... As always, "your
>> mileage may vary," heheh....
>>
>> > What I do have is about 200 ft of perimeter to the house and wooden
>> > eves to which a wire antenna could be stapled. The house is not quite
>> > square but rectangular, measuring 47 ft x 51 ft.
>> >
>> > All of this makes me think a skywire loop may be the way to go except
>> > that 200 ft is neither correct for a 40 meter loop (142ft) nor for an
>> > 80 meter loop (272ft). It is actually tuned to 5.1 MHz (59 meters) by
>> > L=1005/freq. How much of a problem will this be?
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>> I think you are right; I think you have a good candidate for an
>> eave-loop antenna. Of course, you won't know for certain until you try
>> it. If you work regional nets it may work pretty well for that on the
>> lower bands (being low to the ground you'll get some NVIS effect).
>> Sometime you might play around with laying wire on the ground under the
>> loop. You may find that changes it somewhat. If you like the change,

>> build flower boxes along the entire perimeter and line the bottoms with
>> copper sheeting! ;) Pretty, effective, and it smells nice! Perfect! LOL
>>
>> Don't worry about the rule-of-thumb formula. That doesn't take into
>> account your building and the effects it will have upon the antenna
>> system and radiation pattern it develops. Such things are nearly
>> impossible to accurately model. You didn't mention if you had metal
>> siding, but either way, I'd still try it!
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>> Instead of worrying about formulas and what-not, try to identify
>> obviously bad ideas and avoid them. (Such as running ladder line up
>> along the metal downspout -- clearly *not* a recommended practice!)
>>
>> You will be relying on the old "get as much wire in the air as you can"
>> theory. As you increase the area of a loop antenna it generally works
>> better for capturing radio signals. The closer it forms a circle the
>> better, but a near square should be just fine, as are reasonably
>> equal-sided triangles. There are differences between these options of
>> course, and the ARRL Antenna Book is a good starting place to discover
>> more about them, but the bottom line is that doesn't really matter to
>> you. It sounds as if your options are severely limited.
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>> (Although educating yourself is always a winning idea, and the Antenna
>> Book is fun just to thumb through; especially what with winter coming!)
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>> If you have an attic you can try stringing up wire there. Most likely
>> the only vertical antenna you may get away with is a flagpole (which can
>> work well, so you may want to deploy two antennas eventually -- but save
>> that project to follow the spring rains so the soil is easier to work
>> with).
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>> And with the holidays upon us you have the perfect opportunity to run
>> along the entire length and breadth of the house, stringing wire! Both
>> Halloween and Christmas are valid candidates for holiday lights or other
>> decorations. You'll just happen to be running a "special" wire too! ;)
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>> > I'm thinking of using ladderline so I could access a range of bands.
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>> Yes. Wise man!
>>
>> However, do ensure it remains "balanced." This means no metal or
>> magnetic materials nearby. "Nearby" means a minimum distance (preferably
>> open air, with the fewest non-conductive supports needed to maintain
>> stability in the weather) of "one-width" of the ladder line. Just lay a
>> ruler on the ladder line and measure the outside distance from one wire
>> to the other. If you have the common 450-Ohm ladder line that should be
>> something like and inch or so. I've never measured mine, but that has to
>> be in the ballpark.
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>> distance, that is better and worth doing. It is a exponential kind of
>> thing, as opposed to a simple arithmetic slope. (Doubling the cleared
>> distance may decrease ill effects by four times, for example.)
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>> from E-H wave discussion? This is the principal behind all balanced
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>> transmission line and instead become a radiating element of your antenna
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>> > is that?
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>> outdoor ladder line through the window to your station. It cold be just
>> fine or a train wreck with RF flying hither and yon, crackling into your
>> TV and burning your lips should they contact a metal microphone. (If you
>> use a mic.)
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>> But there are plenty of good ways to make this transition. Fear not!
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>> How far away is your station from the window in question? A few feet?
>> Ten feet? Thirty feet? The "answer" is best modified for each solution.
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>> If you are just a few feet away from the window then you can either get
>> some high-quality low-loss coax and run the 5- or 10-feet with that
>> coax. Run the coax out the window and into a balun designed to also
>> transition from coax/ladder. You'll suffer losses in the coax when the
>> swr is high, but if it is a short run and really good coax that won't
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>> aren't already bookmarked on your browser). Find as high a
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>> had 125-Ohm coax, and that was the highest I found. But I didn't call
>> either one to ask if they had higher Ohm coax available. It wasn't the
>> lowest-loss coax, but of a middling-high quality. I wouldn't plan to run
>> it 50- or 100-feet!
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>> The ARRL Antenna Book has a diagram showing how to hook this up.
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>> Both lengths of coax are equal. Solder the shielding together at each
>> end. Outdoors you do nothing with the shielding and just use the two
>> center conductors exactly as if they were any other balanced line
>> (except they are shielded, so you can run them through walls and
>> what-not, just as you can regular shielded coax). Indoors, connect the
>> shielding to your station ground.
>>
>> (Which should in turn be connected to an outdoor ground rod, which in
>> turn should (must be by the NEC) connected to the utility ground, and a
>> chemical-burn is the best joining technique and will last essentially
>> forever because it "welds" the dissimilar metals into one another --
>> seek a qualified electrician for all this work if you don't already know
>> exactly what I am talking about. You may or may not need a permit. You
>> may or may not be required by law to employ a licensed electrician. Call
>> you attorney or city zoning/permits department for legal guidance.)
>>
>> You use the highest-Ohm coax because its effective nominal Ohms will be
>> half of whatever you start with.... 125-Ohms / 2 =~ 62.5-Ohms; 75/2 =~
>> 35-Ohms; 50/2 =~ 25-Ohms. The goal is to minimize the difference between
>> your ladder line (most likely 300- or 450-Ohms) and what you create with
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>> your XCVR is designed to operate into without damage.)

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>> Just pay attention to how each works. I'd only use a stand-alone with my
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>> auto-tuner with a "lock" engaged. One variable at a time, please!
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>> moving electrons, but that represents a small loss. Greater losses can
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>> your transmatch. For example, if the coil is not of sufficiently large
>> physical size, it will have trouble matching a very low impedance (say
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>> (Good candidates are lengths of transmission line that equal 1/8 and 1/4
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>> "unmatchable" impedance within the "matchable" range of your transmatch.)
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>> Staples?
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>> You need not worry about them. Yes, little bits of metal "barb-wiring"
>> your loop antenna is not a common commercial antenna design. Then again,
>> actual barb wire fences have been successfully employed as antennas!
>> You're loop will likely be just fine, so go ahead and just staple it to
>> the wooden eaves. Of the things to worry about, this is not one.
>>
>> A somewhat related idea, is the magnetic coil loop antenna. That is
>> wrapping more than one turn around your house. I've not played with

>> those so I will not comment, other than to say it is something you may
>> wish to research.
>>
>> Best of luck, have fun, and report back to us how it works!
>> 73-Erik Weaver n0ew
>>
>

2723. Re: [SkyWires] Re: Newbie Questions about a Skywire Design That is Low to the Ground

Yahoo group: SkyWires
Date: 2007-10-19 22:18:50 UTC
From: Erik Weaver
Topic: 2708 Message: 2723

Do recall other people living in the house (if any) once informed of the
RF exposure situation, changes their exposure limits by FCC rules.

73-Erik Weaver n0ew

lazysenior wrote:
> --- In SkyWires@yahoogroups.com, "Karl" <kmgeneral@...> wrote:
>> I'm new to all this and could use some help. What do you think of my
> plan?
>
>> Thanks in advance for your thoughts.
>
> Here is something else you should consider. RF Safety. Indeed it is
> your duty as an amateur licensee to do so.
>
> You antenna as you described will be in close proximity to people in
> the house. The residents are going to be enclosed by an RF field.
> Check this out before you do anything. Remember a loop has gain over a
> dipole. Also the gain changes as you change bands.
>
> http://n5xu.ece.utexas.edu/rfsafety/
>
> If that worked ok for you then another consideration should be RFI.
> having an RF field this close to your house can cause problems with
> other electronic devices including your telephone. Are the other
> (non-ham) occupants willing to put up with this?
>
> I am NOT trying to discourage you. But having done ham operations in
> similar situations to yours I know some of the pitfalls.
>
> Stan K9IUQ
>
>
>
>
>
>
>
>
>
> Yahoo! Groups Links
>
>
>

2724. Re: [SkyWires] Newbie Questions about a Skywire Design That is Low to the Ground

Yahoo group: SkyWires
Date: 2007-10-19 23:33:44 UTC
From: Karl Moll
Topic: 2708 Message: 2724

Feel free to use my comments. I am KI6ISB.

Erik Weaver wrote:
>
> Thanks Karl,
>
> You are very welcome. I hope you do well with your project and my info
> helps in some measure. I was serious about posting with your progress.
> It is always interesting to hear how people run into unanticipated
> issues and how the original --and sometimes new-- problems are solved!
>
> Say, do you mind if I quote your comment? I have been considering
> gathering up email's such as this one that I have written over the years
> and placing them all into a single volume. Having such a heart-felt
> expression as your would be a nice touch.
>
> If you do agree, please include your call sign in the rely.
>
> In any event, be careful when you're up that ladder and have a ton of
> fun playing with your radio when it is up and running!
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> 73-Erik Weaver n0ew
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> Karl Moll wrote:
> > Wow, thanks Erik. I will read and re-read this many times as the
> days go
> > by and I work on this antenna project. Lot's of valuable stuff!
> >
> > Erik Weaver wrote:
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> >> Hi Karl,
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> >> Here's pitching my two-cents against the wall!.... As always, "your
> >> mileage may vary," heheh....
> >>
> >> > What I do have is about 200 ft of perimeter to the house and wooden
> >> > eves to which a wire antenna could be stapled. The house is not quite
> >> > square but rectangular, measuring 47 ft x 51 ft.
> >> >
> >> > All of this makes me think a skywire loop may be the way to go except
> >> > that 200 ft is neither correct for a 40 meter loop (142ft) nor for an
> >> > 80 meter loop (272ft). It is actually tuned to 5.1 MHz (59 meters) by
> >> > L=1005/freq. How much of a problem will this be?
> >>

> >> I think you are right; I think you have a good candidate for an
> >> eave-loop antenna. Of course, you won't know for certain until you try
> >> it. If you work regional nets it may work pretty well for that on the
> >> lower bands (being low to the ground you'll get some NVIS effect).
> >> Sometime you might play around with laying wire on the ground under the
> >> loop. You may find that changes it somewhat. If you like the change,
> >> build flower boxes along the entire perimeter and line the bottoms with
> >> copper sheeting! ;) Pretty, effective, and it smells nice! Perfect! LOL
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> >> Don't worry about the rule-of-thumb formula. That doesn't take into
> >> account your building and the effects it will have upon the antenna
> >> system and radiation pattern it develops. Such things are nearly
> >> impossible to accurately model. You didn't mention if you had metal
> >> siding, but either way, I'd still try it!
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> >> Instead of worrying about formulas and what-not, try to identify
> >> obviously bad ideas and avoid them. (Such as running ladder line up
> >> along the metal downspout -- clearly *not* a recommended practice!)
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> >> You will be relying on the old "get as much wire in the air as you can"
> >> theory. As you increase the area of a loop antenna it generally works
> >> better for capturing radio signals. The closer it forms a circle the
> >> better, but a near square should be just fine, as are reasonably
> >> equal-sided triangles. There are differences between these options of
> >> course, and the ARRL Antenna Book is a good starting place to discover
> >> more about them, but the bottom line is that doesn't really matter to
> >> you. It sounds as if your options are severely limited.
> >>
> >> (Although educating yourself is always a winning idea, and the Antenna
> >> Book is fun just to thumb through; especially what with winter coming!)
> >>
> >> If you have an attic you can try stringing up wire there. Most likely
> >> the only vertical antenna you may get away with is a flagpole
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> >> work well, so you may want to deploy two antennas eventually -- but
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> >> that project to follow the spring rains so the soil is easier to work
> >> with).
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> >> And with the holidays upon us you have the perfect opportunity to run
> >> along the entire length and breadth of the house, stringing wire! Both
> >> Halloween and Christmas are valid candidates for holiday lights or
> other
> >> decorations. You'll just happen to be running a "special" wire too! ;)
> >>
> >> > I'm thinking of using ladderline so I could access a range of bands.
> >>
> >> Yes. Wise man!
> >>
> >> However, do ensure it remains "balanced." This means no metal or

> >> magnetic materials nearby. "Nearby" means a minimum distance
> (preferably
> >> open air, with the fewest non-conductive supports needed to maintain
> >> stability in the weather) of "one-width" of the ladder line. Just lay a
> >> ruler on the ladder line and measure the outside distance from one wire
> >> to the other. If you have the common 450-Ohm ladder line that should be
> >> something like and inch or so. I've never measured mine, but that
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> >> be in the ballpark.
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> >> That is the minimum; not optimum. If you can obtain several times this
> >> distance, that is better and worth doing. It is a exponential kind of
> >> thing, as opposed to a simple arithmetic slope. (Doubling the cleared
> >> distance may decrease ill effects by four times, for example.)
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> >> from E-H wave discussion? This is the principal behind all balanced
> >> line. But if it gets too close to metal or a magnetic source, it
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> >> longer be "equal and opposite," therefore it will cease being
> >> transmission line and instead become a radiating element of your
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> >> system. Not generally the goal when using ladder line ;)
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> >> > Unfortunately, the house is a single storey so the ladderline will
> >> > only drop about 8 feet into the window of the shack. How big a
> problem
> >> > is that?
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> >> Depends upon how you transition from the (properly supported and
> routed)
> >> outdoor ladder line through the window to your station. It cold be just
> >> fine or a train wreck with RF flying hither and yon, crackling into
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> >> TV and burning your lips should they contact a metal microphone.
> (If you
> >> use a mic.)
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> >> But there are plenty of good ways to make this transition. Fear not!
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> >> How far away is your station from the window in question? A few feet?
> >> Ten feet? Thirty feet? The "answer" is best modified for each solution.
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> >> If you are just a few feet away from the window then you can either get
> >> some high-quality low-loss coax and run the 5- or 10-feet with that
> >> coax. Run the coax out the window and into a balun designed to also
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> >> aren't already bookmarked on your browser). Find as high a
> >> "characteristic Ohm" value as you can. It seems to me I saw one of them
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> >> either one to ask if they had higher Ohm coax available. It wasn't the
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> >> it 50- or 100-feet!
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> >> You use the highest-Ohm coax because its effective nominal Ohms will be
> >> half of whatever you start with.... 125-Ohms / 2 =~ 62.5-Ohms; 75/2 =~
> >> 35-Ohms; 50/2 =~ 25-Ohms. The goal is to minimize the difference
> between
> >> your ladder line (most likely 300- or 450-Ohms) and what you create
> with
> >> coax. Some will recommend a 1:1 balun between the two types of balanced
> >> line. Unless you over-heat it, and provided it is designed properly for
> >> the frequencies for which you operate, it shouldn't hurt, and at higher
> >> frequencies it may even be beneficial. I'm not convinced you'll
> note any
> >> difference on the lower bands (40/80) but I'm far from a balun expert.
> >> The ARRL Antenna Book.... ;) You may also point your browser to
> >> http://www.cebik.com/ <http://www.cebik.com/>

> <http://www.cebik.com/ <http://www.cebik.com/>> when seeking answer to
> >> questions such as these.
> >> Good info there! Highly recommended!
> >>
> >> Or buy shielded balanced line and follow the manufacturer's
> instructions
> >> for proper use.
> >>
> >> > I'll be using a Kenwood TS-440 with internal antenna tuner. Don't you
> >> > think I will need an external one as well?
> >>
> >> Maybe yes; maybe no. I'd lean toward the "yes" for all-band use. The
> >> reason is the wide range of complex impedance (simply meaning both
> "pure
> >> resistance" --the "good stuff" we like as hams!-- and reactance
> >> --resistance to alternating current, such as say, oh I don't know...
> >> *RF*!-- will both be present, and in wildly fluctuating ranges to boot,
> >> accompanied by drastic differences in both voltages and Ohms).
> >>
> >> Whatever device is connected to the shack-side of this antenna system
> >> has to be able to deal with the upper/lower extremes of both
> voltage and
> >> Ohms. If not, either the device will be damaged or simply unable to
> >> "tune" the antenna system. ("Tune" means to obtain a successful
> >> transformation of complex impedance from what ever is presented to the
> >> device on the "antenna" side, and convert this into a range into which
> >> your XCVR is designed to operate into without damage.)
> >>
> >> Built-in tuners are known to have smaller ranges of complex impedance
> >> conversion than stand-alone transmatches. You can use two transmatches
> >> in-line if you wish (a stand-alone transmatch and the internal tuner).
> >> Just pay attention to how each works. I'd only use a stand-alone
> with my
> >> XCVR's internal tuner if the stand-alone was either a manual, or an
> >> auto-tuner with a "lock" engaged. One variable at a time, please!
> >>
> >> (I have in fact done this fairly often and have never experienced any
> >> trouble or harm to my equipment. You can use the stand-alone transmatch
> >> --almost always a manual design in my case-- to obtain an impedance
> >> match on the band you are using, and then use the XCVR's internal tuner
> >> to quickly and easily hope around inside that band. Works fine. You do
> >> incur slightly greater losses. Electricity heats metal as it moves
> >> through it. We cannot get around this, because this is the nature of
> >> moving electrons, but that represents a small loss. Greater losses can
> >> take place too. This is most common when really pushing the limits of
> >> your transmatch. For example, if the coil is not of sufficiently large
> >> physical size, it will have trouble matching a very low impedance (say
> >> 5- or 10-Ohms, for example). Losses increase (the "coil-Q" is inferior
> >> at that frequency) as compared to using the same transmatch at a
> >> different frequency, or using a transmatch designed to operate

> >> efficiently at that impedance.)
> >>
> >> What was the question? :)
> >>
> >> For this reason you may wish to keep on hand one or more extra lengths
> >> of transmission line (of the same type entering your impedance matching
> >> device on the antenna side). By altering the length of the transmission
> >> line, you will likely find some previously un-tunable frequencies
> can be
> >> successfully "tuned."
> >>
> >> (Good candidates are lengths of transmission line that equal 1/8
> and 1/4
> >> of a wavelength ("WL") --electrical, not physical-- at/near the
> >> frequencies you are having trouble matching. Set them up so you can use
> >> them in any combination: either the 1/8- or 1/4-WL alone, or connected
> >> together providing a 3/8-WL shift. Put away the slide rule -- you need
> >> just enough extra length of transmission line to shift the current
> >> "unmatchable" impedance within the "matchable" range of your
> transmatch.)
> >>
> >> Staples?
> >>
> >> You need not worry about them. Yes, little bits of metal "barb-wiring"
> >> your loop antenna is not a common commercial antenna design. Then
> again,
> >> actual barb wire fences have been successfully employed as antennas!
> >> You're loop will likely be just fine, so go ahead and just staple it to
> >> the wooden eaves. Of the things to worry about, this is not one.
> >>
> >> A somewhat related idea, is the magnetic coil loop antenna. That is
> >> wrapping more than one turn around your house. I've not played with
> >> those so I will not comment, other than to say it is something you may
> >> wish to research.
> >>
> >> Best of luck, have fun, and report back to us how it works!
> >> 73-Erik Weaver n0ew
> >>
> >
>
>

2725. Re: [SkyWires] Re: Newbie Questions about a Skywire Design That is Low to the Ground

Yahoo group: SkyWires
Date: 2007-10-19 23:43:29 UTC
From: Karl Moll
Topic: 2708 Message: 2725

Ultimately I'd like to work DX, but right now I'd be happy just to get
on the air.

lazysenior wrote:
>
> --- In SkyWires@yahoogroups.com <mailto:SkyWires%40yahoogroups.com>,
> "Karl" <kmgeneral@...> wrote:
> >
> > I'm new to all this and could use some help. What do you think of my
> plan?
> >
>
> It all depends what you want in an antenna. Are you interested in DX
> or talking to the guy in the next town? What bands are you wanting to
> use the antenna for?
>
> You can easily model your low loop antenna with readily available
> (free) software. The results will tell you if putting up a (short)low
> loop will meet your goals.
>
> If you are a DXer you will be disappointed with the performance of a
> low loop. A vertical would be much better suited for you.
>
> Stan K9IUQ
>
>

2726. Re: [SkyWires] Re: Aluminum Wire

Yahoo group: SkyWires
Date: 2007-10-20 00:04:38 UTC
From: Dean
Topic: 2687 Message: 2726

Thank you for your skin effect answer...
I was going to write that but did not want to get into some kind of
shouting match with others
This hobby must be kept FUN ... ! !

Dean W5GXL
dean@...

On Oct 19, 2007, at 12:51 PM, Dr.Ace Ratliff wrote:

>
> Hi Stan,
> FYI:
> at 60 Hz the current travels thru the entire wire. At RF Freqs
> there is "Skin Effect" the current only travels on the outside
> perimeter of the wire/conductor almost like it is a hollow pipe
> conductor.
> 73, Ace - WH2T
>
>
> ----- Original Message -----
> From: lazysenior
>
>
> --- In SkyWires@yahoogroups.com, Dean <dean@...> wrote:
> >
> > It will hold that current... Besides, You are talking RF Current...
> > not low 60 hz house current.
> > You worry about too much.
> > Just get it up and Try it...
> >
> > Dean W5GXL
> > dean@...
>
> Since you seem to want to be an expert on current, please explain to
> us what difference the frequency makes or voltage makes when it comes
> to the current handling capacity of a wire???
>
> I for one would like to know how 10 amps of current at 60hz differs
> from 10 amps of current at 14mhz.
>
> I personally am not worrying. I use copper wire for all my wire
> antennas. I know from 47 years of experience that the antenna system
> is the most important part of a ham station. It is the LAST place I
> would cut corners to save a few dollars.
>

> Putting up antennas, ESPECIALLY a loop takes planning and work. I
> would not jeopardize the performance OR longevity of any antenna just
> because I wanted to save a few $$$ on wire....
>
> There will always be hams that will cut corners. These are the guys
> that use RG58 coax, aluminum fencing wire, dog fence wire,radioshack
> coax, clothes line rope for end support. These are the same fellows
> that put their 75 mtr antennas at 30 ft high, and load up that same 75
> mtr antenna on 160 mtrs. And then blame propagation cuz no one can
> hear them.
>
> Stan K9IUQ
>
>
>
>

2727. Re: [SkyWires] Re: Aluminum Wire

Yahoo group: SkyWires
Date: 2007-10-20 01:49:08 UTC
From: Dr.Ace Ratliff
Topic: 2687 Message: 2727

Hi Vince ,
I also use 8ga copper. My loop is 272 feet of bare, solid, #8 awg copper wire !
Very 73, Ace

----- Original Message -----
From: "Vince Werber" <ka1iic@...>
To: <SkyWires@yahoogroups.com>
Sent: Friday, October 19, 2007 10:44 AM
Subject: Re: [SkyWires] Re: Aluminum Wire

> Ace,
>
> You are totally correct about the skin effect that is why cable television
> companies go through the trouble of bonding copper to the outside surface
> of
> their aluminium coaxial lines (meaning the center conductor).
>
> Back in the early 60's my brother and I use to build crystal sets with
> giant
> loops of aluminium wire... we found we didn't even need a crystal because
> that 'flakey white stuff' acted as the crystal! When we cleaned the wire
> up
> we needed the crystal... amazing discovery for us at that stage of
> learning
> really...
>
> I have use aluminium as antennas many times but they must be cleaned
> often, if
> not they can give a mass of rectification (spurs and other garbage) on
> receive and TVI on transmit...
>
> Sure build the antenna but be aware of the problems that might show up
> later
> down the line. I use number 8 copper for everything these days simply
> because I can AND I don't have the physical ability to search down and
> repair
> these types of problems... I also don't need TVI... And I simply don't
> trust the wide band finals in modern rigs as they beg for out of band
> signals...
>
> 73
> vince
> ka1iic
>

>
>
> On Friday 19 October 2007 17:51, Dr.Ace Ratliff wrote:
>> Hi Stan,
>> FYI:
>> at 60 Hz the current travels thru the entire wire. At RF Freqs there is
>> "Skin Effect" the current only travels on the outside perimeter of the
>> wire/conductor almost like it is a hollow pipe conductor. 73, Ace - WH2T
>>
>>
>> ----- Original Message -----
>> From: lazysenior
>> To: SkyWires@yahoogroups.com
>> Sent: Friday, October 19, 2007 12:28 PM
>> Subject: [SkyWires] Re: Aluminum Wire
>>
>> --- In SkyWires@yahoogroups.com, Dean <dean@...> wrote:
>> > It will hold that current... Besides, You are talking RF Current...
>> > not low 60 hz house current.
>> > You worry about too much.
>> > Just get it up and Try it...
>> >
>> > Dean W5GXL
>> > dean@...
>>
>> Since you seem to want to be an expert on current, please explain to
>> us what difference the frequency makes or voltage makes when it comes
>> to the current handling capacity of a wire???
>>
>> I for one would like to know how 10 amps of current at 60hz differs
>> from 10 amps of current at 14mhz.
>>
>> I personally am not worrying. I use copper wire for all my wire
>> antennas. I know from 47 years of experience that the antenna system
>> is the most important part of a ham station. It is the LAST place I
>> would cut corners to save a few dollars.
>>
>> Putting up antennas, ESPECIALLY a loop takes planning and work. I
>> would not jeopardize the performance OR longevity of any antenna just
>> because I wanted to save a few $$$ on wire....
>>
>> There will always be hams that will cut corners. These are the guys
>> that use RG58 coax, aluminum fencing wire, dog fence wire,radioshack
>> coax, clothes line rope for end support. These are the same fellows
>> that put their 75 mtr antennas at 30 ft high, and load up that same 75
>> mtr antenna on 160 mtrs. And then blame propagation cuz no one can
>> hear them.
>>
>> Stan K9IUQ
>

>
>
> Yahoo! Groups Links
>
>
>

2728. Re: [SkyWires] Newbie Questions about a Skywire Design That is Low to the Ground

Yahoo group: SkyWires
Date: 2007-10-21 02:27:01 UTC
From: Karl Moll
Topic: 2708 Message: 2728

Thanks Jim. I appreciate the help.

Jim Dunstan wrote:
>
> At 05:29 PM 10/19/2007 +0000, you wrote:
>
> >I'm new to all this and could use some help. What do you think of my
> plan?
> >
> >I live in a single storey house in an area where the CC&R's and the
> >city make erecting an antenna difficult. In addition, I have no trees
> >on my property.
> >
> >What I do have is about 200 ft of perimeter to the house and wooden
> >eves to which a wire antenna could be stapled. The house is not quite
> >square but rectangular, measuring 47 ft x 51 ft.
> >
> >All of this makes me think a skywire loop may be the way to go except
> >that 200 ft is neither correct for a 40 meter loop (142ft) nor for an
> >80 meter loop (272ft). It is actually tuned to 5.1 MHz (59 meters) by
> >L=1005/freq. How much of a problem will this be?
> >
> >I'm thinking of using ladderline so I could access a range of bands.
> >Unfortunately, the house is a single storey so the ladderline will
> >only drop about 8 feet into the window of the shack. How big a problem
> >is that?
> >
> >I'll be using a Kenwood TS-440 with internal antenna tuner. Don't you
> >think I will need an external one as well?
> >
> >Thanks in advance for your thoughts.
> >
> >__
>
> Hi Karl,
>
> >From what you describe you're antenna will be a 'stealth' horizontal
> loop
> 200' in diameter fed with a short length of balanced feed line (I
> would use
> 300 ohm TV line ... in keeping with the stealth aspect). The antenna
> should be easily tuned to just about any HF band with reasonably good
> efficiency. Since it will be quite low to the ground ... eg 10-15' it
> will

> be a bit of a cloud burner .... but not to worry. You will have no
> difficulty making all kinds of interesting contacts.
>
> It will indeed need the antenna tuner since it is not naturally
> resonant on
> any particular band. The built in antenna tuners are not normally known
> for wide range capability. In any case you will need a balun to go from
> the balanced line to the unbalanced input of your tuner. Try the balun
> with your built in tuner and see what it will do. You can also try
> different lengths of feedline (roll up the excess). You may find your
> tuner will get you on a couple of bands. You might also be able to borrow
> an external tuner in order to see how it will work with the balun.
>
> Jim, VE3CI
>
>

2729. newbie

Yahoo group: SkyWires
Date: 2007-10-23 21:47:47 UTC
From: Glen Bankston
Topic: 122 Message: 2729

Hello,

I am constructing a large loop and believe I will have close to 1500' when done.

I am using open wire feeder to a tree that is almost 80 feet high. Right now, the loop is a long dipole, about 700' bent in half a rectangle.

I am trying to make a circle in the woods on my 14 acres. It is slow going because of the density of the woods.

Anyway, the average height will be 65' or so.

Right now, the antenna is excellent, being my best 30M and 40M antenna, and beats the pants off the 40M delta loop at 70'.

I noticed, however, that on 20M and above, the long 'dipole' is much noisier than the 2 ele quad. And the quad beats the pants off the long dipole. Can I expect the noise to diminish when I close the loop?

ALso, I read somewhere that one fellow thought it might be best to add a switching arrangement on the side opposite the feed point to either short or open the other side. What do you all think about that?

73's

Glen K4KV

2730. Looking for Ladder Line

Yahoo group: SkyWires
Date: 2007-10-24 16:34:06 UTC
From: Karl
Topic: 2730 Message: 2730

Hi,
I'm looking for a supplier of #553 (18GA stranded 450 ohm) ladder line. The Wireman is out of stock at present. Can anyone recommend alternate sources. Thanks.

2731. Re: [SkyWires] Looking for Ladder Line

Yahoo group: SkyWires
Date: 2007-10-24 17:55:52 UTC
From: Demetrius Panaioti
Topic: 2730 Message: 2731

Try radioworks.com
----- Original Message -----
From: Karl
To: SkyWires@yahoogroups.com
Sent: Wednesday, October 24, 2007 9:34 AM
Subject: [SkyWires] Looking for Ladder Line

Hi,
I'm looking for a supplier of #553 (18GA stranded 450 ohm) ladder
line. The Wireman is out of stock at present. Can anyone recommend
alternate sources. Thanks.

No virus found in this incoming message.
Checked by AVG Free Edition.
Version: 7.5.503 / Virus Database: 269.15.9/1090 - Release Date: 10/24/2007 8:48 AM

2732. Re: [SkyWires] Looking for Ladder Line

Yahoo group: SkyWires
Date: 2007-10-24 18:33:11 UTC
From: Dr.Ace Ratliff
Topic: 2730 Message: 2732

I got mine from Van Gorden.
Ace - WH2T

----- Original Message -----
From: Karl
To: SkyWires@yahoogroups.com
Sent: Wednesday, October 24, 2007 12:34 PM
Subject: [SkyWires] Looking for Ladder Line

Hi,
I'm looking for a supplier of #553 (18GA stranded 450 ohm) ladder line. The Wireman is out of stock at present. Can anyone recommend alternate sources. Thanks.

2733. Running two separate loops

Yahoo group: SkyWires
Date: 2007-10-24 20:26:13 UTC
From: Callum M0MCX
Topic: 2733 Message: 2733

I have a 40m loop and an 80m loop. Both have 4:1 baluns directly attached to the loops with coax running back to the shack. The feedpoints are within 15 feet of each other.

I'm planning on running short lengths of twin-feeder from each of the feedpoints of the loops to a 12V relay to switch between loops before feeding a high-power balun which will feed a small single coax run to shack.

The benefits will be:

a) A single run of high quality coax, not two and

b) A single expensive balun, not two of the blighters

OK?

Comments?

Callum McCormick

M0MCX

http://www.m0mcx.co.uk/

2734. Re: [SkyWires] Running two separate loops

Yahoo group: SkyWires
Date: 2007-10-24 22:40:53 UTC
From: Erik Weaver
Topic: 2733 Message: 2734

Provided adequate separation and routing is observed I don't see any glaring problem. The switch itself is so small compared to the wavelength it's impedance bump should not cause a problem. Just make sure it is mechanically and electrically sound. The primary area for potential problems lies in unbalancing the balanced line (ladder line). Keep the coax run as short as is comfortable (it will be the area of greatest loss). Should work just fine.

Erik n0ew

Callum M0MCX wrote:
> I have a 40m loop and an 80m loop. Both have 4:1 baluns directly
> attached to the loops with coax running back to the shack. The
> feedpoints are within 15 feet of each other.
>
>
>
> I?m planning on running short lengths of twin-feeder from each of the
> feedpoints of the loops to a 12V relay to switch between loops before
> feeding a high-power balun which will feed a small single coax run to shack.
>
>
>
> The benefits will be:
>
>
>
> a) A single run of high quality coax, not two and
>
>
>
> b) A single expensive balun, not two of the blighters
>
>
>
> OK?
>
>
>
> Comments?
>
>
>
> Callum McCormick
>

> M0MCX
>
> http://www.m0mcx.co.uk/
>
>
>
>
>
>

2735. RE: [SkyWires] Running two separate loops

Yahoo group: SkyWires
Date: 2007-10-25 01:23:29 UTC
From: G B
Topic: 2733 Message: 2735

Callum,

Oh, why do you want two loops? Wouldn't a single larger loop feed with open wire line
be better, having gain on 40M? Perhaps you have an issue with using a tuner, and, if so,
OK.

I am going to use my loop on 80M and up.

73

Glen K4KV

-----Original Message-----
From: SkyWires@yahoogroups.com [mailto:SkyWires@yahoogroups.com]On Behalf Of Callum M0MCX
Sent: Wednesday, October 24, 2007 4:26 PM
To: SkyWires@yahoogroups.com
Subject: [SkyWires] Running two separate loops

I have a 40m loop and an 80m loop. Both have 4:1 baluns directly attached to the loops with coax running back to the shack. The feedpoints are within 15 feet of each other.

I'm planning on running short lengths of twin-feeder from each of the feedpoints of the loops to a 12V relay to switch between loops before feeding a high-power balun which will feed a small single coax run to shack.

The benefits will be:

a) A single run of high quality coax, not two and

b) A single expensive balun, not two of the blighters

OK?

Comments?

Callum McCormick

M0MCX

http://www.m0mcx.co.uk/

2736. Re: [SkyWires] Looking for Ladder Line

Yahoo group: SkyWires
Date: 2007-10-25 02:42:02 UTC
From: Christopher Zeman
Topic: 2730 Message: 2736

I got mine on eBay for a decent price, but I bought 16 guage. How much were you looking for?

Chris
N9XCR

----- Original Message -----
From: Karl
To: SkyWires@yahoogroups.com
Sent: Wednesday, October 24, 2007 11:34 AM
Subject: [SkyWires] Looking for Ladder Line

Hi,
I'm looking for a supplier of #553 (18GA stranded 450 ohm) ladder line. The Wireman is out of stock at present. Can anyone recommend alternate sources. Thanks.

2737. RE: [SkyWires] Running two separate loops

Yahoo group: SkyWires
Date: 2007-10-25 17:51:30 UTC
From: Callum M0MCX
Topic: 2733 Message: 2737

Glen,

I've had two "tuned" loops for both 40m and 80m in the back garden for about three years now. The 40m one is slightly inside the 80m one - but they do have separate feeders. Currently, I feed these directly with coax to a balun and I don't want any sort of ATU in line which adds complexity to what is endlessly an experimental antenna (and I run these with high power sometimes so I would have to build something pretty bullet proof if I did).

Switching a few antennas with a relay may give me an interesting dimension.

I assume adding a few feet of twin feeder will hardly change the impedance?

Callum McCormick

M0MCX

07976 631881

http://www.m0mcx.co.uk/

From: SkyWires@yahoogroups.com [mailto:SkyWires@yahoogroups.com] On Behalf Of G B
Sent: 25 October 2007 02:23
To: SkyWires@yahoogroups.com
Subject: RE: [SkyWires] Running two separate loops

Callum,

Oh, why do you want two loops? Wouldn't a single larger loop feed with open wire line

be better, having gain on 40M? Perhaps you have an issue with using a tuner, and, if so,

OK.

I am going to use my loop on 80M and up.

73

Glen K4KV

-----Original Message-----
From: SkyWires@yahoogroups.com [mailto:SkyWires@yahoogroups.com]On Behalf Of Callum M0MCX
Sent: Wednesday, October 24, 2007 4:26 PM

To: SkyWires@yahoogroups.com
Subject: [SkyWires] Running two separate loops

I have a 40m loop and an 80m loop. Both have 4:1 baluns directly attached to the loops with coax running back to the shack. The feedpoints are within 15 feet of each other.

I'm planning on running short lengths of twin-feeder from each of the feedpoints of the loops to a 12V relay to switch between loops before feeding a high-power balun which will feed a small single coax run to shack.

The benefits will be:

a) A single run of high quality coax, not two and

b) A single expensive balun, not two of the blighters

OK?

Comments?

Callum McCormick

M0MCX

http://www.m0mcx. <http://www.m0mcx.co.uk/> co.uk/

2738. No Room

Yahoo group: SkyWires
Date: 2007-10-28 18:38:43 UTC
From: Paul
Topic: 2738 Message: 2738

What do you do when have no room for a sky wire setup. I really want to put on up, but I don't have the room. I have about 25 feet up and 300 feet total to put an wire up in. Can someone tell me if this enough to put it up, or should try a different way.

2739. Re: Newbie Questions about a Skywire Design That is Low to the Ground - Update

Yahoo group: SkyWires
Date: 2007-10-28 18:47:53 UTC
From: Karl
Topic: 2708 Message: 2739

As promised, here is the update.

So far I've put a #14 coated wire on half of the house's perimeter by stapling it to the eves. The wire is about 3 inches from the gutters, but I've really had no choice. The final antenna will not be planar because at one end of the house I had to go up the pitch of the roof and down the other side to keep the wire hidden as much as possible. I used my fishing rod and it worked great. Pulled a length of twine over the top followed by the wire. That was in the front of the house. In the back I'm planning to just go straight across about ten feet above ground partly because my DISH antenna is on the apex and I don't want to get too close.

I've ordered a 4:1 voltage balun (LDG) for use outside the shack to convert the ladder line to coax before going through the window to the transceiver. I expect to order the ladder line on Monday. The Kenwood TS-440 transceiver arrives this week. It has a built in antenna tuner.

I've also made a wooden "T" shaped insulator to connect the antenna to the ladder line. It will be mounted just above the window to the shack.

Thanks to all for their help and as usual any comments would be appreciated.

--- In SkyWires@yahoogroups.com, "Karl" <kmgeneral@...> wrote:
>
> I'm new to all this and could use some help. What do you think of my plan?
>
> I live in a single storey house in an area where the CC&R's and the
> city make erecting an antenna difficult. In addition, I have no trees
> on my property.
>
> What I do have is about 200 ft of perimeter to the house and wooden
> eves to which a wire antenna could be stapled. The house is not quite
> square but rectangular, measuring 47 ft x 51 ft.
>
> All of this makes me think a skywire loop may be the way to go except
> that 200 ft is neither correct for a 40 meter loop (142ft) nor for an
> 80 meter loop (272ft). It is actually tuned to 5.1 MHz (59 meters) by
> L=1005/freq. How much of a problem will this be?
>
> I'm thinking of using ladderline so I could access a range of bands.
> Unfortunately, the house is a single storey so the ladderline will
> only drop about 8 feet into the window of the shack. How big a problem

> is that?
>
> I'll be using a Kenwood TS-440 with internal antenna tuner. Don't you
> think I will need an external one as well?
>
> Thanks in advance for your thoughts.
>

2740. Re: [SkyWires] No Room

Yahoo group: SkyWires
Date: 2007-10-28 18:50:46 UTC
From: Erik Weaver
Topic: 2738 Message: 2740

Hi Paul,

Go for it! I had a loop up for several years that measured something like that. It was an interesting antenna. While not perfect (what is?) you'll still have a lot of fun and usefulness out of it.

73-Erik n0ew

Paul wrote:
> What do you do when have no room for a sky wire setup. I really want
> to put on up, but I don't have the room. I have about 25 feet up and
> 300 feet total to put an wire up in. Can someone tell me if this
> enough to put it up, or should try a different way.
>
>
>
>
> Yahoo! Groups Links
>
>
>

2741. Re: [SkyWires] Re: Newbie Questions about a Skywire Design That is Low to the Ground - Update

Yahoo group: SkyWires
Date: 2007-10-28 19:02:22 UTC
From: Erik Weaver
Topic: 2708 Message: 2741

Hi Karl,

That sounds like a very reasonable plan.

I'd have a few extra lengths of coax handy by the XCVR, each with a barrel connector (or build a fancy-dancy switching box). If you find you can't tune a given frequency, add a length of coax.

(Say around 1/8-wavelength -- and if that doesn't help, add another -- but don't worry about the 1/8-WL length too much; just change the length of the coax, which in turn alters the complex impedance presented to the output terminal of the XCVR. If you can shift the impedance far enough, you may find your tuner "suddenly starts working" ;) When you have added one full WL you'll be right back where you started.)

73-Erik Weaver n0ew

2742. RE: [SkyWires] No Room

Yahoo group: SkyWires
Date: 2007-10-28 19:17:28 UTC
From: D. Scott MacKenzie
Topic: 2738 Message: 2742

That will work just fine - use 270 feet for 80M - feed with 450 ohm ladder line. When you want to work 10M - tie the feedline together and use as a vertical....
-----Original Message-----
From: SkyWires@yahoogroups.com [mailto:SkyWires@yahoogroups.com]On Behalf Of Paul
Sent: Sunday, October 28, 2007 2:39 PM
To: SkyWires@yahoogroups.com
Subject: [SkyWires] No Room

What do you do when have no room for a sky wire setup. I really want to put on up, but I don't have the room. I have about 25 feet up and 300 feet total to put an wire up in. Can someone tell me if this enough to put it up, or should try a different way.

2743. RE: [SkyWires] No Room

Yahoo group: SkyWires
Date: 2007-10-28 22:30:27 UTC
From: Christopher Zeman
Topic: 2738 Message: 2743
Attachments: 2 described; binary payloads are missing from this source WARC

You're in better shape than me! J

I just put one up a few months ago and had a lot less room than you. I was only able to put up about 145 feet of wire, just a little over what I needed for 40M. It tunes up well in just about all the bands, 40 and up. I really haven't had a chance to do anything else with it yet. I plan on getting some PSK31 time in within the next couple of weeks, though.

Chris

N9XCR

From: SkyWires@yahoogroups.com [mailto:SkyWires@yahoogroups.com] On Behalf Of Paul
Sent: Sunday, October 28, 2007 1:39 PM
To: SkyWires@yahoogroups.com
Subject: [SkyWires] No Room

What do you do when have no room for a sky wire setup. I really want to put on up, but I don't have the room. I have about 25 feet up and 300 feet total to put an wire up in. Can someone tell me if this enough to put it up, or should try a different way.

2744. RE: [SkyWires] No Room

Yahoo group: SkyWires
Date: 2007-10-28 22:58:01 UTC
From: Paul MW0CDO
Topic: 2738 Message: 2744

What do you mean "no room"?? :-)

My back yard is 30ft wide by 60ft long.

I had a 150 odd ft loop up at 20ft for about 2 years, it worked gangbusters on 40m upwards.
Hooking a GDO to the system showed a good dip at 6.9MHz or so.
The loop had 15ft of RG58 coax feeder and a 15 turn choke at the feedpoint.
The coax feeder went to an MFJ-949e manual T match tuner and I could get a good match on all bands 160 - 10m

Now I have a bigger sloping loop up, details at
HYPERLINK
"http://homepage.ntlworld.com/paultom/"http://homepage.ntlworld.com/paultom/

Put it up and have fun!

Paul MW0CDO.

From: SkyWires@yahoogroups.com [mailto:SkyWires@yahoogroups.com] On Behalf Of Paul
Sent: 28 October 2007 18:39
To: SkyWires@yahoogroups.com
Subject: [SkyWires] No Room

What do you do when have no room for a sky wire setup. I really want to put on up, but I don't have the room. I have about 25 feet up and 300 feet total to put an wire up in. Can someone tell me if this enough to put it up, or should try a different way.

No virus found in this incoming message.
Checked by AVG Free Edition.
Version: 7.5.503 / Virus Database: 269.15.12/1096 - Release Date: 27/10/2007 11:02

No virus found in this outgoing message.
Checked by AVG Free Edition.
Version: 7.5.503 / Virus Database: 269.15.12/1096 - Release Date: 27/10/2007 11:02

2745. My first loop

Yahoo group: SkyWires
Date: 2007-10-29 14:07:51 UTC
From: martin_ehrenfried
Topic: 2745 Message: 2745

Hi All,

I just reworked my antenna to try and obtain better multiband performance.

Originally I had a G5RV at 30' one leg running approx N-S the other E-W.

This weekend I modified it to create a 60m diameter loop (each leg about 15m long) at an average height of 25'

This is fed at one of the corners by a 4:1 balun via the existing 200' length of Heliax and auto tuner in the shack. The tuner and Heliax were previously used with the G5RV.

I was able to use the CQWW contest at the weekend to evaluate the performance on receive and also use a calibrated field strength meter and remote receiver to measure the transmit signal.

The results were disappointing. Apart from a slight improvement on 10m the resulting signals were practically identical to those I can obtain using the G5RV, which is a lot simpler antenna to install.

The other problem is that the loop is closer to the house, so I get more RX noise and TX RF induced into the house wiring and electronics.

My current feeling is that I'm not going to achieve a significant improvement, I should concentrate on getting the G5RV higher up rather than persevere with loops.

Where am I going wrong, or am I expecting too much from the loop ?

Martin - G8JNJ

http://www.geocities.com/martin_ehrenfried

2746. Re: My first loop

Yahoo group: SkyWires
Date: 2007-10-30 07:36:26 UTC
From: Murray Lycan
Topic: 2745 Message: 2746

Martin,

L. B. Cebik, W4RNL, is an authority on loop antennas. See his excellent article at http://www.cebik.com/wire/horloop.html.

The following two charts taken from this article summarize a lot of useful information about large loop antennas. Bottom line: to compete with a dipole, the loop should be a minimum 2-wavelengths at the lowest frequency of operation and preferably 4-wavelengths or more. You must also get your loop up higher to lower the takeoff angle (angle of radiation). If you are serious, you should also model in advance to determine best circumference. Randomly choosing a length is not the best way to get good performance. For ham bands, a 283-foot circumference is a good compromise of length vs. performance on both transmit and receive.

Comparative Performance of a Circular 2-wavelength Loop and a Dipole at Various Heights
Circular Loop Dipole
Height Max. Gain TO Angle Max. Gain TO Angle
wavelengths dBi degrees dBi degrees
2.0 7.36 7 8.05 7
1.0 7.27 14 7.98 14
0.75 7.75 19 7.57 19
0.5 7.43 29 7.91 28
0.25 5.94 47 6.33 60
0.15 4.76 52 6.59 90

Maximum Gain Values for Each Antenna at Each Sampled Frequency
All loops are 2-wavelengths at F.
Frequency F 2F 4F 8F
TO angle (degrees) 14 7 4 2
Antenna
Circle 7.27 9.22 10.71 11.57
Triangle, corner-fed 8.34 9.95 14.38 8.41
Triangle, Side-fed 8.34 10.45 13.24 8.94
Square, side-fed 8.42 11.29 13.59 14.29
Square, corner-fed 6.95 11.51 14.28 14.92
Reference Dipole/Doublet 7.99 9.66 9.64 11.16

I operated the CQ WW SSB contest this past weekend with a 283-foot (1-wavelength @ 4MHz) horizontal delta loop about 80 feet high. On the higher frequencies (14~28MHz) it performs like a beam antenna except having gain in all directions at low takeoff angle and not needing rotation. It is an excellent DX antenna, especially considering the low cost if you have tall trees. Having said that, I'm still working

toward installing a high yagi.

Regards,
Murray VE7HA

--- In SkyWires@yahoogroups.com, "martin_ehrenfried"
<martin_ehrenfried@...> wrote:
>
> Hi All,
>
>........
> This weekend I modified it to create a 60m diameter loop (each leg
> about 15m long) at an average height of 25'
......
> Martin - G8JNJ

2747. Re: My first loop

Yahoo group: SkyWires
Date: 2007-10-30 07:41:37 UTC
From: Murray Lycan
Topic: 2745 Message: 2747

Sorry the two charts mentioned did not display correctly. Both charts
are included in the article mentioned.

Murray VE7HA

--- In SkyWires@yahoogroups.com, "Murray Lycan" <zk2boy@...> wrote:
>
> Martin,
>
> L. B. Cebik, W4RNL, is an authority on loop antennas. See his
> excellent article at http://www.cebik.com/wire/horloop.html.

2748. Re: My first loop

Yahoo group: SkyWires
Date: 2007-10-30 09:11:54 UTC
From: martin_ehrenfried
Topic: 2745 Message: 2748

Hi Murray,

Thanks for this,I have spent many hours reading the various articles on the wonderful Cebik website. However I had overlooked the significance of this particular article.

I concur with his conclusions. My loop is too small and too low for effective operation on the lower frequency bands. As predicted in the article my loop does work well on 10m where the diameter is greater than 4 wavelengths, and the height is just under a wavelength above ground.

So it looks like I don't have enough real estate, or high enough support structures to faciliate a useful size loop.

Once again, thanks for pointing me in the right direction.

Martin - G8JNJ

http://www.geocities.com/martin_ehrenfried

--- In SkyWires@yahoogroups.com, "Murray Lycan" <zk2boy@...> wrote:
>
> Sorry the two charts mentioned did not display correctly. Both
charts
> are included in the article mentioned.
>
> Murray VE7HA
>
> --- In SkyWires@yahoogroups.com, "Murray Lycan" <zk2boy@> wrote:
> >
> > Martin,
> >
> > L. B. Cebik, W4RNL, is an authority on loop antennas. See his
> > excellent article at http://www.cebik.com/wire/horloop.html.
>

2749. Re: My first loop

Yahoo group: SkyWires
Date: 2007-10-30 17:15:35 UTC
From: Murray Lycan
Topic: 2745 Message: 2749

Few of us of the ideal situation for a theoretically properly
installed loop. Therefore, install the best you can and enjoy what it
can offer. If nothing else, the very low noise I enjoy with the loop
makes it capable of copying weaker signals than my elevated vertical.
I also feel the stability of reception (subjective, I know) makes it
worth the effort of installation.

Murray VE7HA

--- In SkyWires@yahoogroups.com, "martin_ehrenfried"
<martin_ehrenfried@...> wrote:
>
> Hi Murray,
>
> Thanks for this,I have spent many hours reading the various articles
> on the wonderful Cebik website. However I had overlooked the
> significance of this particular article.
>
> I concur with his conclusions. My loop is too small and too low for
> effective operation on the lower frequency bands. As predicted in the
> article my loop does work well on 10m where the diameter is greater
> than 4 wavelengths, and the height is just under a wavelength above
> ground.
>
> So it looks like I don't have enough real estate, or high enough
> support structures to faciliate a useful size loop.
>
> Once again, thanks for pointing me in the right direction.
>
> Martin - G8JNJ
>
> http://www.geocities.com/martin_ehrenfried

2750. Another Skywire Newbie with Questions

Yahoo group: SkyWires
Date: 2007-10-31 01:40:34 UTC
From: wb4asz
Topic: 2750 Message: 2750

Hello All,
I am a "longtime listener, first time caller".
After reading many of the posts on this site, I was convinced that the Skywire Loop antenna was my best choice. Read all of Cebik's articles on loops several times. Finally took down the Butternut vertical and was committed to the loop. After drafting the back yard, with tree, I realized that a 160M loop was out of the question, but the 80M would be easy. After getting a new Palstar BT1500A tuner and some W7FG balanced feedline, I went to work gathering parts and 12ga stranded, insulated wire. The tree was only about 40 feet tall and in a poor location to use as a support and it seemed to move a lot in the wind. Therefore, the tree was out. I opted for 2" steel pipe masts, but was afraid to go higher than 20'. The loop seemed to tune fine for stateside contacts, but DX was eluding me. Determined that "height was everything". Will work to raise it up to 40', even if on only one side of the square.

I was really interested in operating the loop on 160M. The idea of shorting the feedline together would be very inconvenient and the feedline is vertical only about 18 feet. Not much for a vertical. I tried placing a loading coil in the opposite side that let the loop load OK, and all bands appeared to load. However, the coil was #22ga emanaled wire on a 3/4" PVC pipe. I was afraid the coil would represent too much power loss on all other bands, so I took it out. Should I just make a comparable coil with larger wire, or just leave it out and be happy with 80-10M?

Has anyone ever tried placing a 160M trap in the opposte side of a fullwave 80M loop to form a halfwave dipole on 160? Do you think is a better solution to the loading coil?

Terry, WB4ASZ

2751. Re: [SkyWires] Another Skywire Newbie with Questions

Yahoo group: SkyWires
Date: 2007-10-31 03:16:38 UTC
From: Earl Needham
Topic: 2750 Message: 2751

At 19:40 10/30/2007, wb4asz wrote:
>I was really interested in operating the loop on 160M. The idea of
>shorting the feedline together would be very inconvenient and the
>feedline is vertical only about 18 feet. Not much for a vertical. I
>tried placing a loading coil in the opposite side that let the loop
>load OK, and all bands appeared to load. However, the coil was #22ga
>emanaled wire on a 3/4" PVC pipe. I was afraid the coil would
>represent too much power loss on all other bands, so I took it out.
>Should I just make a comparable coil with larger wire, or just leave
>it out and be happy with 80-10M?

Did you try tuning it on 160 WITHOUT the coil? Some of the
tuners on the market today will tune almost anything almost anywhere.

7 3
Earl

KD5XB -- Earl Needham
Clovis, New Mexico DM84jk
http://groups.yahoo.com/group/cw_bugs
Quoting from the Coast Guard: ZUT

2753. Re: Another Skywire Newbie with Questions

Yahoo group: SkyWires
Date: 2007-10-31 16:30:27 UTC
From: wb4asz
Topic: 2750 Message: 2753

Yes Earl, I too thought the tuner should be able to tune into the 80M loop, without modifications. I tried to load the antenna with only the tuner. I even lengthened the wire loop by 30', with the same results. VSWR was greater than 5:1 with all possible tuner configurations and settings. I intend to connect the antenna analyzer to the tuner tonight and see what reactance is being seen by the radio. Maybe then I can get an idea as to what it is missing, inductance or capacitance. Logic would say that with a short antenna, the combination of tuner and antenna should still be capacitive and require additional inductance to tune. But we shall see. Thanks for your interest in my problem.

73
Terry

--- In SkyWires@yahoogroups.com, Earl Needham <needhame1@...> wrote:
>
> Did you try tuning it on 160 WITHOUT the coil? Some of the
> tuners on the market today will tune almost anything almost anywhere.
>
> 7 3
> Earl
>
> KD5XB -- Earl Needham
> Clovis, New Mexico DM84jk
> http://groups.yahoo.com/group/cw_bugs
> Quoting from the Coast Guard: ZUT
>

2754. Re: [SkyWires] Re: Another Skywire Newbie with Questions

Yahoo group: SkyWires
Date: 2007-10-31 18:02:46 UTC
From: Earl Needham
Topic: 2750 Message: 2754

At 10:30 10/31/2007, wb4asz wrote:
>Yes Earl, I too thought the tuner should be able to tune into the 80M
>loop, without modifications. I tried to load the antenna with only the
>tuner. I even lengthened the wire loop by 30', with the same results.
>VSWR was greater than 5:1 with all possible tuner configurations and
>settings. I intend to connect the antenna analyzer to the tuner
>tonight and see what reactance is being seen by the radio. Maybe then
>I can get an idea as to what it is missing, inductance or capacitance.
>Logic would say that with a short antenna, the combination of tuner
>and antenna should still be capacitive and require additional
>inductance to tune. But we shall see. Thanks for your interest in my
>problem.

Gee, that's surprising, Terry. My next thought is that you
should probably rewind your coil with larger wire and put it back
in. Only actual on-the-air operating will determine if that gives
you too much loss or not.

I've been wondering about putting some kind of capacity hat
on the END of my long wire to give me a little lower frequency
capability, but haven't tried it yet -- this might be an idea for you
to explore, too.

7 3
Earl

KD5XB -- Earl Needham
Clovis, New Mexico DM84jk
http://groups.yahoo.com/group/cw_bugs
Quoting from the Coast Guard: ZUT

2755. keyer

Yahoo group: SkyWires
Date: 2007-11-07 23:55:22 UTC
From: K.Currie
Topic: 2755 Message: 2755

Would any one have a operatiors manual or any info on a Heathkit Keyer Model HD-1410?
Thanks
VE5HKC

2756. Re: [SkyWires] keyer

Yahoo group: SkyWires
Date: 2007-11-08 01:04:43 UTC
From: Dan KB6NU
Topic: 2755 Message: 2756

Take a look at

http://home.comcast.net/~ed.goss/HD1410/HD1410.html

It has info on the keyer and links to schematics and manuals.

73!

Dan KB6NU

CW Geek and MI Affiliated Club Coordinator
Get my Tech and General Class study guides at www.kb6nu.com/tech-manual
LET'S GET MORE KIDS INTO HAM RADIO!

On Nov 7, 2007, at Nov 7, 6:55 PM, K.Currie wrote:
> Would any one have a operatiors manual or any info on a Heathkit
> Keyer Model HD-1410?
> Thanks
> VE5HKC

2757. Re: [SkyWires] keyer

Yahoo group: SkyWires
Date: 2007-11-08 02:32:08 UTC
From: Demetrius Panaioti
Topic: 2755 Message: 2757

I have the manual.
VE7CRT
----- Original Message -----
From: K.Currie
To: SkyWires@yahoogroups.com
Sent: Wednesday, November 07, 2007 3:55 PM
Subject: [SkyWires] keyer

Would any one have a operatiors manual or any info on a Heathkit Keyer Model HD-1410?
Thanks
VE5HKC

No virus found in this incoming message.
Checked by AVG Free Edition.
Version: 7.5.503 / Virus Database: 269.15.24/1115 - Release Date: 11/7/2007 9:21 AM

2758. Re: [SkyWires] keyer

Yahoo group: SkyWires
Date: 2007-11-08 17:05:49 UTC
From: Dr.Ace Ratliff
Topic: 2755 Message: 2758

I had one of these keyers, with the SB-104A several years ago. It was very nice but it couldn't send high speed code. 13 wpm worked great.
73, Ace - WH2T

----- Original Message -----
From: Dan KB6NU
To: SkyWires@yahoogroups.com
Sent: Wednesday, November 07, 2007 8:04 PM
Subject: Re: [SkyWires] keyer

Take a look at

http://home.comcast.net/~ed.goss/HD1410/HD1410.html

It has info on the keyer and links to schematics and manuals.

73!

Dan KB6NU

CW Geek and MI Affiliated Club Coordinator
Get my Tech and General Class study guides at www.kb6nu.com/tech-manual
LET'S GET MORE KIDS INTO HAM RADIO!

On Nov 7, 2007, at Nov 7, 6:55 PM, K.Currie wrote:
> Would any one have a operatiors manual or any info on a Heathkit
> Keyer Model HD-1410?
> Thanks
> VE5HKC

2759. Yet another Newbie

Yahoo group: SkyWires
Date: 2007-11-09 17:53:53 UTC
From: Tim Folkenson
Topic: 2759 Message: 2759

After plowing through lots of posts and learning just enough to be dangerous, I need to get some specific advice about my weekend antenna project plans. Summary goes like this......

Current rig:

RADIO:1970's Tempo One - 100w output, no protection circuits, no way to reduce power.

Tuner: TenTec 247 - 100w rated with balanced, unbalanced, and longwire inputs

Coax: 75ohm Quad shield, Silicone injected (Underground/Underwater rated) RG-6 (I was a cable guy for many years and had 1000' of the stuff laying around) It performs very well and has very little loss and reads 1.2:1 SWR @50ohms with the analyzer at the TX without the tuner.

Antenna: 40m dipole with extra legs for 20m (I don't call it multiband because it doesn't tune up very well)

Shack: Under the stairs in the far corner of the basement. Coax runs through the joists, up two stories along the chimney, through the attic and out my vent. It then runs up a 16' mast to the dipole. Height is about 50' AGL in front and 65' AGL in back.

Weekend plans:

Before reading about the skywire antenna, I had planned to construct 80m,40m,20m,15m dipoles on the existing mast with a separate feed line for each. They would be spaced about 1/2 meter apart. I nay also mount a remote switch in the attic to avoid running all 6 lines (4 new dipoles plus longwire and 10m dipole in the rafters)

Problem:

If I go with a skywire, I need to use coax to feed to the shack so multiband operation is limited and/or eliminated as an option? Height would be about 50' all around and would be 1 full 80m wavelength. I'd love to use just a loop for everything but it seems that isn't possible?

The other issue is my inability to reduce power with my old rig. Tuning needs to be quick and bad SWR can cause some damage?

The bottom line is how well does a coax fed skywire perform over a well cut mono-band dipole of the same basic height?

Opinions????

2760. Re: [SkyWires] Yet another Newbie

Yahoo group: SkyWires
Date: 2007-11-09 21:38:58 UTC
From: erik@n0ew.org
Topic: 2759 Message: 2760

> The other issue is my inability to reduce power with my old rig.
> Tuning needs to be quick and bad SWR can cause some damage?

I'll only address this right now because it is the one thing that can sink your boat, so to speak.

You can cause damage transmitting into too high of an swr load. Since you can't slowly increase output power you need to in advance make sure you are close to a low swr (defined as whatever the manufacturer says, perhaps 2:1, perhaps 1.5:1 -- so you need to find that 'safe value').

Therefore, you should get a device that will let you determine the swr before applying power.

#1. Get an analyzer like the MFJ-259/269 or one of the other manufacturers. The idea being you read the impedance before hooking up your XCVR, and adjust it until it is 'good enough' to be safe. The 269 at least can also be changed to work with a 75-Ohm input impedance. (I've never tried this but I recall reading that in the manual.)

(As a side note, the theoretical swr of going from 50 to 75 Ohms (purely resistive; e.g. no reactance present) should be 1.5:1, not 1.2:1. This isn't a great deal of difference, especially given the typical margin of error in amateur radio equipment. Perhaps the other extra loss is in the line, if it isn't a meter error, running from the chimney to the basement.)

#2. Ten-Tec makes a kit that can be used to "tune your tuner" (I think that is the line they used.) It compares the impedance seen in the device to a small on-board resistor. In my case I set it close to 50-52-Ohms and when this matches the transmission line connected to it, it does something.... "what" exactly I don't recall. Makes a noise or a LED goes on (I think the tone changes -- I could be wrong on the specific "that's close" indicator).

#3. Use a second low-power transmitter to inject RF at the frequency you're fixing to transmit on with the 100-w rig and use a swr meter to verify the swr is within safe limits.

Have fun!
73-Erik n0ew

2761. Re: Yet another Newbie

Yahoo group: SkyWires
Date: 2007-11-09 22:46:26 UTC
From: Tim Folkenson
Topic: 2759 Message: 2761

Thanks to all that have emailed me offline and posted here. It's been
a great help.

I do have a MFJ on loan and can check things out before I hook it up.

I also have a QRP FT301 with a drive control to hook up if the MFJ
says it's ok.

My biggest question that still remains regarding a coax feed vs
Ladder line. Is a coax fed skywire a multiband antenna?

I keep thinking about how I could feed this thing properly but it's
just not in the cards until I remodel the basement.

Should I keep this project on hold and go back to my dipoles until my
layout improves?

Thanks again everyone.

Tim, KD0AHR

--- In SkyWires@yahoogroups.com, erik@... wrote:
>
> > The other issue is my inability to reduce power with my old rig.
> > Tuning needs to be quick and bad SWR can cause some damage?
>
>
> I'll only address this right now because it is the one thing that
can
> sink your boat, so to speak.
>
> You can cause damage transmitting into too high of an swr load.
Since
> you can't slowly increase output power you need to in advance make
> sure you are close to a low swr (defined as whatever the
manufacturer
> says, perhaps 2:1, perhaps 1.5:1 -- so you need to find that 'safe
> value').
>
> Therefore, you should get a device that will let you determine the
swr
> before applying power.
>
> #1. Get an analyzer like the MFJ-259/269 or one of the other
> manufacturers. The idea being you read the impedance before hooking
up
> your XCVR, and adjust it until it is 'good enough' to be safe. The

269
> at least can also be changed to work with a 75-Ohm input
impedance.
> (I've never tried this but I recall reading that in the manual.)
>
> (As a side note, the theoretical swr of going from 50 to 75 Ohms
> (purely resistive; e.g. no reactance present) should be 1.5:1, not
> 1.2:1. This isn't a great deal of difference, especially given the
> typical margin of error in amateur radio equipment. Perhaps the
other
> extra loss is in the line, if it isn't a meter error, running from
the
> chimney to the basement.)
>
> #2. Ten-Tec makes a kit that can be used to "tune your tuner" (I
think
> that is the line they used.) It compares the impedance seen in the
> device to a small on-board resistor. In my case I set it close to
> 50-52-Ohms and when this matches the transmission line connected
to
> it, it does something.... "what" exactly I don't recall. Makes a
noise
> or a LED goes on (I think the tone changes -- I could be wrong on
the
> specific "that's close" indicator).
>
> #3. Use a second low-power transmitter to inject RF at the
frequency
> you're fixing to transmit on with the 100-w rig and use a swr meter
to
> verify the swr is within safe limits.
>
> Have fun!
> 73-Erik n0ew
>

2762. RE: [SkyWires] Yet another Newbie

Yahoo group: SkyWires
Date: 2007-11-09 22:46:38 UTC
From: ag0k@ag0k.com
Topic: 2759 Message: 2762
Attachments: 1 described; binary payloads are missing from this source WARC

This might be an option worth
considering.

When we had to tune some manual tap
loading networks a few decades ago we
would to the following.We would take and
insert a T connecton at any convienent
point between the transmitter and the
Manual
matching network.

We would then first add a dummy load to
the tee connector and disconnect the
matching network and tune the
transmitter to the dummy load. Let's
say the antenna starts off looking like
5,000 ohms which it wont. T-ing our out
put if we take the product over the sum
or our dummy load impedance and our bad
mismatched impedance ie. 50*5000 or
250,000 ohms divided by 50+5000 or 5050
we get the following 25000/5050= 49.50
ohms at the transmitter. Not Bad... 50
ohm load and 2000 ohm mismatch before
tuning would yeild 48.78 ohms at the
transmitter.... 1,000,000 ohms of
impedance across the 50 ohm will give
you approximately 50 ohms

Then we would the install a SWR Bridge
to the connector and then connect the
tuner to bridge. { This would basically
limit the SWR to an acceptable level at
the transmitter. We then could adjust
the tuner manually for a minimum SWR.
Once you get to a 1 to 1 SWR at the
transmitter will see a 25 ohm Load or
an SWR or 2.0 to 1. That won't hurt
your rig.Now Once that is achieved you
can then just disconnect the dummy load
and your ready to go. 50 ohms appearing
at the transmitter output.

In other words, if you tee your output
and no matter how high the impedance is

the transmitter will see something extremely close to 50 ohms.When you tune your tuner and get your match you have 50*50/100 or 2500/100=25ohms.

Simple and cheap, and very safe on your equipment

73's
Grace, Peace, and Joy, be yours,

Rev. W. Clinton Stockton, pastor
Andrews Presbyterian Church
104 S. Rosemary Ave
Andrews, SC 29510
<mailto:pastor@...>
pastor@...
Office 843 264 5596
Manse 843 264 8756
Cellphone 843 325-9760

-----Original Message-----
From: SkyWires@yahoogroups.com [mailto:SkyWires@yahoogroups.com] On Behalf Of Tim Folkenson
Sent: Friday, November 09, 2007 12:54 PM
To: SkyWires@yahoogroups.com
Subject: [SkyWires] Yet another Newbie

After plowing through lots of posts and learning just enough to be dangerous, I need to get some specific advice about my weekend antenna project plans. Summary goes like this......

Current rig:

RADIO:1970's Tempo One - 100w output, no protection circuits, no way to reduce power.

Tuner: TenTec 247 - 100w rated with balanced, unbalanced, and longwire inputs

Coax: 75ohm Quad shield, Silicone injected (Underground/Underwater rated) RG-6 (I was a cable guy for many years and had 1000' of the stuff laying around) It performs very well and has very little loss

and reads 1.2:1 SWR @50ohms with the analyzer at the TX without the tuner.

Antenna: 40m dipole with extra legs for 20m (I don't call it multiband because it doesn't tune up very well)

Shack: Under the stairs in the far corner of the basement. Coax runs through the joists, up two stories along the chimney, through the attic and out my vent. It then runs up a 16' mast to the dipole. Height is about 50' AGL in front and 65' AGL in back.

Weekend plans:

Before reading about the skywire antenna, I had planned to construct 80m,40m,20m,15m dipoles on the existing mast with a separate feed line for each. They would be spaced about 1/2 meter apart. I nay also mount a remote switch in the attic to avoid running all 6 lines (4 new dipoles plus longwire and 10m dipole in the rafters)

Problem:

If I go with a skywire, I need to use coax to feed to the shack so multiband operation is limited and/or eliminated as an option? Height would be about 50' all around and would be 1 full 80m wavelength. I'd love to use just a loop for everything but it seems that isn't possible?

The other issue is my inability to reduce power with my old rig. Tuning needs to be quick and bad SWR can cause some damage?

The bottom line is how well does a coax fed skywire perform over a well cut mono-band dipole of the same basic height?

Opinions????

2763. Re: [SkyWires] Re: Yet another Newbie

Yahoo group: SkyWires
Date: 2007-11-10 03:17:21 UTC
From: erik@n0ew.org
Topic: 2759 Message: 2763

> My biggest question that still remains regarding a coax feed vs
> Ladder line. Is a coax fed skywire a multiband antenna?
>
> I keep thinking about how I could feed this thing properly but it's
> just not in the cards until I remodel the basement.
>
> Should I keep this project on hold and go back to my dipoles until my
> layout improves?

OK, Tim, we'll assume the not-blowing-up the radio is covered ;) heheheh....

Apparently the 'best' answer is to go ahead and remodel that basement!
Heheh, will your wife belief you're doing it for her? Maybe you both
get a hobby room with a sliding window between!? ;) ....anyway....

Transmission Line Woes

The transmission line you use to feed your antenna doesn't matter in
and of itself, nor does it matter what kind of antenna is at the far
end, other than envelope, take of angle, and that sort of thing.

Balance matters when using balanced line (route that ladder line along
a piece of metal or too close to an electrical line and each side of
the ladder line no longer cancels the other side -- they become an
antenna element), and keeping the RF inside coax matters (RF on the
outside of the shielding also act as an antenna, not as feed line).

Once you meet the above goals, the loss inherent in the line matters
(attenuation). Higher impedance line has less transmission loss. Hard
coax line and balanced wire transmission line both have very low
attenuation losses, I suppose because air is the dielectric in both
cases. But with other kinds of coax, the line attenuations adds up
much more rapidly.

But you might explore some of the "poor man's hard line" which are
supposed to be very low loss coax.

Since you are routing through and along so many things (basement,
floors, roof, chimney, etc) you really do need either coax or shielded
balanced line. I've never priced shielded balanced line, but you may
want to look into that as a 3rd option.

Antenna Type (Loop vs. Dipole)

Dipoles change their polarization due to physical orientation. Loops
can change their polarization either by physical orientation or by
where the feed point is connected. This may or may not be an advantage

for your use.

Both dipoles and loops can be multi-banded. Really, pretty much anything that conducts RF *can* be, but you'll have a multitude of propagation envelopes, and levels of impedance/reactance/swr to consider. Some will be useful and some not so much.

Most likely you have already considered these points and decided to try a loop.

Practical Transmission Line Options

As mentioned above, you really need some kind of shielded line. This is because you are so close to so many things. There are at least three options to explore: (1) hard line; (2) shielded coax of the "low loss" variety; and (3) shielded balanced line.

If you can model the antenna you will be able to get an idea of what feed point impedances to expect. This may help you decide specifically what transmission line would be best. Failing that, go with whatever has the lowest attenuation loss. This data should be readily available from the manufacturer. Typically they pick one or frequencies and state the amount of loss over some number of feet. Find the frequencies close to yours, 10-meters has the greatest loss in HF, and adjust the length to match yours. The feet/length conversion should be simple math. If they tell you the loss for 100-feet and you're using 200-feet, double the loss, etc.

Attenuation

All line has loss. Electrons cause friction moving from one point to another, and there is also dielectric loss. Air is a really good insulator with very little dielectric loss, which is why we enjoy such low losses from hard line and balanced line. As you fill the space between the two wires (either balanced line or between the center conductor and the inside surface of the shield on coax) with stuff other than air, dielectric loss increases.

Also to be considered is how much you expect to bang the line around and what the environment will be. In this case the outdoor portions will be subjected to UV from the sunlight. The rest is indoors and other than laying against things and dealing with electrical sources inside, it is pretty much protected from the environment by the house itself. In any case, you should attempt to route your transmission line away from things: fans, electrical lines, etc.

SWR

Now, when the RF gets to the point that connects to the antenna, less whatever energy was lost in the transmission line along the way (attenuation), some will get into the antenna and some will reflect off, and head back toward the XCVR.

That which enters the antenna we need not be concerned about, as it'll radiate as we wish it to (most of it anyway). The part that isn't "absorbed by the load" (the antenna) will travel back to the XCVR (or transmatch if used), less the attenuation (for a second time). When it encounters the XCVR or transmatch, it'll re-reflect and head back toward the antenna along with however much additional RF the XCVR has added. Again, less attenuation losses (the new forward wave taking the loss once, and the re-reflected portion of the wave taking loss for the third time -- the higher the swr, the more often the waves reflect back and forth before escaping to the antenna, and therefore, the greater the attenuation losses).

Comparing the forward wave to the reflected wave gives the swr.

Comparing the transmission line impedance to that of the antenna feed point will give you an idea of how much RF is absorbed by the antenna and how much is reflected off it each time a forward wave reaches it (that forward wave being comprised of both the re-reflected and new RF). When the antenna feed point is the same impedance as the transmission line 100% goes into the antenna. That results in a 1:1 swr. Realistically, anything 1.5:1 down to 1:1 is perfectly acceptable for our uses. If there is very little attenuation in the line, this swr can be considerably higher without there being much effective difference to our use.

Reactance

Reactance is resistance to current in an ac circuit (like RF). It is basically energy caught in a circle that does nothing productive for us. If capacitive reactance, it is caught in an electrical field and if inductive reactance, it is caught in a magnetic field. Either way, it is stored in one portion of the ac cycle and returned to the system in the next alternate portion of the cycle. Net result to us is no work done.

Impedance Matching

If we add the opposite kind of reactance to the system and in the same magnitude (but opposite sign: capacitive is negative and inductive is positive) we eliminate the reactance. What is left is purely resistive. Now if we can match this purely resistive part to our XCVR (typically around 50-Ohms theses days) it will fully load into (transmit into) the transmission line, and do so safely.

(The same principals apply to reception, but that won't damage our equipment, so we usually only talk about transmitting.)

This allows us to generate maximum power.

Now if the antenna feed point and transmission line have the same impedance 100% of this power is radiated (or nearly 100% -- nothing is perfect, so there is always a tiny loss).

If the antenna feed point and transmission line have a different impedance some RF bounces back and forth. If the attenuation is low, that doesn't negatively affect our ultimate antenna radiation. That RF which isn't lost to attenuation will will eventually radiate from the antenna.

So there you have it!

Eliminate the reactance, properly match the XCVR to the transmission line it is connected to (directly or through a transmatch (aka "tuner")) and if the far end of the transmission line is very different than the antenna feed point impedance, use low loss line. The less attenuation loss the better, and especially when experiencing high swr on the line.

How many bands will you get?

This depends upon the impedance matching range of your transmatch. Lower impedance is more difficult to match than higher impedance. How high and how low of a match you can find is dependent upon the components. Manufacturer's should be able to provide you with their data. Compare this to you antenna's upper and lower limits and you'll find how many bands you can match.

It is certainly possible to have very low loss in the transmatch components at certain frequencies and higher loss at other frequencies. Again, the manufacturer should be able to provide this information. Or you can put a RF power meter on either side of the transmatch and judge for yourself if there is "too much" loss, and if so, where.

Will these be useful bands?

This depends on all of the above and more. Propagation for one. Envelope, take off angle, etc. How much power was lost vs. how much power eventually radiates from the antenna. My guess is if you can talk to most people you hear, and work some really cool DX it is "fine" ;)

Hope that helps!
73-Erik Weaver n0ew

2764. balanced line swr meter

Yahoo group: SkyWires
Date: 2007-11-10 03:56:14 UTC
From: rudywhoizme
Topic: 2764 Message: 2764

I recently acquired an MC Jones MicroMatch model MM-1 while prowling around a Phoenix antique shop. It appears to be a balanced line swr meter. I haven't discovered much about it except that it was advertised for sale in the late 40's. I would appreciate any further information, or leads to a manual.
WA1DPA

2765. Re: Yet another Newbie

Yahoo group: SkyWires
Date: 2007-11-11 02:59:25 UTC
From: oldlongbeard
Topic: 2759 Message: 2765

Tim-

I used an 80M full wave loop for about 5 years, fed with RG-58 Coax. It performed way above my wildest expectations. I recently changed to commercial window line feed, and it is a bit better, maybe, but not by orders of magnitude. Use your Coax, an get on the air with it!

To "tune" your antenna tuner, buy a Palomar R_X impedance bridge (Reasonable on Ebay), and learn how to use it. You can use it to adjust your tuner, and you may actually learn a bunch about antennas and feed lines while you are at it!! Older Handbooks have some good info on using one. Keep the $$ you save on the "analyzer" to improve other areas of your shack/antenna/equipment, etc.

Ask 10 guys from your local club what exactly they use their $300+ MFJ analyzers for, and my guess (and experience) is that 9 out of 10 have only ever used it to find out the SWR on their antenna system.

Just my experiences, and I guess yours could be different.

Best luck any way you go.

73-
Greg Schippers, KC8HXO

--- In SkyWires@yahoogroups.com, "Tim Folkenson" <folkenson@...> wrote:
>
> Thanks to all that have emailed me offline and posted here. It's been
> a great help.
>
> I do have a MFJ on loan and can check things out before I hook it up.
>
> I also have a QRP FT301 with a drive control to hook up if the MFJ
> says it's ok.
>
> My biggest question that still remains regarding a coax feed vs
> Ladder line. Is a coax fed skywire a multiband antenna?
>
>SNIPPED<

2766. Re: [SkyWires] Re: Newbie Questions about a Skywire Design That is Low to the Ground - Update

Yahoo group: SkyWires
Date: 2007-11-11 13:12:48 UTC
From: Steve Ward
Topic: 2708 Message: 2766

Karl, It does not sound like you have many options. I think that you will be surprised at how well it will work in spite of all the "compromises". The ladder line with the external balun is definately the way to go since you will be using an odd length antenna. While you will probably not crush any pilepus, you will work you share of stations. You may find that digital modes such as BPSK (psk 31) or CW will probably net you your best results. Not to say that SSB will not be possible but you will want to keep the power down due to the antenna having total and direct contact with your house, not to mention RF exposure and TVI. Good luck.

Steve

Karl <kmgeneral@...> wrote:
As promised, here is the update.

So far I've put a #14 coated wire on half of the house's perimeter by stapling it to the eves. The wire is about 3 inches from the gutters, but I've really had no choice. The final antenna will not be planar because at one end of the house I had to go up the pitch of the roof and down the other side to keep the wire hidden as much as possible. I used my fishing rod and it worked great. Pulled a length of twine over the top followed by the wire. That was in the front of the house. In the back I'm planning to just go straight across about ten feet above ground partly because my DISH antenna is on the apex and I don't want to get too close.

I've ordered a 4:1 voltage balun (LDG) for use outside the shack to convert the ladder line to coax before going through the window to the transceiver. I expect to order the ladder line on Monday. The Kenwood TS-440 transceiver arrives this week. It has a built in antenna tuner.

I've also made a wooden "T" shaped insulator to connect the antenna to the ladder line. It will be mounted just above the window to the shack.

Thanks to all for their help and as usual any comments would be appreciated.

--- In SkyWires@yahoogroups.com, "Karl" <kmgeneral@...> wrote:
>
> I'm new to all this and could use some help. What do you think of my plan?
>
> I live in a single storey house in an area where the CC&R's and the
> city make erecting an antenna difficult. In addition, I have no trees
> on my property.
>

> What I do have is about 200 ft of perimeter to the house and wooden
> eves to which a wire antenna could be stapled. The house is not quite
> square but rectangular, measuring 47 ft x 51 ft.
>
> All of this makes me think a skywire loop may be the way to go except
> that 200 ft is neither correct for a 40 meter loop (142ft) nor for an
> 80 meter loop (272ft). It is actually tuned to 5.1 MHz (59 meters) by
> L=1005/freq. How much of a problem will this be?
>
> I'm thinking of using ladderline so I could access a range of bands.
> Unfortunately, the house is a single storey so the ladderline will
> only drop about 8 feet into the window of the shack. How big a problem
> is that?
>
> I'll be using a Kenwood TS-440 with internal antenna tuner. Don't you
> think I will need an external one as well?
>
> Thanks in advance for your thoughts.
>

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2767. Question about open loop in attic

Yahoo group: SkyWires
Date: 2007-11-11 20:10:03 UTC
From: Jonathan Helis KB5IAV
Topic: 2767 Message: 2767

I don't have alot of outdoor space for an antenna so I've been forced to put an antenna in the attic. I built an open loop antenna, basically a dipole bent into a rectangle. It's 25ft x 5ft, for a total of 60 feet. It's fed at one corner with 300ohm twinlead and the opposite corner is open.

I'm running the twinlead through an MFJ 911H balun which can work at either 1:1 or 4:1 at the flip of a switch. I tested it using an MFJ-259 antenna analyzer and when using a 1:1 ratio, the lowest frequency with an acceptable SWR without a tuner is 21.320 mhz. I thought the antenna would be at a low SWR at a frequency lower than that. At 4:1, the lowest frequency with acceptable SWR is 38.063 mhz.

I've tried loading on other frequencies with a homebrew transmatch but haven't had any luck doing so. On a positive note, seems this antenna and balun combo can produce very low SWR on most of 6 and 2 meters.

I was considering converting it to a closed loop by attaching the wires at the corner, but am not sure yet. If anyone has any suggestions on what to do, please drop me a line.

Thank you.

--
73,

Jonathan Helis, KB5IAV
Baton Rouge, Louisiana, USA

2768. Re: [SkyWires] Question about open loop in attic

Yahoo group: SkyWires
Date: 2007-11-11 22:42:24 UTC
From: Dr.Ace Ratliff
Topic: 2767 Message: 2768

Jonathan,
You might try inserting an inductor across the open corner of the rectangular bent dipole. You could wind several feet (the more the better, up to a point) of wire on a piece of pvc pipe, broom handle, or dowel rod etc..
Good Luck, Ace

----- Original Message -----
From: Jonathan Helis KB5IAV
To: SkyWires List
Sent: Sunday, November 11, 2007 3:10 PM
Subject: [SkyWires] Question about open loop in attic

I don't have alot of outdoor space for an antenna so I've been forced to put an antenna in the attic. I built an open loop antenna, basically a dipole bent into a rectangle. It's 25ft x 5ft, for a total of 60 feet. It's fed at one corner with 300ohm twinlead and the opposite corner is open.

I'm running the twinlead through an MFJ 911H balun which can work at either 1:1 or 4:1 at the flip of a switch. I tested it using an MFJ-259 antenna analyzer and when using a 1:1 ratio, the lowest frequency with an acceptable SWR without a tuner is 21.320 mhz. I thought the antenna would be at a low SWR at a frequency lower than that. At 4:1, the lowest frequency with acceptable SWR is 38.063 mhz.

I've tried loading on other frequencies with a homebrew transmatch but haven't had any luck doing so. On a positive note, seems this antenna and balun combo can produce very low SWR on most of 6 and 2 meters.

I was considering converting it to a closed loop by attaching the wires at the corner, but am not sure yet. If anyone has any suggestions on what to do, please drop me a line.

Thank you.

--
73,

Jonathan Helis, KB5IAV
Baton Rouge, Louisiana, USA

2769. Re: Question about open loop in attic

Yahoo group: SkyWires
Date: 2007-11-17 13:33:49 UTC
From: Jim
Topic: 2767 Message: 2769

Jonathan, Why dont you look at making a DCTL loop. (Google it) They
are small and can be hung up anywhere . My DCTL for 40 meters sits
on a chair in my shack and outperforms a G5RV dipole at 40 ft.
You must have a variable capacitor to tune it as it is quite sharp
in resonance.
Try it you will enjoy it
Jim VE3DDY

--- In SkyWires@yahoogroups.com, Jonathan Helis KB5IAV <kb5iav@...>
wrote:
>
> I don't have alot of outdoor space for an antenna so I've been
forced to
> put an antenna in the attic. I built an open loop antenna,
basically a
> dipole bent into a rectangle. It's 25ft x 5ft, for a total of 60
feet.
> It's fed at one corner with 300ohm twinlead and the opposite
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> open.
>
> I'm running the twinlead through an MFJ 911H balun which can work
at
> either 1:1 or 4:1 at the flip of a switch. I tested it using an
MFJ-259
> antenna analyzer and when using a 1:1 ratio, the lowest frequency
with
> an acceptable SWR without a tuner is 21.320 mhz. I thought the
antenna
> would be at a low SWR at a frequency lower than that. At 4:1, the
> lowest frequency with acceptable SWR is 38.063 mhz.
>
> I've tried loading on other frequencies with a homebrew transmatch
but
> haven't had any luck doing so. On a positive note, seems this
antenna
> and balun combo can produce very low SWR on most of 6 and 2 meters.
>
> I was considering converting it to a closed loop by attaching the
wires
> at the corner, but am not sure yet. If anyone has any suggestions
on
> what to do, please drop me a line.
>
> Thank you.

>
> --
> 73,
>
> Jonathan Helis, KB5IAV
> Baton Rouge, Louisiana, USA
>

2770. hello friends and hams

Yahoo group: SkyWires
Date: 2007-11-26 09:09:10 UTC
From: satyan
Topic: 2770 Message: 2770

i am satyan sarth - vu3mes from india. i plan to build a rectangular wire loop antenna with multi-band operation in mind. i will be using a 144feet insulated wire with 7.000khz as the lowest frequency for opeation. i have collected lot of details on wire loops from websites like L.B Cebiks and radioworks.com. some people say i must use ladder line type open wire feeder while other say i can use standard 50 or 75 ohm co-axial feeder. i will be using this antenna with a yaesu foxtango 101-e primarly, though i also have an icom ic-718. my question is

1. can i use the standard 50/75 ohm co-axial feeder line along with a diamond bu-55 centre balun to feed this antanne system?

2. secondly will it be possible to use this antenna without an antenna tuner and only using the ft-101e's tuning and loading system for operating in 40/20/15 mtrs?

replies from the experienced friends in this forum will be highly appreciated.

73s de vu3mes
satyan sarath
india.

2771. Re: [SkyWires] hello friends and hams

Yahoo group: SkyWires
Date: 2007-11-26 13:43:08 UTC
From: Steve Eisenberg
Topic: 2770 Message: 2771

Hi, Satyan:

I am not as experienced as some, but everything I've
heard tells me that ladder line will let you
effectively tune an antenna for different bands with
the appropriate tuner.

73,

Steve
WA1ZFY

--- satyan <gladsarul@...> wrote:

> i am satyan sarth - vu3mes from india. i plan to
> build a rectangular
> wire loop antenna with multi-band operation in mind.
> i will be using
> a 144feet insulated wire with 7.000khz as the lowest
> frequency

_____
Be a better pen pal.
Text or chat with friends inside Yahoo! Mail. See how. http://overview.mail.yahoo.com/

2772. RE: [SkyWires] hello friends and hams

Yahoo group: SkyWires
Date: 2007-11-27 13:08:45 UTC
From: Callum M0MCX
Topic: 2770 Message: 2772

Satyan

I have the same antenna. I use Low Loss coax to a 4:1 balun. I achieve good SWR (and radiation) on 40m and 20m. It *does* work also on 15m and 10m too but I rarely go there.

The 4:1 balun is more important for the 20m band because the impedance goes higher here, to about 250 ohms I seem to remember.

With your FT101 and without an ATU, you will get good results even at just 20 feet height - change the height and the impedance (and my properties discussed above) will change. What height did you think of installing this?

Callum McCormick
M0MCX
07976 631881
http://www.m0mcx.co.uk/

From: SkyWires@yahoogroups.com [mailto:SkyWires@yahoogroups.com] On Behalf Of satyan
Sent: 26 November 2007 09:09
To: SkyWires@yahoogroups.com
Subject: [SkyWires] hello friends and hams

i am satyan sarth - vu3mes from india. i plan to build a rectangular wire loop antenna with multi-band operation in mind. i will be using a 144feet insulated wire with 7.000khz as the lowest frequency for opeation. i have collected lot of details on wire loops from websites like L.B Cebiks and radioworks.com. some people say i must use ladder line type open wire feeder while other say i can use standard 50 or 75 ohm co-axial feeder. i will be using this antenna with a yaesu foxtango 101-e primarly, though i also have an icom ic-718. my question is

1. can i use the standard 50/75 ohm co-axial feeder line along with a diamond bu-55 centre balun to feed this antanne system?

2. secondly will it be possible to use this antenna without an antenna tuner and only using the ft-101e's tuning and loading system for operating in 40/20/15 mtrs?

replies from the experienced friends in this forum will be highly appreciated.

73s de vu3mes
satyan sarath

india.

2773. Re: hello friends and hams

Yahoo group: SkyWires
Date: 2007-11-27 14:27:44 UTC
From: Jonathan Helis KB5IAV
Topic: 2770 Message: 2773

>
> 1. hello friends and hams
> Posted by: "satyan" gladsarul@... satyan_sarath
> Date: Mon Nov 26, 2007 1:09 am ((PST))
>
> i am satyan sarth - vu3mes from india. i plan to build a rectangular
> wire loop antenna with multi-band operation in mind. i will be using
> a 144feet insulated wire with 7.000khz as the lowest frequency for
> opeation. i have collected lot of details on wire loops from websites
> like L.B Cebiks and radioworks.com. some people say i must use ladder
> line type open wire feeder while other say i can use standard 50 or
> 75 ohm co-axial feeder. i will be using this antenna with a yaesu
> foxtango 101-e primarly, though i also have an icom ic-718. my
> question is
>
> 1. can i use the standard 50/75 ohm co-axial feeder line along with a
> diamond bu-55 centre balun to feed this antanne system?
>

If you have a good tuner, you could probably get it to load anywhere using coax, but when dealing with high SWR on your feedline, the coax will have alot more loss than a balanced line such as ladder line, twinlead, etc. If you plan to use it for multiple band operation, balanced line is a much better option.

--
73,

Jonathan Helis, KB5IAV
Baton Rouge, Louisiana, USA

2774. Re: [SkyWires] Re: hello friends and hams--tuners nand ladder line

Yahoo group: SkyWires
Date: 2007-11-27 15:38:41 UTC
From: Steve Eisenberg
Topic: 2770 Message: 2774

Once I made my own ladder line by taping two lengths of wire approximately 2" apart with strips of duct tape every foot or so. I used a $80- MFJ tuner to tune up a ferret cage. There was no ferret in the cage at the time and I did make some contacts, although at 4w on 11m AM, so they were local.

Steve
WA1ZFY

Jonathan Helis KB5IAV <kb5iav@...> wrote: >
> 1. hello friends and hams
> Posted by: "satyan" gladsarul@... satyan_sarath
> Date: Mon Nov 26, 2007 1:09 am ((PST))
>
> i am satyan sarth - vu3mes from india. i plan to build a rectangular
> wire loop antenna with multi-band operation in mind.

Be a better pen pal. Text or chat with friends inside Yahoo! Mail. See how.

2775. hello friends and hams--tuners and ladder line

Yahoo group: SkyWires
Date: 2007-11-27 15:41:04 UTC
From: Lake Hodges Radio
Topic: 2770 Message: 2775

At 07:38 AM 11/27/2007, Steve Eisenberg wrote:
>Once I made my own ladder line by taping two lengths of wire
>approximately 2" apart with strips of duct tape every foot or so. I
>used a $80- MFJ tuner to tune up a ferret cage. There was no ferret
>in the cage at the time and I did make some contacts, although at 4w
>on 11m AM, so they were local. Steve WA1ZFY

Do you think the performance would have been any different if you
added a ferret to the cage?

2776. Re: [SkyWires] hello friends and hams--tuners and ladder line

Yahoo group: SkyWires
Date: 2007-11-27 22:08:42 UTC
From: Steve Eisenberg
Topic: 2770 Message: 2776

I believe the ferret would have distorted the directionality of the cage's radiation pattern. There is evidence that a trained animal could permit the operator to "rotate the beam" by directing the ferret to different parts of the cage.

This field of inquiry is in its infancy and if anyone is interested in researching it further I can sell them a ferret cage in mink condition.

73,

Steve
WA1ZFY

Lake Hodges Radio <lakehodgesradio@...> wrote: At 07:38 AM 11/27/2007, Steve Eisenberg wrote:
>Once I made my own ladder line by taping two lengths of wire
>approximately 2" apart with strips of duct tape every foot or so. I
>used a $80- MFJ tuner to tune up a ferret cage. There was no ferret
>in the cage at the time and I did make some contacts, although at 4w
>on 11m AM, so they were local. Steve WA1ZFY

Do you think the performance would have been any different if you
added a ferret to the cage?

Be a better sports nut! Let your teams follow you with Yahoo Mobile. Try it now.

2777. ladder line

Yahoo group: SkyWires
Date: 2007-11-27 23:52:07 UTC
From: cesar maligalig
Topic: 2777 Message: 2777

Satyan,

I have a full-wave delta loop (triangle) which is tuned on 7.045 - which is the calling frequency here in Philippines for amateurs. It is tied to three coconuts trees via pulleys so it is very easy to lower for maintenance if ever. I used it on 40 m and 15 m, no need to tune on 15m - because it is a perfect harmonic of 40m. I tuned the loop by cutting slowly until it was 1.2:1 on the swr meter. I use only the auto tuner on my ft920, with no problems.

The length of 1 side of my delta loop is 14.1 meters and I used an rg59 cable cut to 23 ft. as my transformer - to lower the antenna impedance to 50ohms which is what our modern radios now is set to. Then it is attached to rg8 cable which goes to my radio. I didn't use ladder line, because what we have here locally are not very good quality, they crack easily.

There are a lot of technical people here in this egroup that can explain to you the mathematics behind the length of my transformer (balun). That is my experience and I am very satisfied with my skywire. 73

KC - dw1nsm

----- Original Message ----
From: "SkyWires@yahoogroups.com" <SkyWires@yahoogroups.com>
To: SkyWires@yahoogroups.com
Sent: Tuesday, November 27, 2007 7:54:24 PM
Subject: [SkyWires] Digest Number 840

<!--

#ygrp-mlmsg {font-size:13px;font-family:arial, helvetica, clean, sans-serif;}
#ygrp-mlmsg table{font-size:inherit;font:100%;}
#ygrp-mlmsg select, input, textarea{font:99% arial, helvetica, clean, sans-serif;}
#ygrp-mlmsg pre, code{font:115% monospace;}
#ygrp-mlmsg * {line-height:1.22em;}
#ygrp-mlmsg a{color:#1e66ae;}
#ygrp-mlmsg{width:715px;}
#ygrp-mlmsg #ygrp-banner{
background-color:#295c7d;border:1px solid
#7d9ebd;padding:3px;margin-bottom:10px;text-align:center;}
#ygrp-mlmsg #ygrp-banner a{font-size:136%;font-weight:bold;color:#fff;}
#ygrp-mlmsg #ygrp-banner p{float:right;margin:.5em 0 0 0;font:italic 77%
Arial;color:#fff;}

#ygrp-msg{
width:532px;float:left;padding:0 20px 0 0;margin-bottom:10px;}
#ygrp-msg h1{
font-size:110%;font-weight:bold;padding:.3em 0;margin:0;display:inline;}

```
#ygrp-msg #ygrp-summary{padding-bottom:20px;}
#ygrp-msg #ygrp-summary dl{
padding-bottom:5px;font-family:Verdana;margin:5px 0;}
#ygrp-msg #ygrp-summary .ygrp-subj{
font-family:Georgia;text-decoration:none;font-size:120%;margin-right:4px;}
#ygrp-msg #ygrp-summary dt{
display:block;float:left;font-size:92%;}
#ygrp-msg #ygrp-summary dd{
margin-left:25px;font-size:77%;line-height:150%;}
#ygrp-msg .new{color:#ff8000;}
#ygrp-msg .action{
font-weight:bold;text-align:center;clear:both;padding:20px 0;border-bottom:4px solid
#eee;}
#ygrp-msg #ygrp-detail dl{
margin:0;border-top:4px solid #ccc;
border-bottom:double #666;}
#ygrp-msg #ygrp-detail dd{
margin-left:25px;border-bottom:double #666;}
#ygrp-msg #ygrp-detail dd, #ygrp-msg #ygrp-detail dt{
padding-top:20px;margin-top:0;}
#ygrp-msg #ygrp-detail dt{
display:block;float:left;font-size:92%;}
#ygrp-msg #ygrp-detail h2{
font-size:100%;font-family:Georgia;font-weight:bold;margin:0 0 5px 0;}
#ygrp-msg #ygrp-detail h2 a {
text-decoration:none;}
#ygrp-msg #ygrp-detail h3{
font:100% Arial;margin:0;}
#ygrp-msg #ygrp-detail h4{
font:77% verdana;margin:0 0 20px 0;}
#ygrp-msg #ygrp-detail .ygrp-content{
font-family:Georgia;font-size:100%;line-height:122%;}
#ygrp-msg #ygrp-detail .ygrp-dateline{
font-family:Arial;line-height:140%;padding:10px 0;margin-bottom:20px;}
#ygrp-msg #ygrp-detail .ygrp-dateline a{
padding-bottom:20px;}
.offset{float:right;font:77% verdana;padding-top:2em;}

#ygrp-sponsor #hd{
color:#999;font-size:77%;}
#ygrp-sponsor #ov{
padding:6px 13px;background-color:#e0ecee;margin-bottom:20px;}
#ygrp-sponsor #ov ul{
padding:0 0 0 8px;margin:0;}
#ygrp-sponsor #ov li{
list-style-type:square;padding:6px 0;font-size:77%;}
#ygrp-sponsor #ov li a{
text-decoration:none;font-size:130%;}
#ygrp-sponsor #nc {
background-color:#eee;margin-bottom:20px;padding:0 8px;}
```

```
#ygrp-sponsor .ad{
padding:8px 0;}
#ygrp-sponsor .ad #hd1{
font-family:Arial;font-weight:bold;color:#628c2a;font-size:100%;line-height:122%;}
#ygrp-sponsor .ad a{
text-decoration:none;}
#ygrp-sponsor .ad a:hover{
text-decoration:underline;}
#ygrp-sponsor .ad p{
margin:0;}
#ygrp-vital{
background-color:#e0ecee;margin-bottom:20px;padding:2px 0 8px 8px;}
#ygrp-vital #vithd{
font-size:77%;font-family:Verdana;font-weight:bold;color:#333;text-transform:uppercase;}
#ygrp-vital ul{
padding:0;margin:2px 0;}
#ygrp-vital ul li{
list-style-type:none;clear:both;border:1px solid #e0ecee;
}
#ygrp-vital ul li .ct{
font-weight:bold;color:#ff7900;float:right;width:2em;text-align:right;padding-right:.5em;}
#ygrp-vital ul li .cat{
font-weight:bold;}
#ygrp-vital a {
text-decoration:none;}

#ygrp-vital a:hover{
text-decoration:underline;}

#ygrp-mlmsg #post{
clear:both;background-color:#e7eff7;padding:10px;margin-top:10px;text-align:left;font-size
:100%;font-weight:bold;}
#ygrp-vitnav{
padding:10px 0;font-family:Verdana;font-size:77%;clear:both;}
#ygrp-vitnav a{padding:0 3px;}

#ygrp-grft{
font-family:Verdana;font-size:77%;padding:15px 0;}

#ygrp-ft{
border-top:1px solid #666;padding-top:10px;font-family:Verdana;font-size:77%;
}

#ygrp-msg .last, #ygrp-msg #ygrp-detail dd.last{border:0;}

#ygrp-msg #ygrp-detail dl.first{border-top:0;}
#ygrp-msg #ygrp-detail dl.last{border-bottom:0;}
.bld{font-weight:bold;}
-->

<!--
```

#ygrp-mkp{
border:1px solid #d8d8d8;font-family:Arial;margin:14px 0px;padding:0px 14px;}
#ygrp-mkp hr{
border:1px solid #d8d8d8;}
#ygrp-mkp #hd{
color:#628c2a;font-size:85%;font-weight:bold;line-height:122%;margin:10px 0px;}
#ygrp-mkp #ads{
margin-bottom:10px;}
#ygrp-mkp .ad{
padding:0 0;}
#ygrp-mkp .ad a{
color:#0000ff;text-decoration:none;}
-->

<!--

#ygrp-sponsor #ygrp-lc{
font-family:Arial;}
#ygrp-sponsor #ygrp-lc #hd{
margin:10px 0px;font-weight:bold;font-size:78%;line-height:122%;}
#ygrp-sponsor #ygrp-lc .ad{
margin-bottom:10px;padding:0 0;}
-->

SkyWire Loop Antennas

SkyWire Loop Antennas

Messages In This Digest (1
Message)

1a.

Re: hello friends and hams
From:
Steve Eisenberg

View All Topics | Create New Topic

Message

1a.

Re: hello friends and hams

Posted by: "Steve Eisenberg"
wa1zfy@...

wa1zfy

Mon Nov 26, 2007 10:36 pm (PST)

Hi, Satyan:

I am not as experienced as some, but everything I've

heard tells me that ladder line will let you

effectively tune an antenna for different bands with

the appropriate tuner.

73,

Steve

WA1ZFY

--- satyan <gladsarul@eth. net> wrote:

> i am satyan sarth - vu3mes from india. i plan to

> build a rectangular

> wire loop antenna with multi-band operation in mind.

> i will be using

> a 144feet insulated wire with 7.000khz as the lowest

> frequency

---------- --------- --------- --------- --------- --------- –

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2778. Re: [SkyWires] hello friends and hams

Yahoo group: SkyWires
Date: 2007-11-28 01:19:29 UTC
From: Jim Dunstan
Topic: 2770 Message: 2778

At 05:43 AM 11/26/2007 -0800, you wrote:

>Hi, Satyan:
>
>I am not as experienced as some, but everything I've
>heard tells me that ladder line will let you
>effectively tune an antenna for different bands with
>the appropriate tuner.
>
>73,
>
>Steve
>WA1ZFY

Hi Steve,

Yes, you are correct. When a dipole antenna is cut to a half wavelength at a particular frequency .... eg 80 mtrs ... it will represent a resistive impedance of approximately 75 ohms at that frequency. It will then be easily fed with a coax cable and represent a very good match to the cable and to the transceiver. However, if you wish to use the same antenna on other bands ... eg 40 - 10 mtrs ... then you will have to get rid of the coax feed line and substitute a low loss balanced feed line like 300 ohm tv twinlead or 450 ohm ladder line.

The reason is that the antenna will represent a variety of different impedances at the feed point and the coax feed line will represent too great a power loss. The parallel line can deal with high SWR with small power loss making a multi-band antenna possible. The actual impedance at the end of the feed line will depend on the impedance at the feed point (at the particular frequency) and the length of the feed line. Most antenna tuners have a limited range of impedances with which they can deal. So in the construction of the antenna/feed line ... one is often faced with choosing bands and feed line lengths. Adding or subtracting feed line will bring the antenna/feedline into the range of your tuner on the frequencies you are interested in. Nothing is perfect ... everything is a compromise.

Jim, VE3CI

2779. Re: [SkyWires] Re: hello friends and hams--tuners nand ladder line

Yahoo group: SkyWires
Date: 2007-11-28 01:25:40 UTC
From: Jim Dunstan
Topic: 2770 Message: 2779

At 07:38 AM 11/27/2007 -0800, you wrote:

>Once I made my own ladder line by taping two lengths of wire approximately
>2" apart with strips of duct tape every foot or so. I used a $80- MFJ
>tuner to tune up a ferret cage. There was no ferret in the cage at the
>time and I did make some contacts, although at 4w on 11m AM, so they were
>local.
>
>Steve
>WA1ZFY

Hi Steve,

Well making parallel open wire feed line with duct tape is certainly doing it the hard way hi hi ... But I have no doubt it would be very efficient. I must confess I have constructed my own feed line in the old days using pieces of plastic rod. Time consuming but works very well.

However, I have never used a ferret cage as an antenna or part of an antenna hi hi ... although I am fond of ferrets ... One of my dog's best friends is a ferret hi hi ..

Jim, VE3CI

2780. hello friends

Yahoo group: SkyWires
Date: 2007-11-28 09:05:41 UTC
From: satyan
Topic: 2780 Message: 2780

thanks for all the replies for my quiery on skywire antenna. i have indeed been helped by the replies and hopes to submit the results when i put up the antenna soon.

73s de vu3mes
satyan sarath
chennai / india

2781. RE: [SkyWires] hello friends and hams

Yahoo group: SkyWires
Date: 2007-11-28 09:33:37 UTC
From: satyan
Topic: 2770 Message: 2781

Hi callum - I did visit ur webpage also, very interesting stuff all around. I will be using a diamond bu-55 centre balun capable of 3-75mhz band coverage and 1.2kw output capacity. Cud u pls confirm if this balun will be suitable for my antenna. 73s satyan

-----Original Message-----
From: SkyWires@yahoogroups.com [mailto:SkyWires@yahoogroups.com] On Behalf Of Callum M0MCX
Sent: 27 November 2007 18:39
To: SkyWires@yahoogroups.com
Subject: RE: [SkyWires] hello friends and hams

Satyan

I have the same antenna. I use Low Loss coax to a 4:1 balun. I achieve good SWR (and radiation) on 40m and 20m. It *does* work also on 15m and 10m too but I rarely go there.

The 4:1 balun is more important for the 20m band because the impedance goes higher here, to about 250 ohms I seem to remember.

With your FT101 and without an ATU, you will get good results even at just 20 feet height - change the height and the impedance (and my properties discussed above) will change. What height did you think of installing this?

Callum McCormick
M0MCX
07976 631881
http://www.m0mcx. <http://www.m0mcx.co.uk/> co.uk/

_____
From: SkyWires@yahoogroup <mailto:SkyWires%40yahoogroups.com> s.com [mailto:SkyWires@yahoogroup <mailto:SkyWires%40yahoogroups.com> s.com] On Behalf Of satyan
Sent: 26 November 2007 09:09
To: SkyWires@yahoogroup <mailto:SkyWires%40yahoogroups.com> s.com
Subject: [SkyWires] hello friends and hams

i am satyan sarth - vu3mes from india. i plan to build a rectangular wire loop antenna with multi-band operation in mind. i will be using a 144feet insulated wire with 7.000khz as the lowest frequency for opeation. i have collected lot of details on wire loops from websites like L.B Cebiks and radioworks.com. some people say i must use ladder line type open wire feeder while other say i can use standard 50 or 75 ohm co-axial feeder. i will be using this antenna with a yaesu foxtango 101-e primarly, though i also have an icom ic-718. my

question is

1. can i use the standard 50/75 ohm co-axial feeder line along with a diamond bu-55 centre balun to feed this antanne system?

2. secondly will it be possible to use this antenna without an antenna tuner and only using the ft-101e's tuning and loading system for operating in 40/20/15 mtrs?

replies from the experienced friends in this forum will be highly appreciated.

73s de vu3mes
satyan sarath
india.

2782. RE: [SkyWires] hello friends and hams

Yahoo group: SkyWires
Date: 2007-11-28 18:28:38 UTC
From: Callum M0MCX
Topic: 2770 Message: 2782

Satyan,

The bu-55 looks like a 1:1 balun - and only 500 watts. You need to look at a 4:1 version and higher power.

But wait! Please build your antenna with the bu-55 first with low power and measure the SWR and impedance and see what will happen. Being higher off the ground may mean you have a lower impedance than mine.

OK?

Callum McCormick

M0MCX

07976 631881

http://www.m0mcx.co.uk/

_____

From: SkyWires@yahoogroups.com [mailto:SkyWires@yahoogroups.com] On Behalf Of satyan
Sent: 28 November 2007 09:34
To: SkyWires@yahoogroups.com
Subject: RE: [SkyWires] hello friends and hams

Hi callum - I did visit ur webpage also, very interesting stuff all around. I will be using a diamond bu-55 centre balun capable of 3-75mhz band coverage and 1.2kw output capacity. Cud u pls confirm if this balun will be suitable for my antenna. 73s satyan

-----Original Message-----
From: SkyWires@yahoogroups.com [mailto:SkyWires@yahoogroups.com] On Behalf Of Callum M0MCX
Sent: 27 November 2007 18:39
To: SkyWires@yahoogroups.com
Subject: RE: [SkyWires] hello friends and hams

Satyan

I have the same antenna. I use Low Loss coax to a 4:1 balun. I achieve good SWR (and radiation) on 40m and 20m. It *does* work also on 15m and 10m too but I rarely go there.

The 4:1 balun is more important for the 20m band because the impedance goes higher here, to about 250 ohms I seem to remember.

With your FT101 and without an ATU, you will get good results even at just 20 feet height - change the height and the impedance (and my properties discussed above) will change. What height did you think of installing this?

Callum McCormick
M0MCX
07976 631881
http://www.m0mcx. <http://www.m0mcx.co.uk/> co.uk/

_____
From: SkyWires@yahoogroup <mailto:SkyWires%40yahoogroups.com> s.com [mailto:SkyWires@yahoogroup <mailto:SkyWires%40yahoogroups.com> s.com] On Behalf
Of satyan
Sent: 26 November 2007 09:09
To: SkyWires@yahoogroup <mailto:SkyWires%40yahoogroups.com> s.com
Subject: [SkyWires] hello friends and hams

i am satyan sarth - vu3mes from india. i plan to build a rectangular wire loop antenna with multi-band operation in mind. i will be using a 144feet insulated wire with 7.000khz as the lowest frequency for opeation. i have collected lot of details on wire loops from websites like L.B Cebiks and radioworks.com. some people say i must use ladder line type open wire feeder while other say i can use standard 50 or 75 ohm co-axial feeder. i will be using this antenna with a yaesu foxtango 101-e primarly, though i also have an icom ic-718. my question is

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2. secondly will it be possible to use this antenna without an antenna tuner and only using the ft-101e's tuning and loading system for operating in 40/20/15 mtrs?

replies from the experienced friends in this forum will be highly appreciated.

73s de vu3mes
satyan sarath
india.

2783. 9RSN005 CANADA WEBPAGE

Yahoo group: SkyWires
Date: 2007-12-02 16:52:07 UTC
From: Mike Welsh
Topic: 2783 Message: 2783

GREETINGS FROM THE GREAT WHITE NORTH !!! THIS IS AN INVITATION TO MY WEBPAGE.LITEN TO SCANNER AND SW ONLINE ... EVEN A SWAP SHOP ... COME CHECK IT OUT ... 73' MIKE 9rsn005

http://www.freewebs.com/9rsn005/9rsn005homepage.htm

2786. Square or rectangular

Yahoo group: SkyWires
Date: 2007-12-22 10:29:43 UTC
From: dxnature
Topic: 2786 Message: 2786

Hi,

Yesterday I looked at the possibilty to mount a 80 meter loop. Since the size of my garden will allow me to go for a horizontal rectangular loop. Is it possible to go rectangular at 28 by 12 meters. I suspect a difference in radiation angle against a square version, but could there be other anomalities to expect?

I will feed the loop with a 450 Ohm ladder and a SG-239 antenna coupler as is do right now with my 40 meter horizontal delta loop. As I cruze daily over the tropical BC bands I hopefully get a better result with the 80 meter loop in play and can use it on the ham bands as well.

All comments are more than welcome.

73's and seasonal greetings,

Ron Liekens
ON3RON - DXA64

2787. Re: Square or rectangular

Yahoo group: SkyWires
Date: 2007-12-22 11:35:44 UTC
From: Murray Lycan
Topic: 2786 Message: 2787

Ron,

You left out key pieces of information: how high will the loop be;
where on the loop will you connect the ladder line; on which bands
will you transmit using the loop?

The books say that as the antenna gets rectangular rather than square,
the loop will take on characteristics of a folded dipole rather than a
loop antenna.

Murray
7J1AQH

--- In SkyWires@yahoogroups.com, "dxnature" <on3ron@...> wrote:
>
> Hi,
>
> Yesterday I looked at the possibilty to mount a 80 meter loop. Since
> the size of my garden will allow me to go for a horizontal rectangular
> loop. Is it possible to go rectangular at 28 by 12 meters. I suspect a
> difference in radiation angle against a square version, but could
> there be other anomalities to expect?
>
> I will feed the loop with a 450 Ohm ladder and a SG-239 antenna
> coupler as is do right now with my 40 meter horizontal delta loop. As
> I cruze daily over the tropical BC bands I hopefully get a better
> result with the 80 meter loop in play and can use it on the ham bands
> as well.
>
> All comments are more than welcome.
>
> 73's and seasonal greetings,
>
> Ron Liekens
> ON3RON - DXA64
>

2788. wire antenna specs for....

Yahoo group: SkyWires
Date: 2007-12-23 02:08:49 UTC
From: Ask me?
Topic: 2788 Message: 2788

26.305-27.905
thanks and happy holidays email me info please
worknnda518@yahoo.com

2789. Re: [SkyWires] wire antenna specs for....

Yahoo group: SkyWires
Date: 2007-12-23 03:51:22 UTC
From: Facility 406 DM09
Topic: 2788 Message: 2789

"26.305-27.905"

What country?

Kurt

2790. Re: [SkyWires] Re: Square or rectangular

Yahoo group: SkyWires
Date: 2007-12-23 21:11:25 UTC
From: Bill Graham
Topic: 2786 Message: 2790

Ron,

You'll get the greatest overall performance from a loop antenna by enclosing the greatest amount of area possible (given a constant antenna height). The winning shape would be the circle, but that is almost impossible to implement (requiring an infinite number of supports). The key word here is 'overall'.

Regarding square vs. rectangle, for a given diameter, the square will provide the greatest enclosed area. The more a rectangle deviates from a perfect square, the less area is enclosed.

The shape of the horizontal pattern will also be affected (sq vs rectangle), but this could be beneficial for a given deployment, depending on what pattern you're looking for.

Anyway, just my 2 cents.

'73
Bill
AG4SI

Murray Lycan wrote:
>
> Ron,
>
> You left out key pieces of information: how high will the loop be;
> where on the loop will you connect the ladder line; on which bands
> will you transmit using the loop?
>
> The books say that as the antenna gets rectangular rather than square,
> the loop will take on characteristics of a folded dipole rather than a
> loop antenna.
>
> Murray
> 7J1AQH
>
> --- In SkyWires@yahoogroup s.com <mailto:SkyWires%40yahoogroups.com>,
> "dxnature" <on3ron@...> wrote:
> >
> > Hi,
> >
> > Yesterday I looked at the possibilty to mount a 80 meter loop. Since
> > the size of my garden will allow me to go for a horizontal rectangular
> > loop. Is it possible to go rectangular at 28 by 12 meters. I suspect a
> > difference in radiation angle against a square version, but could

> > there be other anomalities to expect?
> >
> > I will feed the loop with a 450 Ohm ladder and a SG-239 antenna
> > coupler as is do right now with my 40 meter horizontal delta loop. As
> > I cruze daily over the tropical BC bands I hopefully get a better
> > result with the 80 meter loop in play and can use it on the ham bands
> > as well.
> >
> > All comments are more than welcome.
> >
> > 73's and seasonal greetings,
> >
> > Ron Liekens
> > ON3RON - DXA64
> >
>
>

--

Bill Graham

Principal Software Engineer
Assurance Technology Corp
Florida Operation
Suite 300 / 3rd Floor
315 Brevard Avenue
Cocoa, FL 32922

Voice ... : 321.639.1699 (x501)
Fax .....: 321.639.7427

2791. RE: [SkyWires] Re: Square or rectangular

Yahoo group: SkyWires
Date: 2007-12-23 22:31:46 UTC
From: Christopher Zeman
Topic: 2786 Message: 2791

My loop is a triangle, and varies in height (~27 to ~31 feet). I was going to go with a rectangle, but I wasn't able to get a support rope where I needed it. I have Andrews LDF4-50A (1/4" hardline) running from my shack to the attic where I have a 4:1 balun feeding ~37 feet of 450 window line that leaves the attic through the roof and straight up to the feedpoint. Perhaps the hardline is overkill, but it was free and I had it sitting here.

I've only used it for PSK31 so far, and not very much yet. The reports I have gotten, though, have been great! :) The best part is I don't interfere with ANYTHING in my home, and the neighbors who CAN see the window line haven't said a word. Then again, I've only operated on a casual basis (not very much).

The point is that the loop is a great idea, and you should put up what you can. I think you'll be pleasantly surprised by the results.

Good luck!

Chris

N9XCR

7J1AQH

--- In SkyWires@yahoogroup s.com <mailto:SkyWires%40yahoogroups.com> , "dxnature" <mailto:on3ron@...> <on3ron@...> wrote:
>
> Hi,
>
> Yesterday I looked at the possibilty to mount a 80 meter loop. Since
> the size of my garden will allow me to go for a horizontal rectangular
> loop. Is it possible to go rectangular at 28 by 12 meters. I suspect a
> difference in radiation angle against a square version, but could
> there be other anomalities to expect?
>
> I will feed the loop with a 450 Ohm ladder and a SG-239 antenna
> coupler as is do right now with my 40 meter horizontal delta loop. As
> I cruze daily over the tropical BC bands I hopefully get a better
> result with the 80 meter loop in play and can use it on the ham bands
> as well.
>
> All comments are more than welcome.
>
> 73's and seasonal greetings,
>
> Ron Liekens
> ON3RON - DXA64

>

--

Bill Graham

Principal Software Engineer
Assurance Technology Corp
Florida Operation
Suite 300 / 3rd Floor
315 Brevard Avenue
Cocoa, FL 32922

Voice . : 321.639.1699 (x501)
Fax ...: 321.639.7427

2792. Re: Square or rectangular

Yahoo group: SkyWires
Date: 2007-12-24 00:29:20 UTC
From: Murray Lycan
Topic: 2786 Message: 2792

I also have a triangular (delta) full-size 80m loop fed with ladder line. It is between 80 and 90 feet high.

I chose triangular because only three skyhooks are needed and also because modeling indicates the triangle shape produces a more desirable pattern on ALL bands from 80m to 10m. The antenna loads well on all bands and works as a DX antenna in most directions. Highly recommended if installed HIGH. Low height also works, but high is best.

Murray
VE7HA

--- In SkyWires@yahoogroups.com, "Christopher Zeman" <chris@...> wrote:
>
> My loop is a triangle, and varies in height (~27 to ~31 feet). I was going
> to go with a rectangle, but I wasn't able to get a support rope where I
> needed it. I have Andrews LDF4-50A (1/4" hardline) running from my shack to
> the attic where I have a 4:1 balun feeding ~37 feet of 450 window line that
> leaves the attic through the roof and straight up to the feedpoint. Perhaps
> the hardline is overkill, but it was free and I had it sitting here.
>
>
>
> I've only used it for PSK31 so far, and not very much yet. The reports I
> have gotten, though, have been great! :) The best part is I don't interfere
> with ANYTHING in my home, and the neighbors who CAN see the window line
> haven't said a word. Then again, I've only operated on a casual basis (not
> very much).
>
>
>
> The point is that the loop is a great idea, and you should put up what you
> can. I think you'll be pleasantly surprised by the results.
>
>
>
> Good luck!
>
> Chris

>
> N9XCR

2793. RE: [SkyWires] Re: Square or rectangular

Yahoo group: SkyWires
Date: 2007-12-24 01:41:22 UTC
From: Christopher Zeman
Topic: 2786 Message: 2793

Height is definitely key. I'm still determined to get my loop up higher. I'm currently using one oak tree, another tree (I don't know what kind) and the TV antenna mast on my roof. My fourth support would have been another tree, but I may still be able to use it. I have to be cautious how I go about getting my supports up into the trees. There are power lines running along my back and side property lines. The oak tree is at the corner near one pole; the other tree is about 35' south of it along the power lines as well. I could definitely get the supports up higher, but I have to be a little creative and careful. The oak tree is at least 75 - 100 feet tall. My support is around 30 feet up the tree. The other tree is probably at least 30 feet tall, though my support is not quite that high. My antenna is at its lower point in this tree. I'd like to move the support from my roof to the tree I wasn't able to use. That tree is at least 40 or 50 feet tall.

I waited until my neighbors were on vacation to install the antenna. :) Actually, I realized they were on vacation and realized it was the perfect time to do it. We also had company that day so I had to try and balance both. I have time to plan on how to get higher. I'm hoping to find a way to, perhaps, squeeze and 80 meter loop on my property. :)

Chris

Christopher Zeman, N9XCR
http://n9xcr.com

Going to college? Have a loved one who is going to college?

Be sure you're aware of the corruption behind student lending

before it's too late!!!

http://salliemaebeef.com

From: SkyWires@yahoogroups.com [mailto:SkyWires@yahoogroups.com] On Behalf Of Murray Lycan
Sent: Sunday, December 23, 2007 6:29 PM
To: SkyWires@yahoogroups.com
Subject: [SkyWires] Re: Square or rectangular

I also have a triangular (delta) full-size 80m loop fed with ladder line. It is between 80 and 90 feet high.

I chose triangular because only three skyhooks are needed and also because modeling indicates the triangle shape produces a more desirable pattern on ALL bands from 80m to 10m. The antenna loads well on all bands and works as a DX antenna in most directions. Highly recommended if installed HIGH. Low height also works, but high is best.

Murray
VE7HA

--- In SkyWires@yahoogroups.com <mailto:SkyWires%40yahoogroups.com> ,
"Christopher Zeman" <chris@...> wrote:
>
> My loop is a triangle, and varies in height (~27 to ~31 feet). I was
going
> to go with a rectangle, but I wasn't able to get a support rope where I
> needed it. I have Andrews LDF4-50A (1/4" hardline) running from my
shack to
> the attic where I have a 4:1 balun feeding ~37 feet of 450 window
line that
> leaves the attic through the roof and straight up to the feedpoint.
Perhaps
> the hardline is overkill, but it was free and I had it sitting here.
>
>
>
> I've only used it for PSK31 so far, and not very much yet. The reports I
> have gotten, though, have been great! :) The best part is I don't
interfere
> with ANYTHING in my home, and the neighbors who CAN see the window line
> haven't said a word. Then again, I've only operated on a casual
basis (not
> very much).
>
>
>
> The point is that the loop is a great idea, and you should put up
what you
> can. I think you'll be pleasantly surprised by the results.
>
>
>
> Good luck!
>
> Chris
>
> N9XCR

2794. Re: [SkyWires] Re: Square or rectangular

Yahoo group: SkyWires
Date: 2007-12-24 15:25:53 UTC
From: deritchie@earthlink.net
Topic: 2786 Message: 2794

Has anyone ever tried an hexagonal loop hung within a triangle (i.e. Using 3 supports, and with every other side of the hexagon running along a nonconductive support that supports two adjacent corners of the hexagon?)
73, Dave N4DJS
Sent via BlackBerry from T-Mobile

2795. Re: Square or rectangular

Yahoo group: SkyWires
Date: 2007-12-25 05:49:58 UTC
From: Murray Lycan
Topic: 2786 Message: 2795

Dave,

I suspect this idea is overly complicating the situation. I doubt it would radiate/ receive any better than a conventional square or possibly even a triangle. Put your effort into getting whatever shape you use higher to lower the radiation angle.

Murray
7J1AQH

--- In SkyWires@yahoogroups.com, deritchie@... wrote:
>
> Has anyone ever tried an hexagonal loop hung within a triangle (i.e. Using 3 supports, and with every other side of the hexagon running along a nonconductive support that supports two adjacent corners of the hexagon?)
> 73, Dave N4DJS
> Sent via BlackBerry from T-Mobile

2796. Re: [SkyWires] Re: Square or rectangular

Yahoo group: SkyWires
Date: 2007-12-25 21:11:25 UTC
From: Dr.Ace Ratliff
Topic: 2786 Message: 2796

Any shape loop will work - octagon, pentagon, etc. The larger the area or aperture inside the loop the better, A circle has the largest area but is impractical. A circle has 1dbd gain over a square. Most people use a square but if you only have 3 supports you can shape it like a triangle. Triangle loops are called Delta loops. A square loop has 1dbd gain over an equal lateral triangle loop. If you use a triangle shape try to make each leg an equal length as this gives the largest inside aperture or area.

If you are a DXer put the loop as high as possible. If you are a local rag chewer like me put the loop any convenient height.
73 and Merry Christmas to all.
Ace - WH2T

----- Original Message -----
From: Murray Lycan
To: SkyWires@yahoogroups.com
Sent: Tuesday, December 25, 2007 12:49 AM
Subject: [SkyWires] Re: Square or rectangular

Dave,

I suspect this idea is overly complicating the situation. I doubt it would radiate/ receive any better than a conventional square or possibly even a triangle. Put your effort into getting whatever shape you use higher to lower the radiation angle.

Murray
7J1AQH

--- In SkyWires@yahoogroups.com, deritchie@... wrote:
>
> Has anyone ever tried an hexagonal loop hung within a triangle (i.e. Using 3 supports, and with every other side of the hexagon running along a nonconductive support that supports two adjacent corners of the hexagon?)
> 73, Dave N4DJS
> Sent via BlackBerry from T-Mobile

2797. Re: Square or rectangular

Yahoo group: SkyWires
Date: 2007-12-25 23:11:10 UTC
From: dxnature
Topic: 2786 Message: 2797

Thanks for all the comments guys. I will give it a try and see what happens. After all I do not have much choice seen the size of my garden.

Seasonal greetings,
Ron
ON3RON

--- In SkyWires@yahoogroups.com, "dxnature" <on3ron@...> wrote:
>
> Hi,
>
> Yesterday I looked at the possibilty to mount a 80 meter loop. Since
> the size of my garden will allow me to go for a horizontal rectangular
> loop. Is it possible to go rectangular at 28 by 12 meters. I suspect a
> difference in radiation angle against a square version, but could
> there be other anomalities to expect?
>
> I will feed the loop with a 450 Ohm ladder and a SG-239 antenna
> coupler as is do right now with my 40 meter horizontal delta loop. As
> I cruze daily over the tropical BC bands I hopefully get a better
> result with the 80 meter loop in play and can use it on the ham bands
> as well.
>
> All comments are more than welcome.
>
> 73's and seasonal greetings,
>
> Ron Liekens
> ON3RON - DXA64
>

2798. Sky Wire is up FINALLY!!!!!!

Yahoo group: SkyWires
Date: 2007-12-26 12:45:13 UTC
From: Steve Holman
Topic: 2798 Message: 2798

Well Guys I finally got by loop up in the back patch. It is a 160m full wave loop at approximately 28 to 30 ft. I have it supported on 5 PVC Conduits telescoped to give me the 28Ft. the PVC is on Steel T-post driven in at about 10 degrees from vertical leaning away from the center of the loop. I threaded the ant. wire through the insulators and pulled it taught with a pully and halyard system on the 6th pole which is a drill Stem pipe with a 10ft. PVC above the steel. got it up in late Oct. and have made a few contacts It is quieter than the Dipole I had up previously. With the holidays I have a new Microphone for my IC 718 so I should be up and making contacts full time soon.

Steve
N%WDD

2799. Re: Square or rectangular

Yahoo group: SkyWires
Date: 2007-12-27 00:03:14 UTC
From: Paul@N4LCD.com
Topic: 2786 Message: 2799

>Posted by: "Dr.Ace Ratliff"
>
>Any shape loop will work - octagon, pentagon, etc. The larger the
>area or aperture inside the loop the better, A circle has the
>largest area but is impractical. A circle has 1dbd gain over a
>square. Most people use a square but if you only have 3 supports you
>can shape it like a triangle. Triangle loops are called Delta loops.
>A square loop has 1dbd gain over an equal lateral triangle loop. If
>you use a triangle shape try to make each leg an equal length as
>this gives the largest inside aperture or area.
>
>If you are a DXer put the loop as high as possible. If you are a
>local rag chewer like me put the loop any convenient height.
>73 and Merry Christmas to all.
>Ace - WH2T

Ace,

What are your thoughts on a full wave length 80 meter (287 feet
circumference) vertical triangle with a flat on top, with an SGC-230
at the feed point which would be at the point on the bottom of the triangle?

73,

Paul

2800. Re: Sky Wire is up FINALLY!!!!!!

Yahoo group: SkyWires
Date: 2007-12-27 00:40:29 UTC
From: Robert Tadlock
Topic: 2798 Message: 2800

Did you have to back-guy it at the top of every pole to keep it from leaning in ? Also what size of wire did you use ? Curious because of the weight , sounds like you have the makings of a gangbuster all band antenna .

Bob WD6GLA

2801. Re: Square or rectangular

Yahoo group: SkyWires
Date: 2007-12-27 01:09:26 UTC
From: Murray Lycan
Topic: 2786 Message: 2801

I used this antenna this year with exception of apex up and no SGC-230. Ladder line to apex for feed. My comment is: the higher you raise the lowest point (approaching horizontal instead of vertical loop), the happier you will be if your purpose is distant communication. Taking the low side of the triangle from 10 feet high to 80 feet high opened the world. I suspect even taking the low point up to 30 or 40 feet would help a lot.

Murray
7J1AQH
VE7HA

--- In SkyWires@yahoogroups.com, Paul@... wrote:

> What are your thoughts on a full wave length 80 meter (287 feet
> circumference) vertical triangle with a flat on top, with an SGC-230
> at the feed point which would be at the point on the bottom of the triangle?
>
> 73,
>
> Paul

2802. RE: [SkyWires] Sky Wire is up FINALLY!!!!!!

Yahoo group: SkyWires
Date: 2007-12-27 04:29:17 UTC
From: satyan
Topic: 2798 Message: 2802

Hello Steve - good morning merry Xmas and happy New Year from India, this is vu3mes, satyan. Can u mail me a rough drawing of ur sky wire to satyansarath@....

Ur help will be deeply appreciated, coz I am also planning to put up a sky wire as soon as the winter goes down.

73s and namasthe from India. Satyan

-----Original Message-----
From: SkyWires@yahoogroups.com [mailto:SkyWires@yahoogroups.com] On Behalf Of Steve Holman
Sent: 26 December 2007 18:15
To: SkyWires@yahoogroups.com
Subject: [SkyWires] Sky Wire is up FINALLY!!!!!!

Well Guys I finally got by loop up in the back patch. It is a 160m full wave loop at approximately 28 to 30 ft. I have it supported on 5 PVC Conduits telescoped to give me the 28Ft. the PVC is on Steel T-post driven in at about 10 degrees from vertical leaning away from the center of the loop. I threaded the ant. wire through the insulators and pulled it taught with a pully and halyard system on the 6th pole which is a drill Stem pipe with a 10ft. PVC above the steel. got it up in late Oct. and have made a few contacts It is quieter than the Dipole I had up previously. With the holidays I have a new Microphone for my IC 718 so I should be up and making contacts full time soon.

Steve
N%WDD

2803. Re: [SkyWires] Re: Square or rectangular

Yahoo group: SkyWires
Date: 2007-12-27 04:45:18 UTC
From: Dr.Ace Ratliff
Topic: 2786 Message: 2803

Paul,
No doubt it will work to some degree; but I doubt if you can get the bottom feed point high enough to make it really shine. It is well worth trying if you don't have enough room or supports for a horizontally oriented loop antenna.
The larger the area or aperture inside the loop the better.
If you use a triangle shape try to make each leg an equal length as this gives the largest inside aperture or area.
73, Ace - WH2T

----- Original Message -----
From: Paul@...
To: SkyWires@yahoogroups.com
Sent: Wednesday, December 26, 2007 7:03 PM
Subject: [SkyWires] Re: Square or rectangular

>Posted by: "Dr.Ace Ratliff"
>
>Any shape loop will work - octagon, pentagon, etc. The larger the
>area or aperture inside the loop the better, A circle has the
>largest area but is impractical. A circle has 1dbd gain over a
>square. Most people use a square but if you only have 3 supports you
>can shape it like a triangle. Triangle loops are called Delta loops.
>A square loop has 1dbd gain over an equal lateral triangle loop. If
>you use a triangle shape try to make each leg an equal length as
>this gives the largest inside aperture or area.
>
>If you are a DXer put the loop as high as possible. If you are a
>local rag chewer like me put the loop any convenient height.
>73 and Merry Christmas to all.
>Ace - WH2T

Ace,

What are your thoughts on a full wave length 80 meter (287 feet
circumference) vertical triangle with a flat on top, with an SGC-230
at the feed point which would be at the point on the bottom of the triangle?

73,

Paul

2804. Re: Sky Wire is up FINALLY!!!!!!

Yahoo group: SkyWires
Date: 2007-12-27 13:33:40 UTC
From: Steve Holman
Topic: 2798 Message: 2804

No I did not back guy it, I drove the steel T-Post in the ground at about an 80 degree angle away from the center of the antenna. then I lifted the PVC up and slid it down over the T-Post and the limber PVC would lean away from the center. Before I lifted the PVC up I strung baling twine through the insulators so I could pull the ant. wire through them. The wire is enamel coated about 14ga solid used in winding transformers and I was able to get a stub end of a roll from the plant owner, It stretches some but not bad.

I counted on the flexibility of the PVC to bend and when the wire is pulled taught the PVC bends inside like a bow and puts tension on the wire keeping it tight. as of now we have had no ice but I would expect that Icing conditions would pull the wire and the PVC down a lot. fortunately icing is rare here and what we do have is not long or bad in most years.

PVC does get brittle with cold weather so I will consider this first antenna to be a prototype and I will see how the PVC poles survive the winter. I have about $20 in each PVC pole except the feed point pole. that pole is Drill Stem and PVC, this cost me about $50 so I really don't want to put more of them if I don't have to. I can already see that if it survives the winter I will be fine tuning some of the post locations as the T-Post could have been placed further from the center to provide more tension and support to the wire.

If any one is interested I can attempt to take some photos and post them to the photos section.

--- In SkyWires@yahoogroups.com, "Robert Tadlock" <btadlock@...> wrote:
>
>
> Did you have to back-guy it at the top of every pole to keep it from
> leaning in ? Also what size of wire did you use ? Curious because of
> the weight , sounds like you have the makings of a gangbuster all band
> antenna .
>
> Bob WD6GLA
>

2805. Re: Sky Wire is up FINALLY!!!!!!

Yahoo group: SkyWires
Date: 2007-12-27 13:35:54 UTC
From: Steve Holman
Topic: 2798 Message: 2805

Satyan, I dont have the ability to post drawings and I cant draw anyway. I can attempt to post some photos of what I did so you can see how it worked

Steve
--- In SkyWires@yahoogroups.com, satyan <gladsarul@...> wrote:
>
> Hello Steve - good morning merry Xmas and happy New Year from India, this is
> vu3mes, satyan. Can u mail me a rough drawing of ur sky wire to
> satyansarath@...
>
>
>
> Ur help will be deeply appreciated, coz I am also planning to put up a sky
> wire as soon as the winter goes down.
>
>
>
> 73s and namasthe from India. Satyan
>
>
>
> -----Original Message-----
> From: SkyWires@yahoogroups.com [mailto:SkyWires@yahoogroups.com] On Behalf
> Of Steve Holman
> Sent: 26 December 2007 18:15
> To: SkyWires@yahoogroups.com
> Subject: [SkyWires] Sky Wire is up FINALLY!!!!!!
>
>
>
> Well Guys I finally got by loop up in the back patch. It is a 160m
> full wave loop at approximately 28 to 30 ft. I have it supported on 5
> PVC Conduits telescoped to give me the 28Ft. the PVC is on Steel
> T-post driven in at about 10 degrees from vertical leaning away from
> the center of the loop. I threaded the ant. wire through the
> insulators and pulled it taught with a pully and halyard system on the
> 6th pole which is a drill Stem pipe with a 10ft. PVC above the steel.
> got it up in late Oct. and have made a few contacts It is quieter than
> the Dipole I had up previously. With the holidays I have a new
> Microphone for my IC 718 so I should be up and making contacts full
> time soon.

>
> Steve
> N%WDD
>

2807. Re: Sky Wire is up FINALLY!!!!!!

Yahoo group: SkyWires
Date: 2007-12-27 16:14:42 UTC
From: Don Keith
Topic: 2798 Message: 2807

Satyan:

Happy New Year! It may not be exactly what you are looking for, but
I have a drawing of my skywire loop installation at my web site:
www.n4kc.com. Look for the link about halfway down the page.

73,

Don N4KC

--- In SkyWires@yahoogroups.com, satyan <gladsarul@...> wrote:
>
> Hello Steve - good morning merry Xmas and happy New Year from
India, this is
> vu3mes, satyan. Can u mail me a rough drawing of ur sky wire to
> satyansarath@...
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>
>
> Ur help will be deeply appreciated, coz I am also planning to put
up a sky
> wire as soon as the winter goes down.
>
>
>
> 73s and namasthe from India. Satyan
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>
>
> -----Original Message-----
> From: SkyWires@yahoogroups.com [mailto:SkyWires@yahoogroups.com] On
Behalf
> Of Steve Holman
> Sent: 26 December 2007 18:15
> To: SkyWires@yahoogroups.com
> Subject: [SkyWires] Sky Wire is up FINALLY!!!!!!
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>
>
> Well Guys I finally got by loop up in the back patch. It is a 160m
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the
> 6th pole which is a drill Stem pipe with a 10ft. PVC above the
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> the Dipole I had up previously. With the holidays I have a new
> Microphone for my IC 718 so I should be up and making contacts full
> time soon.
>
> Steve
> N%WDD
>

2808. RE: [SkyWires] Re: Sky Wire is up FINALLY!!!!!!

Yahoo group: SkyWires
Date: 2007-12-27 20:56:06 UTC
From: Callum M0MCX
Topic: 2798 Message: 2808

>>>I can attempt to post some photos

Steve,

Love a copy of a photo, particularly of one of the mast section thingy's!

Callum McCormick

M0MCX

07976 631881

http://www.m0mcx.co.uk/

_____

From: SkyWires@yahoogroups.com [mailto:SkyWires@yahoogroups.com] On Behalf Of Steve Holman
Sent: 27 December 2007 13:36
To: SkyWires@yahoogroups.com
Subject: [SkyWires] Re: Sky Wire is up FINALLY!!!!!!

Satyan, I dont have the ability to post drawings and I cant draw anyway. I can attempt to post some photos of what I did so you can see how it worked

Steve
--- In SkyWires@yahoogroup <mailto:SkyWires%40yahoogroups.com> s.com, satyan <gladsarul@...> wrote:
>
> Hello Steve - good morning merry Xmas and happy New Year from India, this is
> vu3mes, satyan. Can u mail me a rough drawing of ur sky wire to
> satyansarath@...
>
>
>
> Ur help will be deeply appreciated, coz I am also planning to put up a sky
> wire as soon as the winter goes down.
>
>
>
> 73s and namasthe from India. Satyan
>
>
>

> -----Original Message-----
> From: SkyWires@yahoogroup <mailto:SkyWires%40yahoogroups.com> s.com
[mailto:SkyWires@yahoogroup <mailto:SkyWires%40yahoogroups.com> s.com] On
Behalf
> Of Steve Holman
> Sent: 26 December 2007 18:15
> To: SkyWires@yahoogroup <mailto:SkyWires%40yahoogroups.com> s.com
> Subject: [SkyWires] Sky Wire is up FINALLY!!!!!!
>
>
>
> Well Guys I finally got by loop up in the back patch. It is a 160m
> full wave loop at approximately 28 to 30 ft. I have it supported on 5
> PVC Conduits telescoped to give me the 28Ft. the PVC is on Steel
> T-post driven in at about 10 degrees from vertical leaning away from
> the center of the loop. I threaded the ant. wire through the
> insulators and pulled it taught with a pully and halyard system on the
> 6th pole which is a drill Stem pipe with a 10ft. PVC above the steel.
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> the Dipole I had up previously. With the holidays I have a new
> Microphone for my IC 718 so I should be up and making contacts full
> time soon.
>
> Steve
> N%WDD
>

2809. Re: Sky Wire is up FINALLY!!!!!!

Yahoo group: SkyWires
Date: 2007-12-27 22:37:39 UTC
From: Steve Holman
Topic: 2798 Message: 2809

--- In SkyWires@yahoogroups.com, "Callum M0MCX" <callum@...> wrote:
>
> >>>I can attempt to post some photos
Ok give me a few days and I will have some photos

Steve
>
>
> Steve,
>
>
>
> Love a copy of a photo, particularly of one of the mast section
thingy's!
>
>
>
> Callum McCormick
>
> M0MCX
>
> 07976 631881
>
> http://www.m0mcx.co.uk/
>
>
>
> _____
>
> From: SkyWires@yahoogroups.com [mailto:SkyWires@yahoogroups.com] On
Behalf
> Of Steve Holman
> Sent: 27 December 2007 13:36
> To: SkyWires@yahoogroups.com
> Subject: [SkyWires] Re: Sky Wire is up FINALLY!!!!!!
>
>
>
> Satyan, I dont have the ability to post drawings and I cant draw
> anyway. I can attempt to post some photos of what I did so you can see
> how it worked
>
> Steve
> --- In SkyWires@yahoogroup <mailto:SkyWires%40yahoogroups.com>
s.com, satyan

> <gladsarul@> wrote:
> >
> > Hello Steve - good morning merry Xmas and happy New Year from India,
> this is
> > vu3mes, satyan. Can u mail me a rough drawing of ur sky wire to
> > satyansarath@
> >
> >
> >
> > Ur help will be deeply appreciated, coz I am also planning to put up
> a sky
> > wire as soon as the winter goes down.
> >
> >
> >
> > 73s and namasthe from India. Satyan
> >
> >
> >
> > -----Original Message-----
> > From: SkyWires@yahoogroup <mailto:SkyWires%40yahoogroups.com> s.com
> [mailto:SkyWires@yahoogroup <mailto:SkyWires%40yahoogroups.com>
s.com] On
> Behalf
> > Of Steve Holman
> > Sent: 26 December 2007 18:15
> > To: SkyWires@yahoogroup <mailto:SkyWires%40yahoogroups.com> s.com
> > Subject: [SkyWires] Sky Wire is up FINALLY!!!!!!
> >
> >
> >
> > Well Guys I finally got by loop up in the back patch. It is a 160m
> > full wave loop at approximately 28 to 30 ft. I have it supported on 5
> > PVC Conduits telescoped to give me the 28Ft. the PVC is on Steel
> > T-post driven in at about 10 degrees from vertical leaning away from
> > the center of the loop. I threaded the ant. wire through the
> > insulators and pulled it taught with a pully and halyard system on the
> > 6th pole which is a drill Stem pipe with a 10ft. PVC above the steel.
> > got it up in late Oct. and have made a few contacts It is quieter than
> > the Dipole I had up previously. With the holidays I have a new
> > Microphone for my IC 718 so I should be up and making contacts full
> > time soon.
> >
> > Steve
> > N%WDD
> >
>

2810. RE: [SkyWires] Re: Sky Wire is up FINALLY!!!!!!

Yahoo group: SkyWires
Date: 2007-12-28 03:59:00 UTC
From: satyan
Topic: 2798 Message: 2810

Thank you very much , I will try tht and let u know - 73s de vu3mes

-----Original Message-----
From: SkyWires@yahoogroups.com [mailto:SkyWires@yahoogroups.com] On Behalf
Of Don Keith
Sent: 27 December 2007 21:45
To: SkyWires@yahoogroups.com
Subject: [SkyWires] Re: Sky Wire is up FINALLY!!!!!!

Satyan:

Happy New Year! It may not be exactly what you are looking for, but
I have a drawing of my skywire loop installation at my web site:
www.n4kc.com. Look for the link about halfway down the page.

73,

Don N4KC

--- In SkyWires@yahoogroup <mailto:SkyWires%40yahoogroups.com> s.com, satyan
<gladsarul@...> wrote:
>
> Hello Steve - good morning merry Xmas and happy New Year from
India, this is
> vu3mes, satyan. Can u mail me a rough drawing of ur sky wire to
> satyansarath@...
>
>
>
> Ur help will be deeply appreciated, coz I am also planning to put
up a sky
> wire as soon as the winter goes down.
>
>
>
> 73s and namasthe from India. Satyan
>
>
>
> -----Original Message-----
> From: SkyWires@yahoogroup <mailto:SkyWires%40yahoogroups.com> s.com
[mailto:SkyWires@yahoogroup <mailto:SkyWires%40yahoogroups.com> s.com] On
Behalf
> Of Steve Holman
> Sent: 26 December 2007 18:15
> To: SkyWires@yahoogroup <mailto:SkyWires%40yahoogroups.com> s.com

> Subject: [SkyWires] Sky Wire is up FINALLY!!!!!!
>
>
>
> Well Guys I finally got by loop up in the back patch. It is a 160m
> full wave loop at approximately 28 to 30 ft. I have it supported on
5
> PVC Conduits telescoped to give me the 28Ft. the PVC is on Steel
> T-post driven in at about 10 degrees from vertical leaning away from
> the center of the loop. I threaded the ant. wire through the
> insulators and pulled it taught with a pully and halyard system on
the
> 6th pole which is a drill Stem pipe with a 10ft. PVC above the
steel.
> got it up in late Oct. and have made a few contacts It is quieter
than
> the Dipole I had up previously. With the holidays I have a new
> Microphone for my IC 718 so I should be up and making contacts full
> time soon.
>
> Steve
> N%WDD
>

2811. RE: [SkyWires] Re: Sky Wire is up FINALLY!!!!!!

Yahoo group: SkyWires
Date: 2007-12-28 03:57:47 UTC
From: satyan
Topic: 2798 Message: 2811

Thank u steve - take ur own time 73s vu3mes

-----Original Message-----
From: SkyWires@yahoogroups.com [mailto:SkyWires@yahoogroups.com] On Behalf
Of Steve Holman
Sent: 28 December 2007 04:08
To: SkyWires@yahoogroups.com
Subject: [SkyWires] Re: Sky Wire is up FINALLY!!!!!!

--- In SkyWires@yahoogroup <mailto:SkyWires%40yahoogroups.com> s.com,
"Callum M0MCX" <callum@...> wrote:
>
> >>>I can attempt to post some photos
Ok give me a few days and I will have some photos

Steve
>
>
> Steve,
>
>
>
> Love a copy of a photo, particularly of one of the mast section
thingy's!
>
>
>
> Callum McCormick
>
> M0MCX
>
> 07976 631881
>
> http://www.m0mcx. <http://www.m0mcx.co.uk/> co.uk/
>
>
>
> _____
>
> From: SkyWires@yahoogroup <mailto:SkyWires%40yahoogroups.com> s.com
[mailto:SkyWires@yahoogroup <mailto:SkyWires%40yahoogroups.com> s.com] On
Behalf
> Of Steve Holman
> Sent: 27 December 2007 13:36
> To: SkyWires@yahoogroup <mailto:SkyWires%40yahoogroups.com> s.com
> Subject: [SkyWires] Re: Sky Wire is up FINALLY!!!!!!

>
>
>
> Satyan, I dont have the ability to post drawings and I cant draw
> anyway. I can attempt to post some photos of what I did so you can see
> how it worked
>
> Steve
> --- In SkyWires@yahoogroup <mailto:SkyWires%40yahoogroups.com>
s.com, satyan
> <gladsarul@> wrote:
> >
> > Hello Steve - good morning merry Xmas and happy New Year from India,
> this is
> > vu3mes, satyan. Can u mail me a rough drawing of ur sky wire to
> > satyansarath@
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> >
> >
> > Ur help will be deeply appreciated, coz I am also planning to put up
> a sky
> > wire as soon as the winter goes down.
> >
> >
> >
> > 73s and namasthe from India. Satyan
> >
> >
> >
> > -----Original Message-----
> > From: SkyWires@yahoogroup <mailto:SkyWires%40yahoogroups.com> s.com
> [mailto:SkyWires@yahoogroup <mailto:SkyWires%40yahoogroups.com>
s.com] On
> Behalf
> > Of Steve Holman
> > Sent: 26 December 2007 18:15
> > To: SkyWires@yahoogroup <mailto:SkyWires%40yahoogroups.com> s.com
> > Subject: [SkyWires] Sky Wire is up FINALLY!!!!!!
> >
> >
> >
> > Well Guys I finally got by loop up in the back patch. It is a 160m
> > full wave loop at approximately 28 to 30 ft. I have it supported on 5
> > PVC Conduits telescoped to give me the 28Ft. the PVC is on Steel
> > T-post driven in at about 10 degrees from vertical leaning away from
> > the center of the loop. I threaded the ant. wire through the
> > insulators and pulled it taught with a pully and halyard system on the
> > 6th pole which is a drill Stem pipe with a 10ft. PVC above the steel.
> > got it up in late Oct. and have made a few contacts It is quieter than
> > the Dipole I had up previously. With the holidays I have a new

> > Microphone for my IC 718 so I should be up and making contacts full
> > time soon.
> >
> > Steve
> > N%WDD
> >
>

2812. "Huff Duff" antenna

Yahoo group: SkyWires
Date: 2007-12-29 20:10:18 UTC
From: knyuen88
Topic: 2812 Message: 2812

What is the ww2 shipboard HFDF antenna("Huff Duff"). The picture
shown it is composed of implicated triangles mounted on top of the
ship's mast rather than a typical DF loop. Their physical sizes are
definately much shorter than the designated reception HF wavelengths.
How it works?
Thanks in advance.

2813. Hi_Fi receiver antenna impedance.

Yahoo group: SkyWires
Date: 2008-01-03 21:40:57 UTC
From: knyuen88
Topic: 2813 Message: 2813

What is the impedance of a Hi Fi receiver AM external antenna input?
Am thinking to connect an longwire outdoor antenna for MW broadcasting
DX.

Noted the set came with a loop antenna to be connected to the ext. AM
Ant. terminals. --- to make it more precise --- a 6 inches dia. coil
with 12 turns of hookup wires.
Thanks in advance.

2814. Loop Photos are Up!!

Yahoo group: SkyWires
Date: 2008-01-04 13:30:06 UTC
From: Steve Holman
Topic: 2814 Message: 2814

Well I was finally able to get time to take photos and post them to the board. I have 5 photos posted that show my version of a Sky Wire Loop.

It is difficult to see the wire in the photos but you should be able to see the supports and how they are used. I already have plans to move some of the supports out from the center as there is slack in the wire in spots of the loop. But that will happen with warmer weather. The wire is free floating in all of the insulators except for the feed point. I can take photos of them and the feed point if anyone wants to see them.

Over Time I am planning to circle the complete back patch with a loop supported by poles like the Feed Point Support. This loop would be close to 1800ft long and would have 5 supports and I would be able to pull more tension on the wire.

Steve
N5WDD

2815. Half Wave Open Loop in Attic question

Yahoo group: SkyWires
Date: 2008-01-05 02:55:21 UTC
From: Jonathan Helis KB5IAV
Topic: 2815 Message: 2815

I'm in an area where outdoor antennas wouldn't be easy to put up so for now, I'm working with a half wave open loop antenna in my attic. It's basically a 60 foot long dipole bent into a 25x5 rectangle. Not the best setup I know, but for now I'll have to do.

I have it fed with 300ohm indoor/outdoor foam filled TV twinlead from Radio Shack. I had a big roll of it lying around and decided to use it since I will run this antenna on multiple bands.

I'm loading it up using a LDG Z11 Pro autotuner. I tried a tuner from MFJ, but the inductor fried the first week I had it so I sent it back. The balun I'm using is MFJ 911H, which can be switched between being a 1:1 and a 4:1 balun. I run it at 4:1 and it can load on every band 40-10 meters, and I was able to get it to load on a 60 meter channel.

When operating 20 meter phone, my rig cuts out even though I have a flat SWR. The rig just seems to shut down and not be able to transmit, almost as if the SWR is too high. Sometimes lowering the power helps. What could be causing this problem? Should my twinlead be a different length or should I use the balun as a 1:1? It's nice to be able to get on the air again, but this problem makes working 20 very difficult.

Any help is appreciated.

Thank you.

--
73,

Jonathan Helis, KB5IAV
Baton Rouge, Louisiana, USA

2816. Re: [SkyWires] Half Wave Open Loop in Attic question

Yahoo group: SkyWires
Date: 2008-01-05 03:14:20 UTC
From: David Shrum
Topic: 2815 Message: 2816

Jonathan,
My first thought was the power supply might be going south on you, my logic is, as you say the SWR if flat so you radio can transmit at full power, IF your power supply is starting to go on you, or your connections are getting loose, you might not be able to get all of the power your radio needs. But it is just a guess. I hope you find the problem.
Dave N8PU

Jonathan Helis KB5IAV wrote:
> I'm in an area where outdoor antennas wouldn't be easy to put up so for
> now, I'm working with a half wave open loop antenna in my attic. It's
> basically a 60 foot long dipole bent into a 25x5 rectangle. Not the
> best setup I know, but for now I'll have to do.
>
> I have it fed with 300ohm indoor/outdoor foam filled TV twinlead from
> Radio Shack. I had a big roll of it lying around and decided to use it
> since I will run this antenna on multiple bands.
>
> I'm loading it up using a LDG Z11 Pro autotuner. I tried a tuner from
> MFJ, but the inductor fried the first week I had it so I sent it back.
> The balun I'm using is MFJ 911H, which can be switched between being a
> 1:1 and a 4:1 balun. I run it at 4:1 and it can load on every band
> 40-10 meters, and I was able to get it to load on a 60 meter channel.
>
> When operating 20 meter phone, my rig cuts out even though I have a flat
> SWR. The rig just seems to shut down and not be able to transmit,
> almost as if the SWR is too high. Sometimes lowering the power helps.
> What could be causing this problem? Should my twinlead be a different
> length or should I use the balun as a 1:1? It's nice to be able to get
> on the air again, but this problem makes working 20 very difficult.
>
> Any help is appreciated.
>
> Thank you.
>
>

2817. RE: [SkyWires] Loop Photos are Up!!

Yahoo group: SkyWires
Date: 2008-01-05 03:52:56 UTC
From: satyan
Topic: 2814 Message: 2817

Hi Steve - thanks for the pics, I hve got a good idea on how the set up is done. 73s de vu3mes

-----Original Message-----
From: SkyWires@yahoogroups.com [mailto:SkyWires@yahoogroups.com] On Behalf Of Steve Holman
Sent: 04 January 2008 19:00
To: SkyWires@yahoogroups.com
Subject: [SkyWires] Loop Photos are Up!!

Well I was finally able to get time to take photos and post them to the board. I have 5 photos posted that show my version of a Sky Wire Loop.

It is difficult to see the wire in the photos but you should be able to see the supports and how they are used. I already have plans to move some of the supports out from the center as there is slack in the wire in spots of the loop. But that will happen with warmer weather. The wire is free floating in all of the insulators except for the feed point. I can take photos of them and the feed point if anyone wants to see them.

Over Time I am planning to circle the complete back patch with a loop supported by poles like the Feed Point Support. This loop would be close to 1800ft long and would have 5 supports and I would be able to pull more tension on the wire.

Steve
N5WDD

2818. RE: [SkyWires] Half Wave Open Loop in Attic question

Yahoo group: SkyWires
Date: 2008-01-05 15:28:51 UTC
From: Paul T
Topic: 2815 Message: 2818
Attachments: 2 described; binary payloads are missing from this source WARC

Hi Jonathan.

RF getting back into the radio?

Prove by turning down the RF output power.

If turning down the power helps, connect a half wave (about 17 feet on 20m) of insulated wire to the ground terminal of the ATU.

The wire can be laid on the floor under carpet or whatever.

Don’t forget to insulate the end of the wire, high voltages can appear on it.

Some radios are much more immune to RF in the shack than others.

Cheers!

Paul.

HYPERLINK "http://homepage.ntlworld.com/paultom/"MW0CDO Radio Pages

From: SkyWires@yahoogroups.com [mailto:SkyWires@yahoogroups.com] On Behalf Of Jonathan Helis KB5IAV
Sent: 05 January 2008 02:55
To: SkyWires List
Subject: [SkyWires] Half Wave Open Loop in Attic question

I'm in an area where outdoor antennas wouldn't be easy to put up so for now, I'm working with a half wave open loop antenna in my attic. It's basically a 60 foot long dipole bent into a 25x5 rectangle. Not the best setup I know, but for now I'll have to do.

I have it fed with 300ohm indoor/outdoor foam filled TV twinlead from Radio Shack. I had a big roll of it lying around and decided to use it since I will run this antenna on multiple bands.

I'm loading it up using a LDG Z11 Pro autotuner. I tried a tuner from MFJ, but the inductor fried the first week I had it so I sent it back. The balun I'm using is MFJ 911H, which can be switched between being a 1:1 and a 4:1 balun. I run it at 4:1 and it can load on every band 40-10 meters, and I was able to get it to load on a 60 meter channel.

When operating 20 meter phone, my rig cuts out even though I have a flat SWR. The rig just seems to shut down and not be able to transmit, almost as if the SWR is too high. Sometimes lowering the power helps. What could be causing this problem? Should my twinlead be a different

length or should I use the balun as a 1:1? It's nice to be able to get on the air again, but this problem makes working 20 very difficult.

Any help is appreciated.

Thank you.

--
73,

Jonathan Helis, KB5IAV
Baton Rouge, Louisiana, USA

No virus found in this incoming message.
Checked by AVG Free Edition.
Version: 7.5.516 / Virus Database: 269.17.13/1209 - Release Date: 04/01/2008 12:05

No virus found in this outgoing message.
Checked by AVG Free Edition.
Version: 7.5.516 / Virus Database: 269.17.13/1209 - Release Date: 04/01/2008 12:05

2819. Re: [SkyWires] Half Wave Open Loop in Attic question

Yahoo group: SkyWires
Date: 2008-01-05 20:41:37 UTC
From: Jim Dunstan
Topic: 2815 Message: 2819

At 08:55 PM 1/4/2008 -0600, you wrote:

>I'm in an area where outdoor antennas wouldn't be easy to put up so for
>now, I'm working with a half wave open loop antenna in my attic. It's
>basically a 60 foot long dipole bent into a 25x5 rectangle. Not the
>best setup I know, but for now I'll have to do.
>
>I have it fed with 300ohm indoor/outdoor foam filled TV twinlead from
>Radio Shack. I had a big roll of it lying around and decided to use it
>since I will run this antenna on multiple bands.
>
>I'm loading it up using a LDG Z11 Pro autotuner. I tried a tuner from
>MFJ, but the inductor fried the first week I had it so I sent it back.
>The balun I'm using is MFJ 911H, which can be switched between being a
>1:1 and a 4:1 balun. I run it at 4:1 and it can load on every band
>40-10 meters, and I was able to get it to load on a 60 meter channel.
>
>When operating 20 meter phone, my rig cuts out even though I have a flat
>SWR. The rig just seems to shut down and not be able to transmit,
>almost as if the SWR is too high. Sometimes lowering the power helps.
>What could be causing this problem? Should my twinlead be a different
>length or should I use the balun as a 1:1? It's nice to be able to get
>on the air again, but this problem makes working 20 very difficult.
>
>Any help is appreciated.
>
>Thank you.
>
>--
>73,
>
>Jonathan Helis, KB5IAV
>Baton Rouge, Louisiana, USA

Hi Jonathon,

It seems you have the antenna/feed system pretty much under control... I wouldn't worry about the TV twinlead ... I have used it many times with power up to 300 watts. My only suggestion is to try the antenna as a full loop ... e.g. 60' loop. It should be easy to try it ... just connect the ends together. You can easily undo it if it is less effective ... I have used smaller loops like that and found them decent antennas.

As far as the rig cutting out I don't think it is the fault of the antenna ... if your SWR is low the problem is something else. I recall when using my Kenwood TS-50 with an under rated power supply it would cut out on high

power (the TS-50 has 3 levels high at 100w, medium at 50w, and low at 10w). However it worked quite well on medium and low. When I connected it to a robust power supply e.g. the MFJ -1035, rated at 35amps, the rig operated flawlessly.

Jim, VE3CI

2820. K9QLL Loop SWR Scans

Yahoo group: SkyWires
Date: 2008-01-05 21:00:16 UTC
From: wv6bwf
Topic: 2820 Message: 2820

I couldn't find real world SWR scans on the net so had to DIY.
Thanks to WB9ROC and the AIM 4170 analyzer.
The scans are for 50 Ohms through the Balun and 450 Ohms direct to
Ladderline. Dotted blue line on graph is 1 to 1 SWR.
I hope this may be of some help to others.
My loop is, I believe, a "typical" 160 meter horizontal loop.
73
Bob
K9QLL

2821. RE: [SkyWires] Half Wave Open Loop in Attic question

Yahoo group: SkyWires
Date: 2008-01-05 21:53:32 UTC
From: Paul T
Topic: 2815 Message: 2821

Sorry Jonathan, I got the math wrong.

You need a quarter wave length of wire, not half wave.

17 feet is in the ballpark.

Cheers!

Paul.

HYPERLINK "http://homepage.ntlworld.com/paultom/"MW0CDO Radio Pages

From: SkyWires@yahoogroups.com [mailto:SkyWires@yahoogroups.com] On Behalf Of Paul T
Sent: 05 January 2008 15:29
To: SkyWires@yahoogroups.com
Subject: RE: [SkyWires] Half Wave Open Loop in Attic question

Hi Jonathan.

RF getting back into the radio?

Prove by turning down the RF output power.

If turning down the power helps, connect a half wave (about 17 feet on 20m) of insulated wire to the ground terminal of the ATU.

The wire can be laid on the floor under carpet or whatever.

Don’t forget to insulate the end of the wire, high voltages can appear on it.

Some radios are much more immune to RF in the shack than others.

Cheers!

Paul.

HYPERLINK "http://homepage.ntlworld.com/paultom/"MW0CDO Radio Pages

From: SkyWires@yahoogroups.com [mailto:SkyWires@yahoogroups.com] On Behalf Of Jonathan Helis KB5IAV
Sent: 05 January 2008 02:55
To: SkyWires List
Subject: [SkyWires] Half Wave Open Loop in Attic question

I'm in an area where outdoor antennas wouldn't be easy to put up so for now, I'm working with a half wave open loop antenna in my attic. It's basically a 60 foot long dipole bent into a 25x5 rectangle. Not the

best setup I know, but for now I'll have to do.

I have it fed with 300ohm indoor/outdoor foam filled TV twinlead from Radio Shack. I had a big roll of it lying around and decided to use it since I will run this antenna on multiple bands.

I'm loading it up using a LDG Z11 Pro autotuner. I tried a tuner from MFJ, but the inductor fried the first week I had it so I sent it back. The balun I'm using is MFJ 911H, which can be switched between being a 1:1 and a 4:1 balun. I run it at 4:1 and it can load on every band 40-10 meters, and I was able to get it to load on a 60 meter channel.

When operating 20 meter phone, my rig cuts out even though I have a flat SWR. The rig just seems to shut down and not be able to transmit, almost as if the SWR is too high. Sometimes lowering the power helps. What could be causing this problem? Should my twinlead be a different length or should I use the balun as a 1:1? It's nice to be able to get on the air again, but this problem makes working 20 very difficult.

Any help is appreciated.

Thank you.

--
73,

Jonathan Helis, KB5IAV
Baton Rouge, Louisiana, USA

No virus found in this incoming message.
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Version: 7.5.516 / Virus Database: 269.17.13/1209 - Release Date: 04/01/2008 12:05

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Checked by AVG Free Edition.
Version: 7.5.516 / Virus Database: 269.17.13/1209 - Release Date: 04/01/2008 12:05

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Checked by AVG Free Edition.
Version: 7.5.516 / Virus Database: 269.17.13/1209 - Release Date: 04/01/2008 12:05

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Checked by AVG Free Edition.
Version: 7.5.516 / Virus Database: 269.17.13/1209 - Release Date: 04/01/2008 12:05

2825. Re: [SkyWires] Re: Stealth Wire loop

Yahoo group: SkyWires
Date: 2008-01-07 17:21:56 UTC
From: Dean L.
Topic: 2822 Message: 2825

Have you thought of placing a 2 to 3 ft. standoff
horizontal in the middle of your pole on the back side.
Then run a cable with a turn buckle from top to bottom.
This will give you a back guy with little space taken up.
Place a little force on the guy with the turn buckle and
it will hold a lot of antenna weight.

73 Dean W5GXL

Disclaimer: Any errors in spelling, or fact are
transmission errors.

On Jan 7, 2008, at 10:49 AM, martin_ehrenfried wrote:

>
> Do you know the weight of the wire per 100' (or similar) ?
>
> My support at one corner has to be a 40' self supporting pole, but
> because it's at the corner of the lot, I can't guy it at the opposite
> side to take up some of the lateral force. So the weight of wire is
> an important consideration for me.
>
> Regards,
>
> Martin - G8JNJ
>

2827. Re: [SkyWires] Re: Stealth Wire loop

Yahoo group: SkyWires
Date: 2008-01-08 03:02:12 UTC
From: Dr.Ace Ratliff
Topic: 2822 Message: 2827

Martin ,
Can you place a rigid diagonal support (from ground to as high as possible) inside the corner 40' self supporting pole ?
73, Ace - WH2T

----- Original Message -----
From: martin_ehrenfried
To: SkyWires@yahoogroups.com
Sent: Monday, January 07, 2008 11:49 AM
Subject: [SkyWires] Re: Stealth Wire loop

Hi,

This is the same material I used, but in thicker gauge.

Unfortunately actual specifications seem to be difficult to obtain.

What is the DC resistance of your loop ?

Do you know the weight of the wire per 100' (or similar) ?

My support at one corner has to be a 40' self supporting pole, but
because it's at the corner of the lot, I can't guy it at the opposite
side to take up some of the lateral force. So the weight of wire is
an important consideration for me.

Regards,

Martin - G8JNJ
.

2831. Re: Stealth Wire loop

Yahoo group: SkyWires
Date: 2008-01-09 07:59:35 UTC
From: KI4BUN / AAV4TP
Topic: 2822 Message: 2831

I had an 80 meter loop up which worked just fine and it was 18 gauge copper stranded 'chandelier wire'. I picked up a 500' roll at Home Depot for about $30.00. I'm sure it's gone up with the insane metals prices these days, but it held up for over 2 years.

My mast poles were each set up just like flagpoles with a pulley, lanyard system, and lanyard cleats. I just clipped the insulators to the lanyards and hoisted the corners of the loop. Worked pretty slick and one could adjust the height of each corner individually to experiment with radiation patterns.

I was running an old Kenwood TS830s and a cheap MFJ tuner and the loop was fed with coax. At the feed-point, I used a 4" x 6" piece of PVC pipe would with 8 turns of coax for a balun/choke. Worked great.

Now I have purchased a house in Ft Worth TX and am anxious to put up another loop down here! I'm really tired of only being able to work mobile. The 18 gauge chandelier wire is what I'll be using for the new antenna.

73

Chris KI4BUN/AAV6TP

2832. Re: Stealth Wire loop

Yahoo group: SkyWires
Date: 2008-01-09 20:31:47 UTC
From: Jim Stafford W4QO
Topic: 2822 Message: 2832

I've been using 16 gauge stranded PVC covered wire for about 15 years on my loop. It has never broken and in last 3.5 years I have 137 countries worked QRP. It is very light weight and the resistance is maybe 3 ohms. It is also very stealthy. I used the GREEN colored PVC. It has never broken although the 1/8" dacron and nylon has broken a couple times. Simple to shoot it back up and pull over the trees. I feed it with 300 Open Wire feeder (about 50') and then go to Coax (25') to come into the house. I have tried it with and without a 1:1 balun - no difference. Takes a tuner of course. Mine is an 80M loop about 70' on a side (280 feet total). It is very hot on 20M.

70 Meters of 26 gauge wire should have 9 ohms. Not sure why your loop has such high resistance IF it is copper plated clad steel.
-

Jim/W4QO

2833. 160m 1/2 wave Dipole help Needed

Yahoo group: SkyWires
Date: 2008-01-09 23:30:54 UTC
From: k5hsv
Topic: 2833 Message: 2833

According to my antenna analizer on 1.900MHz my SWR is 3.4:1 but origionally it was pretty flat 1:1 before a coax re-routing.

I've re-routed my coax underground from a tower I added a few months back. I'm sending every thing back into the shack by a DX-Engineering CC8 coax box / switch. Now that I've added about 150' of BuryFlex from the shack to the tower and switch box, my home made 160meter dipole, which was cut and tuned to be flat 1:1 SWR on 1.900MHZ, NOW has a 3.4 SWR at the same frequency.

Today I lowered the apex and took a look at the center connection and everything was Ok at that junction. I even tried raising the legs of the dipole and rerouting so as the wires don't touch tree limbs (only a couple at least and the wire is insulated, solid copper #12). It is fed by one solid piece of BuryFlex coax up to the tower switch and the same coax from the switch box into the tower. My TH-11 beam functions perfect so I know it's not the switch box.

My question: Is this dipole too short now for 160 meter? Should I just cut it down to a 80 meter wire? Any constructive advice will be appreciated.

73s,
Paul - K5HSV

2834. Re: 160m 1/2 wave Dipole help Needed

Yahoo group: SkyWires
Date: 2008-01-10 17:39:51 UTC
From: wv6bwf
Topic: 2833 Message: 2834

--- In SkyWires@yahoogroups.com, "k5hsv" <k5hsv@...> wrote:
>
> According to my antenna analizer on 1.900MHz my SWR is 3.4:1 but
> origionally it was pretty flat 1:1 before a coax re-routing.
>
> I've re-routed my coax underground from a tower I added a few months
> back. I'm sending every thing back into the shack by a DX-Engineering
> CC8 coax box / switch. Now that I've added about 150' of BuryFlex from
> the shack to the tower and switch box, my home made 160meter dipole,
> which was cut and tuned to be flat 1:1 SWR on 1.900MHZ, NOW has a 3.4
> SWR at the same frequency.
>
> Today I lowered the apex and took a look at the center connection and
> everything was Ok at that junction. I even tried raising the legs of
> the dipole and rerouting so as the wires don't touch tree limbs (only a
> couple at least and the wire is insulated, solid copper #12). It is fed
> by one solid piece of BuryFlex coax up to the tower switch and the same
> coax from the switch box into the tower. My TH-11 beam functions
> perfect so I know it's not the switch box.
>
> My question: Is this dipole too short now for 160 meter? Should I just
> cut it down to a 80 meter wire? Any constructive advice will be
> appreciated.
>
>
> 73s,
> Paul - K5HSV
>
Hi Paul,
If you have made no changes in the antenna, it will continue to work
just fine on 160. The indicated SWR "in the shack" has changed
because of the change in co-ax length, the actual SWR at the antenna
is the same since you have made no changes. Measure the SWR at the
switch and since the feed line length will be different so will the
indicated SWR. You can also patch in a length of co-ax in the shack
and see a change. Take a look at http://w2du.com/Chapter01.pdf for the
reasons for what you are seeing.
If you radio doesn't like the SWR use your tuner...the stations at
the other end will never know the difference.
73
Bob

2835. Re: 160m 1/2 wave Dipole help Needed

Yahoo group: SkyWires
Date: 2008-01-10 20:20:12 UTC
From: k5hsv
Topic: 2833 Message: 2835

--- In SkyWires@yahoogroups.com, "wv6bwf" <wv6bwf@...> wrote:
>
> --- In SkyWires@yahoogroups.com, "k5hsv" <k5hsv@> wrote:
> >
> > According to my antenna analizer on 1.900MHz my SWR is 3.4:1 but
> > origionally it was pretty flat 1:1 before a coax re-routing.
> >
> > I've re-routed my coax underground from a tower I added a few
months
> > back. I'm sending every thing back into the shack by a DX-
Engineering
> > CC8 coax box / switch. Now that I've added about 150' of BuryFlex
from
> > the shack to the tower and switch box, my home made 160meter
dipole,
> > which was cut and tuned to be flat 1:1 SWR on 1.900MHZ, NOW has a
3.4
> > SWR at the same frequency.
> >
> > Today I lowered the apex and took a look at the center connection
and
> > everything was Ok at that junction. I even tried raising the legs
of
> > the dipole and rerouting so as the wires don't touch tree limbs
(only a
> > couple at least and the wire is insulated, solid copper #12). It
is fed
> > by one solid piece of BuryFlex coax up to the tower switch and
the same
> > coax from the switch box into the tower. My TH-11 beam functions
> > perfect so I know it's not the switch box.
> >
> > My question: Is this dipole too short now for 160 meter? Should I
just
> > cut it down to a 80 meter wire? Any constructive advice will be
> > appreciated.
> >
> >
> > 73s,
> > Paul - K5HSV
> >
> Hi Paul,
> If you have made no changes in the antenna, it will continue to
work
> just fine on 160. The indicated SWR "in the shack" has changed

> because of the change in co-ax length, the actual SWR at the antenna
> is the same since you have made no changes. Measure the SWR at the
> switch and since the feed line length will be different so will the
> indicated SWR. You can also patch in a length of co-ax in the shack
> and see a change. Take a look at http://w2du.com/Chapter01.pdf for
the
> reasons for what you are seeing.
> If you radio doesn't like the SWR use your tuner...the stations at
> the other end will never know the difference.
> 73
> Bob
>

Thanks Bob,
I was wondring about installing a DXEngineering DXE-BAL050-H10-AT to
the dipole. I have read some great stats on that balun, which is
specifically made for wire antennas, used for multiband operation.
from what I've read on eHam.net it works very well.

Opinion on this idea? I do have a tuner in the shack that works
well. Thanks for you information and the link which I found very
helpful as well.

73s,
Paul - K5HSV

2836. Re: 160m 1/2 wave Dipole help Needed

Yahoo group: SkyWires
Date: 2008-01-10 22:46:13 UTC
From: wv6bwf
Topic: 2833 Message: 2836

--- In SkyWires@yahoogroups.com, "k5hsv" <k5hsv@...> wrote:
>
> --- In SkyWires@yahoogroups.com, "wv6bwf" <wv6bwf@> wrote:
> >
> > --- In SkyWires@yahoogroups.com, "k5hsv" <k5hsv@> wrote:
> > >
> > > According to my antenna analizer on 1.900MHz my SWR is 3.4:1 but
> > > origionally it was pretty flat 1:1 before a coax re-routing.
> > >
> > > I've re-routed my coax underground from a tower I added a few
> months
> > > back. I'm sending every thing back into the shack by a DX-
> Engineering
> > > CC8 coax box / switch. Now that I've added about 150' of BuryFlex
> from
> > > the shack to the tower and switch box, my home made 160meter
> dipole,
> > > which was cut and tuned to be flat 1:1 SWR on 1.900MHZ, NOW has a
> 3.4
> > > SWR at the same frequency.
> > >
> > > Today I lowered the apex and took a look at the center connection
> and
> > > everything was Ok at that junction. I even tried raising the legs
> of
> > > the dipole and rerouting so as the wires don't touch tree limbs
> (only a
> > > couple at least and the wire is insulated, solid copper #12). It
> is fed
> > > by one solid piece of BuryFlex coax up to the tower switch and
> the same
> > > coax from the switch box into the tower. My TH-11 beam functions
> > > perfect so I know it's not the switch box.
> > >
> > > My question: Is this dipole too short now for 160 meter? Should I
> just
> > > cut it down to a 80 meter wire? Any constructive advice will be
> > > appreciated.
> > >
> > >
> > > 73s,
> > > Paul - K5HSV
> > >
> > Hi Paul,
> > If you have made no changes in the antenna, it will continue to

> work
> > just fine on 160. The indicated SWR "in the shack" has changed
> > because of the change in co-ax length, the actual SWR at the antenna
> > is the same since you have made no changes. Measure the SWR at the
> > switch and since the feed line length will be different so will the
> > indicated SWR. You can also patch in a length of co-ax in the shack
> > and see a change. Take a look at http://w2du.com/Chapter01.pdf for
> the
> > reasons for what you are seeing.
> > If you radio doesn't like the SWR use your tuner...the stations at
> > the other end will never know the difference.
> > 73
> > Bob
> >
>
> Thanks Bob,
> I was wondring about installing a DXEngineering DXE-BAL050-H10-AT to
> the dipole. I have read some great stats on that balun, which is
> specifically made for wire antennas, used for multiband operation.
> from what I've read on eHam.net it works very well.
>
> Opinion on this idea? I do have a tuner in the shack that works
> well. Thanks for you information and the link which I found very
> helpful as well.
>
> 73s,
> Paul - K5HSV
>
Hi Paul,
Glad to help.
I wouldn't bother with a balun at all for a low single band dipole.
The DXE-BAL050-H10-AT is a nice well built balun . My own preference
is for a choke balun of the type made by slipping ferrite cores over a
length of co-ax for use with a dipole.
Perhaps we will run across one another on top band.
73
Bob
K9QLL

2837. Re: 160m 1/2 wave Dipole help Needed

Yahoo group: SkyWires
Date: 2008-01-11 07:32:29 UTC
From: David
Topic: 2833 Message: 2837

Can you get a lower swr on a frequency within the 160 meter band?
You may just want to lengthen or shorten the ends to get a decent swr
on the frequency you want to operate on.
Dave

> > > > According to my antenna analizer on 1.900MHz my SWR is 3.4:1 but
> > > > origionally it was pretty flat 1:1 before a coax re-routing.
> > > >
> > > > I've re-routed my coax underground from a tower I added a few
> > months
> > > > back. I'm sending every thing back into the shack by a DX-
> > Engineering
> > > > CC8 coax box / switch. Now that I've added about 150' of BuryFlex
> > from
> > > > the shack to the tower and switch box, my home made 160meter
> > dipole,
> > > > which was cut and tuned to be flat 1:1 SWR on 1.900MHZ, NOW has a
> > 3.4
> > > > SWR at the same frequency.
> > > >
> > > > Today I lowered the apex and took a look at the center connection
> > and
> > > > everything was Ok at that junction. I even tried raising the legs
> > of
> > > > the dipole and rerouting so as the wires don't touch tree limbs
> > (only a
> > > > couple at least and the wire is insulated, solid copper #12). It
> > is fed
> > > > by one solid piece of BuryFlex coax up to the tower switch and
> > the same
> > > > coax from the switch box into the tower. My TH-11 beam functions
> > > > perfect so I know it's not the switch box.
> > > >
> > > > My question: Is this dipole too short now for 160 meter? Should I
> > just
> > > > cut it down to a 80 meter wire? Any constructive advice will be
> > > > appreciated.
> > > >
> > > >
> > > > 73s,
> > > > Paul - K5HSV

2839. Slightly OT: terrible experience with Dennis Gazak, eBay seller who specializes in ham radio equipment

Yahoo group: SkyWires
Date: 2008-01-13 15:44:24 UTC
From: Steve Eisenberg
Topic: 2839 Message: 2839

Hi, All:

This guy sells under "pennradio" and possibly a few other names, and one might want be extremely careful before choosing to deal with him. I won't bore the group with the sordid details, but Gazak, who spells his name "Gazek" for eBay purposes, should be avoided at all costs, in my opinion. Details upon request, and/or you can Google him.

Steve
WA1ZFY

Be a better friend, newshound, and know-it-all with Yahoo! Mobile. Try it now.

2840. Is Dean Your Friend? Please Respond!!

Yahoo group: SkyWires
Date: 2008-01-18 04:18:13 UTC
From: Dean Terrell
Topic: 2840 Message: 2840

Friendship Request Dean has added you as a friend Is Dean your friend?
Please respond or Dean will think you said no :(Click Here to block all emails from
myYearbook, 280 Union Square Dr., New Hope, PA 18938

Be a better friend, newshound, and know-it-all with Yahoo! Mobile. Try it now.

2841. Re: Is Dean Your Friend? Please Respond!!

Yahoo group: SkyWires
Date: 2008-01-18 04:29:20 UTC
From: Richard Zolla
Topic: 2840 Message: 2841

SPAM!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!

--- In SkyWires@yahoogroups.com, Dean Terrell
<tandn_family_electronics@...> wrote:
>
> Friendship Request

Dean has added you as a friend Is Dean your
friend?
>
Please respond
or Dean will think you said no :(Click Here to
block all emails from myYearbook, 280 Union Square Dr., New Hope, PA
18938
>
>
> ---------------------------------
> Be a better friend, newshound, and know-it-all with Yahoo! Mobile.
Try it now.
>

2842. Re: [SkyWires] Re:

Yahoo group: SkyWires
Date: 2008-01-18 04:34:22 UTC
From: Facility 406 DM09
Topic: 2842 Message: 2842

Yes, we know...

Kurt

----- Original Message -----
From: "Richard Zolla" <N8NKN@...>

SPAM!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!

2843. Bad E-mail

Yahoo group: SkyWires
Date: 2008-01-18 07:53:14 UTC
From: Dean Terrell
Topic: 2843 Message: 2843

AN E-MAIL WAS SENT OUT ABOUT A FRIEND REQUEST. I DID NOT KNOW THAT EVERYONE IN MY CONTACTS WAS GOING TO GET THIS.

I do not send out spam like that. I will never respond to anything like that in the future.

I did not put this on Freecycle. I would never put something stupid like this on Freecycle. I responded to an E-mail about being a friend. I am going to send you a copy of the person that sent me the E-mail.

"Harry Greene" kingskid1961@...
I understand that he runs a computer place in Thomaston. I only replied to
his friend reguest.

Dean

Never miss a thing. Make Yahoo your homepage.

2844. Tuners

Yahoo group: SkyWires
Date: 2008-01-19 22:19:32 UTC
From: K.Currie
Topic: 741 Message: 2844

Have any of you guys, or girls had any experience with the MFJ "Balanced" tuner,mod 974HB, or does any one have a schematic for them?
Thanks
VE5HKC

2845. Re: Tuners

Yahoo group: SkyWires
Date: 2008-01-20 01:47:38 UTC
From: stocktonclinton
Topic: 741 Message: 2845

Hi,

I use the MFJ-974HB and I love it. I have two antennas. One is a 137' end feed Zepp and the other is a 144' loop. Both are feed with 450 ohm balanced lines. The MFJ-974HB tunes anything I want. I put in a good station ground and if I just use the side of the line that is attached to the 137' wire I can even load it up on 160 meter.

If you go to the MFJ web site you can down load a manual for the 974B. That was the model without 160 meters I think. I have not been there for at least a year and maybe they have the 974HB manual there now.

73's AGØK
Clint

--- In SkyWires@yahoogroups.com, "K.Currie" <kecurrie@...> wrote:
>
> Have any of you guys, or girls had any experience with the MFJ "Balanced" tuner,mod 974HB, or does any one have a schematic for them?
> Thanks
> VE5HKC
>

2846. Re: [SkyWires] Re: Tuners

Yahoo group: SkyWires
Date: 2008-01-20 02:28:01 UTC
From: K.Currie
Topic: 741 Message: 2846

Thanks Clink
I have a 1000' loop fed with 450 ohm ladder line and I am using a MFJ 989-C tuner now but would like to try the balanced one to see if there is a difference. That big loop takes a good tuner on some freqs. I got the schematic from the site and thanks again for your reply.
Keith VE5HKC

Hi,

I use the MFJ-974HB and I love it. I have two antennas. One is a 137' end feed Zepp and the other is a 144' loop. Both are feed with 450 ohm balanced lines. The MFJ-974HB tunes anything I want. I put in a good station ground and if I just use the side of the line that is attached to the 137' wire I can even load it up on 160 meter.

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73's AGØK
Clint

--- In SkyWires@yahoogroups.com, "K.Currie" <kecurrie@...> wrote:
>
> Have any of you guys, or girls had any experience with the MFJ "Balanced" tuner,mod 974HB, or does any one have a schematic for them?
> Thanks
> VE5HKC
>

No virus found in this incoming message.
Checked by AVG Free Edition.
Version: 7.5.486 / Virus Database: 269.19.7/1232 - Release Date: 1/18/08 7:32 PM

2847. RE: [SkyWires] Re: Tuners

Yahoo group: SkyWires
Date: 2008-01-20 03:36:50 UTC
From: ag0k@ag0k.com
Topic: 741 Message: 2847
Attachments: 1 described; binary payloads are missing from this source WARC

Keith,

The main thing with tuning with the 974
is to make sure you stop transmitting to
change the inductor setting. I have
heard from others that they overheated
the inductor
and burned off contacts by changing the
inductor while transmitting.

I also recommend getting a dc cord or
make one for the lamp. I usually keep
the radio
room lights down and the lighted
SWR/Power Meter is neat. The first
month I did not
have the lamp lit and I was surprised
how much easier it is when you can see
the needles.
LOL 58 the eyes get a little dimmer.

Have fun and 73's AGØK
Clint

Grace, Peace, and Joy, be yours,

Rev. W. Clinton Stockton, pastor
Andrews Presbyterian Church
104 S. Rosemary Ave
Andrews, SC 29510
<mailto:pastor@...m>
pastor@...
Office 843 264 5596
Manse 843 264 8756
Cellphone 843 325-9760

-----Original Message-----
From: SkyWires@yahoogroups.com
[mailto:SkyWires@yahoogroups.com] On
Behalf Of K.Currie
Sent: Saturday, January 19, 2008 9:28 PM
To: SkyWires@yahoogroups.com
Subject: Re: [SkyWires] Re: Tuners

Thanks Clink
I have a 1000' loop fed with 450 ohm

ladder line and I am using a MFJ 989-C tuner now but would like to try the balanced one to see if there is a difference. That big loop takes a good tuner on some freqs. I got the schematic from the site and thanks again for your reply.
Keith VE5HKC

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If you go to the MFJ web site you can down load a manual for the 974B. That was the model without 160 meters I think. I have not been there for at least a year and maybe they have the 974HB manual there now.

73's AGØK
Clint

--- In SkyWires@yahoogroup <mailto:SkyWires%40yahoogroups.com> s.com, "K.Currie" <kecurrie@...> wrote:
>
> Have any of you guys, or girls had any experience with the MFJ "Balanced" tuner,mod 974HB, or does any one have a schematic for them?
> Thanks
> VE5HKC
>

_____

No virus found in this incoming message.
Checked by AVG Free Edition.
Version: 7.5.486 / Virus Database: 269.19.7/1232 - Release Date: 1/18/08 7:32 PM

2848. Re: [SkyWires] Re: Tuners

Yahoo group: SkyWires
Date: 2008-01-20 16:09:20 UTC
From: Dr.Ace Ratliff
Topic: 741 Message: 2848
Attachments: 1 described; binary payloads are missing from this source WARC

Clint,
A while back I rigged a wall wart transformer to the light(s) inside the meter thru an RCA phono jack on the back of the radio that grounded when you keyed the radio. So that when you keyed the radio the meter light(s) lit and when you unkeyed the light(s) went out.
I liked it.
Very 73, Ace - WH2T

----- Original Message -----
From: ag0k@...
To: SkyWires@yahoogroups.com
Sent: Saturday, January 19, 2008 10:36 PM
Subject: RE: [SkyWires] Re: Tuners

Keith,

The main thing with tuning with the 974 is to make sure you stop transmitting to change the inductor setting. I have heard from others that they overheated the inductor and burned off contacts by changing the inductor while transmitting.

I also recommend getting a dc cord or make one for the lamp. I usually keep the radio room lights down and the lighted SWR/Power Meter is neat. The first month I did not have the lamp lit and I was surprised how much easier it is when you can see the needles. LOL 58 the eyes get a little dimmer.

Have fun and 73's AGØK
Clint

Grace, Peace, and Joy, be yours,

Rev. W. Clinton Stockton, pastor
Andrews Presbyterian Church
104 S. Rosemary Ave
Andrews, SC 29510
pastor@...
Office 843 264 5596
Manse 843 264 8756
Cellphone 843 325-9760
-----Original Message-----
From: SkyWires@yahoogroups.com [mailto:SkyWires@yahoogroups.com] On Behalf Of K.Currie
Sent: Saturday, January 19, 2008 9:28 PM
To: SkyWires@yahoogroups.com
Subject: Re: [SkyWires] Re: Tuners

Thanks Clink
I have a 1000' loop fed with 450 ohm ladder line and I am using a MFJ 989-C tuner now but would like to try the balanced one to see if there is a difference. That big loop takes a

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Keith VE5HKC

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73's AGØK
Clint

--- In SkyWires@yahoogroups.com, "K.Currie" <kecurrie@...> wrote:
>
> Have any of you guys, or girls had any experience with the MFJ "Balanced" tuner,mod 974HB, or does any one have a schematic for them?
> Thanks
> VE5HKC
>

No virus found in this incoming message.
Checked by AVG Free Edition.
Version: 7.5.486 / Virus Database: 269.19.7/1232 - Release Date: 1/18/08 7:32 PM

2849. Re: Tuners

Yahoo group: SkyWires
Date: 2008-01-20 18:50:41 UTC
From: stocktonclinton
Topic: 741 Message: 2849

Dear Ace,

Now that is a project I like. I think I will dig out my
TS-440 book and look around. I bet that maybe I have a
keyed 12 volt line on the acc/transverter connection.
I also toyed with the idea of a foot switch for keying during tune.
Fast and responsive.

Thanks again for another outstanding idea.

73's AGØK Clint

--- In SkyWires@yahoogroups.com, "Dr.Ace Ratliff" <wh2t@...> wrote:
>
> Clint,
> A while back I rigged a wall wart transformer to the light(s)
inside the meter thru an RCA phono jack on the back of the radio that
grounded when you keyed the radio. So that when you keyed the radio
the meter light(s) lit and when you unkeyed the light(s) went out.
> I liked it.
> Very 73, Ace - WH2T
>
>
> ----- Original Message -----
> From: ag0k@...
> To: SkyWires@yahoogroups.com
> Sent: Saturday, January 19, 2008 10:36 PM
> Subject: RE: [SkyWires] Re: Tuners
>
>
>
> Keith,
>
> The main thing with tuning with the 974 is to make sure you stop
transmitting to
> change the inductor setting. I have heard from others that they
overheated the inductor
> and burned off contacts by changing the inductor while
transmitting.
>
> I also recommend getting a dc cord or make one for the lamp. I
usually keep the radio
> room lights down and the lighted SWR/Power Meter is neat. The
first month I did not
> have the lamp lit and I was surprised how much easier it is when
you can see the needles.

> LOL 58 the eyes get a little dimmer.
>
> Have fun and 73's AGØK
> Clint
>
>
> Grace, Peace, and Joy, be yours,
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> Rev. W. Clinton Stockton, pastor
> Andrews Presbyterian Church
> 104 S. Rosemary Ave
> Andrews, SC 29510
> pastor@...
> Office 843 264 5596
> Manse 843 264 8756
> Cellphone 843 325-9760
> -----Original Message-----
> From: SkyWires@yahoogroups.com
[mailto:SkyWires@yahoogroups.com] On Behalf Of K.Currie
> Sent: Saturday, January 19, 2008 9:28 PM
> To: SkyWires@yahoogroups.com
> Subject: Re: [SkyWires] Re: Tuners
>
>
>
> Thanks Clink
> I have a 1000' loop fed with 450 ohm ladder line and I am using
a MFJ 989-C tuner now but would like to try the balanced one to see
if there is a difference. That big loop takes a good tuner on some
freqs. I got the schematic from the site and thanks again for your
reply.
> Keith VE5HKC
>
> Hi,
>
> I use the MFJ-974HB and I love it. I have two antennas. One
is a 137'
> end feed Zepp and the other is a 144' loop. Both are feed
with 450 ohm
> balanced lines. The MFJ-974HB tunes anything I want. I put in
a good
> station ground and if I just use the side of the line that is
attached
> to the 137' wire I can even load it up on 160 meter.
>
> If you go to the MFJ web site you can down load a manual for
the 974B.
> That was the model without 160 meters I think. I have not
been there
> for at least a year and maybe they have the 974HB manual

there now.
>
> 73's AGØK
> Clint
>
> --- In SkyWires@yahoogroups.com, "K.Currie" <kecurrie@> wrote:
> >
> > Have any of you guys, or girls had any experience with the
> MFJ "Balanced" tuner,mod 974HB, or does any one have a
schematic for
> them?
> > Thanks
> > VE5HKC
> >
>
>
>
>
>
> --

>
>
> No virus found in this incoming message.
> Checked by AVG Free Edition.
> Version: 7.5.486 / Virus Database: 269.19.7/1232 - Release
Date: 1/18/08 7:32 PM
>

2850. Re: [SkyWires] Re: Tuners

Yahoo group: SkyWires
Date: 2008-01-20 20:27:17 UTC
From: Dr.Ace Ratliff
Topic: 741 Message: 2850

Clint,
Glad you like the idea. I just connected the 12 V negative lead to the center of the RCA phono jack on the back of the radio that
grounded when you keyed the radio. I think the jack I used was intended to key an Amp. I actually used a little less than 12V DC to extend bulb life, Also bulbs last longer on DC than they do on AC.
Let me know how it works out.

I use a foot switch and a Heil boom with Radio Shack by SHURE mic on HF. I plan to add a second mic on the boom. If anyone wants plans on how I will mount 2 mics on the Heil boom, let me know, as I know how to make it look factory original.
I plan to series the two mics for better audio fidelity. I have 2 matching Radio Shack by SHURE discontinued cat # 33-1070C mics . They are 300 ohms impedance each. My radio calls for 600 ohms input. These mics are identical to the discontinued SHURE VP64 mics. Not the newer, less quality SHURE VP64A or VP64B mics.
73, Ace www.WH2T.com

----- Original Message -----
From: stocktonclinton
To: SkyWires@yahoogroups.com
Sent: Sunday, January 20, 2008 1:50 PM
Subject: [SkyWires] Re: Tuners

Dear Ace,

Now that is a project I like. I think I will dig out my
TS-440 book and look around. I bet that maybe I have a
keyed 12 volt line on the acc/transverter connection.
I also toyed with the idea of a foot switch for keying during tune.
Fast and responsive.

Thanks again for another outstanding idea.

73's AGØK Clint

--- In SkyWires@...m, "Dr.Ace Ratliff" <wh2t@...> wrote:
>
> Clint,
> A while back I rigged a wall wart transformer to the light(s)
inside the meter thru an RCA phono jack on the back of the radio that
grounded when you keyed the radio. So that when you keyed the radio
the meter light(s) lit and when you unkeyed the light(s) went out.
> I liked it.
> Very 73, Ace - WH2T
>
>
> ----- Original Message -----

> From: ag0k@...
> To: SkyWires@yahoogroups.com
> Sent: Saturday, January 19, 2008 10:36 PM
> Subject: RE: [SkyWires] Re: Tuners
>
>
>
> Keith,
>
> The main thing with tuning with the 974 is to make sure you stop
transmitting to
> change the inductor setting. I have heard from others that they
overheated the inductor
> and burned off contacts by changing the inductor while
transmitting.
>
> I also recommend getting a dc cord or make one for the lamp. I
usually keep the radio
> room lights down and the lighted SWR/Power Meter is neat. The
first month I did not
> have the lamp lit and I was surprised how much easier it is when
you can see the needles.
> LOL 58 the eyes get a little dimmer.
>
> Have fun and 73's AGØK
> Clint
>
>
> Grace, Peace, and Joy, be yours,
>
> Rev. W. Clinton Stockton, pastor
> Andrews Presbyterian Church
> 104 S. Rosemary Ave
> Andrews, SC 29510
> pastor@...
> Office 843 264 5596
> Manse 843 264 8756
> Cellphone 843 325-9760
> -----Original Message-----
> From: SkyWires@yahoogroups.com
[mailto:SkyWires@yahoogroups.com] On Behalf Of K.Currie
> Sent: Saturday, January 19, 2008 9:28 PM
> To: SkyWires@yahoogroups.com
> Subject: Re: [SkyWires] Re: Tuners
>
>
>
> Thanks Clink
> I have a 1000' loop fed with 450 ohm ladder line and I am using
a MFJ 989-C tuner now but would like to try the balanced one to see

if there is a difference. That big loop takes a good tuner on some freqs. I got the schematic from the site and thanks again for your reply.
> Keith VE5HKC
>
> Hi,
>
> I use the MFJ-974HB and I love it. I have two antennas. One is a 137'
> end feed Zepp and the other is a 144' loop. Both are feed with 450 ohm
> balanced lines. The MFJ-974HB tunes anything I want. I put in a good
> station ground and if I just use the side of the line that is attached
> to the 137' wire I can even load it up on 160 meter.
>
> If you go to the MFJ web site you can down load a manual for the 974B.
> That was the model without 160 meters I think. I have not been there
> for at least a year and maybe they have the 974HB manual there now.
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> 73's AGØK
> Clint
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> --- In SkyWires@yahoogroups.com, "K.Currie" <kecurrie@> wrote:
> >
> > Have any of you guys, or girls had any experience with the
> MFJ "Balanced" tuner,mod 974HB, or does any one have a schematic for
> them?
> > Thanks
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> Version: 7.5.486 / Virus Database: 269.19.7/1232 - Release Date: 1/18/08 7:32 PM
>

2851. Newbie here with questions

Yahoo group: SkyWires
Date: 2008-01-21 01:43:24 UTC
From: w4dsb
Topic: 2851 Message: 2851

First thanks for this wonderful group, lots of info here!
Looking to put up my first loop
looking at making it for 40m but also multi band with a tuner I read
so many articles about the skywire loop that i'm starting to be confused

do i need to feed with coax or twin lead?

balun or no balun?

ratio of the balun ?

I plan on running no more than 100 watts into the loop

thanks, W4DSB

2852. Re: [SkyWires] Newbie here with questions

Yahoo group: SkyWires
Date: 2008-01-21 04:06:21 UTC
From: Erik Weaver
Topic: 2851 Message: 2852

Open wire is usually the better choice for multiband antennas. This is because the high swr doesn't matter nearly so much because open wire (ladder line, twin lead too) has so much less loss than coax. When using coax you need to be aware of how much additional loss will take place as swr rises. When using ladder line/twin lead/etc, it really isn't all that important.

(You can see these comparisons in the ARRL Handbook and ARRL Antenna Books, if you have them. Look for something called "Additional Loss Due To SWR" -- If you get World Radio Magazine, there was an article on this topic in the most recent issue.)

The biggest concern with open wire, ladder line, etc, is keeping it several inches (more is better) from metal, wet wood, etc. This makes it difficult to go through the wall ;)

You can still use the open line in these conditions, but you have to understand that it becomes unbalanced (too close to something -- all kinds of things), and once it is unbalanced, it becomes an active part of the antenna, radiating RF.

So some people will use coax to get outside and then switch to open wire (or ladder line/twin lead/etc). That may be the point where a 1:1 current balun may help. If you know the impedance will always be "too high" you may wish to use a 4:1 balun. Ultimately if you have a transmatch with a wide enough tuning range (meaning the ability to transform impedance from one value to another) that balun ratio doesn't really matter all that much in the greater scheme of things.

You can always refine it later (and that is part of the fun!) so don't worry overly much about the details. Just get something up and keep accurate notes as to our swr, impedance, and whatever you can measure. Then keep reading. When you think something may be an improvement, try it! Measure it, use it, and compare that to your records. Antennas are arguably the most approachable aspect of ham radio, so enjoy playing with them!

Good luck!
Erik Weaver n0ew

w4dsb wrote:
> First thanks for this wonderful group, lots of info here!
> Looking to put up my first loop
> looking at making it for 40m but also multi band with a tuner I read
> so many articles about the skywire loop that i'm starting to be confused
>
> do i need to feed with coax or twin lead?

>
> balun or no balun?
>
> ratio of the balun ?
>
>
> I plan on running no more than 100 watts into the loop
>
> thanks, W4DSB

2853. Re: Newbie here with questions

Yahoo group: SkyWires
Date: 2008-01-21 13:06:38 UTC
From: w4dsb
Topic: 2851 Message: 2853

--- In SkyWires@yahoogroups.com, Erik Weaver <erik@...> wrote:
>
> Open wire is usually the better choice for multiband antennas. This is
> because the high swr doesn't matter nearly so much because open wire
> (ladder line, twin lead too) has so much less loss than coax. When
using
> coax you need to be aware of how much additional loss will take
place as
> swr rises. When using ladder line/twin lead/etc, it really isn't all
> that important.
>
> (You can see these comparisons in the ARRL Handbook and ARRL Antenna
> Books, if you have them. Look for something called "Additional Loss Due
> To SWR" -- If you get World Radio Magazine, there was an article on
this
> topic in the most recent issue.)
>
> The biggest concern with open wire, ladder line, etc, is keeping it
> several inches (more is better) from metal, wet wood, etc. This
makes it
> difficult to go through the wall ;)
>
> You can still use the open line in these conditions, but you have to
> understand that it becomes unbalanced (too close to something -- all
> kinds of things), and once it is unbalanced, it becomes an active part
> of the antenna, radiating RF.
>
> So some people will use coax to get outside and then switch to open
wire
> (or ladder line/twin lead/etc). That may be the point where a 1:1
> current balun may help. If you know the impedance will always be "too
> high" you may wish to use a 4:1 balun. Ultimately if you have a
> transmatch with a wide enough tuning range (meaning the ability to
> transform impedance from one value to another) that balun ratio doesn't
> really matter all that much in the greater scheme of things.
>
> You can always refine it later (and that is part of the fun!) so don't
> worry overly much about the details. Just get something up and keep
> accurate notes as to our swr, impedance, and whatever you can measure.
> Then keep reading. When you think something may be an improvement, try
> it! Measure it, use it, and compare that to your records. Antennas are
> arguably the most approachable aspect of ham radio, so enjoy playing
> with them!
>
> Good luck!

> Erik Weaver n0ew
>
> w4dsb wrote:
> > First thanks for this wonderful group, lots of info here!
> > Looking to put up my first loop
> > looking at making it for 40m but also multi band with a tuner I read
> > so many articles about the skywire loop that i'm starting to be
confused
> >
> > do i need to feed with coax or twin lead?
> >
> > balun or no balun?
> >
> > ratio of the balun ?
> >
> >
> > I plan on running no more than 100 watts into the loop
> >
> > thanks, W4DSB

Thats where a big part of my confusion came from. the ARRL handbook
said to feed it with 50 ohm coax with no balun.

The ARRL antenna book states only use ladder line
>
SO I think i will give it a whirl with 400 ohm ladder line to the
tuner and see for myself!

2854. Re: [SkyWires] Re: Newbie here with questions

Yahoo group: SkyWires
Date: 2008-01-21 16:20:27 UTC
From: Erik Weaver
Topic: 2851 Message: 2854

>
> Thats where a big part of my confusion came from. the ARRL handbook
> said to feed it with 50 ohm coax with no balun.
>
> The ARRL antenna book states only use ladder line
> SO I think i will give it a whirl with 400 ohm ladder line to the
> tuner and see for myself!
>

Ah, yes, I can see how that'd be confusing. Perhaps I wasn't clear enough when I mentioned these books. I was referring to the additional losses due to swr, and only that.

Let's see, thumbing through the handbook...

2008 Handbook, Fig. 21-4 and Fig. 21.5; Pgs. 21-6 and 21-9. Beginning with the section entitled "Losses in Transmission Lines" (pg. 21-6) reading through "The Transmission Line as Impedance Transformer" (pg. 21-9).

But you're right, the bottom line is try it for yourself. Any balanced transmission line from 300 to 600 ohms should be fine (open/ladder/window/twinlead/etc). And certainly better than coax for your multiband use. I don't think you'll benefit by using coax, so if you must, keep those runs as short as possible because they'll get very lossy when under high swr.

Just be careful going through the wall to get outside, so you don't unbalance any balanced line (it'll then radiate RF as an antenna element). One way is to double up a short length of coax running from your transmatch through the wall and then connecting that directly to the balanced line. You ground only one end of the pair-coax and use the center conductors as you would balanced line. The Antenna Book has a line drawing of this: 2008 edition, pg. 24-21, called "Shielded balanced transmission lines using standard small-sized coaxial cable...."

The facing page of the 2008 Antenna Book (Fig. 23) has the coax attenuation chart, but I didn't see the chart for the additional losses due to swr. That must be elsewhere. I can't imagine they wouldn't have it in the Antenna Book.

73-Erik n0ew

2855. Re: [SkyWires] Newbie here with questions

Yahoo group: SkyWires
Date: 2008-01-21 17:59:44 UTC
From: Jim Dunstan
Topic: 2851 Message: 2855

At 01:43 AM 1/21/2008 +0000, you wrote:

>First thanks for this wonderful group, lots of info here!
>Looking to put up my first loop
>looking at making it for 40m but also multi band with a tuner I read
>so many articles about the skywire loop that i'm starting to be confused
>
>do i need to feed with coax or twin lead?
>
>balun or no balun?
>
>ratio of the balun ?
>
>I plan on running no more than 100 watts into the loop
>
>thanks, W4DSB

Hi,

Starting with a full size loop for 40M (1 wavelength in circumference) the feed point is balanced with an impedance in the range of 100 ohms. The easiest and most reliable way to connect the loop to your rig is to connect 50 ohm coax directly to the feed point, which will limit you to single band operation (40M). This method is a bit of compromise in that the match is 100 to 50 ohms and balanced antenna to unbalanced feed line. The power loss due to standing waves will be acceptable; the SWR your rig actually sees will be in the range of 1:1 to 2:1 depending on the length of the feedline ... you could have a simple antenna tuner at the rig to make sure your rig is completely happy ... but generally not necessary.

Some operators use a balun (at the feed point) between the antenna and 50 ohm coax, which is controversial. This balun would be a 1:1 balun since the impedance of the loop and the coax is close .... its purpose would be to provide a transition between BALanced antenna and UNbalanced feed line (thus BALUN). Supposedly this would prevent antenna currents on the outside of the coax feed line. By the way, the efficiency of a balun is best at these relatively low impedances .... baluns always become less efficient at higher impedances.

All of the above pertains to a single band antenna ... in this case 40M. If you want to operate your loop on multiple frequencies e.g. 40-10M ... multi-band operation is always higher than the natural resonant frequency of the loop .... then forget the forgoing directions. The high SWR and losses preclude using direct feed with coax. An efficient multi-band feed system always requires the use of low loss balanced feed line such as 450 ohm ladder line or 300 ohm TV twin-lead. Connect the

balanced feed line to the loop feed point (balanced to balanced) ... no transition problem here. However there will be a great impedance transition .... thus the reason for using line with low loss .... this makes the loss acceptable.

Balanced feed-line is not as easy to deal with physically as coax ... ideally the balanced feed-line can be brought right to the operating position and connected to your antenna tuner. Some people will say that this creates a problem of feed-line radiation .... NOT TRUE. Balanced feed line connected to a balanced antenna carries RF that is out of phase and self cancelling at all points along its length. The result is there is little radiation beyond a very short distance around the feed-line.

The balanced feed-line is then connected to the balanced input connectors on your antenna tuner. Almost all modern antenna tuners are unbalanced tuners ... and they come with a built in balun, usually 4:1 to provide the transition of BAlanced to UNbalanced. Now here is a point where a number of Hams use their own 4:1 baluns. Running a balanced line is generally a reasonable proposition from the antenna to the outside of the house near the operating position. However, it is difficult getting it in to the house to the operating position. What is often done is to bring the balanced feed-line to the outside of the house as close to the operating position as possible and to terminate it at the balanced input of a 4:1 balun. A coax line is then run from the un-balanced output of the balun to the unbalanced input of the antenna tuner. The idea is that the efficient low loss balanced line is made as long as possible to a balun and then the remainder of the distance is made up with coax to the tuner. Often the loss in the short length of coax is acceptable.

This should answer your 3 questions.

Jim, VE3CI

2856. Re: [SkyWires] Newbie here with questions

Yahoo group: SkyWires
Date: 2008-01-21 19:38:11 UTC
From: Erik Weaver
Topic: 2851 Message: 2856

> Some people will say that
> this creates a problem of feed-line radiation .... NOT TRUE. Balanced feed
> line connected to a balanced antenna carries RF that is out of phase and
> self cancelling at all points along its length. The result is there is
> little radiation beyond a very short distance around the feed-line.

True -- provided the feed line remains balanced. Should it become
unbalanced this is no longer true.

How to *un*balance balanced line?

A good way would be to duck tape it to your aluminum siding. Lay it on
the earth. Or stick it through the window and smash the window sash
closed onto it, especially if it is a metal window frame or if it is
wrapped in a wet towel. (Yes, I've done most of those naughty things at
one time or another!)

A very tricky way I discovered to unbalance my balanced line was letting
it get too close to my lead crystal ashtray. Who knew they really used
lead in those these days, and that there was enough metal in it to
unbalance the 450-ohm ladder line?! That one really threw me for awhile!

> What is often done is to bring the
> balanced feed-line to the outside of the house as close to the operating
> position as possible and to terminate it at the balanced input of a 4:1
> balun. A coax line is then run from the un-balanced output of the balun to
> the unbalanced input of the antenna tuner. The idea is that the efficient
> low loss balanced line is made as long as possible to a balun and then the
> remainder of the distance is made up with coax to the tuner. Often the
> loss in the short length of coax is acceptable.

Yep. This is often the easiest solution. Coax is good for routing along,
through, and under just about anything! It just isn't very good while
experiencing high swr, which is why such runs are minimized.

You'll have to consider your application. Are you only running outside
the wall, 10 or 20 feet of coax? That's usually fine. Are you not only
getting outside but also running down the length of your basement
ceiling across heating ducts and water pipes for another 100 feet to the
far corner of your house? That's a lot of loss when high swr is on that
line. That example maybe is not so fine.

So we can't really say with perfect confidence what should be your best
bet. But these are the guidelines and kinds of things we think about
while trying to determine this issue.

Keep us posted on your progress, and let us know how it works for you.
It is always nice hearing how these projects turn out.

73-Erik n0ew

2857. Re: [SkyWires] Newbie here with questions

Yahoo group: SkyWires
Date: 2008-01-21 22:08:35 UTC
From: Jim Dunstan
Topic: 2851 Message: 2857

At 01:38 PM 1/21/2008 -0600, you wrote:

> > Some people will say that
> > this creates a problem of feed-line radiation .... NOT TRUE. Balanced feed
> > line connected to a balanced antenna carries RF that is out of phase and
> > self cancelling at all points along its length. The result is there is
> > little radiation beyond a very short distance around the feed-line.
>
>True -- provided the feed line remains balanced. Should it become
>unbalanced this is no longer true.
>
>How to *un*balance balanced line?
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>A good way would be to duck tape it to your aluminum siding. Lay it on
>the earth. Or stick it through the window and smash the window sash
>closed onto it, especially if it is a metal window frame or if it is
>wrapped in a wet towel. (Yes, I've done most of those naughty things at
>one time or another!)
>
>A very tricky way I discovered to unbalance my balanced line was letting
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> > What is often done is to bring the
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> > position as possible and to terminate it at the balanced input of a 4:1
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> > the unbalanced input of the antenna tuner. The idea is that the efficient
> > low loss balanced line is made as long as possible to a balun and then the
> > remainder of the distance is made up with coax to the tuner. Often the
> > loss in the short length of coax is acceptable.
>
>Yep. This is often the easiest solution. Coax is good for routing along,
>through, and under just about anything! It just isn't very good while
>experiencing high swr, which is why such runs are minimized.

Hi Erik,

Yes, proper dressing of open line feeders is a kind of art in itself. The basic rules are never bend or change direction more than 90 degree at one time ... don't go parallel to metal objects ... keep the feeder at 90 degrees in relation to the antenna as far as possible, keep feeder supports as symmetrical as possible to the feed line, etc. etc. I am sure there are any number of good tips.

The best solution ... and by definition it is a long term solution is if at all possible to bring the feed line right up to the antenna tuner at the rig. Then, in the best of all possible worlds, avoid a ferrite balun altogether and use a balanced antenna tuner. Many/most of the problems that occur in matching to all bands/frequencies are the result of the performance of the ferrite balun. If you have a balanced antenna fed by well dressed balanced feed-line connected to a balanced antenna tuner you will find it a rare thing to find a frequency that won't match to the xcvr.

The efficiency of this kind of antenna feed system is a joy .... works wonders with QRP ... and no problem handling a full gallon !!

Jim, VE3CI

2858. Re: Newbie here with questions

Yahoo group: SkyWires
Date: 2008-01-21 22:39:29 UTC
From: Don Keith
Topic: 2851 Message: 2858

I just wanted to commend the folks who have been giving such good
advice re: ladder line. One more advantage over coax--you don't have
to worry about water getting into the feedline!

Don N4KC
www.n4kc.com
www.n4kc.blogspot.com

--- In SkyWires@yahoogroups.com, Jim Dunstan <dunstan@...> wrote:
>
> At 01:38 PM 1/21/2008 -0600, you wrote:
>
> > > Some people will say that
> > > this creates a problem of feed-line radiation .... NOT TRUE.
Balanced feed
> > > line connected to a balanced antenna carries RF that is out of
phase and
> > > self cancelling at all points along its length. The result is
there is
> > > little radiation beyond a very short distance around the feed-
line.
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> >True -- provided the feed line remains balanced. Should it become
> >unbalanced this is no longer true.
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> >How to *un*balance balanced line?
> >
> >A good way would be to duck tape it to your aluminum siding. Lay
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> >the earth. Or stick it through the window and smash the window sash
> >closed onto it, especially if it is a metal window frame or if it
is
> >wrapped in a wet towel. (Yes, I've done most of those naughty
things at
> >one time or another!)
> >
> >A very tricky way I discovered to unbalance my balanced line was
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> >it get too close to my lead crystal ashtray. Who knew they really
used
> >lead in those these days, and that there was enough metal in it to
> >unbalance the 450-ohm ladder line?! That one really threw me for
awhile!
> >
> > > What is often done is to bring the

> > > balanced feed-line to the outside of the house as close to the
operating
> > > position as possible and to terminate it at the balanced input
of a 4:1
> > > balun. A coax line is then run from the un-balanced output of
the balun to
> > > the unbalanced input of the antenna tuner. The idea is that the
efficient
> > > low loss balanced line is made as long as possible to a balun
and then the
> > > remainder of the distance is made up with coax to the tuner.
Often the
> > > loss in the short length of coax is acceptable.
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> >Yep. This is often the easiest solution. Coax is good for routing
along,
> >through, and under just about anything! It just isn't very good
while
> >experiencing high swr, which is why such runs are minimized.
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> Hi Erik,
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> Yes, proper dressing of open line feeders is a kind of art in
itself. The
> basic rules are never bend or change direction more than 90 degree
at one
> time ... don't go parallel to metal objects ... keep the feeder at
90
> degrees in relation to the antenna as far as possible, keep feeder
supports
> as symmetrical as possible to the feed line, etc. etc. I am sure
there are
> any number of good tips.
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> The best solution ... and by definition it is a long term solution
is if at
> all possible to bring the feed line right up to the antenna tuner
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> rig. Then, in the best of all possible worlds, avoid a ferrite
balun
> altogether and use a balanced antenna tuner. Many/most of the
problems
> that occur in matching to all bands/frequencies are the result of
the
> performance of the ferrite balun. If you have a balanced antenna
fed by
> well dressed balanced feed-line connected to a balanced antenna
tuner you
> will find it a rare thing to find a frequency that won't match to
the xcvr.

>
> The efficiency of this kind of antenna feed system is a joy ....
works
> wonders with QRP ... and no problem handling a full gallon !!
>
> Jim, VE3CI
>

2859. Re: [SkyWires] Re: Newbie here with questions

Yahoo group: SkyWires
Date: 2008-01-21 22:46:06 UTC
From: Rein A. Smit
Topic: 2851 Message: 2859

Hello All,

Here are some recorded spectra of the HAARP experiments:

http://www.nitehawh.com/rasmit/haarp_exp.html

73 Rein W6SZ

2860. Corerrection

Yahoo group: SkyWires
Date: 2008-01-21 22:51:02 UTC
From: Rein A. Smit
Topic: 2860 Message: 2860

http://www.nitehawk.com/rasmit/haarp.html

should that have been, SRI

W6SZ

2861. Re: Newbie here with questions

Yahoo group: SkyWires
Date: 2008-01-22 19:53:17 UTC
From: w4dsb
Topic: 2851 Message: 2861

--- In SkyWires@yahoogroups.com, "Don Keith" <n4kc@...> wrote:
>
> I just wanted to commend the folks who have been giving such good
> advice re: ladder line. One more advantage over coax--you don't have
> to worry about water getting into the feedline!
>
> Don N4KC
> www.n4kc.com
> www.n4kc.blogspot.com
>
>
> --- In SkyWires@yahoogroups.com, Jim Dunstan <dunstan@> wrote:
> >
> > At 01:38 PM 1/21/2008 -0600, you wrote:
> >
> > > > Some people will say that
> > > > this creates a problem of feed-line radiation .... NOT TRUE.
> Balanced feed
> > > > line connected to a balanced antenna carries RF that is out of
> phase and
> > > > self cancelling at all points along its length. The result is
> there is
> > > > little radiation beyond a very short distance around the feed-
> line.
> > >
> > >True -- provided the feed line remains balanced. Should it become
> > >unbalanced this is no longer true.
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> > >How to *un*balance balanced line?
> > >
> > >A good way would be to duck tape it to your aluminum siding. Lay
> it on
> > >the earth. Or stick it through the window and smash the window sash
> > >closed onto it, especially if it is a metal window frame or if it
> is
> > >wrapped in a wet towel. (Yes, I've done most of those naughty
> things at
> > >one time or another!)
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> > >A very tricky way I discovered to unbalance my balanced line was
> letting
> > >it get too close to my lead crystal ashtray. Who knew they really
> used
> > >lead in those these days, and that there was enough metal in it to
> > >unbalance the 450-ohm ladder line?! That one really threw me for

> awhile!
> > >
> > > > What is often done is to bring the
> > > > balanced feed-line to the outside of the house as close to the
> operating
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> of a 4:1
> > > > balun. A coax line is then run from the un-balanced output of
> the balun to
> > > > the unbalanced input of the antenna tuner. The idea is that the
> efficient
> > > > low loss balanced line is made as long as possible to a balun
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> > > > remainder of the distance is made up with coax to the tuner.
> Often the
> > > > loss in the short length of coax is acceptable.
> > > >
> > > >Yep. This is often the easiest solution. Coax is good for routing
> along,
> > > >through, and under just about anything! It just isn't very good
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> > > >experiencing high swr, which is why such runs are minimized.
> > >
> > > Hi Erik,
> > >
> > > Yes, proper dressing of open line feeders is a kind of art in
> itself. The
> > > basic rules are never bend or change direction more than 90 degree
> at one
> > > time ... don't go parallel to metal objects ... keep the feeder at
> 90
> > > degrees in relation to the antenna as far as possible, keep feeder
> supports
> > > as symmetrical as possible to the feed line, etc. etc. I am sure
> there are
> > > any number of good tips.
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> > > The best solution ... and by definition it is a long term solution
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> > > all possible to bring the feed line right up to the antenna tuner
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> > > rig. Then, in the best of all possible worlds, avoid a ferrite
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> > > well dressed balanced feed-line connected to a balanced antenna

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> > will find it a rare thing to find a frequency that won't match to
> the xcvr.
> >
> > The efficiency of this kind of antenna feed system is a joy ....
> works
> > wonders with QRP ... and no problem handling a full gallon !!
> >
> > Jim, VE3CI
> >
WOW ! thanks everyone for all the help and information
>
I have truly learned alot in a short time!

2862. Re: [SkyWires] Newbie here with questions

Yahoo group: SkyWires
Date: 2008-01-23 04:28:33 UTC
From: erik@n0ew.org
Topic: 2851 Message: 2862

Yes, agreed.
Erik

Quoting Jim Dunstan <dunstan@...>:

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>> > low loss balanced line is made as long as possible to a balun and then the
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2863. Re: [SkyWires] Re: Newbie here with questions

Yahoo group: SkyWires
Date: 2008-01-23 04:33:49 UTC
From: erik@n0ew.org
Topic: 2851 Message: 2863

Heheh, now of course you invite the disclaimer that open wire balanced line is somewhat better during inclement weather than window line, which it somewhat better than ladder line, which is somewhat better than twin lead. Less area of the supporting material means less dielectric losses and less area for water to collect upon during a rain storm and less opportunity to start ice building up. Bla, bla, blah.

Please note, these are all very small pros/cons vs. the original question of balanced line vs coax ;)

Erik n0ew
PS: As with balanced line, the above velocity factor of my humor is about 95% :)

Quoting Don Keith <n4kc@...>:

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> advice re: ladder line. One more advantage over coax--you don't have
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2864. Re: Newbie here... (Plus, ladder line run through the wall of a house)

Yahoo group: SkyWires
Date: 2008-01-24 05:34:10 UTC
From: Mike
Topic: 2851 Message: 2864

--- In SkyWires@yahoogroups.com, Erik Weaver <erik@...> wrote:
>
> The biggest concern with open wire, ladder line, etc, is keeping it
> several inches (more is better) from metal, wet wood, etc. This
makes it
> difficult to go through the wall ;)

In my case, I have two loops, both fed with 450 Ohm ladder line.

Both of the ladder line runs are passed through the wooden wall of my home, as my way of getting it into the house.

My MAIN LOOP's ladder line is run through the 'built-rite' (buffalo-board) and the siding of my garage; This is then routed to my Icom AH-4 auto-tuner, kept well clear of metal, wiring. (12' of coax is routed from the tuner into the family room, to the radio.)

My 'new loop' is fed into the house at the other end of the house; I drilled a one-inch hole through the siding, buffalo-board and insulation to allow the ladder line to be passed directly into the basement shop.

My 'main loop' runs EXTREMELY well. My 'new loop' is so-so, but this is because the shape is poor! (It is a well-flattened triangle, with too-sharp ends, or corners. Per input, my 'poor loop' is suffering from CURRENT CANCELLATION' at the sharp corners.)

My question: Is it all that bad to pass ladder line through the house sidewall? I can expect and assume that the offense would be noticeable (or worse) if the siding is wet!

Or, am I simply LUCKY that my 'main loop' is happy on all bands, even though I have allowed the ladder line to pass through the wall of my garage?

-Eric's comments continue as follows:

> So some people will use coax to get outside and then switch to open
wire
> (or ladder line/twin lead/etc). That may be the point where a 1:1
> current balun may help.

In my case, the ladder line in the basement shop is only 4 feet long. (This is the part of the ladder line that is actually INSIDE the house.)

I started out with a 4;1 balun, and found that the RX and TX signals were better if I simply attached the coax's PL-259 to the ladder line.

I got a large 1:1 (160-6 Meter coverage, 1.5 Kw) current balun; This allows the same performance as if I simply attached the ladder line to the coax's PL-259.

So, I am committing two sins:
1. I passed the ladder line through the basement's wooden wall.
2. I had a 1:1 balun, but am now NOT using this.

I am presenting this as I would like more info (data?) on the passing of ladder line through a wooden house's wall, and I am also looking for opinions on my use-or-not-use of either balun.

Thank you!! (Great group!!)

-Mike-
K0JTA
-One more thing: Where can I find INFO or OPINIONS on this CURRENT CANCELLATION thing?

2865. Re: [SkyWires] Re: Newbie here... (Plus, ladder line run through the wall of a house)

Yahoo group: SkyWires
Date: 2008-01-24 07:35:25 UTC
From: erik@n0ew.org
Topic: 2851 Message: 2865

Hello,

I'll try to add a few lines....

> --- In SkyWires@yahoogroups.com, Erik Weaver <erik@...> wrote:
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> sidewall? I can expect and assume that the offense would be
> noticeable (or worse) if the siding is wet!
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> Or, am I simply LUCKY that my 'main loop' is happy on all bands, even
> though I have allowed the ladder line to pass through the wall of my
> garage?
>

The only "offense" will be if the line becomes unbalanced and begins
to behave as a radiating element as opposed to transmission line. Beg
borrow or steal a current tester and measure it. That'll settle the

issue.

Yes, it'll be more likely to be worse when raining.

RatShack recently had a cheapie on sale, and Fluke makes pretty good ones that fit on some of their VOM's. If you have older hams around borrow a grid dip -- rather have then come out with it, so they can show you how it works. MFJ antenna analyzers can also be rigged with a coil to measure such things.

>
> -Eric's comments continue as follows:

Erik with a "K" not a "c"

>
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> wire
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heeheh, 'sin' is too strong. First test for unbalanced line. #1 may or may not be a problem. That state hasn't been identified yet. Point #2, does your transmatch have a balun in it? Some do, and some don't. But this too is largely about keeping the transmission line balanced. Maybe that isn't a problem in your case. The other part is a ratio balun (4:1, 2:1, whatever) to alter the antenna's impedance to something closer to the lines. Again, maybe an issue in case and maybe not.

So don't assume there is anything wrong with your existing systems. They may be just fine.

73-Erik n0ew

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> of ladder line through a wooden house's wall, and I am also looking
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2866. [SkyWires] Re: Newbie here with questions

Yahoo group: SkyWires
Date: 2008-01-24 13:52:41 UTC
From: G B
Topic: 2851 Message: 2866

Don,

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25 that uses it. Do not confuse ladder line with open wire line. Some
folks do.
Open wire line is not adversely affected by rain, while ladder line is.

I can run full power and get no rf in the shack (1kw) and the open wire line
enters
the window through a 12" x 8" plexiglass panel next to the air conditioner.
The Heath SA-2060,
is located 1 foot from the panel, and can tune 160-6M.

Now if I can just finish the 1500' sky loop through the jungle! Now it is a
lonely 800' dipole. ;-)

73's

Glen K4KV

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advice re: ladder line. One more advantage over coax--you don't have
to worry about water getting into the feedline!

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2867. Re: Newbie here with questions

Yahoo group: SkyWires
Date: 2008-01-24 15:16:25 UTC
From: Don Keith
Topic: 2851 Message: 2867

Beautiful, Glen! I hope I get to hear that 1500-foot beauty on the air soon!

I continue to be amazed at how many hams are afraid of any kind of balanced feedline. I used to be. Coax ruled! Now that I've used window line for three different antennas, coax will be the exception rather than the rule from now on.

I still use 450-ohm (give or take a few ohms) "window" line, primarily because it is cheap and readily available. But my wife has noticed that her plastic clothes hangers have been disappearing from the closet. Someday I'm going to chop those babies up into six-inch pieces and make myself some true open-wire feedline for my big loop.

Oh, so many potential antennas and so little time, space and wire!

Don N4KC
www.n4kc.com
www.n4kc.blogspot.com

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> > > > position as possible and to terminate it at the balanced
input
> of a 4:1
> > > > balun. A coax line is then run from the un-balanced output
of
> the balun to
> > > > the unbalanced input of the antenna tuner. The idea is that
the
> efficient
> > > > low loss balanced line is made as long as possible to a
balun
> and then the
> > > > remainder of the distance is made up with coax to the tuner.
> Often the
> > > > loss in the short length of coax is acceptable.
> > >
> > >Yep. This is often the easiest solution. Coax is good for
routing
> along,
> > >through, and under just about anything! It just isn't very good
> while
> > >experiencing high swr, which is why such runs are minimized.
> >
> > Hi Erik,
> >
> > Yes, proper dressing of open line feeders is a kind of art in
> itself. The
> > basic rules are never bend or change direction more than 90
degree
> at one
> > time ... don't go parallel to metal objects ... keep the feeder
at
> 90
> > degrees in relation to the antenna as far as possible, keep
feeder
> supports
> > as symmetrical as possible to the feed line, etc. etc. I am sure

> there are
> > any number of good tips.
> >
> > The best solution ... and by definition it is a long term
solution
> is if at
> > all possible to bring the feed line right up to the antenna
tuner
> at the
> > rig. Then, in the best of all possible worlds, avoid a ferrite
> balun
> > altogether and use a balanced antenna tuner. Many/most of the
> problems
> > that occur in matching to all bands/frequencies are the result
of
> the
> > performance of the ferrite balun. If you have a balanced antenna
> fed by
> > well dressed balanced feed-line connected to a balanced antenna
> tuner you
> > will find it a rare thing to find a frequency that won't match
to
> the xcvr.
> >
> > The efficiency of this kind of antenna feed system is a joy ....
> works
> > wonders with QRP ... and no problem handling a full gallon !!
> >
> > Jim, VE3CI
> >
>

2868. RE: [SPAM][SkyWires] Re: Newbie here with questions

Yahoo group: SkyWires
Date: 2008-01-25 13:31:20 UTC
From: G B
Topic: 2851 Message: 2868

Don,

Yes, I wish more people understood balanced line, and how it eliminates all kinds
of antenna problems. I cannot tell you how many antenna failures I and other guys
around here have were because of coax issues.

My long dipole, as I call it now in the unfinished stage, beats the pants off my 40 meter
delta loop at 25M high. However, the 2 element quad at 27M high beats the pants off
the long dipole on 20M.

I read a piece by a guy who's tower was 1200 feet from his shack. His solution: ran #4
copper open wire line from poles 6' to remote tower. measured 0.3 db loss on HF ;-)

Of course, the #4 is way over kill. I use #14 with black poly pipe (underground sprinkler stuff).
I bought it from a guy for $0.50/ft, but you an make it for half of that. #14 is $0.095/ft and the
two 4" pieces of polypipe is pennies.

160M is my only problem child. My inv-L is the only antenna with any dx capability. I have a full sized
delta loop, but apex is only 75' high. Going to put up 120' tower in the spring, and move it to that.
Perhaps that will help. I know my 75M delta loop at 25M high does dx very well.

Take care and nice chatting,

Glen K4KV

-----Original Message-----
From: SkyWires@yahoogroups.com [mailto:SkyWires@yahoogroups.com]On Behalf Of Don Keith
Sent: Thursday, January 24, 2008 10:16 AM
To: SkyWires@yahoogroups.com
Subject: [SPAM][SkyWires] Re: Newbie here with questions

Beautiful, Glen! I hope I get to hear that 1500-foot beauty on the air soon!

I continue to be amazed at how many hams are afraid of any kind of balanced feedline. I used to be. Coax ruled! Now that I've used window line for three different antennas, coax will be the exception rather than the rule from now on.

I still use 450-ohm (give or take a few ohms) "window" line, primarily because it is cheap and readily available. But my wife has noticed that her plastic clothes hangers have been disappearing from the closet. Someday I'm going to chop those babies up into six-inch pieces and make myself some true open-wire feedline for my big loop.

Oh, so many potential antennas and so little time, space and wire!

Don N4KC
www.n4kc.com
www.n4kc.blogspot.com

--- In SkyWires@yahoogroups.com, "G B" <microsys@...> wrote:
>
> Don,
>
> Yes, open wire line is a lost art. I think I am the only ham in my club of
> 25 that uses it. Do not confuse ladder line with open wire line. Some
> folks do.
> Open wire line is not adversely affected by rain, while ladder line is.
>
> I can run full power and get no rf in the shack (1kw) and the open wire line
> enters
> the window through a 12" x 8" plexiglass panel next to the air conditioner.
> The Heath SA-2060,
> is located 1 foot from the panel, and can tune 160-6M.
>
> Now if I can just finish the 1500' sky loop through the jungle! Now it is a
> lonely 800' dipole. ;-)
>
> 73's
>
> Glen K4KV
>
>
> I just wanted to commend the folks who have been giving such good
> advice re: ladder line. One more advantage over coax--you don't have
> to worry about water getting into the feedline!
>
> Don N4KC

> www.n4kc.com
> www.n4kc.blogspot.com
>
> --- In SkyWires@yahoogroups.com, Jim Dunstan <dunstan@> wrote:
> >
> > At 01:38 PM 1/21/2008 -0600, you wrote:
> >
> > > > Some people will say that
> > > > this creates a problem of feed-line radiation .... NOT TRUE.
> Balanced feed
> > > > line connected to a balanced antenna carries RF that is out
of
> phase and
> > > > self cancelling at all points along its length. The result
is
> there is
> > > > little radiation beyond a very short distance around the
feed-
> line.
> > >
> > >True -- provided the feed line remains balanced. Should it
become
> > >unbalanced this is no longer true.
> > >
> > >How to *un*balance balanced line?
> > >
> > >A good way would be to duck tape it to your aluminum siding.
Lay
> it on
> > >the earth. Or stick it through the window and smash the window
sash
> > >closed onto it, especially if it is a metal window frame or if
it
> is
> > >wrapped in a wet towel. (Yes, I've done most of those naughty
> things at
> > >one time or another!)
> > >
> > >A very tricky way I discovered to unbalance my balanced line
was
> letting
> > >it get too close to my lead crystal ashtray. Who knew they
really
> used
> > >lead in those these days, and that there was enough metal in
it to
> > >unbalance the 450-ohm ladder line?! That one really threw me
for
> awhile!
> > >

> > > > What is often done is to bring the
> > > > balanced feed-line to the outside of the house as close to
the
> operating
> > > > position as possible and to terminate it at the balanced
input
> of a 4:1
> > > > balun. A coax line is then run from the un-balanced output
of
> the balun to
> > > > the unbalanced input of the antenna tuner. The idea is that
the
> efficient
> > > > low loss balanced line is made as long as possible to a
balun
> and then the
> > > > remainder of the distance is made up with coax to the tuner.
> Often the
> > > > loss in the short length of coax is acceptable.
> > >
> > >Yep. This is often the easiest solution. Coax is good for
routing
> along,
> > >through, and under just about anything! It just isn't very good
> while
> > >experiencing high swr, which is why such runs are minimized.
> >
> > Hi Erik,
> >
> > Yes, proper dressing of open line feeders is a kind of art in
> itself. The
> > basic rules are never bend or change direction more than 90
degree
> at one
> > time ... don't go parallel to metal objects ... keep the feeder
at
> 90
> > degrees in relation to the antenna as far as possible, keep
feeder
> supports
> > as symmetrical as possible to the feed line, etc. etc. I am sure
> there are
> > any number of good tips.
> >
> > The best solution ... and by definition it is a long term
solution
> is if at
> > all possible to bring the feed line right up to the antenna
tuner
> at the

> > rig. Then, in the best of all possible worlds, avoid a ferrite
> balun
> > altogether and use a balanced antenna tuner. Many/most of the
> problems
> > that occur in matching to all bands/frequencies are the result
of
> the
> > performance of the ferrite balun. If you have a balanced antenna
> fed by
> > well dressed balanced feed-line connected to a balanced antenna
> tuner you
> > will find it a rare thing to find a frequency that won't match
to
> the xcvr.
> >
> > The efficiency of this kind of antenna feed system is a joy ....
> works
> > wonders with QRP ... and no problem handling a full gallon !!
> >
> > Jim, VE3CI
> >
>

2869. sorry

Yahoo group: SkyWires
Date: 2008-01-25 13:41:06 UTC
From: G B
Topic: 2869 Message: 2869

Sorry, last email not intended for the list.

Glen K4KV

2870. Wow, a Loop Skywire group!

Yahoo group: SkyWires
Date: 2008-02-02 02:02:58 UTC
From: Dave
Topic: 2870 Message: 2870

I was surprised to find such a group...thought the antenna was so simple that hams would just "put one up".

It was at an Atlanta Radio Club meeting in 1983 when I heard W0MHS present his "Loop Skywire" talk. In fact, I think he had not named the antenna that yet - but someone in the club dubbed it thus, as "Return of the Jedi" had just been released and Luke Skywalker was on everybody's minds.

At the time, I was renting a half of a duplex, which had a fairly small back yard, but over 50 scrub pines in that back yard. I got a 500 foot spool of #14 THHN and got the wire in the trees as high as I could using a 12 inch crescent wrench tied to a string. I didn't stop until ALL the wire was in those trees...I think I went around the back yard twice with the wire, then snaked it along the hedge at the back yard into the adjacent (renter) neighbor's yard then back. Too cheap to deal with a feedline, and not wanting to muck about with anything too "damaging" to the rental house, I did not feed it with any normal type of feedline. Instead, I found some #20 gauge hookup wire, white and black, and made my own twisted-pair transmission line. That was unobtrusive enough to run from one of the trees onto the roof of the rental house. From there over to above the back door, over the gutter, down a bit of the back wall, then it fit between door and weather gasket (no screen door) into the house. Since I was a recent college grad with no furniture, I had no kitchen table, but instead, had some cardboard boxes holding my Drake B-line. I used an MFJ "econo tuner" - an unbalanced tuner - didn't worry about baluns or any of that.

I never worked any serious DX with it, but then it wasn't even 20 feet up. It served better than I expected, considering that it was a truly invisible antenna, being buried up in those trees. But I seemed to have no difficulties working most of whoever I could hear. That was at a time in my ham career when I had not yet discovered microphones....straight key only.

A few years later when I moved, I tried to take it down - no luck. The pine trees had grown around the wire. So the antenna stayed, although I did clip the "feedline".

Years of being mainly off the air due to housing and career complications, then when I got re-activated finally I was in California, this time I wanted to be mostly a DXer. So it was wire verticals and high dipoles on my micro-lot (50 X 70 feet)...and I did a decent job working CW DX with those antennas.

Another career move took me to Oregon, where I am surrounded by, and becoming engaged with ARES and other public service work...and NVIS antennas are again potentially useful. So, while I have my nice elevated vertical with tuned radials that is a champion at DX, and I also have my nice 70 foot high 80 meter dipole for coast-to-coast 80 meter QSOs, I am once again contemplating a loop. My neighbor has one at 8 feet high, and he swears it's the best antenna he has for checking into the local, state, and regional NTS nets on 80 and 160.

Dave W8NF

2871. Re:Wow, a Loop Skywire group!

Yahoo group: SkyWires
Date: 2008-02-02 21:16:08 UTC
From: Bruce Conner
Topic: 2870 Message: 2871

Hi Dave,

Well, due to weather breaking my 30 foot wooden towers, I have my horizontal 80 meter delta loop up at about 12-15 feet at the moment. Last night I actually heard Germany and Spain on 80 meters with a reasonable signal (I'm East Coast US). I was busy with something else, so I didn't try to work them. I used that antenna at the full 30 feet to work Europe on 20 meters with 1 watt, so don't think of it as just a NVIS antenna, although it will work well for that too, especially near the fundamental length. I run mine with home made ladder line (3 inch) and an old Harvey Wells balanced tuner. Wire is 14 ga insulated from Home Despot. Works great!

Good luck getting your new antenna up. You might as well go whole hog and use ladder line too. Makes it a nice multiband antenna that way and no need for baluns.

Bruce
WB8OGK

2872. Re: Tuners

Yahoo group: SkyWires
Date: 2008-02-03 07:04:21 UTC
From: leonardo_da_vinci_nz
Topic: 741 Message: 2872

--- In SkyWires@yahoogroups.com, "K.Currie" <kecurrie@...> wrote:
>
> Have any of you guys, or girls had any experience with the MFJ "Balanced" tuner,mod 974HB, or does any one have a schematic for them?
> Thanks
> VE5HKC
>
You may want to investigate the "S-Match" from PA0FRI which uses a minimum of components and is very suited to loops. Just finished building one.

73

2873. Re: [SkyWires] Re: Tuners

Yahoo group: SkyWires
Date: 2008-02-03 17:29:04 UTC
From: Jim Dunstan
Topic: 741 Message: 2873

At 07:04 AM 2/3/2008 +0000, you wrote:

>--- In <mailto:SkyWires%40yahoogroups.com>SkyWires@yahoogroups.com,
>"K.Currie" <kecurrie@...> wrote:
> >
> > Have any of you guys, or girls had any experience with the
>MFJ "Balanced" tuner,mod 974HB, or does any one have a schematic for
>them?
> > Thanks
> > VE5HKC
> >
>You may want to investigate the "S-Match" from PA0FRI which uses a
>minimum of components and is very suited to loops. Just finished
>building one.
>
>73

Hi,

At first I thought you were actually referring to "Z-Match" and misspelled hi hi. I did a search on "S-Match PA0FRI" and was very impressed with the "S-Match" design. I may build a version myself as I am very fond of mult-band balanced antennas and balanced antenna tuners. Thanks for bringing it to our attention.

73

Jim, VE3CI

2874. Re: Tuners

Yahoo group: SkyWires
Date: 2008-02-03 22:16:57 UTC
From: leonardo_da_vinci_nz
Topic: 741 Message: 2874

> At first I thought you were actually referring to "Z-Match" and misspelled
> hi hi. I did a search on "S-Match PA0FRI" and was very impressed with the
> "S-Match" design. I may build a version myself as I am very fond of
> mult-band balanced antennas and balanced antenna tuners. Thanks for
> bringing it to our attention.

I used two 618T inductors (0.5 - 6 uH, www.mgs4u.com) and a 600 pF variable capacitor. Toroid is T184-2 11 windings primary and 2 x 5 windings secondary (nicely "nesting" between the primary winding). Make sure to use thermaleze / teflon coated wire for the secondary of the toroid as the voltages can be very high. Could not get teflon and used shrink tubing over the thermaleze (thermaleze is good for 2 kV and some shrinktubing will do several kV but more important it will prevent damage to the thermaleze). "Driving" the two above rotary indictors is far from light though, hi hi!

The use of two inductors allows me to "earth" the "centre" of the rotary coil and force symmetry. Alternatively I can earth one of the balanced terminals and get an unbalanced output.

Enjoy!
73

2875. Re: Tuners

Yahoo group: SkyWires
Date: 2008-02-04 00:06:09 UTC
From: leonardo_da_vinci_nz
Topic: 741 Message: 2875

PS

My ATU started off as an "ordinary" L-C tuner as promoted by AG6K and then just rewound the input balun to an input transformer to trial the S-match design. The balun did not come back.

The transformer is a part of a tuned circuit and it needs to be firmly mounted. The windings may be locked in place with Q-dope, I used clear nail polish.

2876. Re: Tuners

Yahoo group: SkyWires
Date: 2008-02-04 00:35:06 UTC
From: leonardo_da_vinci_nz
Topic: 741 Message: 2876

I have uploaded a few pictures of my contraption.

2877. connection details

Yahoo group: SkyWires
Date: 2008-02-04 00:43:33 UTC
From: leonardo_da_vinci_nz
Topic: 741 Message: 2877

Shorting the green and black terminal on the right side (in the
picture) will earth the centre between the two coils which "forces"
symmetry for balanced operation.

Shorting the black terminal on the left with either of the red ones
will force unbalanced operation.

Neither shorting is required (however I like the antenna to have some
connection to earth somewhere for static and lightning protection).

73

2878. Re: Tuners

Yahoo group: SkyWires
Date: 2008-02-04 22:16:18 UTC
From: Dave
Topic: 741 Message: 2878

--- In SkyWires@yahoogroups.com, "leonardo_da_vinci_nz"
<leonardo_da_vinci_nz@...> wrote:
>
>
> > At first I thought you were actually referring to "Z-Match" and
> misspelled
> > hi hi. I did a search on "S-Match PA0FRI" and was very impressed
> with the
> > "S-Match" design. I may build a version myself as I am very fond of
> > mult-band balanced antennas and balanced antenna tuners. Thanks for
> > bringing it to our attention.
>
> I used two 618T inductors (0.5 - 6 uH, www.mgs4u.com) and a 600 pF
> variable capacitor. Toroid is T184-2 11 windings primary and 2 x 5
> windings secondary (nicely "nesting" between the primary winding). Make
> sure to use thermaleze / teflon coated wire for the secondary of the
> toroid as the voltages can be very high. Could not get teflon and used
> shrink tubing over the thermaleze (thermaleze is good for 2 kV and some
> shrinktubing will do several kV but more important it will prevent
> damage to the thermaleze). "Driving" the two above rotary indictors is
> far from light though, hi hi!
>
> The use of two inductors allows me to "earth" the "centre" of the
> rotary coil and force symmetry. Alternatively I can earth one of the
> balanced terminals and get an unbalanced output.
>
> Enjoy!
> 73
>
Since the transformer is very close to a 1:1 transformer, you could
move the variable capacitor to the primary of the thing - put the cap
in series with the primary winding and now the cap has one grounded
leg, reducing the chance of exposing an operator to RF voltages.

Be careful how you "force" a balance on things. By grounding the
center tap of a transformer output, you have forced equal voltages and
opposite phase into the output terminals. If, when those
equal-but-opposite voltages get to the antenna, the
single-point-against-earth impedance of the two antenna terminals is
not identical, it will give rise to a difference in current on the two
legs of the transmission line, turning the t-line into a radiator.
That's why current-mode baluns (usually in the form of common mode
chokes) are preferred - they force equal currents.

You can force either equal currents or equal voltages, but not both.
Equal currents is the correct item to force, if your goal is to
eliminate feedline radiation.

Dave W8NF

2879. Re: [SkyWires] Re: Tuners

Yahoo group: SkyWires
Date: 2008-02-05 04:24:30 UTC
From: K.Currie
Topic: 741 Message: 2879

Thanks for the info on the S-match, it looke very interesting, but how do you think it would work on a very large loop? My loop is two W/L on 160 , and I know it has some wild impepience's on some bands.
I use it mostley on the lower bands but some on 20m.
I havent built very much , and no experience with building baluns or toroid cores. Would the big loop change the values very much.
I do have a roller inductor and some old caps around . I have also built some coiles in the past for tuners with inductive coupling.
Dont have your e-mail but mine is in QRZ.
Thanks again Leonard,
Keith VE5 HKC

----- Original Message -----
From: leonardo_da_vinci_nz
To: SkyWires@yahoogroups.com
Sent: Sunday, February 03, 2008 1:04 AM
Subject: [SkyWires] Re: Tuners

--- In SkyWires@yahoogroups.com, "K.Currie" <kecurrie@...> wrote:
>
> Have any of you guys, or girls had any experience with the
MFJ "Balanced" tuner,mod 974HB, or does any one have a schematic for
them?
> Thanks
> VE5HKC
>
You may want to investigate the "S-Match" from PA0FRI which uses a
minimum of components and is very suited to loops. Just finished
building one.

73

No virus found in this incoming message.
Checked by AVG Free Edition.
Version: 7.5.516 / Virus Database: 269.19.19/1256 - Release Date: 2/2/08 1:50 PM

2880. bazooka antenna

Yahoo group: SkyWires
Date: 2008-02-10 00:30:36 UTC
From: Ernie
Topic: 2880 Message: 2880

Can someone help me find the plans to build an 11meter bazooka? I need one to take on a trip!

Thanks

2881. Re: [SkyWires] bazooka antenna

Yahoo group: SkyWires
Date: 2008-02-10 02:43:39 UTC
From: Jim Dunstan
Topic: 2880 Message: 2881

At 12:30 AM 2/10/2008 +0000, you wrote:

>Can someone help me find the plans to build an 11meter bazooka? I need
>one to take on a trip!
>
>Thanks

Hi,

You can check out several articles listed on this site ....
www.dxzone.com/catalog/Antennas/Bazooka/ including a design
calculator. Just out of curiosity I was wondering how you were planing to
setup and use the antenna .. it is not exactly a light portable
antenna. But then again an 11m dipole is not all that big hi hi.

Jim, VE3CI

2882. Re: [SkyWires] bazooka antenna

Yahoo group: SkyWires
Date: 2008-02-10 19:49:28 UTC
From: Dr. Ace Ratliff
Topic: 2880 Message: 2882

SEE
http://www.bloomington.in.us/~wh2t/bazooka.html

Good Luck and 73, Ace - WH2T
www.WH2T.com

----- Original Message -----
From: Jim Dunstan
To: SkyWires@yahoogroups.com
Sent: Saturday, February 09, 2008 9:43 PM
Subject: Re: [SkyWires] bazooka antenna

At 12:30 AM 2/10/2008 +0000, you wrote:

>Can someone help me find the plans to build an 11meter bazooka? I need
>one to take on a trip!
>
>Thanks
.
__,

2883. Re: Tuners

Yahoo group: SkyWires
Date: 2008-02-13 04:37:20 UTC
From: leonardo_da_vinci_nz
Topic: 741 Message: 2883

Keith (and the group)

Have been laid up in hospital and have replied to your email message in private.

I think it will work fine, it will handle some very weird difference in impedances with ease.

Nice thing is that it will "find" its own balance) or you can "force" things. Both have their advantages and disadvantages.

I am finding that at the low frequency range I get difficulty with very low impedances and at the high end with very high impedances. With a loop that should not be a problem: my 40m full wave is halve wave loop at 80 and very high impedance. On 40 , 20 and 15 the impedances are more in a "normal" range.

73

2884. Re: Tuners

Yahoo group: SkyWires
Date: 2008-02-13 21:49:48 UTC
From: leonardo_da_vinci_nz
Topic: 741 Message: 2884

> Since the transformer is very close to a 1:1 transformer, you could
> move the variable capacitor to the primary of the thing - put the
cap
> in series with the primary winding and now the cap has one grounded
> leg, reducing the chance of exposing an operator to RF voltages.
>
> Be careful how you "force" a balance on things. By grounding the
> center tap of a transformer output, you have forced equal voltages
and
> opposite phase into the output terminals. If, when those
> equal-but-opposite voltages get to the antenna, the
> single-point-against-earth impedance of the two antenna terminals is
> not identical, it will give rise to a difference in current on the
two
> legs of the transmission line, turning the t-line into a radiator.
> That's why current-mode baluns (usually in the form of common mode
> chokes) are preferred - they force equal currents.
>
> You can force either equal currents or equal voltages, but not
both.
> Equal currents is the correct item to force, if your goal is to
> eliminate feedline radiation.
>
> Dave W8NF
>

Dave

I am not an expert in these things (wink) but I think that if somehow
you take a bit of a distant view of the thing then you can reduced
this to a link coupled LC resonant circuit: first the link
was "removed" by using a second coil assembly (toroid) and then the
link was removed from the "centre" to the "ends" (perhaps one
could "revert" the view: instead of the tapped part being the
resonant circuit now the link is the resonant circuit). This is where
lots of confusion starts: many people try to see this as a 1:1
coupling which it ain't. It is part of a resonant circuit that has
been unusual configured. Hence the working is totally different than
with an ordinary L-C balanced tuner that is driven by a balun.

Further you are 100% correct: make sure everything is RF isolated
otherwise you could get up hurt badly. This is why I like to "earth"
whenever I can.

But when this thing is left floating it is wonderfull how much static
and other noise disappears at my location.

73

2886. OT: Twincom

Yahoo group: SkyWires
Date: 2008-02-15 01:50:56 UTC
From: leonardo_da_vinci_nz
Topic: 2886 Message: 2886

Don't know how many of you have heard of the above twin wire designed for RF.

It was highly recommended to me as being as simple to use as coax inside the house with little interference. On can lay it directly on the floor, ceiling etc without the requirement of being suspended. Losses are appernetly extreemly low too. This is due to not using air as the dielectric like in the normal twin wire.

Have a look at this website and search for twincom cable:
http://www.titanex.de/frames/products.html

My wife is due to go over to Europe in the near future (family health) and I am going to get her to bring some of this back to New Zealand. We'll see how this will turn out.

73's

2887. New to the Group

Yahoo group: SkyWires
Date: 2008-02-15 17:05:11 UTC
From: ke4nu_7
Topic: 2887 Message: 2887

Hello, I'm KE4NU/7 (Alan) in Western Montana. I've been using a 80 meter horizontal loop for a couple of years. Its in a kind of a rectangle configuration. The corners vary in height from about 30 to 55 ft. I feed it with 450 ohm twinlead to a 4:1 balun then about 10 ft rg8x into the shack to a tuner. It has been a great performing antenna. I've used it on 160-6 meters, worked a bunch of dx. On 75 I've worked South America, New Zealand, Australia, and a lot more during contests. This is not just a antenna for close in contacts.
I've also tried bringing the twin feeline inside the shack and using an old johnson matchbox. I could tell no difference on either transmit or receive so I went back to the balun.
I might ad that over the years I've tried many different antennas and plan on trying more and the loop is one the best IMHO 73, Alan

2888. RE: [SkyWires] New to the Group

Yahoo group: SkyWires
Date: 2008-02-15 23:43:48 UTC
From: Callum M0MCX
Topic: 2887 Message: 2888
Attachments: 2 described; binary payloads are missing from this source WARC

Hi Alan,

Some kind guy sent me some software plots of the RF pattern similar to yours but with a height of around 80 feet (difficult for most of us, I know). Both his experience in contests as well as the software plots demonstrated excellent DX capability.

I only I had 4 x 100 foot trees spread apart!

:)

Callum

http://www.m0mcx.co.uk/

From: SkyWires@yahoogroups.com [mailto:SkyWires@yahoogroups.com] On Behalf Of ke4nu_7
Sent: 15 February 2008 17:05
To: SkyWires@yahoogroups.com
Subject: [SkyWires] New to the Group

Hello, I'm KE4NU/7 (Alan) in Western Montana. I've been using a 80 meter horizontal loop for a couple of years. Its in a kind of a rectangle configuration. The corners vary in height from about 30 to 55 ft. I feed it with 450 ohm twinlead to a 4:1 balun then about 10 ft rg8x into the shack to a tuner. It has been a great performing antenna. I've used it on 160-6 meters, worked a bunch of dx. On 75 I've worked South America, New Zealand, Australia, and a lot more during contests. This is not just a antenna for close in contacts. I've also tried bringing the twin feeline inside the shack and using an old johnson matchbox. I could tell no difference on either transmit or receive so I went back to the balun.
I might ad that over the years I've tried many different antennas and plan on trying more and the loop is one the best IMHO 73, Alan

2889. Re: [SkyWires] New to the Group

Yahoo group: SkyWires
Date: 2008-02-16 00:13:58 UTC
From: Alan Wilson
Topic: 2887 Message: 2889

yes, wish i had those tall trees here too. i got one about 50-70 ft.73, Alan

On 2/15/08, Callum M0MCX <callum@...> wrote:
> Hi Alan,
>
>
>
> Some kind guy sent me some software plots of the RF pattern similar to yours
> but with a height of around 80 feet (difficult for most of us, I know). Both
> his experience in contests as well as the software plots demonstrated
> excellent DX capability.
>
>
>
> I only I had 4 x 100 foot trees spread apart!
>
>
>
> :)
>
>
>
> Callum
>
> http://www.m0mcx.co.uk/
>
>
>
>
>
> From: SkyWires@yahoogroups.com [mailto:SkyWires@yahoogroups.com] On Behalf
> Of ke4nu_7
> Sent: 15 February 2008 17:05
> To: SkyWires@yahoogroups.com
> Subject: [SkyWires] New to the Group
>
>
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> meter horizontal loop for a couple of years. Its in a kind of a
> rectangle configuration. The corners vary in height from about 30 to
> 55 ft. I feed it with 450 ohm twinlead to a 4:1 balun then about 10 ft
> rg8x into the shack to a tuner. It has been a great performing
> antenna. I've used it on 160-6 meters, worked a bunch of dx. On 75
> I've worked South America, New Zealand, Australia, and a lot more

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> I've also tried bringing the twin feeline inside the shack and using
> an old johnson matchbox. I could tell no difference on either transmit
> or receive so I went back to the balun.
> I might ad that over the years I've tried many different antennas and
> plan on trying more and the loop is one the best IMHO 73, Alan
>
>
>
>

--
Alan Wilson
67 Bullseye Lane
Victor, MT 59875
http://montanaham.tripod.com

2890. Shortwave World

Yahoo group: SkyWires
Date: 2008-02-16 13:00:25 UTC
From: Antônio Schuler
Topic: 2890 Message: 2890

Dear friends

Welcome to the Shortwave World.

The group was founded to SW radio listeners and DXers around the world. Members are free to post their Shortwave DX Logs and QSL Cards. The group also receives information about international schedules and guides, broadcasting, pirates, propagation, utility and internet links about world of radio.

To join us:
http://groups.yahoo.com/group/shortwaveworld

73

Shortwave World
Moderator.

2891. Re: New to the Group

Yahoo group: SkyWires
Date: 2008-02-16 16:46:41 UTC
From: Dave
Topic: 2887 Message: 2891

--- In SkyWires@yahoogroups.com, "Alan Wilson" <ke4nu7@...> wrote:
>
> yes, wish i had those tall trees here too. i got one about 50-70
ft.73, Alan
>

The trouble with trees is that they're often not placed for optimal antenna work. I've got many dozens of trees on my property. A dozen 70 foot oaks are all clustered so densely together (the way Mother Nature puts them naturally) that the only way to use them as a support is to slingshot a line clear over them. There's one Douglas Fir tree well over 100 feet high, but the foliage at the top is little more then webbing. Far too weak to climb, and in such a thicket that one could not get a bucket truck nearby, and a line from a slingshot barely makes purchase.

Then, 300 feet to the north, an abandoned Christmas tree farm, 50 or so Doug Firs of about 30 feet in height, which I can approach only from one side on account of the terrain and several farmers' animals.

So, as it turns out, I'll be needing to plant towers, and in that case, the presence of the trees inhibits guy lines...thus forcing me into more expensive cantilevered towers.

For now, I'm using a vertical, supported on a man-made tree house, and an 80 meter inverted vee, its apex vaguely situated somewhere in those oaks. My neighbor insists that I should do a loop, around the perimeter of the property (1800 feet). If I did that, one corner would be at 30 feet, and the remaining three would be at six feet, as the support structures in most of the perimeter consist of six foot fences.

Why can't trees be where you need them?

;)

Dave W8NF

2892. RE: [SkyWires] Re: New to the Group

Yahoo group: SkyWires
Date: 2008-02-16 22:51:29 UTC
From: Callum M0MCX
Topic: 2887 Message: 2892
Attachments: 2 described; binary payloads are missing from this source WARC

>>> Why can't trees be where you need them?

Took the words right out my mouth....!

Callum McCormick

http://www.m0mcx.co.uk/

From: SkyWires@yahoogroups.com [mailto:SkyWires@yahoogroups.com] On Behalf Of Dave
Sent: 16 February 2008 16:47
To: SkyWires@yahoogroups.com
Subject: [SkyWires] Re: New to the Group

--- In SkyWires@yahoogroups.com <mailto:SkyWires%40yahoogroups.com> , "Alan Wilson" <ke4nu7@...> wrote:
>
> yes, wish i had those tall trees here too. i got one about 50-70 ft.73, Alan
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Then, 300 feet to the north, an abandoned Christmas tree farm, 50 or so Doug Firs of about 30 feet in height, which I can approach only from one side on account of the terrain and several farmers' animals.

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Why can't trees be where you need them?

;)

Dave W8NF

2893. RE: [SkyWires] Re: New to the Group

Yahoo group: SkyWires
Date: 2008-02-16 23:48:31 UTC
From: phil SINGLEY
Topic: 2887 Message: 2893

I guess I'm lucky with the placement of trees on my property. First got my ticket in 1959. In 1964, my new wife and I picked out a building spot on the old home place, hoping one day to build there. That year, I set out a bunch of Southern pine trees around the place with placement of antennas in mind. We did not build there until 1980. Now, after 44 years these trees are huge, but thanks to Hurricane Katrina, I lost four of them. I use a potato gun, or "spud gun," as some people call them to place my lines over the top of the trees.

73,

Phil - K5FSP

Callum M0MCX <callum@...> wrote:
>>> Why can't trees be where you need them?

Took the words right out my mouth....!

Callum McCormick
http://www.m0mcx.co.uk/

From: SkyWires@yahoogroups.com [mailto:SkyWires@yahoogroups.com] On Behalf Of Dave
Sent: 16 February 2008 16:47
To: SkyWires@yahoogroups.com
Subject: [SkyWires] Re: New to the Group

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>
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So, as it turns out, I'll be needing to plant towers, and in that case, the presence of the trees inhibits guy lines...thus forcing me into more expensive cantilevered towers.

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Why can't trees be where you need them?

;)

Dave W8NF

Never miss a thing. Make Yahoo your homepage.

2894. shooting lines over limbs

Yahoo group: SkyWires
Date: 2008-02-17 00:30:02 UTC
From: Alan Wilson
Topic: 2894 Message: 2894

Has anyone ever used one of those cheap crossbox pistols to shoot lines over limbs. You can get fishing line reels for them. You usually find them either 50lb or 80lb on ebay. Price seems right most of the time. Before we bought this place, the last place had 1 tree on 7 acres and wasn't very tall...73, Alan

2895. shooting lines over limbs

Yahoo group: SkyWires
Date: 2008-02-17 00:41:29 UTC
From: Lake Hodges Radio
Topic: 2894 Message: 2895

At 04:30 PM 2/16/2008, Alan Wilson wrote:
>Has anyone ever used one of those cheap crossbox pistols to shoot lines
>over limbs. You can get fishing line reels for them.

==========

Yes... I have used them to put wire antennas in trees about 75 feet
above the ground.

They sell on eBay and also on eHam.net.

They're a slingshot with a fishing reel.

HIGHLY recommended (pun intended).

-- Kurt, N6MD

2896. Radioworks Superloop 36

Yahoo group: SkyWires
Date: 2008-02-17 09:02:03 UTC
From: leonardo_da_vinci_nz
Topic: 2896 Message: 2896

It looks like that at present Radioworks only offers the Superloop 80. Wonder if anyone has worked with the 40 version and what their experiences are.

I noted that ladderline is being used for the stub - if I do decide to create one then I will have to come up with an alternative since I cannot get my hands on ladderline easily here down under. May just make one continued loop and then just make the wire closely spaced. Has any tried this?

Thanks
Marinus ZL2ML

2897. Re: [SkyWires] shooting lines over limbs

Yahoo group: SkyWires
Date: 2008-02-17 10:27:56 UTC
From: Sarge
Topic: 2894 Message: 2897

> At 04:30 PM 2/16/2008, Alan Wilson wrote:
>>Has anyone ever used one of those cheap crossbox pistols to shoot lines
>>over limbs. You can get fishing line reels for them.

I wouldn't think the small bolt is heavy enough but never tried one.

Sarge

2898. Re: [SkyWires] Radioworks Superloop 36

Yahoo group: SkyWires
Date: 2008-02-17 16:00:20 UTC
From: Ken Burchfield
Topic: 2896 Message: 2898

For Roll your own Ladder line, you may find in the links section of this Group Information to make your own, interesting.
73 Ken
BALANCED FEED LINE – ROLLING YOUR OWN by VE1VQ GETTING READY
Homebrew Ladder Line
http://users.eastlink.ca/~dbm1/radio/bfline3.pdf

PacketRadio is Still Alive.....Mississippi.....145.010.....Simplex.....1200 Baud

----- Original Message ----
From: leonardo_da_vinci_nz <leonardo_da_vinci_nz@....nz>
To: SkyWires@yahoogroups.com
Sent: Sunday, February 17, 2008 3:02:03 AM
Subject: [SkyWires] Radioworks Superloop 36

It looks like that at present Radioworks only offers the Superloop 80.
Wonder if anyone has worked with the 40 version and what their
experiences are.

I noted that ladderline is being used for the stub - if I do decide to
create one then I will have to come up with an alternative since I
cannot get my hands on ladderline easily here down under. May just make
one continued loop and then just make the wire closely spaced. Has any
tried this?

Thanks
Marinus ZL2ML

Looking for last minute shopping deals?
Find them fast with Yahoo! Search.
http://tools.search.yahoo.com/newsearch/category.php?category=shopping

2899. Re: Radioworks Superloop 36

Yahoo group: SkyWires
Date: 2008-02-17 17:51:50 UTC
From: leonardo_da_vinci_nz
Topic: 2896 Message: 2899

--- In SkyWires@yahoogroups.com, Ken Burchfield <k5jxl@...> wrote:
>
> For Roll your own Ladder line, you may find in the links section of
this Group
> Information to make your own, interesting.
> 73 Ken
> BALANCED FEED LINE ☐ ROLLING YOUR OWN by VE1VQ GETTING READY
> Homebrew Ladder Line
> http://users.eastlink.ca/~dbm1/radio/bfline3.pdf

Ken

Thanks for the link, had not thought about that.

73, Marinus, ZL2ML

2900. Re: [SkyWires] shooting lines over limbs a much better way.

Yahoo group: SkyWires
Date: 2008-02-17 18:08:14 UTC
From: schuetzen
Topic: 2894 Message: 2900

Sarge wrote:
>
>
>> At 04:30 PM 2/16/2008, Alan Wilson wrote:
>
> I wouldn't think the small bolt is heavy enough but never tried one.
>
> Sarge
>

a tree trimmer here in Houston put a line over a branch about 50' up for me and how he did it has changed my mind since the "wrist rocket" is a POC of the first order. (line is too light, should be 75# braided). What he did was to unwind his yellow cord off his 1x4 with V cuts in each end ... about 150 feet of it (remember, tree trimmers have to get ropes up there to cut limbs,etc) and laid it out carerully on the grass in front of him. he then took the end which terminated in a small leather pouch filled with about a pound of ball bearings... might have been half that but it weighed plenty and then dropped it towards the ground about 30" worth. while fixing his stare on where he wanted the pouch to go, he began whirling this pouch underhanded, at his side and when he was ready, he let go of it.

He put it exactly where I wanted it in the top of my neighbor's street front 60 yr old elm tree. the pouch was heavy enough to drop straight down thru the foliage and small branches to the ground. I then piggy backed some 700# test black line after he pulled the pouch back up to the fork, then dropped the pouch and I pulled the pouch down so that i could get my suspension line down.

anyway, he untied his cord from the board (it was that yellow cord that most builders use over and over again to mark between corner stakes where the foundation form boards will go), and pulled the rest of it thru the crotch and then rewound it.

this works better than anything short of climbing or using a ladder to get a line up in a tree AND BACK DOWN on the other side. takes practice to get it to go where you want it but heck, it should be fun pitting your hand-eye coordination against such a task.

fwiw
chas
k5dam

2901. Lines over tree limbs

Yahoo group: SkyWires
Date: 2008-02-17 20:15:28 UTC
From: Alan Wilson
Topic: 2901 Message: 2901

This is how I did it for the last few years, I used a compound bow and practice arrow. I wrapped some solder around the tip (to ad weight). I tied 30 lb test fishing line (spider wire) to tail end of the arrow. I had the fishing line on zebco33 on the bottom half of fishing rod. I had someone hold the rod and reel or placed in a bucket. With the cast button pushed and a little line free from the reel and not tangled in grass, rock, etc, I fired the arrow and if the arrow went where I intended it to go. The added weight on the tip of the arrow made it head back down to the ground easily most of the time. After retrieving the arrow I removed the fishing line and tied it to the 1/4" line. I also taped it to make it smooth and less likely to hang up. I pulled line back over with the fishing reel. I tied the insulator or whatever to the end and tied the two ends of the 1/4" line together so that is was a continuous loop. That way I could pull it up or down when needed. I just thought using this method with a crossbow pistol with the attached fishing reel would be easier. Cheap as they are I think I'll try it anyway, hey if nothing else I'll have something to hunt gophers with...73, Alan

2902. Re: [SkyWires] Lines over tree limbs

Yahoo group: SkyWires
Date: 2008-02-17 22:09:17 UTC
From: phil SINGLEY
Topic: 2901 Message: 2902

I use a spud gun to get my lines over tree limbs. I may have posted this before. I can't remember. Just make sure you don't have any irate neighbors, or local laws against its use before using the spud gun. For just a few dollars, you can construct one. If you wish to construct one, you can use my plans, or Google "spud gun." There's thousands of articles on spud gun construction. The first time I used mine, I had 600' of nylon masonery line coiled up in a bucket. I did not tie the other end of the line to anything. I fired the gun, and it took away all the line, and over the trees it went!

The following is my experience using a spud gun, or potato gun:

Spud Gun

Construction:

Cut 2 inch Schedule 40 PVC to a length of 36 inches for the barrel.
Cut 4 inch Schedule 40 PVC to a length of 18 inches for the firing chamber.
Install 2 inch female x 4 inch female Schedule 40 PVC x-over on one end of the 4 inch x 18 inch firing chamber. Install the 2 inch x 36 inch barrel. Bevel the outside of the end of the barrel to aid in cutting the potato to size.
Install 4 inch threaded female x 4 inch slip-on Schedule 40 PVC on the other end of the 4 inch x 18 inch firing chamber. A 4 inch bull plug will be used in the threaded end later.
The Coleman lantern striker was purchased in the camping section of Wal-mart for about $3.00. It is installed as follows: Disassemble the striker and discard the mounting tab. Remove the knurled knob and slide the striker out of the bushing. Drill a hole in the 4 inch firing chamber as near as possible to the 4 inch threaded end. This is so the flint in the striker can be changed easily. Thread the bushing from the inside of the 4 inch allowing the bushing to make its own threads. Reassemble the striker.
Allow glue to cure for about 18 ? 24 hours before test firing.

Installing line over tree:

Cut about a 6 inch piece of 2 inch PVC to use as a jig for pre-cutting the potato. Bevel the outside of the end as was done on the barrel.
Cut potato to size and remove from jig.
Cut a square piece of cheese cloth ? Purchased from the sewing/cloth section of Wal-mart.
Place the potato on the cheese cloth and tie the four corners together with the nylon masonry line. Spool off the estimated amount of line to go over the tree and back down.
Coil the masonry string in a bucket.
Place the wrapped potato on the barrel and push down about 30 inches with a wooden dowel rod.
Remove the 4 inch bull plug from the end of the firing chamber holding the plug just above the threads. Make sure the threads have a light lubricant on them.
Spray about 3 seconds worth of Brute aerosol deodorant, hair spray, or whatever. Check for a butane or propane ingredient on the can.
Hold the gun to your side with one hand on the barrel and at a 45 degree angle to the top to the tree, and fire away!!! The recoil is very light.

Alan Wilson <ke4nu7@...> wrote:
This is how I did it for the last few years, I used a compound bow and practice arrow. I wrapped some solder around the tip (to ad weight). I tied 30 lb test fishing line (spider wire) to tail end of the arrow. I had the fishing line on zebco33 on the bottom half of fishing rod. I had someone hold the rod and reel or placed in a bucket. With the cast button pushed and a little line free from the reel and not tangled in grass, rock, etc, I fired the arrow and if the arrow went where I intended it to go. The added weight on the tip of the arrow made it head back down to the ground easily most of the time. After retrieving the arrow I removed the fishing line and tied it to the 1/4" line. I also taped it to make it smooth and less likely to hang up. I pulled line back over with the fishing reel. I tied the insulator or whatever to the end and tied the two ends of the 1/4" line together so that is was a continuous loop. That way I could pull it up or down when needed. I just thought using this method with a crossbow pistol with the attached fishing reel would be easier. Cheap as they are I think I'll try it anyway, hey if nothing else I'll have something to hunt gophers with...73, Alan

---
Never miss a thing. Make Yahoo your homepage.

2903. RE: [SkyWires] Lines over tree limbs

Yahoo group: SkyWires
Date: 2008-02-17 23:00:19 UTC
From: David Shrum
Topic: 2901 Message: 2903
Attachments: 1 described; binary payloads are missing from this source WARC

Just a thought here, why not put this in a text or PDF file and put a copy of it in the files section of the group, also if you have pictures that would be nice too. As far as that goes why not anyone else that has a favorite way of getting their antenna 'up there' in the air do likewise, put it in a file or picture(s) and put it in the files area. That way if someone is looking for an idea they might be able to get some ideas from you that might work for them.

Just a thought.

Dave N8PU

From: SkyWires@yahoogroups.com [mailto:SkyWires@yahoogroups.com] On Behalf Of phil SINGLEY
Sent: Sunday, February 17, 2008 5:09 PM
To: SkyWires@yahoogroups.com
Subject: Re: [SkyWires] Lines over tree limbs

I use a spud gun to get my lines over tree limbs. I may have posted this before. I can't remember. Just make sure you don't have any irate neighbors, or local laws against its use before using the spud gun. For just a few dollars, you can construct one. If you wish to construct one, you can use my plans, or Google "spud gun." There's thousands of articles on spud gun construction. The first time I used mine, I had 600' of nylon masonery line coiled up in a bucket. I did not tie the other end of the line to anything. I fired the gun, and it took away all the line, and over the trees it went!

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Install 4 inch threaded female x 4 inch slip-on Schedule 40 PVC on the other end of the 4 inch x 18 inch firing chamber. A 4 inch bull plug will be used in the threaded end later.
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* Spray about 3 seconds worth of Brute aerosol deodorant, hair spray, or whatever. Check for a butane or propane ingredient on the can.
* Hold the gun to your side with one hand on the barrel and at a 45 degree angle to the top to the tree, and fire away!!! The recoil is very light.

2904. RE: [SkyWires] Lines over tree limbs

Yahoo group: SkyWires
Date: 2008-02-17 23:11:12 UTC
From: Scott MacKenzie
Topic: 2901 Message: 2904

I use a "hyperdog" sling shot. It is designed to throw tennis balls for dogs to chase. The literature says 250 feet - and I have gotten it easily up 125' over some trees. I slit the tennis ball, and put a large bolt tied with 50 pound test fishing line. I unwound a lot of line out so reduce the drag on the tennis ball going up. Works well - and a very cheap solution. It also works well with snowballs to ward off kids.

From: SkyWires@yahoogroups.com [mailto:SkyWires@yahoogroups.com] On Behalf Of David Shrum
Sent: Sunday, February 17, 2008 6:00 PM
To: SkyWires@yahoogroups.com
Subject: RE: [SkyWires] Lines over tree limbs

Just a thought here, why not put this in a text or PDF file and put a copy of it in the files section of the group, also if you have pictures that would be nice too. As far as that goes why not anyone else that has a favorite way of getting their antenna 'up there' in the air do likewise, put it in a file or picture(s) and put it in the files area. That way if someone is looking for an idea they might be able to get some ideas from you that might work for them.

Just a thought.

Dave N8PU

From: SkyWires@yahoogroups.com [mailto:SkyWires@yahoogroups.com] On Behalf Of phil SINGLEY
Sent: Sunday, February 17, 2008 5:09 PM
To: SkyWires@yahoogroups.com
Subject: Re: [SkyWires] Lines over tree limbs

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Construction:

* Cut 2 inch Schedule 40 PVC to a length of 36 inches for the barrel.

* Cut 4 inch Schedule 40 PVC to a length of 18 inches for the firing chamber.
* Install 2 inch female x 4 inch female Schedule 40 PVC x-over on one end of the 4 inch x 18 inch firing chamber. Install the 2 inch x 36 inch barrel. Bevel the outside of the end of the barrel to aid in cutting the potato to size.
Install 4 inch threaded female x 4 inch slip-on Schedule 40 PVC on the other end of the 4 inch x 18 inch firing chamber. A 4 inch bull plug will be used in the threaded end later.
* The Coleman lantern striker was purchased in the camping section of Wal-mart for about $3.00. It is installed as follows: Disassemble the striker and discard the mounting tab. Remove the knurled knob and slide the striker out of the bushing. Drill a hole in the 4 inch firing chamber as near as possible to the 4 inch threaded end. This is so the flint in the striker can be changed easily. Thread the bushing from the inside of the 4 inch allowing the bushing to make its own threads. Reassemble the striker.
* Allow glue to cure for about 18 - 24 hours before test firing.

Installing line over tree:

* Cut about a 6 inch piece of 2 inch PVC to use as a jig for pre-cutting the potato. Bevel the outside of the end as was done on the barrel.
* Cut potato to size and remove from jig.
* Cut a square piece of cheese cloth - Purchased from the sewing/cloth section of Wal-mart.
* Place the potato on the cheese cloth and tie the four corners together with the nylon masonry line. Spool off the estimated amount of line to go over the tree and back down. Coil the masonry string in a bucket.
* Place the wrapped potato on the barrel and push down about 30 inches with a wooden dowel rod.
* Remove the 4 inch bull plug from the end of the firing chamber holding the plug just above the threads. Make sure the threads have a light lubricant on them.
* Spray about 3 seconds worth of Brute aerosol deodorant, hair spray, or whatever. Check for a butane or propane ingredient on the can.
* Hold the gun to your side with one hand on the barrel and at a 45 degree angle to the top to the tree, and fire away!!! The recoil is very light.

2905. Re: Lines over tree limbs

Yahoo group: SkyWires
Date: 2008-02-18 00:09:51 UTC
From: Paul
Topic: 2901 Message: 2905

Phil,
I guess it is obvious but because you were so complete in the other steps, I'm guessing you re-secure the plug between thoe last two steps.

I also figure you should not dillydally. The faster you get the plug back on and the sooner your fire, the more effective the propellant - right?

73,
Paul

--- In SkyWires@yahoogroups.com, phil SINGLEY <k5fsp@...> wrote:
>

> Remove the 4 inch bull plug from the end of the firing chamber holding the plug just above the threads. Make sure the threads have a light lubricant on them.
> Spray about 3 seconds worth of Brute aerosol deodorant, hair spray, or whatever. Check for a butane or propane ingredient on the can.
> Hold the gun to your side with one hand on the barrel and at a 45 degree angle to the top to the tree, and fire away!!! The recoil is very light.
>
>

2906. Re: [SkyWires] Re: Lines over tree limbs

Yahoo group: SkyWires
Date: 2008-02-18 00:26:13 UTC
From: phil SINGLEY
Topic: 2901 Message: 2906

Paul,

I did omit that step in error. You are correct... The faster you get the 4" plug in the more effective your propellant is. I have plans to install a 2" pvc ball valve in that end using a 4" npt male X 2" female x/o and install the 2" pvc ball valve. That way, all you have to do is open the valve, charge your combustion chamber and close the valve. I believe that would work much better.

73,

Phil - K5FSP

Paul <k7nhb@...> wrote:

Phil,
I guess it is obvious but because you were so complete in the other steps, I'm guessing you re-secure the plug between thoe last two steps.

I also figure you should not dillydally. The faster you get the plug back on and the sooner your fire, the more effective the propellant - right?

73,
Paul

--- In SkyWires@yahoogroups.com, phil SINGLEY <k5fsp@...> wrote:
>

> Remove the 4 inch bull plug from the end of the firing chamber holding the plug just above the threads. Make sure the threads have a light lubricant on them.
> Spray about 3 seconds worth of Brute aerosol deodorant, hair spray, or whatever. Check for a butane or propane ingredient on the can.
> Hold the gun to your side with one hand on the barrel and at a 45 degree angle to the top to the tree, and fire away!!! The recoil is very light.
>
>

Be a better friend, newshound, and know-it-all with Yahoo! Mobile. Try it now.

2907. RE: [SkyWires] Lines over tree limbs

Yahoo group: SkyWires
Date: 2008-02-18 00:30:45 UTC
From: Jim Dunstan
Topic: 2901 Message: 2907

At 06:11 PM 2/17/2008 -0500, you wrote:

Hi,

I have suspended wire antennas from tree branches for years ... mine are in the 50' bracket. I have always used a good quality sling shot, a good size lead fishing weight, with a colorful silk trailer (my biggest problem was finding the weight after it lands in the brush hi hi ... really helps to have a second pair of eyes following the flight path. I use a fishing rod and spinning reel (use one with a closed face). I found that any line more than 20lb test is too heavy.

However, once I have a decent sized line up over the best branches I found that the branches (in my trees) were flexible enough to act as springs and I never had to deal with broken antenna wire or halyards. Now wear of the halyard at the point where it goes over the branch is the weak spot. It wears and when it parts you are back to square one ... eg trying to get the line back up over that branch. There are all kinds of techniques I have seen published as to dealing with this weak spot ... eg pulleys & weights etc...

The simple solution I have come up with solves the problem and once I started using it I never had to re-string a halyard again (25 years now !!!). It is so simple it sounds silly. All you do is tie the halyard so there are 2 ropes at the point they cross the branch. The main halyard is tight and carries the weight and experiences the wear .... the other parallel portion is slack enough that it does not experience wear and simply takes over when the main halyard parts. The other reason I keep the safety line loose is that when the halyard parts the antenna sags and you notice it. All you do is tighten it up and plan the repair at your convenience.

Mark the end of your halyard with black tape every 10 or 15 ft .... so that when you lower it you will know approximately where it crosses the branch .... then tie in your second rope parallel about 10' or so either side of the crossing point. When you pull it back into position you will see that the doubled portion bridges the crossing point (and is loose enough to prevent wear).

Jim, VE3CI

2910. Re: [SkyWires] We - I and my girlfriend. Mad 18 hours in my lifes.

Yahoo group: SkyWires
Date: 2008-02-18 19:11:14 UTC
From: Facility 406 DM09
Topic: 2909 Message: 2910

So press your delete key and walk away...

Kurt

----- Original Message -----
From: "Gaylon Rose" <kc0aud@...>

: ...This appears to be "Spam", and an unacceptable use of this reflector...

2911. hello admin

Yahoo group: SkyWires
Date: 2008-02-20 07:19:07 UTC
From: VU3MES
Topic: 2911 Message: 2911

i have seen some spam mails getting in here and feel that the admins must exercise moderation of in coming mails. to give some example two yahoo groups for the yaesu vx5r and the kaito/deigen radio receiver has been so much infilterated by porn messages, many legitimate users of these two reflectors have opted out. there other places for stuff likes porn and dating etc. and not on any radio related groups. hence i strongly feel that the incoming messages should be edited by the admins.

73s de vu3mes
satyan
india.

2912. Re: [SkyWires] hello admin

Yahoo group: SkyWires
Date: 2008-02-20 07:23:04 UTC
From: Hans Remeeus
Topic: 2911 Message: 2912

This SkyWires group seems to have not a very good moderator...

I am moderator of several Yahoo-groups and my groups are 100% spam- and pornfree!

73,
Hans Remeeus (PA1HR)
http://www.remeeus.eu
Communication is about people, the rest is technology.

VU3MES schreef:
> i have seen some spam mails getting in here and feel that the admins
> must exercise moderation of in coming mails. to give some example two
> yahoo groups for the yaesu vx5r and the kaito/deigen radio receiver has
> been so much infilterated by porn messages, many legitimate users of
> these two reflectors have opted out. there other places for stuff likes
> porn and dating etc. and not on any radio related groups. hence i
> strongly feel that the incoming messages should be edited by the admins.
>
> 73s de vu3mes
> satyan
> india.
>
>
>

2913. Re: [SkyWires] hello admin

Yahoo group: SkyWires
Date: 2008-02-20 08:06:09 UTC
From: Sandeep Lohia
Topic: 2911 Message: 2913
Attachments: 2 described; binary payloads are missing from this source WARC

[Attachment content not displayed]

2914. Re: [SkyWires] hello admin

Yahoo group: SkyWires
Date: 2008-02-20 10:24:08 UTC
From: David Shrum
Topic: 2911 Message: 2914

I am one of those moderators and apparently you are new to this group, this has gone around and around in the past so to get to the point; The group owner didn't give us the ability to put new members on moderation for their first few post SO all that is left for us to do is wait until they spam this group and ban them after the fact. You can search the archives to see that this has been discussed in the past before. I wish we could do something about it but we can't.
Dave N8PU

VU3MES wrote:
> i have seen some spam mails getting in here and feel that the admins
> must exercise moderation of in coming mails. to give some example two
> yahoo groups for the yaesu vx5r and the kaito/deigen radio receiver has
> been so much infilterated by porn messages, many legitimate users of
> these two reflectors have opted out. there other places for stuff likes
> porn and dating etc. and not on any radio related groups. hence i
> strongly feel that the incoming messages should be edited by the admins.
>
> 73s de vu3mes
> satyan
> india.
>

2915. RE: [SkyWires] hello admin

Yahoo group: SkyWires
Date: 2008-02-20 15:54:13 UTC
From: Callum M0MCX
Topic: 2911 Message: 2915
Attachments: 2 described; binary payloads are missing from this source WARC

Can we go back to sleep now Mr Mod ?

:)

This place has been quiet for a few days.. I'd like more about shooting various vegetables out of tubes. That was fun :)

!

Callum McCormick

http://www.m0mcx.co.uk/

From: SkyWires@yahoogroups.com [mailto:SkyWires@yahoogroups.com] On Behalf Of David Shrum
Sent: 20 February 2008 10:24
To: SkyWires@yahoogroups.com
Subject: Re: [SkyWires] hello admin

I am one of those moderators and apparently you are new to this group, this has gone around and around in the past so to get to the point; The group owner didn't give us the ability to put new members on moderation for their first few post SO all that is left for us to do is wait until they spam this group and ban them after the fact. You can search the archives to see that this has been discussed in the past before. I wish we could do something about it but we can't.
Dave N8PU

VU3MES wrote:
> i have seen some spam mails getting in here and feel that the admins
> must exercise moderation of in coming mails. to give some example two
> yahoo groups for the yaesu vx5r and the kaito/deigen radio receiver has
> been so much infilterated by porn messages, many legitimate users of
> these two reflectors have opted out. there other places for stuff likes
> porn and dating etc. and not on any radio related groups. hence i
> strongly feel that the incoming messages should be edited by the admins.
>
> 73s de vu3mes
> satyan
> india.
>

2916. Re: [SkyWires] hello admin

Yahoo group: SkyWires
Date: 2008-02-20 16:57:39 UTC
From: Dr. Ace Ratliff
Topic: 2911 Message: 2916

Hi All,
I am also a moderator in this group. Several attempts were made by various members to contact this groups owner so changes could be made, none were successful. As Dave N8PU said we are powerless until they post then we can ban that spammers user name. At this time group users can hit the delete button when spam occurs or unsubscribe from this fine group!
73, Ace - WH2T

----- Original Message -----
From: David Shrum
To: SkyWires@yahoogroups.com
Sent: Wednesday, February 20, 2008 5:24 AM
Subject: Re: [SkyWires] hello admin

I am one of those moderators and apparently you are new to this group, this has gone around and around in the past so to get to the point; The group owner didn't give us the ability to put new members on moderation for their first few post SO all that is left for us to do is wait until they spam this group and ban them after the fact. You can search the archives to see that this has been discussed in the past before. I wish we could do something about it but we can't.
Dave N8PU

VU3MES wrote:
> i have seen some spam mails getting in here and feel that the admins
> must exercise moderation of in coming mails. to give some example two
> yahoo groups for the yaesu vx5r and the kaito/deigen radio receiver has
> been so much infilterated by porn messages, many legitimate users of
> these two reflectors have opted out. there other places for stuff likes
> porn and dating etc. and not on any radio related groups. hence i
> strongly feel that the incoming messages should be edited by the admins.
>
> 73s de vu3mes
> satyan
> india.
>

2917. Re: [SkyWires] hello admin

Yahoo group: SkyWires
Date: 2008-02-20 17:10:35 UTC
From: ve1vq
Topic: 2911 Message: 2917

Perhaps it has been suggested before and I've forgotten it but we could start a new group called "Skywires something else" and all move. I've been here long enough to just hit the delete key!

Dave
VE1VQ

2918. Re: hello admin

Yahoo group: SkyWires
Date: 2008-02-20 17:22:08 UTC
From: Ben - ne5B
Topic: 2911 Message: 2918

You are not powerless!

The Barn Door for this group is open to Spammers !

Looking at the Group's settings
**** Membership does not require approval ****
Messages do not require approval
All members can post messages
Email attachments are permitted
Members can hide email address
Listed in directory

**** Membership does not require approval **** is the main problem.
It let's anyone in, spammers and the like!

The solution for preventing future spammers from joining is simple.

The owner of the group needs to set the group so that Membership
requires approval, and if new perspective members don't specify their
Amateur Radio callsign or their interest in Amateur Radio Don't let
them in.

This is what I've used to keep the following Yahoogroups SpamFree
TexasHams
TexasVHF
W5SFA
BrenhamTXAmateurRadio
and a few others that I am the owner of, and most of the groups that
I am a member of us this same preventative measure.

When new members request to join my groups, it takes me or one of my
moderators about 5 seconds to decide and then either approve or deny
their request.

73 Ben - ne5B

--- In SkyWires@yahoogroups.com, "Dr. Ace Ratliff" <wh2t@...> wrote:
>
> Hi All,
> I am also a moderator in this group. Several attempts were made by
various members to contact this groups owner so changes could be
made, none were successful. As Dave N8PU said we are powerless until
they post then we can ban that spammers user name. At this time group
users can hit the delete button when spam occurs or unsubscribe from
this fine group!
> 73, Ace - WH2T
>

> ----- Original Message -----
> From: David Shrum
> To: SkyWires@yahoogroups.com
> Sent: Wednesday, February 20, 2008 5:24 AM
> Subject: Re: [SkyWires] hello admin
>
>
> I am one of those moderators and apparently you are new to this
group,
> this has gone around and around in the past so to get to the
point; The
> group owner didn't give us the ability to put new members on
moderation
> for their first few post SO all that is left for us to do is wait
until
> they spam this group and ban them after the fact. You can search
the
> archives to see that this has been discussed in the past before.
I wish
> we could do something about it but we can't.
> Dave N8PU
>
> VU3MES wrote:
> > i have seen some spam mails getting in here and feel that the
admins
> > must exercise moderation of in coming mails. to give some
example two
> > yahoo groups for the yaesu vx5r and the kaito/deigen radio
receiver has
> > been so much infilterated by porn messages, many legitimate
users of
> > these two reflectors have opted out. there other places for
stuff likes
> > porn and dating etc. and not on any radio related groups. hence
i
> > strongly feel that the incoming messages should be edited by
the admins.
> >
> > 73s de vu3mes
> > satyan
> > india.
> >
>

2919. Re: [SkyWires] hello admin

Yahoo group: SkyWires
Date: 2008-02-20 18:25:06 UTC
From: Jim Dunstan
Topic: 2911 Message: 2919

At 01:10 PM 2/20/2008 -0400, you wrote:

>Perhaps it has been suggested before and I've forgotten it
>but we could start a new group called "Skywires something
>else" and all move. I've been here long enough to just hit
>the delete key!
>
>Dave
>VE1VQ

Hi all,

I am not overly sensitive .... unwanted Email ... whether on a discussion group or in general is a reality of modern life. I am sure the moderator/s will do what they can ... in the mean time I have no problem with the delete key ... in fact I often delete posts that are of no particular interest to me in any event .... after all, I have to keep my Email database a reasonable size hi hi.

Enough said .... all on this discussion group are encouraged to delete this message .... hi hi (fourth key from the right on the bottom ... on my keybrd)

73,s

Jim, VE3CI

2920. RE: [SkyWires] Re: hello admin

Yahoo group: SkyWires
Date: 2008-02-20 20:59:09 UTC
From: Callum M0MCX
Topic: 2911 Message: 2920

Ben,

You missed the point.

The moderators are powerless, the owner of the group left it in this state and then disappeared.

But guys, there's more drivel about the consequences of this spam that there is spam in the first place. Just hit delete for gawd's sakes. Are you really worried about a few nonsense emails from time to time? I would be very surprised.

Callum McCormick

http://www.m0mcx.co.uk/

2921. RE: [SkyWires] Re: hello admin

Yahoo group: SkyWires
Date: 2008-02-20 22:56:39 UTC
From: Wayne Helms
Topic: 2911 Message: 2921

I was wondering if he is worried about porn being on his computer. Some countries it is illegal to have it on the computer and we know how some of those countries are. You steal a peanut you get a lashing with a bamboo cane. Wonder what they would do to you if some one was just walking by and he just innocently opens his mail and there is

The girl next door in all her glory.... Do they beat him with that bamboo cane or worse?

wayne

From: SkyWires@yahoogroups.com [mailto:SkyWires@yahoogroups.com] On Behalf Of Callum M0MCX
Sent: Wednesday, February 20, 2008 2:59 PM
To: SkyWires@yahoogroups.com
Subject: RE: [SkyWires] Re: hello admin

Ben,

You missed the point.

The moderators are powerless, the owner of the group left it in this state and then disappeared.

But guys, there's more drivel about the consequences of this spam that there is spam in the first place. Just hit delete for gawd's sakes. Are you really worried about a few nonsense emails from time to time? I would be very surprised.

Callum McCormick

http://www.m0mcx.co.uk/

2922. hello callum and all the friends

Yahoo group: SkyWires
Date: 2008-02-21 04:50:18 UTC
From: VU3MES
Topic: 2922 Message: 2922

let us bury the hatchet now and carry on with the business of discussing things related to ham radio. my intention was juz to bring those spam mails to the attention of the mods and as said already this group loosing its perpective.

for the time being the best option will be the almighty DELETE key.

73s de vu3mes
satyan
chennai

2923. RE: [SkyWires] hello callum and all the friends

Yahoo group: SkyWires
Date: 2008-02-21 12:52:26 UTC
From: Callum M0MCX
Topic: 2922 Message: 2923
Attachments: 2 described; binary payloads are missing from this source WARC

No worries. You were right to discuss - never feel you cannot say what you want!

:)

73

Callum McCormick

http://www.m0mcx.co.uk/

From: SkyWires@yahoogroups.com [mailto:SkyWires@yahoogroups.com] On Behalf Of VU3MES
Sent: 21 February 2008 04:50
To: SkyWires@yahoogroups.com
Subject: [SkyWires] hello callum and all the friends

let us bury the hatchet now and carry on with the business of discussing things related to ham radio. my intention was juz to bring those spam mails to the attention of the mods and as said already this group loosing its perpective.

for the time being the best option will be the almighty DELETE key.

73s de vu3mes
satyan
chennai

2924. Cymco Im Antenna Tuner

Yahoo group: SkyWires
Date: 2008-02-21 15:55:43 UTC
From: naaah2001
Topic: 2924 Message: 2924

Hello Group
Just Picked up a Cymco Im antenna tuner.
Has anyone ever heard of this unit?
It has no manual, so of course I would be interested in getting my hands on that.I paid very short money for it, so that is why I took a chance with it. Thanks...
Norm
KB1MAA

2925. Re: hello admin

Yahoo group: SkyWires
Date: 2008-02-21 16:54:38 UTC
From: leonardo_da_vinci_nz
Topic: 2911 Message: 2925

If it was only beating with a cane I think that could still be survivable.

I have worked in countries that if they would find anything with minors then you are as good as dead.

When I travelled I made 100% sure there would not be any flesh visible in any of my saved photographs. Even a bikini is off-limits in some countries!

If they do find something that only warrants "light" punishment you may discover that you are deported and never allowed to come back again. And that can seriously affect any employment contract that you may have in that country.

Did not realise that the owner of the group left it in this state and did not hand it over in a better manner. Perhaps the earlier suggestion of starting a new group may be the way to go. Suggest calling it perhaps "SkyWire 2000" in honour of living in the 21-st century? The moderators may think about starting a poll what the group feels about moving / renaming.

Is there anything the moderatos can do by contacting Yahoo administrators?

Peace to all
73
Marinus
ZL2ML

--- In SkyWires@yahoogroups.com, "Wayne Helms" <kc5wxc@...> wrote:
>
> I was wondering if he is worried about porn being on his computer. Some
> countries it is illegal to have it on the computer and we know how some of
> those countries are. You steal a peanut you get a lashing with a bamboo
> cane. Wonder what they would do to you if some one was just walking by and
> he just innocently opens his mail and there is
>
> The girl next door in all her glory.... Do they beat him with that bamboo
> cane or worse?
>
>

>
> wayne
>
>
>
>
>
>
>
>
>
>
> _____
>
> From: SkyWires@yahoogroups.com [mailto:SkyWires@yahoogroups.com] On
Behalf
> Of Callum M0MCX
> Sent: Wednesday, February 20, 2008 2:59 PM
> To: SkyWires@yahoogroups.com
> Subject: RE: [SkyWires] Re: hello admin
>
>
>
> Ben,
>
>
>
> You missed the point.
>
> The moderators are powerless, the owner of the group left it in
this state
> and then disappeared.
>
> But guys, there's more drivel about the consequences of this spam
that there
> is spam in the first place. Just hit delete for gawd's sakes. Are
you really
> worried about a few nonsense emails from time to time? I would be
very
> surprised.
>
> Callum McCormick
>
> http://www.m0mcx.co.uk/
>

2926. Re: [SkyWires] Re: hello admin

Yahoo group: SkyWires
Date: 2008-02-21 17:07:38 UTC
From: Earl Needham
Topic: 2911 Message: 2926

At 09:54 2/21/2008, leonardo_da_vinci_nz wrote:
>Is there anything the moderatos can do by contacting Yahoo
>administrators?

Nope -- don't even try!

I was on another list where this same thing happened, and
someone contacted Yahoo for help. A few days later, the list was
deleted with no warning whatsoever. The best thing to do when you
create a list is to give your moderators power enough to take care of
the list if something happens to the listowner. The next best thing
to do is to designate a new listowner if the original listowner gets
tired of it.

My opinion is that we need to create another list with a
similar name, and move everybody over there. Sooner or later
something will happen and this list will disappear and it will be
incredibly difficult to get it back together after the fact.

7 3
Earl

KD5XB -- Earl Needham
Clovis, New Mexico DM84jk
http://groups.yahoo.com/group/cw_bugs
Quoting from the Coast Guard: ZUT

2927. Re: [SkyWires] Re: hello admin

Yahoo group: SkyWires
Date: 2008-02-21 17:50:54 UTC
From: Hans Remeeus
Topic: 2911 Message: 2927

I just started a new Yahoo group called LoopSkywire. Just feel free (not obliged) to join this group.

Other (experienced) moderators are welcome; without restrictions!!

Here are the details on LoopSkywire:
Group home page: http://groups.yahoo.com/group/LoopSkywire
Group email address: LoopSkywire@yahoogroups.com

Ready to start?
Get the ball rolling by posting the very first group message. Then add photos, create an event, or whatever. In short, make yourself at home in your new group.

Simply drop by the LoopSkywire homepage now. To keep the online conversation moving, be sure to invite friends, family, and others who share your passion.

73,
Hans Remeeus (PA1HR)
http://www.remeeus.eu
Communication is about people, the rest is technology.

Earl Needham schreef:
> At 09:54 2/21/2008, leonardo_da_vinci_nz wrote:
>
>> Is there anything the moderatos can do by contacting Yahoo
>> administrators?
>>
>
> Nope -- don't even try!
>
> I was on another list where this same thing happened, and
> someone contacted Yahoo for help. A few days later, the list was
> deleted with no warning whatsoever. The best thing to do when you
> create a list is to give your moderators power enough to take care of
> the list if something happens to the listowner. The next best thing
> to do is to designate a new listowner if the original listowner gets
> tired of it.
>
> My opinion is that we need to create another list with a
> similar name, and move everybody over there. Sooner or later
> something will happen and this list will disappear and it will be
> incredibly difficult to get it back together after the fact.
>
> 7 3
> Earl
>

> KD5XB -- Earl Needham
> Clovis, New Mexico DM84jk
> http://groups.yahoo.com/group/cw_bugs
> Quoting from the Coast Guard: ZUT
>
>
>

2928. Re: hello admin

Yahoo group: SkyWires
Date: 2008-02-21 20:41:30 UTC
From: leonardo_da_vinci_nz
Topic: 2911 Message: 2928

--- In SkyWires@yahoogroups.com, Hans Remeeus <hans@...> wrote:
>
>
> I just started a new Yahoo group called LoopSkywire. Just feel free
(not
> obliged) to join this group.

signing up

Marinus, ZL2ML

2929. RE: [SkyWires] Re: hello admin

Yahoo group: SkyWires
Date: 2008-02-22 04:36:44 UTC
From: satyan
Topic: 2911 Message: 2929

Ok signing up - vu3mes satyan india

-----Original Message-----
From: SkyWires@yahoogroups.com [mailto:SkyWires@yahoogroups.com] On Behalf Of leonardo_da_vinci_nz
Sent: 22 February 2008 02:12
To: SkyWires@yahoogroups.com
Subject: [SkyWires] Re: hello admin

--- In SkyWires@yahoogroup <mailto:SkyWires%40yahoogroups.com> s.com, Hans Remeeus <hans@...> wrote:
>
>
> I just started a new Yahoo group called LoopSkywire. Just feel free (not
> obliged) to join this group.

signing up

Marinus, ZL2ML

2930. Re: [SkyWires] Re: hello admin

Yahoo group: SkyWires
Date: 2008-02-22 05:38:58 UTC
From: Sandeep Lohia
Topic: 2911 Message: 2930
Attachments: 2 described; binary payloads are missing from this source WARC

[Attachment content not displayed]

2931. Re: [SkyWires] Re: hello admin

Yahoo group: SkyWires
Date: 2008-02-23 03:50:02 UTC
From: Andy
Topic: 2911 Message: 2931

> I just started a new Yahoo group called LoopSkywire.

Oh good. We now have THREE Skywires groups, this one and two replacements (so far) that have been created to alleviate the spam problem.

See http://groups.yahoo.com/group/SkyWires/message/2544

No offense, but it does seem a little silly. Why not use what we've got, rather than re-re-creating it all over again and again?

Personally, I prefer Yahoogroups to Googlegroups, but that's just me. On the other hand, that could be part of the reason why the other replacement group hasn't gotten off the ground in its six months of existence.

IMO, for the replacement group to be effective, someone has to copy all the existing files, photos, links, etc. over to it. Preferably the 2900 existing messages too (so people have only one place to look), but that's not practical and as far as I know Yahoo doesn't give us any tricks that might make that job easier.

As a side note, I don't like spam one bit either, but I think the moderators here are doing a pretty good job of controlling it, given the limitations imposed by the group's owner. Spam is a major and rapidly growing problem, yet this group is mostly spam-free, in spite of it.

Andy

2932. Re: [SkyWires] Re: hello admin

Yahoo group: SkyWires
Date: 2008-02-23 05:01:39 UTC
From: Facility 406 DM09
Topic: 2911 Message: 2932

: but it does seem a little silly. Why not use what we've got,
: rather than re-re-creating it all over again and again?

Because for most, it is far easier to do that and complain and whine and cry that the world doesn't protect people from themselves enough, dilute the knowledge base, alienate and offend those around them while running away, squeezing their eyes pretending the world is invisible... than make a proactive split second decision effecting only them and just hit the delete key and go about one's business as an independent soul responsible for their own lives.

Kurt

2933. Re: hello admin

Yahoo group: SkyWires
Date: 2008-02-23 11:28:12 UTC
From: leonardo_da_vinci_nz
Topic: 2911 Message: 2933

--- In SkyWires@yahoogroups.com, "Facility 406 DM09"
<facility_406@...> wrote:
>
> : but it does seem a little silly. Why not use what we've got,
> : rather than re-re-creating it all over again and again?
>
> Because for most, it is far easier to do that and complain and
whine and cry
> that the world doesn't protect people from themselves enough,
dilute the
> knowledge base, alienate and offend those around them while running
away,
> squeezing their eyes pretending the world is invisible... than
make a
> proactive split second decision effecting only them and just hit
the delete
> key and go about one's business as an independent soul responsible
for their
> own lives.
>
> Kurt

Kurt

If you would have taken note of what I wrote in my previous message on this subject - spam in certain countries where I travel can have some very dire consequences. It is for me - at least when I am travelling - either use a group that has no spam or do not visit a group at all.

Peace
Marinus, ZL2ML

2934. Re: hello admin

Yahoo group: SkyWires
Date: 2008-02-23 11:30:54 UTC
From: leonardo_da_vinci_nz
Topic: 2911 Message: 2934

> Personally, I prefer Yahoogroups to Googlegroups, but that's just me.

I will NEVER EVER use either gmail or Google groups. This has to do
with privacy that Google seems to take great liberty with.

Peace
Marinus

2935. RE: [SkyWires] Re: hello admin

Yahoo group: SkyWires
Date: 2008-02-23 15:26:21 UTC
From: Callum M0MCX
Topic: 2911 Message: 2935

Yes Andy, I tend to agree. We have mods here - just missing an owner. Oh well, worse things happen.

Marinus, - you say that you can be imprisoned, flogged or fined due to Yahoo Groups spam - and that you relying on a moderator somewhere not to make a mistake? Tell that to your judge :)!!!

PS - Only three groups? Along with "Ham Antennas" that makes four :)

Callum McCormick

http://www.m0mcx.co.uk/

2936. Re: [SkyWires] Re: hello admin

Yahoo group: SkyWires
Date: 2008-02-23 16:47:09 UTC
From: Jim Dunstan
Topic: 2911 Message: 2936

At 11:28 AM 2/23/2008 +0000, you wrote:

>--- In <mailto:SkyWires%40yahoogroups.com>SkyWires@yahoogroups.com,
>"Facility 406 DM09"
><facility_406@...> wrote:
> >
> > : but it does seem a little silly. Why not use what we've got,
> > : rather than re-re-creating it all over again and again?
> >
> > Because for most, it is far easier to do that and complain and
>whine and cry
> > that the world doesn't protect people from themselves enough,
>dilute the
> > knowledge base, alienate and offend those around them while running
>away,
> > squeezing their eyes pretending the world is invisible... than
>make a
> > proactive split second decision effecting only them and just hit
>the delete
> > key and go about one's business as an independent soul responsible
>for their
> > own lives.
> >
> > Kurt
>
>Kurt
>
>If you would have taken note of what I wrote in my previous message
>on this subject - spam in certain countries where I travel can have
>some very dire consequences. It is for me - at least when I am
>travelling - either use a group that has no spam or do not visit a
>group at all.
>
>Peace
>Marinus, ZL2ML

Marinus et al,

Please stop talking about going .... and discussing where you are going
..... and why you are going .... just go. Better for you and certainly
better for me.

73

Jim, VE3CI

2937. Re: [SkyWires] Re: hello admin

Yahoo group: SkyWires
Date: 2008-02-23 17:24:52 UTC
From: Andy
Topic: 2911 Message: 2937

> PS - Only three groups? Along with "Ham Antennas" that makes four :)

Oh there are many many more than four ham antenna groups. I was just talking about this one and ITS offshoots.

Andy

2938. RE: [SkyWires] Re: hello admin

Yahoo group: SkyWires
Date: 2008-02-23 18:38:06 UTC
From: Callum M0MCX
Topic: 2911 Message: 2938
Attachments: 2 described; binary payloads are missing from this source WARC

I see.

I resigned as many as I could recently but I ended up keeping SkyWires and HamAntennas. I've still got around 20 others - all ham related in one way or other...!

:)

Callum McCormick

http://www.m0mcx.co.uk/

From: SkyWires@yahoogroups.com [mailto:SkyWires@yahoogroups.com] On Behalf Of Andy
Sent: 23 February 2008 17:25
To: SkyWires@yahoogroups.com
Subject: Re: [SkyWires] Re: hello admin

> PS - Only three groups? Along with "Ham Antennas" that makes four :)

Oh there are many many more than four ham antenna groups. I was just talking about this one and ITS offshoots.

Andy

2939. My Skywire Loop

Yahoo group: SkyWires
Date: 2008-03-02 13:09:24 UTC
From: Steve Holman
Topic: 2939 Message: 2939

Well I can report that my Loop is working well. in the lead in to the contest this weekend I have contacted Brazil, Argintine (sp), Paraguay Costa Rica and other locations. as of now it seems to favor the south which should be correct as it is fed on the north side of the loop. I am happy with the results. I need to tinker with the supports as they have taken a set and with the wind and cold the wire swoops up and down between supports so I need to improve them some.

Over all I am satisfied so far

N5WDD

2940. Re: [SkyWires] My Skywire Loop

Yahoo group: SkyWires
Date: 2008-03-02 15:16:27 UTC
From: Steve Eisenberg
Topic: 2939 Message: 2940

Pretty cool, Steve. Looks like I'll have to get a hold
of a toroid and an air capacitor and some wire, then
I'll be all set to build. I guess an antenna analyzer
wouldn't hurt, either.

Steve
NH

--- Steve Holman <fholmancop@...> wrote:

> Well I can report that my Loop is working well.e
> wire swoops up
> and down between supports so I need to improve them
> some.
>
> Over all I am satisfied so far
>
> N5WDD
>
>

_____
Never miss a thing. Make Yahoo your home page.
http://www.yahoo.com/r/hs

2941. Re: My Skywire Loop

Yahoo group: SkyWires
Date: 2008-03-03 16:14:02 UTC
From: Steve Holman
Topic: 2939 Message: 2941

Well I don't have an Ant. Analyzer yet. I have to sell a AT-180 for
that. My Icom 718 feeds a LDG AT-200 to 10" of coax through at Single
Point Ground Plate to a 1:1 Current Balun to Ladder line to the Loop.
The loop is Roughly 600Ft Long.

I am happy so far and with some tuning of the Supports to remove some
sag it should be in place a long time. I plan on using this as my
primary Ant. for now. I will probably build a 135" Multiband Dipole
this spring to provide a second backup ant.

So that is the plan

Steve
N5WDD

-- In SkyWires@yahoogroups.com, Steve Eisenberg <wa1zfy@...> wrote:
>
> Pretty cool, Steve. Looks like I'll have to get a hold
> of a toroid and an air capacitor and some wire, then
> I'll be all set to build. I guess an antenna analyzer
> wouldn't hurt, either.
>
> Steve
> NH
>
>
> --- Steve Holman <fholmancop@...> wrote:
>
> > Well I can report that my Loop is working well.e
> > wire swoops up
> > and down between supports so I need to improve them
> > some.
> >
> > Over all I am satisfied so far
> >
> > N5WDD
> >
> >
>
>
>
>

> Never miss a thing. Make Yahoo your home page.
> http://www.yahoo.com/r/hs
>

2942. Loops -n- more loops

Yahoo group: SkyWires
Date: 2008-03-12 18:40:01 UTC
From: Ben - ne5B
Topic: 2942 Message: 2942

Don't forget the new Improved group at
http://groups.yahoo.com/group/loopskywire/

The Improvement being that New Members have to pass through a
moderator - this keeps the spammers out.

A lot of the same files are being posted for reference. The members
there are mostly from this group along with a few new ones.

Come on over and join up, just please be sure to specify your Amateur
Radio callsign on your request to join.

Link to join -- http://groups.yahoo.com/group/loopskywire/join?

73 Ben-ne5B

2943. RE: [SkyWires] Loops -n- more loops

Yahoo group: SkyWires
Date: 2008-03-12 21:05:34 UTC
From: Callum M0MCX
Topic: 2942 Message: 2943
Attachments: 2 described; binary payloads are missing from this source WARC

<yawn>

Think about it.. You're the bl**dy spammer now!

Go and place your advert elsewhere.

Nuff said

(as they say in London)

Callum McCormick

T: 07976 631881

http://www.m0mcx.co.uk/

While others were busy thinking outside the box, I cut it up because I
needed some cardboard for a project I was making.

From: SkyWires@yahoogroups.com [mailto:SkyWires@yahoogroups.com] On Behalf
Of Ben - ne5B
Sent: 12 March 2008 18:40
To: SkyWires@yahoogroups.com
Subject: [SkyWires] Loops -n- more loops

Don't forget the new Improved group at
http://groups.yahoo.com/group/loopskywire/

The Improvement being that New Members have to pass through a
moderator - this keeps the spammers out.

A lot of the same files are being posted for reference. The members
there are mostly from this group along with a few new ones.

Come on over and join up, just please be sure to specify your Amateur
Radio callsign on your request to join.

Link to join -- http://groups.yahoo.com/group/loopskywire/join?

73 Ben-ne5B

2945. Re: [SkyWires] Loops -n- more loops

Yahoo group: SkyWires
Date: 2008-03-13 03:17:46 UTC
From: Catherine Greengrass
Topic: 2942 Message: 2945

Hi, Interested in setting up a Sky loop To act as a relay for the great northnern boats net. I don't need people like you. WHAT ADVERT. Peter

----- Original Message ----
From: Callum M0MCX <callum@...>
To: SkyWires@yahoogroups.com
Sent: Wednesday, March 12, 2008 2:05:34 PM
Subject: RE: [SkyWires] Loops -n- more loops

<yawn>

Think about it.. You’re the bl**dy spammer now!

Go and place your advert elsewhere.

Nuff said

(as they say in London)

Callum McCormick
T: 07976 631881
http://www.m0mcx.co.uk/

While others were busy thinking outside the box, I cut it up because I needed some cardboard for a project I was making.

From: SkyWires@yahoogroups.com [mailto:SkyWires@yahoogroups.com] On Behalf Of Ben - ne5B
Sent: 12 March 2008 18:40
To: SkyWires@yahoogroups.com
Subject: [SkyWires] Loops -n- more loops

Don't forget the new Improved group at
http://groups.yahoo.com/group/loopskywire/

The Improvement being that New Members have to pass through a
moderator - this keeps the spammers out.

A lot of the same files are being posted for reference. The members
there are mostly from this group along with a few new ones.

Come on over and join up, just please be sure to specify your Amateur
Radio callsign on your request to join.

Link to join -- http://groups.yahoo.com/group/loopskywire/join?

73 Ben-ne5B

Connect with friends from any web browser - no download required. Try the new Yahoo! Canada Messenger for the Web BETA at http://ca.messenger.yahoo.com/webmessengerpromo.php

2946. Re: [SkyWires] Loops -n- more loops

Yahoo group: SkyWires
Date: 2008-03-13 03:28:00 UTC
From: Catherine Greengrass
Topic: 2942 Message: 2946

----- Original Message ----
From: Catherine Greengrass <delphisfour@yahoo.ca>
To: SkyWires@yahoogroups.com
Sent: Wednesday, March 12, 2008 8:17:46 PM
Subject: Re: [SkyWires] Loops -n- more loops

Hi, Interested in setting up a Sky loop To act as a relay for the great northnern boats net. I don't need people like you. WHAT ADVERT. Peter

----- Original Message ----
From: Callum M0MCX <callum@...>
To: SkyWires@yahoogroups.com
Sent: Wednesday, March 12, 2008 2:05:34 PM
Subject: RE: [SkyWires] Loops -n- more loops

<yawn>

Think about it.. You’re the bl**dy spammer now!

Go and place your advert elsewhere.

Nuff said

(as they say in London)

Callum McCormick
T: 07976 631881
http://www.m0mcx.co.uk/

While others were busy thinking outside the box, I cut it up because I needed some cardboard for a project I was making.

From: SkyWires@yahoogroups.com [mailto:SkyWires@yahoogroups.com] On Behalf Of Ben - ne5B
Sent: 12 March 2008 18:40
To: SkyWires@yahoogroups.com
Subject: [SkyWires] Loops -n- more loops

Don't forget the new Improved group at
http://groups.yahoo.com/group/loopskywire/

The Improvement being that New Members have to pass through a
moderator - this keeps the spammers out.

A lot of the same files are being posted for reference. The members
there are mostly from this group along with a few new ones.

Come on over and join up, just please be sure to specify your Amateur
Radio callsign on your request to join.

Link to join -- http://groups.yahoo.com/group/loopskywire/join?

73 Ben-ne5B

Looking for the perfect gift? Give the gift of Flickr!

Connect with friends from any web browser - no download required. Try the new Yahoo! Canada Messenger for the Web BETA at http://ca.messenger.yahoo.com/webmessengerpromo.php

2947. Re: [SkyWires] Loops -n- more loops

Yahoo group: SkyWires
Date: 2008-03-13 03:42:02 UTC
From: Catherine Greengrass
Topic: 2942 Message: 2947

Hi Callum, I just got spammed Not my doing. Intrested in sky loops not bike chicks. Sorry to be defensive. Please check before you shoot. Peter. VE7-PCG- Original Message ----
From: Catherine Greengrass <delphisfour@...>
To: SkyWires@yahoogroups.com
Sent: Wednesday, March 12, 2008 8:17:46 PM
Subject: Re: [SkyWires] Loops -n- more loops

Hi, Interested in setting up a Sky loop To act as a relay for the great northnern boats net. I don't need people like you. WHAT ADVERT. Peter

----- Original Message ----
From: Callum M0MCX <callum@...>
To: SkyWires@yahoogroups.com
Sent: Wednesday, March 12, 2008 2:05:34 PM
Subject: RE: [SkyWires] Loops -n- more loops

<yawn>

Think about it.. You’re the bl**dy spammer now!

Go and place your advert elsewhere.

Nuff said

(as they say in London)

Callum McCormick
T: 07976 631881
http://www.m0mcx.co.uk/

While others were busy thinking outside the box, I cut it up because I needed some cardboard for a project I was making.

From: SkyWires@yahoogroups.com [mailto:SkyWires@yahoogroups.com] On Behalf Of Ben - ne5B
Sent: 12 March 2008 18:40
To: SkyWires@yahoogroups.com
Subject: [SkyWires] Loops -n- more loops

Don't forget the new Improved group at
http://groups.yahoo.com/group/loopskywire/

The Improvement being that New Members have to pass through a
moderator - this keeps the spammers out.

A lot of the same files are being posted for reference. The members
there are mostly from this group along with a few new ones.

Come on over and join up, just please be sure to specify your Amateur Radio callsign on your request to join.

Link to join -- http://groups.yahoo.com/group/loopskywire/join?

73 Ben-ne5B

Looking for the perfect gift? Give the gift of Flickr!

Be smarter than spam. See how smart SpamGuard is at giving junk email the boot with the All-new Yahoo! Mail. Click on Options in Mail and switch to New Mail today or register for free at http://mail.yahoo.ca

2948. RE: [SkyWires] Loops -n- more loops

Yahoo group: SkyWires
Date: 2008-03-13 11:05:27 UTC
From: Callum M0MCX
Topic: 2942 Message: 2948

>>> Please check before you shoot

Check what, my air pressure?

I'm just fed up with do-gooders going off on one just because of a couple of weird messages every once in a while. So frigging what? Hit the delete button folks!

In fact, now that I'm nearly 50, I'm getting fed up with everything. I'm entering the dark ages where my youth and age are in conflict! Roll on 65 when I can relax in my old age and this stuff won't bother me :)

Callum McCormick
http://www.m0mcx.co.uk/

While others were busy thinking outside the box, I cut it up because I needed some cardboard for a project I was making.

.

2949. Re: [SkyWires] Loops -n- more loops

Yahoo group: SkyWires
Date: 2008-03-13 12:35:49 UTC
From: Harold Burton
Topic: 2942 Message: 2949

I'm 75 and my youngest granddaughter like to tell folks her grandpa is just a big old kid. I'm irritated by our culture in general and our government in particular. Don't expect to morph into serene old age, unless your mind begins to slow down.(G)

Harold
KD5SAK

----- Original Message -----
From: "Callum M0MCX" <callum@...>
To: <SkyWires@yahoogroups.com>
Sent: Thursday, March 13, 2008 6:05 AM
Subject: RE: [SkyWires] Loops -n- more loops

>>>> Please check before you shoot
>
> Check what, my air pressure?
>
> I'm just fed up with do-gooders going off on one just because of a couple
> of
> weird messages every once in a while. So frigging what? Hit the delete
> button folks!
>
> In fact, now that I'm nearly 50, I'm getting fed up with everything. I'm
> entering the dark ages where my youth and age are in conflict! Roll on 65
> when I can relax in my old age and this stuff won't bother me :)
>
>
> Callum McCormick
> http://www.m0mcx.co.uk/
>
> While others were busy thinking outside the box, I cut it up
> because I needed some cardboard for a project I was making.
>
>
>
>
>
> .
>
>
>
>
> Yahoo! Groups Links
>
>

>

2950. Re: [SkyWires] Loops -n- more loops

Yahoo group: SkyWires
Date: 2008-03-13 13:31:22 UTC
From: Hans Remeeus
Topic: 2942 Message: 2950

Hello Callum,

The problem is not the spam messages once in a while. The major problem
is that this group is not fully moderated anymore. The owner left
without taking care of a good handover to the moderators.

The new group has a much better set-up and control!

Take care with your 2nd youth and enjoy our radiohobby; it will help you
through the in-between-age (I'm 54 years old and still very happy).

--

73,
Hans Remeeus (PA1HR)
http://www.remeeus.eu
Communication is about people, the rest is technology.

Callum M0MCX schreef:
>>>> Please check before you shoot
>
> Check what, my air pressure?
>
> I'm just fed up with do-gooders going off on one just because of a couple of
> weird messages every once in a while. So frigging what? Hit the delete
> button folks!
>
> In fact, now that I'm nearly 50, I'm getting fed up with everything. I'm
> entering the dark ages where my youth and age are in conflict! Roll on 65
> when I can relax in my old age and this stuff won't bother me :)
>

2951. Re: Loops -n- more loops

Yahoo group: SkyWires
Date: 2008-03-13 15:27:46 UTC
From: Ben - ne5B
Topic: 2942 Message: 2951

All,

A bigger problem than the occasional message from a spammer is the fact that even if they are not sending messages the spammer can still harvest/collect the email address of everyone that posts a message to the list, as well as any other email addresses in that message.

Anyone in the IT Field should realize it doesn't take much to write a program that reads email (a simple Telnet client task for pop servers), that then will parse through the text of every email message looking for anything and everything that has the pattern of an email address and adding it to their collection of addresses to spam or to sell to another spammer.

A lot of us on Amateur Radio are trying to be "do-Gooders", especially those involved in ARES and other Public Service Functions on both sides of the pond.

73 Ben

--- In SkyWires@yahoogroups.com, Hans Remeeus <hans@...> wrote:
>
>
> Hello Callum,
>
> The problem is not the spam messages once in a while. The major
problem
> is that this group is not fully moderated anymore. The owner left
> without taking care of a good handover to the moderators.
>
> The new group has a much better set-up and control!
>
> Take care with your 2nd youth and enjoy our radiohobby; it will
help you
> through the in-between-age (I'm 54 years old and still very happy).
>
>
> --
>
> 73,
> Hans Remeeus (PA1HR)
> http://www.remeeus.eu
> Communication is about people, the rest is technology.
>
>
> Callum M0MCX schreef:

> >>>> Please check before you shoot
> >
> > Check what, my air pressure?
> >
> > I'm just fed up with do-gooders going off on one just because of
a couple of
> > weird messages every once in a while. So frigging what? Hit the
delete
> > button folks!
> >
> > In fact, now that I'm nearly 50, I'm getting fed up with
everything. I'm
> > entering the dark ages where my youth and age are in conflict!
Roll on 65
> > when I can relax in my old age and this stuff won't bother me :)
> >
>

2952. Re: [SkyWires] Re: Loops -n- more loops

Yahoo group: SkyWires
Date: 2008-03-13 16:25:10 UTC
From: Hans Remeeus
Topic: 2942 Message: 2952

Hello Ben,

Thanks for your interesting additional information! This is important to know for all of us.

--

73,
Hans Remeeus (PA1HR)
http://www.remeeus.eu
Communication is about people, the rest is technology.

Ben - ne5B schreef:
> All,
>
> A bigger problem than the occasional message from a spammer is the
> fact that even if they are not sending messages the spammer can still
> harvest/collect the email address of everyone that posts a message to
> the list, as well as any other email addresses in that message.
>
> Anyone in the IT Field should realize it doesn't take much to write a
> program that reads email (a simple Telnet client task for pop
> servers), that then will parse through the text of every email
> message looking for anything and everything that has the pattern of
> an email address and adding it to their collection of addresses to
> spam or to sell to another spammer.
>
> A lot of us on Amateur Radio are trying to be "do-Gooders",
> especially those involved in ARES and other Public Service Functions
> on both sides of the pond.
>
> 73 Ben

2953. RE: [SkyWires] Re: Loops -n- more loops

Yahoo group: SkyWires
Date: 2008-03-13 23:05:58 UTC
From: Callum M0MCX
Topic: 2942 Message: 2953
Attachments: 2 described; binary payloads are missing from this source WARC

My problem is that I'm already at saturation point. I don't think I could get any more spam if I tried. Between yesterday morning and tonight, I've had 1,809 emails enter my junk-mail filter and a further 86 that were identified as SPAM but not junk email.

I kid you not, I personally get between 5,000 and 10,000 spam emails per week - and that's just my home email. My work email get's around 3,000 spam per hour. Crazy but true.

(I have some great tools to get rid of them!)

Callum McCormick

T: 07976 631881

http://www.m0mcx.co.uk/

While others were busy thinking outside the box, I cut it up because I needed some cardboard for a project I was making.

From: SkyWires@yahoogroups.com [mailto:SkyWires@yahoogroups.com] On Behalf Of Ben - ne5B
Sent: 13 March 2008 15:28
To: SkyWires@yahoogroups.com
Subject: [SkyWires] Re: Loops -n- more loops

All,

A bigger problem than the occasional message from a spammer is the fact that even if they are not sending messages the spammer can still harvest/collect the email address of everyone that posts a message to the list, as well as any other email addresses in that message.

Anyone in the IT Field should realize it doesn't take much to write a program that reads email (a simple Telnet client task for pop servers), that then will parse through the text of every email message looking for anything and everything that has the pattern of an email address and adding it to their collection of addresses to spam or to sell to another spammer.

A lot of us on Amateur Radio are trying to be "do-Gooders", especially those involved in ARES and other Public Service Functions on both sides of the pond.

73 Ben

--- In SkyWires@yahoogroups.com <mailto:SkyWires%40yahoogroups.com> , Hans Remeeus <hans@...> wrote:
>
>
> Hello Callum,
>
> The problem is not the spam messages once in a while. The major problem
> is that this group is not fully moderated anymore. The owner left
> without taking care of a good handover to the moderators.
>
> The new group has a much better set-up and control!
>
> Take care with your 2nd youth and enjoy our radiohobby; it will help you
> through the in-between-age (I'm 54 years old and still very happy).
>
>
> --
>
> 73,
> Hans Remeeus (PA1HR)
> http://www.remeeus.eu
> Communication is about people, the rest is technology.
>
>
> Callum M0MCX schreef:
> >>>> Please check before you shoot
> >
> > Check what, my air pressure?
> >
> > I'm just fed up with do-gooders going off on one just because of a couple of
> > weird messages every once in a while. So frigging what? Hit the delete
> > button folks!
> >
> > In fact, now that I'm nearly 50, I'm getting fed up with everything. I'm
> > entering the dark ages where my youth and age are in conflict! Roll on 65
> > when I can relax in my old age and this stuff won't bother me :)
> >
>

2954. RE: [SkyWires] Re: Loops -n- more loops

Yahoo group: SkyWires
Date: 2008-03-13 23:38:59 UTC
From: Steve Eisenberg
Topic: 2942 Message: 2954
Attachments: 1 described; binary payloads are missing from this source WARC

[Attachment content not displayed]

2955. Putting Up a Longwire

Yahoo group: SkyWires
Date: 2008-03-13 23:59:04 UTC
From: Jeff Stevens
Topic: 2955 Message: 2955

Hello All,

My sole HF antenna at this point is a wire dipole cut for 40m at about 35'. I'm quite pleased with all the contacts I've been able to make using the internal tuner on my TS-440 as well as the LDG-200 with my IC-718.

I'm looking to try a longwire next. I should be able to run it about 300' long about 40' up in the air. I'll run coax from my AT-200 tuner and feed it with either a RadioWorks balun or the balun that came along with my tuner.

Reading about longwires, I understand the need for a good *short* path to ground. Well, 40' up and short path to ground don't exactly go together (especially on the higher HF bands). From the feed point (on top of my house) the shortest path to ground (not going through my roof) will be a run 90 degrees off from the direction of the radiating arm, across the sloped roof and down to the ground. Will running the ground leg of the longwire 90 degrees off from the radiator be "bad"? I can run it in the same plane as the radiator with an extra few feet. Would that be better?

Once it gets to ground, I can certainly earth it well. I have plenty of ground rods available and a wet clay soil.

Considering the 50' or greater length of the ground leg, this setup almost sounds like some haphazard off center fed dipole with the short leg running in a funny direction. Mmm... I want the gain pattern of a longwire -- not a dipole...

My goal for this antenna (besides simply building another antenna) is to use it on 30m through 10m in such a way that it's directivity is oriented in a different direction than my 40m dipole. I'd also like to use it on 80m and 160m for local QSOs.

Any thoughts on the whole shortest path to ground being 50 plus feet??

Thanks!

-Jeff
KE7FRJ

2956. RE: [SkyWires] Re: Loops -n- more loops

Yahoo group: SkyWires
Date: 2008-03-14 01:00:45 UTC
From: Christopher Zeman
Topic: 2942 Message: 2956

Besides that, how many tens-of-millions of dollars are waiting for you in Ghana from relatives dying off? lol

Chris

N9XCR

From: SkyWires@yahoogroups.com [mailto:SkyWires@yahoogroups.com] On Behalf Of Steve Eisenberg
Sent: Thursday, March 13, 2008 6:39 PM
To: SkyWires@yahoogroups.com
Subject: RE: [SkyWires] Re: Loops -n- more loops

Look on the bright side, Callum, you've won several hundred laptops, and you've been selected Mystery Shopper Of The Month more times than you can count.

Steve
NH USA

--- Callum M0MCX <callum@... <mailto:callum%40mccormick.uk.com>
> wrote:

> My problem is that I'm already at saturation point.
> I don't think I could
> get any more spam if I tried.

_____
Be a better friend, newshound, and
know-it-all with Yahoo! Mobile. Try it now.
http://mobile.yahoo.com/;_ylt=Ahu06i62sR8HDtDypao8Wcj9tAcJ

2957. RE: [SkyWires] Re: Loops -n- more loops

Yahoo group: SkyWires
Date: 2008-03-14 01:03:36 UTC
From: Steve Eisenberg
Topic: 2942 Message: 2957

Chris:

Actually, I am expecting to receive shortly the sum of
$60,000,000 USD for assisting the only living son of
the former Nigerian Supreme Souf Chef who was
assassinated by the previous regime.

Steve
WA1ZFY

--- Christopher Zeman <chris@...> wrote:

> Besides that, how many tens-of-millions of dollars
> are waiting for you in
> Ghana from relatives dying off? lol
>

Never miss a thing. Make Yahoo your home page.
http://www.yahoo.com/r/hs

2958. RE: [SkyWires] Re: Loops -n- more loops

Yahoo group: SkyWires
Date: 2008-03-14 02:41:25 UTC
From: Christopher Zeman
Topic: 2942 Message: 2958

Wow! That is a coincidence!!! I'm waiting for the same amount, and have been for a couple years now. I figure it's just taking a while since it's such a large sum of money. It's worth the wait, though. lol

From: SkyWires@yahoogroups.com [mailto:SkyWires@yahoogroups.com] On Behalf Of Steve Eisenberg
Sent: Thursday, March 13, 2008 8:04 PM
To: SkyWires@yahoogroups.com
Subject: RE: [SkyWires] Re: Loops -n- more loops

Chris:

Actually, I am expecting to receive shortly the sum of
$60,000,000 USD for assisting the only living son of
the former Nigerian Supreme Souf Chef who was
assassinated by the previous regime.

Steve
WA1ZFY

--- Christopher Zeman <chris@... <mailto:chris%40n9xcr.com> > wrote:

> Besides that, how many tens-of-millions of dollars
> are waiting for you in
> Ghana from relatives dying off? lol
>

Never miss a thing. Make Yahoo your home page.
http://www.yahoo.com/r/hs

2959. RE: [SkyWires] Re: Loops -n- more loops

Yahoo group: SkyWires
Date: 2008-03-14 04:46:54 UTC
From: satyan
Topic: 2942 Message: 2959

Hi Callum - good morning from India. I can understand the dilemma you are in as far as your email is concerned. May be your ISP can help you a bit. We have in India

a system where all your in coming mails are kept in a separate folder, when they arrive first time from a person. You can mark the mail as spam and good mail and future mails from this person will reach your inbox only if you mark it as good mail. In this case you take pain only once to mark the mails spam or not and thereby save the routine of deleting the spam everyday. You can try if this works out with your internet service provider. The spam mail that goes to the spam folder is deleted automatically periodically. This facility is available for paid e-mail accounts only in India and not for common clients like yahoo, gmail etc.

How are things at your end? Radio wise it is very quiet here. Not much propagation happening and lot of qrm on the bands. I worked some Russians and a Dutch station and exchanged some e-qsls via eqsl.cc website.

73s and regards to you and your family. Vu3mes satyan/India.

-----Original Message-----
From: SkyWires@yahoogroups.com [mailto:SkyWires@yahoogroups.com] On Behalf Of Callum M0MCX
Sent: 14 March 2008 04:36
To: SkyWires@yahoogroups.com
Subject: RE: [SkyWires] Re: Loops -n- more loops

My problem is that I'm already at saturation point. I don't think I could get any more spam if I tried. Between yesterday morning and tonight, I've had 1,809 emails enter my junk-mail filter and a further 86 that were identified as SPAM but not junk email.

I kid you not, I personally get between 5,000 and 10,000 spam emails per week - and that's just my home email. My work email get's around 3,000 spam per hour. Crazy but true.

(I have some great tools to get rid of them!)

Callum McCormick

T: 07976 631881

http://www.m0mcx. <http://www.m0mcx.co.uk/> co.uk/

While others were busy thinking outside the box, I cut it up because I needed some cardboard for a project I was making.

From: SkyWires@yahoogroups.com [mailto:SkyWires@yahoogroups.com] On Behalf Of Ben - ne5B
Sent: 13 March 2008 15:28
To: SkyWires@yahoogroups.com
Subject: [SkyWires] Re: Loops -n- more loops

All,

A bigger problem than the occasional message from a spammer is the fact that even if they are not sending messages the spammer can still harvest/collect the email address of everyone that posts a message to the list, as well as any other email addresses in that message.

Anyone in the IT Field should realize it doesn't take much to write a program that reads email (a simple Telnet client task for pop servers), that then will parse through the text of every email message looking for anything and everything that has the pattern of an email address and adding it to their collection of addresses to spam or to sell to another spammer.

A lot of us on Amateur Radio are trying to be "do-Gooders", especially those involved in ARES and other Public Service Functions on both sides of the pond.

73 Ben

--- In SkyWires@yahoogroup <mailto:SkyWires%40yahoogroups.com> s.com, Hans Remeeus <hans@...> wrote:
>
>
> Hello Callum,
>
> The problem is not the spam messages once in a while. The major problem
> is that this group is not fully moderated anymore. The owner left
> without taking care of a good handover to the moderators.
>
> The new group has a much better set-up and control!
>
> Take care with your 2nd youth and enjoy our radiohobby; it will help you
> through the in-between-age (I'm 54 years old and still very happy).
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>
> --
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> 73,
> Hans Remeeus (PA1HR)
> http://www.remeeus. <http://www.remeeus.eu> eu
> Communication is about people, the rest is technology.
>
>
> Callum M0MCX schreef:

> >>>> Please check before you shoot
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> > Check what, my air pressure?
> >
> > I'm just fed up with do-gooders going off on one just because of
a couple of
> > weird messages every once in a while. So frigging what? Hit the
delete
> > button folks!
> >
> > In fact, now that I'm nearly 50, I'm getting fed up with
everything. I'm
> > entering the dark ages where my youth and age are in conflict!
Roll on 65
> > when I can relax in my old age and this stuff won't bother me :)
> >
>

2960. RE: [SkyWires] Re: Loops -n- more loops

Yahoo group: SkyWires
Date: 2008-03-14 14:20:22 UTC
From: Callum M0MCX
Topic: 2942 Message: 2960

Thanks all for the fun and games folks, nice to have a bit of fun sometimes, eh? Satyan, RF is alive and well here in Birmingham England - but not on the higher bands as you know! I've been playing 40m mostly.

Well folks, I've been experimenting as usual with my two sky loops (of course, these are just closed loops of wire held above the ground at three or more points) and comparing them against various verticals. Sometimes the verticals win, other times the loops do. I've had 8m verticals and longer too. Today, I've put the 12m vertical back up (http://www.m0mcx.co.uk/?p=102) fed with my trusty SG230 coupler (I may add that anyone interested in fast antenna experiments should get one of these. A tremendous piece of kit. Matches anything.)

Apart from the noise factor (loops are quiet), the vertical seems to make a better impact on transmit more often than not, unless I'm into NVIS or near NVIS (500 miles or so). Even then, up to 1,500 miles, the jury is out - either antenna can win. Beyond 1,500 miles the vertical seems to do a better job most of the time - not always, however my loops are very low to the ground, maximum height of 7 meters.

I used to have the opinion that loops were more often than not, cloud warmers. However let's face it, so are almost all low-to-the-ground HF antennas. Of interest though, VE7HA (on this reflector) sent me an MMANA file of a very high (80- foot) 300 foot sky loop that he had built with three very large trees. He claimed great things with it and fantastic contest results. I had a look at the plots. Yes, he was right.. how about 10.4 dbi gain at 5 degrees to the horizon on 10m? On 15m band, we're looking at 12.5 dbi at 7 degrees to horizon! On 20, it's as good with 10.5 dbi gain at less than 10 degrees.

Now.. This is a very different animal to the Skyloops that most people build. If you want a pile-up generator, this is the animal to have. It fundamentally, takes all your RF energy and pancakes it low to the ground in various star shapes. Very impressive - and it changed my mind on the ability of closed loops antennas.

Be prepared to get into some matching territory, or buy an automatic coupler at the fedpoint (maybe open wire feeder).

Some day I will build one, I just don't have the house for it today!

73 all, Back to my new interest, PSK31.

Callum McCormick
T: 07976 631881
http://www.m0mcx.co.uk/

=> While others were busy thinking outside the box, I cut it up because I needed some cardboard for a project I was making.

2961. Re: [SkyWires] Putting Up a Longwire

Yahoo group: SkyWires
Date: 2008-03-14 16:00:38 UTC
From: Jim Dunstan
Topic: 2955 Message: 2961

At 04:59 PM 3/13/2008 -0700, you wrote:

>Hello All,
>
>My sole HF antenna at this point is a wire dipole cut for 40m at about
>35'. I'm quite pleased with all the contacts I've been able to make
>using the internal tuner on my TS-440 as well as the LDG-200 with my
>IC-718.
>
>I'm looking to try a longwire next. I should be able to run it about
>300' long about 40' up in the air. I'll run coax from my AT-200 tuner
>and feed it with either a RadioWorks balun or the balun that came along
>with my tuner.
>
>Reading about longwires, I understand the need for a good *short* path
>to ground. Well, 40' up and short path to ground don't exactly go
>together (especially on the higher HF bands). From the feed point (on
>top of my house) the shortest path to ground (not going through my roof)
>will be a run 90 degrees off from the direction of the radiating arm,
>across the sloped roof and down to the ground. Will running the ground
>leg of the longwire 90 degrees off from the radiator be "bad"? I can
>run it in the same plane as the radiator with an extra few feet. Would
>that be better?
>
>Once it gets to ground, I can certainly earth it well. I have plenty of
>ground rods available and a wet clay soil.
>
>Considering the 50' or greater length of the ground leg, this setup
>almost sounds like some haphazard off center fed dipole with the short
>leg running in a funny direction. Mmm... I want the gain pattern of a
>longwire -- not a dipole...
>
>My goal for this antenna (besides simply building another antenna) is to
>use it on 30m through 10m in such a way that it's directivity is
>oriented in a different direction than my 40m dipole. I'd also like to
>use it on 80m and 160m for local QSOs.
>
>Any thoughts on the whole shortest path to ground being 50 plus feet??
>
>Thanks!
>
>-Jeff
>KE7FRJ

Hi Jeff,

First, long wire and dipole are not mutually exclusive. Long wire indicates a wire several wavelengths in relation to the frequency of operation, while dipole indicates a balanced antenna/feed system. A dipole with several wavelengths either side of the feed line is every bit as much a 'long wire' antenna as one fed against ground. In the balanced feed system the feed line can be considered to be separate from the antenna ... eg if properly installed the feed line does not radiate ... only the antenna (again note I said properly installed). Now as soon as you deviate from the balanced antenna (either loop or dipole) then it is all antenna including every inch from the far tip to the point it gets to your radio ... or the tuner. In this case ... feeding with a single wire against ground, the usual technique is to feed it at the end. If you feed the same 300' horizontal wire in the middle with balanced feed line it would behave much the same except it would eliminate the vertical radiation component as well as the difficulty of predicting grounding effectiveness. The exception is to end feed it with open wire feed line ... but then it is tricky because you need to find the appropriate length that puts a half wave high voltage point at the end at the frequency of operation.

All of this is to eliminate the conception that a dipole has some kind of fixed radiation pattern ... and it does if self resonant and a 1/2 wave in length. But a dipole does not have to be a half wave length or resonant for that matter ... it simply indicates a symmetrical aspect of the antenna in relation to the feed point ... and it is balanced. Then when you feed it the feeder can be somewhat divorced from the antenna. When you make the antenna a monopole ... eg fed against ground, the earth is the other half of the antenna which introduces radiation to the feed line and problems in making the earth behave like a decent half of the antenna.

Feeding a long wire against ground is very unpredictable in terms of performance and behavior. Generally speaking the installation you describe is 300 ft of wire in a horizontal position 40 ft high. At some point at or near one end you are going to bring the wire down the 40+ ft (little bends here and there) to your tuner and ground rod. To answer your question will a few bends in a few odd directions make any difference I would say nothing anyone would be able to detect. As far as directivity the radiation pattern of a long wire is generally at an angle off the ends.

I have used a long wire and from time to time it seemed to perform quite well ... however it also very unpredictable when you run with power eg 100 watts and up .... that is, getting the power into it without blowing things up hi hi.

Jim, VE3CI

2962. Re: [SkyWires] Re: Loops -n- more loops

Yahoo group: SkyWires
Date: 2008-03-15 17:57:56 UTC
From: K.Currie
Topic: 2942 Message: 2962

do you have any info on the GS 230 coupler?
----- Original Message -----
From: Callum M0MCX
To: SkyWires@yahoogroups.com
Sent: Friday, March 14, 2008 8:20 AM
Subject: RE: [SkyWires] Re: Loops -n- more loops

Thanks all for the fun and games folks, nice to have a bit of fun sometimes, eh? Satyan, RF is alive and well here in Birmingham England - but not on the higher bands as you know! I've been playing 40m mostly.

Well folks, I've been experimenting as usual with my two sky loops (of course, these are just closed loops of wire held above the ground at three or more points) and comparing them against various verticals. Sometimes the verticals win, other times the loops do. I've had 8m verticals and longer too. Today, I've put the 12m vertical back up (http://www.m0mcx.co.uk/?p=102) fed with my trusty SG230 coupler (I may add that anyone interested in fast antenna experiments should get one of these. A tremendous piece of kit. Matches anything.)

Apart from the noise factor (loops are quiet), the vertical seems to make a better impact on transmit more often than not, unless I'm into NVIS or near NVIS (500 miles or so). Even then, up to 1,500 miles, the jury is out - either antenna can win. Beyond 1,500 miles the vertical seems to do a better job most of the time - not always, however my loops are very low to the ground, maximum height of 7 meters.

I used to have the opinion that loops were more often than not, cloud warmers. However let's face it, so are almost all low-to-the-ground HF antennas. Of interest though, VE7HA (on this reflector) sent me an MMANA file of a very high (80- foot) 300 foot sky loop that he had built with three very large trees. He claimed great things with it and fantastic contest results. I had a look at the plots. Yes, he was right.. how about 10.4 dbi gain at 5 degrees to the horizon on 10m? On 15m band, we're looking at 12.5 dbi at 7 degrees to horizon! On 20, it's as good with 10.5 dbi gain at less than 10 degrees.

Now.. This is a very different animal to the Skyloops that most people build. If you want a pile-up generator, this is the animal to have. It fundamentally, takes all your RF energy and pancakes it low to the ground in various star shapes. Very impressive - and it changed my mind on the ability of closed loops antennas.

Be prepared to get into some matching territory, or buy an automatic coupler at the fedpoint (maybe open wire feeder).

Some day I will build one, I just don't have the house for it today!

73 all, Back to my new interest, PSK31.

Callum McCormick
T: 07976 631881
http://www.m0mcx.co.uk/

=> While others were busy thinking outside the box, I cut it up because I needed some cardboard for a project I was making.

No virus found in this incoming message.
Checked by AVG Free Edition.
Version: 7.5.516 / Virus Database: 269.21.6/1318 - Release Date: 3/7/08 2:01 PM

2963. RE: [SkyWires] Re: Loops -n- more loops

Yahoo group: SkyWires
Date: 2008-03-16 00:20:07 UTC
From: Callum M0MCX
Topic: 2942 Message: 2963
Attachments: 2 described; binary payloads are missing from this source WARC

The SG230 is a tremendous piece of kit which can match anything. You still need to obey the simple rules of antennas though (eg, for verticals you will need a good ground etc) but other than that, they have a habit of becoming addictive. For the UK for instance, imagine having an antenna that will comfortably go from 3.5 to 3.8 MHz at maximum efficiency.

You will need to get your mind around "non-resonant antennas" before these come into their own because the search for 50 ohms all of a sudden becomes a thing of the past.! It really will tune (actually, they call it "couple") any antenna to your coax regardless of what the impedance and resonance your antenna is. Antennas that previously on some bands were unworkable, all of a sudden spring to life once you've squirted 10 watts up it (it takes a few moments to work out a tune).

See reviews here: http://www.eham.net/reviews/detail/483

I'll write a blog about it shortly since I've used mine as a vertical, a doublet and a loop. Bloomin marvellous they are!

For info, I've recently had an 8m whip in the garden with 9 radials. Just amazing. It does out-perform almost anything I've got but the trouble is they only handle up to around 200w PEP. If you are a QRO sort of person, get a big manual tuner :)

I have loads of pictures of mine on my website.

Cheers,

Callum McCormick

T: 07976 631881

http://www.m0mcx.co.uk/

While others were busy thinking outside the box, I cut it up because I needed some cardboard for a project I was making.

From: SkyWires@yahoogroups.com [mailto:SkyWires@yahoogroups.com] On Behalf Of K.Currie
Sent: 15 March 2008 17:58
To: SkyWires@yahoogroups.com
Subject: Re: [SkyWires] Re: Loops -n- more loops

do you have any info on the GS 230 coupler?

----- Original Message -----

From: Callum M0MCX <mailto:callum@...>

To: SkyWires@yahoogroups.com

Sent: Friday, March 14, 2008 8:20 AM

Subject: RE: [SkyWires] Re: Loops -n- more loops

Thanks all for the fun and games folks, nice to have a bit of fun sometimes, eh? Satyan, RF is alive and well here in Birmingham England - but not on the higher bands as you know! I've been playing 40m mostly.

Well folks, I've been experimenting as usual with my two sky loops (of course, these are just closed loops of wire held above the ground at three or more points) and comparing them against various verticals. Sometimes the verticals win, other times the loops do. I've had 8m verticals and longer too. Today, I've put the 12m vertical back up (http://www.m0mcx.co.uk/?p=102) fed with my trusty SG230 coupler (I may add that anyone interested in fast antenna experiments should get one of these. A tremendous piece of kit. Matches anything.)

Apart from the noise factor (loops are quiet), the vertical seems to make a better impact on transmit more often than not, unless I'm into NVIS or near NVIS (500 miles or so). Even then, up to 1,500 miles, the jury is out - either antenna can win. Beyond 1,500 miles the vertical seems to do a better job most of the time - not always, however my loops are very low to the ground, maximum height of 7 meters.

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Be prepared to get into some matching territory, or buy an automatic coupler at the fedpoint (maybe open wire feeder).

Some day I will build one, I just don't have the house for it today!

73 all, Back to my new interest, PSK31.

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=> While others were busy thinking outside the box, I cut it up because I needed some cardboard for a project I was making.

No virus found in this incoming message.
Checked by AVG Free Edition.
Version: 7.5.516 / Virus Database: 269.21.6/1318 - Release Date: 3/7/08 2:01 PM

2964. Re: Loops -n- more loops

Yahoo group: SkyWires
Date: 2008-03-16 14:21:54 UTC
From: Paul Gerhardt
Topic: 2942 Message: 2964

Callum

Nice comments on your web site!
I have a lot of wire am thinking of playing with but I am mostly playing with the old Curshcraft R-7 vertical. I miss the low G5RV for local nets and want to put up something else.

BTW your web site says you "just don't have the trees" now you need a house too??!! What happened <LOL> I have a house with two trees in the yard so something low maybe possible. Not 80 ft though thats for sure more like 30 ft if I am lucky!

Look for you on PSK31.

Paul K3PG

Some day I will build one, I just don't have the house for it today!

73 all, Back to my new interest, PSK31.

Paul Gerhardt
pgerhardt@...
Cog 1594
"If everything seems under control, you're just not going fast enough"
--Mario Andretti

2965. MFJ-998 Ant Tuner Question

Yahoo group: SkyWires
Date: 2008-03-18 01:04:02 UTC
From: Dr. Ace Ratliff
Topic: 2896 Message: 2965

__, Hi All,
Does anyone have any info, experience, opinions, etc. about the MFJ-998,
1500 watt Intellituner. I am thinking about ordering one for HF operations.
BTW, (now I'm bragging) I recently got a mint condition Henry 3002 amp but I
haven't installed the 240 V AC wall socket yet. Unless I put up another
antenna I will not be able to run it at full output as my cushcraft 13 element beam is
only rated for a KW.
73 all, Ace - WH2T , Right downtown QRO city

2966. RE: [SkyWires] Re: Loops -n- more loops

Yahoo group: SkyWires
Date: 2008-03-18 04:57:46 UTC
From: Earl Needham
Topic: 2942 Message: 2966

At 06:20 PM 3/15/2008, Callum M0MCX wrote:
>The SG230 is a tremendous piece of kit which can match anything. You
>still need to obey the simple rules of antennas though (eg, for
>verticals you will need a good ground etc) but other than that, they
>have a habit of becoming addictive. For the UK for instance, imagine
>having an antenna that will comfortably go from 3.5 to 3.8 MHz at
>maximum efficiency.

I agree with most of what Callum said -- I use the Icom
AH-4, and I've had exceptional results with it. Using 110' of wire
on it, I can tune all bands form 6-160 meters, with the exception of
3500-3700 KHz -- the wire is a half-wavelength there, so the
impedance is just too high for the AH-4 to match.

Of course, getting a good match -- "coupling" the antenna to
the coax -- doesn't necessarily guarantee a good signal -- on several
bands, my signal apparently goes straight up! 17 meters, in
particular, gets a great match, but if I hear anything there, it's
weak. A quick check using EZ-NEC shows my radiation pattern to
theoretically be almost straight up, with next to no signal in any
direction below perhaps 70 degrees elevation.

7 3
Earl

KD5XB -- Earl Needham
Clovis, New Mexico DM84jk
http://groups.yahoo.com/group/cw_bugs
Quoting from the Coast Guard: ZUT

2967. RE: [SkyWires] Re: Loops -n- more loops

Yahoo group: SkyWires
Date: 2008-03-18 13:59:58 UTC
From: Paul@N4LCD.com
Topic: 2942 Message: 2967

>At 06:20 PM 3/15/2008, Callum M0MCX wrote:
> >The SG230 is a tremendous piece of kit which can match anything. You
> >still need to obey the simple rules of antennas though (eg, for
> >verticals you will need a good ground etc) but other than that, they
> >have a habit of becoming addictive. For the UK for instance, imagine
> >having an antenna that will comfortably go from 3.5 to 3.8 MHz at
> >maximum efficiency.
>
>I agree with most of what Callum said -- I use the Icom
>AH-4,

Does the AH-4 have a similar tuning range as the SGC-230?

>and I've had exceptional results with it. Using 110' of wire

Loop or sloper?

>on it, I can tune all bands form 6-160 meters, with the exception of
>3500-3700 KHz -- the wire is a half-wavelength there, so the
>impedance is just too high for the AH-4 to match.
>
>Of course, getting a good match -- "coupling" the antenna to
>the coax -- doesn't necessarily guarantee a good signal -- on several
>bands, my signal apparently goes straight up! 17 meters, in
>particular, gets a great match, but if I hear anything there, it's
>weak. A quick check using EZ-NEC shows my radiation pattern to
>theoretically be almost straight up, with next to no signal in any
>direction below perhaps 70 degrees elevation.
>
>7 3
>Earl

2968. RE: [SkyWires] Re: Loops -n- more loops

Yahoo group: SkyWires
Date: 2008-03-18 15:54:55 UTC
From: Earl Needham
Topic: 2942 Message: 2968

At 07:59 AM 3/18/2008, Paul@... wrote:
>Does the AH-4 have a similar tuning range as the SGC-230?

I believe the range of the AH-4 is from ~5 ohms to ~5000
ohms. Of course this is greatly simplified and not speaking to reactance.

> >and I've had exceptional results with it. Using 110' of wire
>
>Loop or sloper?

Level piece of wire. I have the AH-4 mounted on a 20-foot
piece of plastic pipe at the end of the house. The wire goes 72 feet
due south to a corner of the yard, then turns due east for another 50
feet or so. It's all at about 20 feet up.

7 3
Earl

KD5XB -- Earl Needham
Clovis, New Mexico DM84jk
http://groups.yahoo.com/group/cw_bugs
Quoting from the Coast Guard: ZUT

2969. 6 meter loop

Yahoo group: SkyWires
Date: 2008-03-19 16:34:46 UTC
From: w4dsb
Topic: 2969 Message: 2969

anyone here use a 6 meter loop?
any pro's or cons on using one for 6 meters?

2970. RE: [SkyWires] 6 meter loop

Yahoo group: SkyWires
Date: 2008-03-19 17:00:00 UTC
From: Scott MacKenzie
Topic: 2969 Message: 2970

It works - mount it vertically, feed it for horizontal polarization, and it will work OK.not as good as a 5 element beam - but it will work in a pinch.

From: SkyWires@yahoogroups.com [mailto:SkyWires@yahoogroups.com] On Behalf Of w4dsb
Sent: Wednesday, March 19, 2008 12:35 PM
To: SkyWires@yahoogroups.com
Subject: [SkyWires] 6 meter loop

anyone here use a 6 meter loop?
any pro's or cons on using one for 6 meters?

2971. Re: 6 meter loop

Yahoo group: SkyWires
Date: 2008-03-19 20:07:54 UTC
From: w4dsb
Topic: 2969 Message: 2971

--- In SkyWires@yahoogroups.com, "Scott MacKenzie" <kb0fhp@...> wrote:
>
> It works - mount it vertically, feed it for horizontal polarization,
and it
> will work OK.not as good as a 5 element beam - but it will work in a
pinch.

Hoping to use it as a omni directional for monitoring and then i can
point the moxon antenna toward the station

>
>
>
> _____
>
> From: SkyWires@yahoogroups.com [mailto:SkyWires@yahoogroups.com] On
Behalf
> Of w4dsb
> Sent: Wednesday, March 19, 2008 12:35 PM
> To: SkyWires@yahoogroups.com
> Subject: [SkyWires] 6 meter loop
>
>
>
> anyone here use a 6 meter loop?
> any pro's or cons on using one for 6 meters?
>

2972. RE: [SkyWires] Re: 6 meter loop

Yahoo group: SkyWires
Date: 2008-03-19 23:56:38 UTC
From: Callum M0MCX
Topic: 2969 Message: 2972

You might like to try a pair and get an extra 3dbi gain? I built a pair for 2m and fed them as a stack, however the distance between them is probably a bit difficult for 6m though? I seem to remember mine are a wavelength apart..? I think you can squeeze this down to half a wavelength. Not sure.

See here: http://www.m0mcx.co.uk/gallery/picture.php?/140/category/16

Callum McCormick

T: 07976 631881

http://www.m0mcx.co.uk/

While others were busy thinking outside the box, I cut it up because I needed some cardboard for a project I was making.

2973. RE: [SkyWires] Re: 6 meter loop

Yahoo group: SkyWires
Date: 2008-03-20 00:03:43 UTC
From: Scott MacKenzie
Topic: 2969 Message: 2973

You could also turn the so the loops are vertical - and make a quad..

_____

From: SkyWires@yahoogroups.com [mailto:SkyWires@yahoogroups.com] On Behalf Of Callum M0MCX
Sent: Wednesday, March 19, 2008 7:57 PM
To: SkyWires@yahoogroups.com
Subject: RE: [SkyWires] Re: 6 meter loop

You might like to try a pair and get an extra 3dbi gain? I built a pair for 2m and fed them as a stack, however the distance between them is probably a bit difficult for 6m though? I seem to remember mine are a wavelength apart..? I think you can squeeze this down to half a wavelength. Not sure.

See here: http://www.m0mcx. <http://www.m0mcx.co.uk/gallery/picture.php?/140/category/16> co.uk/gallery/picture.php?/140/category/16

Callum McCormick

T: 07976 631881

http://www.m0mcx. <http://www.m0mcx.co.uk/> co.uk/

While others were busy thinking outside the box, I cut it up because I needed some cardboard for a project I was making.

2974. Re: 6 meter loop

Yahoo group: SkyWires
Date: 2008-03-20 02:48:07 UTC
From: Dr.Ace
Topic: 2969 Message: 2974

Hi Dwayne,

No real cons, but it's not as good as a 5 element yagi. If you want to beat the yagi go with a rhombic antenna. Pros = good band width, quiet noise floor, easy to match, low cost, gain over a dipole, easy to construct, etc.

Fed at the bottom corner of a diamond a loop antenna has horizontal polarization.

If you hang it from a tower, you could use a single 1 inch PVC pipe spreader horizontal inside the diamond. I would put a PVC T connector in the center of the 1 inch PVC pipe spreader then attach a 1 inch PVC pipe from the tower to the PVC T connector to hold the antenna stationary.

"A vertically oriented horizontally polarized one wavelength loop antenna with the bottom of the loop 1/2 wave length above ground is a FINE antenna".

Do NOT put the bottom of the vertically oriented loop more than 1/2 wave length above ground.

The impedance of a Full Wave Loop antenna is theoretically in the vicinity of 100 ohms. That is why I use a 75 ohm "Q section" to provide a perfect match to the 50 ohm coax. My Loop antenna is flat 1:1 VSWR without using a tuner.

Here is How I Do It.

IMPORTANT - Connect the shield of a "Short Piece" of 75 ohm coax to one end of the loop antenna , Connect the center of the 75 ohm coax to the other end of the loop antenna. The length of the 75 ohm coax is most important. It will be used as a Q section.

To determine the length to use, Use this formula "Length in feet = 246 x VF / Freq in Mhz" VF = the Velocity Factor of the coax. So multiply 246 by the Velocity Factor of the coax , Then divide by the frequency .

If you use RG59 or RG11 with a Velocity Factor of 0.66 , For the 75 meter band the Piece of 75 ohm coax should be about 42 feet long , It doesn't need to be exact . RG59 and RG11 coax usually have a Velocity Factor of 0.66 , Foam dielectric coax such as RG6 might have a Velocity Factor of 0.81 or more.

Put a PL259 coax connector on the unused end of the 75 ohm coax, Screw a PL258 double female coax connector onto this PL259 coax

connector. Then connect 50 ohm coax to the other side of the PL258 double female coax connector, Use any length 50 ohm coax needed to reach your Transceiver.

Here's the only con I could think of, and it would not apply if the antenna was oriented horizontally. Vertically oriented it would have some (not sure how much) directivity.

You could construct the antenna and then spin it to check it's directivity. If you thought it had too much directivity (I don't think it will) You could make 2 antennas and switch between them.

73, Ace -WH2T

--

Dr.Ace Ratliff

www.WH2T.com

--- In SkyWires@yahoogroups.com, "w4dsb" <w4dsb@...> wrote:
>
> --- In SkyWires@yahoogroups.com, "Scott MacKenzie" <kb0fhp@> wrote:
> >
> > It works - mount it vertically, feed it for horizontal polarization,
> and it
> > will work OK.not as good as a 5 element beam - but it will work in a
> pinch.
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> point the moxon antenna toward the station
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> > From: SkyWires@yahoogroups.com [mailto:SkyWires@yahoogroups.com] On
> Behalf
> > Of w4dsb
> > Sent: Wednesday, March 19, 2008 12:35 PM
> > To: SkyWires@yahoogroups.com
> > Subject: [SkyWires] 6 meter loop
> >
> >
> >
> > anyone here use a 6 meter loop?
> > any pro's or cons on using one for 6 meters?
> >

>

2975. Nested loops for gain?

Yahoo group: SkyWires
Date: 2008-03-20 12:22:13 UTC
From: Tony DiCenzo
Topic: 2975 Message: 2975

Are there any horizontal loop designs that can achieve gain? (there are designs for vertical loops) Would nested loops act like a yagi to achieve gain?

-An inner loop to act as a reflector
-A middle, driven loop
-A outer director loop

Or is this a silly idea?

73,
Tony KX1G

2976. Re: [SkyWires] Nested loops for gain?

Yahoo group: SkyWires
Date: 2008-03-20 13:21:26 UTC
From: rev. don
Topic: 2975 Message: 2976

Tony, the reflector is the longest wire loop so it would have to be on the outside and the director on the inside. They would have to be spaced about .15 wavelength between the loops. If you try to draw it on graph paper you will see it is not possible to have them on the same plane.OTOH, I have seen loops on 6 or 2 meters stacked one above the other, possibly could do it for 10 meters, to increase gain omnidirectional.
Don W4BWS
----- Original Message -----
From: Tony DiCenzo
To: SkyWires@yahoogroups.com
Sent: Thursday, March 20, 2008 7:22 AM
Subject: [SkyWires] Nested loops for gain?

Are there any horizontal loop designs that can achieve gain? (there
are designs for vertical loops) Would nested loops act like a yagi to
achieve gain?

-An inner loop to act as a reflector
-A middle, driven loop
-A outer director loop

Or is this a silly idea?

73,
Tony KX1G

2977. RE: [SkyWires] Re: 6 meter loop

Yahoo group: SkyWires
Date: 2008-03-20 15:06:04 UTC
From: Robert Mozulay
Topic: 2969 Message: 2977

Has anyone tried the Rover-6 6 meter quad by Dunestar?

See:

http://www.dunestar.com/Rover6/

Bob/WB2UFE

Scott MacKenzie <kb0fhp@...> wrote:
You could also turn the so the loops are vertical ? and make a quad?.

From: SkyWires@yahoogroups.com [mailto:SkyWires@yahoogroups.com] On Behalf Of Callum M0MCX
Sent: Wednesday, March 19, 2008 7:57 PM
To: SkyWires@yahoogroups.com
Subject: RE: [SkyWires] Re: 6 meter loop

You might like to try a pair and get an extra 3dbi gain? I built a pair for 2m and fed them as a stack, however the distance between them is probably a bit difficult for 6m though? I seem to remember mine are a wavelength apart..? I think you can squeeze this down to half a wavelength. Not sure.

See here: http://www.m0mcx.co.uk/gallery/picture.php?/140/category/16

Callum McCormick
T: 07976 631881
http://www.m0mcx.co.uk/

While others were busy thinking outside the box, I cut it up because I needed some cardboard for a project I was making.

2978. Re: [SkyWires] Re: 6 meter loop

Yahoo group: SkyWires
Date: 2008-03-20 15:15:40 UTC
From: Sarge
Topic: 2969 Message: 2978

I just use a PAR Omni Loop for 6 mtrs. No more action than there is, I just can't see doing much for the band.

Has anyone tried the Rover-6 6 meter quad by Dunestar?

See:

http://www.dunestar.com/Rover6/

Bob/WB2UFE

Scott MacKenzie <kb0fhp@...> wrote:
You could also turn the so the loops are vertical - and make a quad..

From: SkyWires@yahoogroups.com [mailto:SkyWires@yahoogroups.com] On Behalf Of Callum M0MCX
Sent: Wednesday, March 19, 2008 7:57 PM
To: SkyWires@yahoogroups.com
Subject: RE: [SkyWires] Re: 6 meter loop
You might like to try a pair and get an extra 3dbi gain? I built a pair for 2m and fed them as a stack, however the distance between them is probably a bit difficult for 6m though? I seem to remember mine are a wavelength apart..? I think you can squeeze this down to half a wavelength. Not sure.
See here: http://www.m0mcx.co.uk/gallery/picture.php?/140/category/16
Callum McCormick
T: 07976 631881
http://www.m0mcx.co.uk/
While others were busy thinking outside the box, I cut it up because I needed some cardboard for a project I was making.

No virus found in this incoming message.
Checked by AVG.
Version: 7.5.519 / Virus Database: 269.21.7/1335 - Release Date: 3/19/2008 9:54 AM

2979. farg - loop down - no more coated cable

Yahoo group: SkyWires
Date: 2008-03-23 23:34:45 UTC
From: Jason Buchanan
Topic: 2979 Message: 2979

My loop went down yesterday, snapped and broke on a corner.

Looking at it more carefully the plastic shielding looks to have done far worse damage than it would have helped. I should have used bare wire. 100 feet of either side where it broke the copper has a slight greenish hue, apparently due to trapping the moisture inside the plastic insulation. On 5 feet either side of the break it is black and nasty - so it had been corroding for quite a while. I have the same wire, but BARE, on other antennas that have been up for 5+ years, but the loop lasted only about 18 months.

Next time i'm going to opt for #12 bare wire. argh.

73 Jason N1SU

2980. Re: [SkyWires] farg - loop down - no more coated cable

Yahoo group: SkyWires
Date: 2008-03-24 16:00:13 UTC
From: Dean L.
Topic: 2979 Message: 2980

Sounds like you may be using the Wrong kind of
wire... Ever think of getting a roll of 14 Ga. copper
coated steal ?
Sounds like at this time you are using copper wire
that is intended for in a conduit. Not hung up in
the air.
BTW It is normal for copper wire to turn color in
the air. That will not affect the radiation of it .

Dean L.
W5GXL@...

On Mar 23, 2008, at 6:34 PM, Jason Buchanan wrote:

>
> My loop went down yesterday, snapped and broke on a corner.
>
> Looking at it more carefully the plastic shielding looks to have done
> far worse damage than it would have helped. I should have used bare
> wire. 100 feet of either side where it broke the copper has a slight
> greenish hue, apparently due to trapping the moisture inside the
> plastic insulation. On 5 feet either side of the break it is black
> and nasty - so it had been corroding for quite a while. I have the
> same wire, but BARE, on other antennas that have been up for 5+ years,
> but the loop lasted only about 18 months.
>
> Next time i'm going to opt for #12 bare wire. argh.
>
> 73 Jason N1SU
>

2981. Re: [SkyWires] farg - loop down - no more coated cable

Yahoo group: SkyWires
Date: 2008-03-24 19:46:31 UTC
From: Jason Buchanan
Topic: 2979 Message: 2981

On Mar 24, 2008, at 12:00 PM, Dean L. wrote:

> Sounds like you may be using the Wrong kind of
> wire... Ever think of getting a roll of 14 Ga. copper
> coated steal ?

I was using #14 flex weave with the plastic jacket. It was holding up fine except for the corners where there is the most tension. Not sure if copper coated steel would last any longer though unless I use a larger diameter pulley. I have a 1" pulley on the corner but I think a 3 inch pulley would be better as it would spread out the tension across a greater surface area.

tnx jason N1SU

2982. Re: [SkyWires] farg - loop down - no more coated cable

Yahoo group: SkyWires
Date: 2008-03-25 04:35:29 UTC
From: icra@galaxynet.com
Topic: 2979 Message: 2982

> I was using #14 flex weave with the plastic jacket. It was holding
> up
> fine except for the corners where there is the most tension. Not
> sure
> if copper coated steel would last any longer though unless I use a
> larger diameter pulley. I have a 1" pulley on the corner but I
> think
> a 3 inch pulley would be better as it would spread out the tension
> across a greater surface area.
>
My experience....with either a support line or antenna wire.....

You can not use too large a pulley....

Mel
N7OKL

2983. Re: [SkyWires] farg - loop down - no more coated cable

Yahoo group: SkyWires
Date: 2008-03-25 08:02:03 UTC
From: Facility 406 DM09
Topic: 2979 Message: 2983

Copper household wire work hardens, it is not designed for much more strain or movement than pulling it through a conduit and rarely touching it again. It is so easily damaged (nicks, work hardening), it often breaks when replacing a household switch or receptical. It shouldn't be considered for anything other than it was designed. Copper clad steel, on the other hand, it designed for communications lines and antennas.

Kurt

2984. Re: [SkyWires] farg - loop down - no more coated cable

Yahoo group: SkyWires
Date: 2008-03-26 18:46:31 UTC
From: Christopher Zeman
Topic: 2979 Message: 2984

I'm using 12AWG stranded THHN for my loop, but it's only been up 9 months so far. I guess we'll see what happens with mine. :)

Chris
N9XCR

2985. Re: farg - loop down - no more coated cable

Yahoo group: SkyWires
Date: 2008-03-27 23:15:06 UTC
From: oldlongbeard
Topic: 2979 Message: 2985

My loop using stranded, coated wire has been up for 7 years. It has 2 splices that I remember. The ropes have broken multiple times, but the wire has NEVER failed. Still works great! I did replace the coax feed with open wire line, though. Very good antenna. Worked Clipperton a couple weeks ago with it barefoot from Michigan.

73-
Greg, KC8HXO

2986. Re: 6 meter loop

Yahoo group: SkyWires
Date: 2008-03-28 23:17:54 UTC
From: w4dsb
Topic: 2969 Message: 2986

Thanks All
I have built the 6 meter loop and have it hanging on a wooden pole (old power co pole) in the back yard. I have one spreader in the middle made from 1 1/4" pvc.
I hung it at the top from a block of teflon with a V notch cut in it for the wire to hang in.at the bottom I built a Teflon terminal block to terminate the ends of the loop to and used a rubber bungee cord to pull it down and keep it tight.
I used rg-6 for my Q section and the SWR is Great over a Wide portion of the band!

--- In SkyWires@yahoogroups.com, "Dr.Ace" <wh2t@...> wrote:
>
> Hi Dwayne,
>
> No real cons, but it's not as good as a 5 element yagi. If you want
> to beat the yagi go with a rhombic antenna. Pros = good band width,
> quiet noise floor, easy to match, low cost, gain over a dipole, easy
> to construct, etc.
>
>
> Fed at the bottom corner of a diamond a loop antenna has horizontal
> polarization.
>
> If you hang it from a tower, you could use a single 1 inch PVC pipe
> spreader horizontal inside the diamond. I would put a PVC T connector
> in the center of the 1 inch PVC pipe spreader then attach a 1 inch
> PVC pipe from the tower to the PVC T connector to hold the antenna
> stationary.
>
>
> "A vertically oriented horizontally polarized one wavelength loop
> antenna with the bottom of the loop 1/2 wave length above ground is a
> FINE antenna".
>
> Do NOT put the bottom of the vertically oriented loop more than 1/2
> wave length above ground.
>
> The impedance of a Full Wave Loop antenna is theoretically in the
> vicinity of 100 ohms. That is why I use a 75 ohm "Q section" to
> provide a perfect match to the 50 ohm coax. My Loop antenna is flat
> 1:1 VSWR without using a tuner.
>
> Here is How I Do It.
>

> IMPORTANT - Connect the shield of a "Short Piece" of 75 ohm coax to
> one end of the loop antenna , Connect the center of the 75 ohm coax
> to the other end of the loop antenna. The length of the 75 ohm coax
> is most important. It will be used as a Q section.
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> To determine the length to use, Use this formula "Length in feet =
> 246 x VF / Freq in Mhz" VF = the Velocity Factor of the coax. So
> multiply 246 by the Velocity Factor of the coax , Then divide by the
> frequency .
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> If you use RG59 or RG11 with a Velocity Factor of 0.66 , For the 75
> meter band the Piece of 75 ohm coax should be about 42 feet long , It
> doesn't need to be exact . RG59 and RG11 coax usually have a Velocity
> Factor of 0.66 , Foam dielectric coax such as RG6 might have a
> Velocity Factor of 0.81 or more.
>
> Put a PL259 coax connector on the unused end of the 75 ohm coax,
> Screw a PL258 double female coax connector onto this PL259 coax
> connector. Then connect 50 ohm coax to the other side of the PL258
> double female coax connector, Use any length 50 ohm coax needed to
> reach your Transceiver.
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> antenna was oriented horizontally. Vertically oriented it would have
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>
> You could construct the antenna and then spin it to check it's
> directivity. If you thought it had too much directivity (I don't
> think it will) You could make 2 antennas and switch between them.
>
> 73, Ace -WH2T
>
> --
>
> Dr.Ace Ratliff
>
> www.WH2T.com
>
>
> --- In SkyWires@yahoogroups.com, "w4dsb" <w4dsb@> wrote:
> >
> > --- In SkyWires@yahoogroups.com, "Scott MacKenzie" <kb0fhp@> wrote:
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> > Hoping to use it as a omni directional for monitoring and then i can
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> > > From: SkyWires@yahoogroups.com [mailto:SkyWires@yahoogroups.com]
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> > > Of w4dsb
> > > Sent: Wednesday, March 19, 2008 12:35 PM
> > > To: SkyWires@yahoogroups.com
> > > Subject: [SkyWires] 6 meter loop
> > >
> > >
> > >
> > > anyone here use a 6 meter loop?
> > > any pro's or cons on using one for 6 meters?
> > >
> >
>

2988. WORKING GREAT!!!

Yahoo group: SkyWires
Date: 2008-03-31 04:24:17 UTC
From: Steve Holman
Topic: 2988 Message: 2988

Well I have had the loop up for a while. And it has exceeded my expectations to this point. In the contest this weekend I was able to work everything I could hear except for one or two mostly due to QRM from the contest. I will have to rework my supports this spring as they have gotten loosey goosey (technical word there) and the wire sags but it still communicates.

These Skywire things WORK!!

STEVE
N5WDD

2989. Re: farg - loop down - no more coated cable

Yahoo group: SkyWires
Date: 2008-03-31 13:40:07 UTC
From: Jim Stafford
Topic: 2979 Message: 2989

Oh pls don't abandon insulated wire for a loop. Like GREG, my experience has been very positive with insulated stranded wire. I have had mine up for 12 years and a couple times the ropes have worn through (I don't use pulleys), and about 4 years ago something caused it to sag and it got tangled in my chimney covers. Try as I might, I could not get it untangled so I pulled it till it broke. Doing that, I had sort of worn through a section of the wire so I replace it with 10 feet of non insulated wire and about 3 weeks ago, the loop broke where the splice was and when I examined it, the non insulated stranded wire was very corroded. I went back in with an insulated wire section. Now, this is 16 gauge stranded insulated wire I'm using. Not 12 gauge or even 14 gauge. I thought about replacing the entire loop due to its age but went back with the same 12 year old wire as it looks pretty good.

My loop is a full wave 80M loop at 50 to 60 feet up feed with open wire. I have 141 countries on it in the past 4 years since I started using the N3FJP software to track my QSOs. That's all bands. I have 25 on 80, 87 on 40M and 123 on 20M and a few on 15 and 10M during this sunspot LOW. And Worked all States several times - 49 on 40M alone. And I'm 100% QRP!

jim/w4qo

2990. Re: [SkyWires] Re: farg - loop down - no more coated cable

Yahoo group: SkyWires
Date: 2008-03-31 14:08:41 UTC
From: Erik Weaver
Topic: 2979 Message: 2990

Hi all,

I had used bare #14 stranded copper-clad steel "antenna" wire from one of the well-known suppliers (not trying to keep secrets, I just can't remember from which I bought -- The Wire Man? Davis RF? "Jake's Place" (cablexperts)? 99% it was one of these)

Anyway, it was up about 5 or 6 years. I have taken it down now because the supports broke again and I haven't gotten around to replacing them. But the wire is still in very good shape.

Maybe it has more to do with the quality of the wire itself, and less with the insulation? I don't know. Just guessing.

For support-springs, I'm thinking next time of using the springs big trucks use on their air-lines hanging off the back of their cabs. I've seen them in two lengths, one maybe 2 or 2.5 feet long and the other about half that length. They feel like about the right amount of tension and they obviously survive outdoor weather in poor conditions --road salt, lotsa tugging-- quite well because they hardly ever break.

Has anyone tried them?

73-Erik n0ew

2991. Re: [SkyWires] Re: farg - loop down - no more coated cable

Yahoo group: SkyWires
Date: 2008-03-31 15:07:38 UTC
From: Alan Wilson
Topic: 2979 Message: 2991
Attachments: 2 described; binary payloads are missing from this source WARC

[Attachment content not displayed]

2992. Re: [SkyWires] Re: farg - loop down - no more coated cable

Yahoo group: SkyWires
Date: 2008-03-31 15:49:11 UTC
From: Jim Dunstan
Topic: 2979 Message: 2992

At 09:07 AM 3/31/2008 -0600, you wrote:

>Hello all, I've been using 14 ga coated solid wire in a 75 meter loop now
>for 3 years here in western montana where the wind howls quite a bit. No
>problem with the wire, the support rope has broken a couple of times. I
>feed the loop with 450 ohm ladderline down to a 4 to 1 balun. Works very
>well...73, Alan
>
>--
>Alan Wilson
>67 Bullseye Lane
>Victor, MT 59875

Hi,

I concur ... solid copper coated or not if properly installed is all but indestructible. I have put up any number of wire antennas and never have to special order the wire ... I go to an electrical supply store and get standard #14 gauge insulated wire. The only thing that ever deteriorates and breaks are halyards ... and there are tricks that can be used in these cases. You must properly terminate the wire in a good size smooth strain insulator ... so any movement is against the insulator and not the wire. This wire will easily hold 150 ft with a suspended feed line in the middle. If there is no suspended feed line you can easily go beyond 150 ft.. In the case of a loop the main problem is usually 'cutting corners' at the corners (no pun intended). One is tempted to use a single insulator and put the wire through ... sometimes to even allow it to move. This will always be the breaking point. On a 4 sided loop each side should terminate in its own egg (strain) insulator and there should be no movement of the wire at this join. The should only be a tensile strain (if that is the word).

I have a particular 150' length with feed line in the middle out at the farm that has been up there for at least 15 years ... tied between swaying branches of large trees ... there have been uncounted halyard breaks ...even a couple of feed line breaks ... but never a break in the horizontal wire.

Jim, VE3CI

2993. MFJ Antenna analyzer....help!

Yahoo group: SkyWires
Date: 2008-03-31 16:21:14 UTC
From: Tim Folkenson
Topic: 2993 Message: 2993

I have been using my 80m loop w/TenTec tuner all winter with great reults. Yesterday I replaced my 22ga temp wire with a 14ga permenant solution. I am running 450ohm ladder line through the attic past all kinds of duct work etc. The system works well with a tuner (so I thought) until I hooked up the MFJ analyzer to find resonance,

The best SWR I get is 3:1 @ 100ohms. What's up with that? Should I run it through a ballun before the analyzer? Maybe run the ladder line to coax like a G5RV?

TIA,

Tim in MN KD0AHR

2994. Re: farg - loop down - no more coated cable

Yahoo group: SkyWires
Date: 2008-03-31 16:24:23 UTC
From: Don Keith
Topic: 2979 Message: 2994

I, too, use the 14 ga. insulated electrical wire. I get mine from Lowe's when (if ever again) it is on sale. My 475-foot loop's been up for almost two years with no failures. My neighbor did have some pine trees taken down and, in the process, they let a tree get into the loop and it broke it, but only in one spot. That gave me the chance to inspect the wire and, though the black outer insulation showed some damage where it went through one of my insulators (I'm sure that happened when the tree hit the antenna), the inner plastic--next to the conductor--was still untouched. I did the best splice I could manage and it has stayed up fine for five months now, including during some pretty good thunderstorms.

I use PVC 45-degree elbows at most of the support points. That allows the wire to move within the elbow without causing undue friction on the insulation. See my site at www.n4kc.com if you are interested in what I did.

I have to use insulated wire since my loop necessarily runs through some branches, but the typical Lowes stuff seems to be holding up just fine.

I also use the 14 ga. insulated wire for a 135-foot doublet and it got hit by the same tree. It broke at the end, at the insulator. Very convenient! I was able to re-hang it on a higher limb. Sweet!

Don N4KC
www.n4kc.com
www.n4kc.blogspot.com
www.donkeith.com

--- In SkyWires@yahoogroups.com, Jim Dunstan <jdunstan@...> wrote:
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> Jim, VE3CI
>

2995. Re: MFJ Antenna analyzer....help!

Yahoo group: SkyWires
Date: 2008-03-31 16:43:18 UTC
From: Don Keith
Topic: 2993 Message: 2995

Tim, your first mistake was hooking up the SWR analyzer! You said it was working great but then you fooled around and found out you had some danged old standing waves. Sometimes ignorance is bliss! So long as you are feeding with ladder line or window line, and have a good tuner that seems to find a match in most places, don't worry about SWR.

Yes, a 4:1 current balun at the output of the tuner would probably make it easier to match at many places in the spectrum. Some would even argue that a 1:1 ratio would work better in spots, such as when the impedance falls very low. But if your tuner has been handling it on the frequencies where you like to operate, and you see no signs of heat within the tuner that indicates excessive loss, I'd ignore those pesky standing waves and OPERATE!

By the way, you should find that 80-meter loop to be an effective all-band antenna if you have a good external tuner and don't introduce too much coax into the equation. If you're interested, I have a couple of articles on my web site on this subject: www.n4kc.com.

Don N4KC
www.n4kc.com
www.n4kc.blogspot.com
www.donkeith.com

--- In SkyWires@yahoogroups.com, "Tim Folkenson" <folkenson@...> wrote:
>
> I have been using my 80m loop w/TenTec tuner all winter with great
> reults. Yesterday I replaced my 22ga temp wire with a 14ga permenant
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> coax like a G5RV?
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> TIA,
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> Tim in MN KD0AHR
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2996. RE: [SkyWires] Re: farg - loop down - no more coated cable

Yahoo group: SkyWires
Date: 2008-03-31 16:44:52 UTC
From: Scott MacKenzie
Topic: 2979 Message: 2996

I use 16 gage stranded that I picked up at a supply house. I have more problems with the line holding the antenna in the tree than I do with the wire. I have found that 50 pound test or greater, is cheap, effective and gives a bit when the trees sway. Several antennas up for more than several years with no issues. It is also relatively stealthy.

Scott

From: SkyWires@yahoogroups.com [mailto:SkyWires@yahoogroups.com] On Behalf Of Don Keith
Sent: Monday, March 31, 2008 12:24 PM
To: SkyWires@yahoogroups.com
Subject: [SkyWires] Re: farg - loop down - no more coated cable

I, too, use the 14 ga. insulated electrical wire. I get mine from Lowe's when (if ever again) it is on sale. My 475-foot loop's been up for almost two years with no failures. My neighbor did have some pine trees taken down and, in the process, they let a tree get into the loop and it broke it, but only in one spot. That gave me the chance to inspect the wire and, though the black outer insulation showed some damage where it went through one of my insulators (I'm sure that happened when the tree hit the antenna), the inner plastic--next to the conductor--was still untouched. I did the best splice I could manage and it has stayed up fine for five months now, including during some pretty good thunderstorms.

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2997. Re: [SkyWires] Re: farg - loop down - no more coated cable

Yahoo group: SkyWires
Date: 2008-03-31 17:08:50 UTC
From: Alan Wilson
Topic: 2979 Message: 2997
Attachments: 2 described; binary payloads are missing from this source WARC

[Attachment content not displayed]

2998. Re: [SkyWires] MFJ Antenna analyzer....help!

Yahoo group: SkyWires
Date: 2008-03-31 17:31:07 UTC
From: Jim Dunstan
Topic: 2993 Message: 2998

At 04:21 PM 3/31/2008 +0000, you wrote:

>I have been using my 80m loop w/TenTec tuner all winter with great
>reults. Yesterday I replaced my 22ga temp wire with a 14ga permenant
>solution. I am running 450ohm ladder line through the attic past all
>kinds of duct work etc. The system works well with a tuner (so I
>thought) until I hooked up the MFJ analyzer to find resonance,
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>The best SWR I get is 3:1 @ 100ohms. What's up with that? Should I run
>it through a ballun before the analyzer? Maybe run the ladder line to
>coax like a G5RV?
>
>TIA,
>
>Tim in MN KD0AHR

Okay ..... you have a 80m loop connected to 450 ohm feed line which in turn is connected to your Ten-Tec tuner. You are getting good results ... on more than 1 band 80 to 10 mtrs I would assume. I also assume your tuner matches the system to your radio (50 ohm output) satisfactorily .... (meaning the SWR at the radio is satisfactory).

You connect your antenna analyzer to make a measurement .... where do you connect it? on what frequency do you make the measurement ? and for what purpose (although you mention to find resonance) .. curiosity ??

Jim, VE3CI

2999. Re: [SkyWires] MFJ Antenna analyzer....help!

Yahoo group: SkyWires
Date: 2008-03-31 17:32:37 UTC
From: Erik Weaver
Topic: 2993 Message: 2999

Hi Tim,

As others have already said, just leave well-enough alone! ;)

It sounds as if your antenna is working as expected. All-band antennas will normally display a wide range of impedance values, and a wide range of reactances as well. You may or may not find they approach 50-ohms in one of the amateur radio bands. But that doesn't matter in all cases. This means you might expect many swr values as you scan across the amateur bands.

Of course, this doesn't answer your question, nor point out other questions you may wish to ask. Read on!

When does "too high" swr matter? Certainly *not* when you are using open/balanced line (such as the 450-ohm ladder line you are using). Why? Because the loss is so very low! In fact, it is almost not worth measuring. That means you can even have 50:1 swr on open/balanced line and not really care, because there is not enough to notice as you operate.

Coax is an entirely different animal! Most of us think 10:1 swr is usually too high on coax. But even then it depends how long the length is, because a 6-inch or 1-foot length still won't have much loss at 10:1 swr. But if it is 100-feet, the odds are the losses at 10:1 swr will be quite large and very noticeable.

So much for the transmission line.

What about the antenna?

Well, the antenna doesn't care about swr either. As the RF travels from the XCVR to the antenna, some of the RF is 'lost' inside the antenna, but that is our desired goal: RF 'lost' in the antenna radiates into the sky!

What RF doesn't radiate from the antenna bounces back toward the your XCVR (or transmatch if you are using one) and we call it the 'reflected' wave. When this reflected RF hits the XCVR/transmatch, none of the RF is 'lost' inside the XCVR/transmatch (it all re-reflects back toward the antenna). When the RF reaches the antenna, this all starts over again: some RF radiates; some reflects. Over and over until all the RF has escaped the system from the antenna. ... With one exception: transmission line attenuation, which can be thought of as the "heat loss" taking place inside the transmission line as the RF travels from one end of the line to the other.

And *that* is why the quality of the transmission line is so important!

If it is open/balanced line this "attenuation" is so small it is seldom worth worrying about, and therefore swr is equally unimportant. You do have to keep the line "balanced" however, or the situation needs to be reevaluated. Maintaining balance basically means keeping the ladder line a minimum clearance of a couple inches away from other objects, especially those that are metal or magnetic. Maintaining this clearance is not always possible, such as when going through attics and walls for example. If the line becomes unbalanced it will begin to radiate just like an antenna. If fact, it becomes an antenna.

When you use coax there are more variables to consider. A big plus of coax is you can route it just about anywhere; the downside is it is much lossier than balanced line. The condition of the coax is important (age, cuts, etc), the quality (attenuation loss at the frequencies you are using), and the total length used, are all important to consider. You weigh all these variables and end up with a total loss for your situation. Then you consider the swr on all the bands you intend to use this with, and look up the additional losses due to that swr.

The other thing to consider about swr is how it interacts with your XCVR/transmatch. If you use a transmatch, the XCVR is protected from any unusual swr because the transmatch transforms the impedance to something close to 50 ohms. Assuming you can 'tune' the antenna system, of course.

Sometimes the antenna system presents too high or too low an impedance for the transmatch to successfully transform: we can't get a 'tune' in these cases. Now you need to change something in the system if you are going to use this antenna on that band. But what?

You can try a different transmatch. These are generally most efficient when not pushed to their extremes, and when pushed beyond their extremes internal arcing or damage may occur inside the device.

You can try altering the geometry of the antenna too. Shorten it, lengthen it, angle it differently, change the angle the transmission line approaches it, change the height, and on and on.

You can also alter the length of the transmission line. Sometimes that will change the impedance presented to the transmatch enough that it can now 'tune' the system.

Questions:

What was the worse swr? What was the swr on each of the amateur radio bands you wish to use? Has your transmatch (aka tuner) been working fine?

All of which can be summed up with the popular phrase: if it ain't broke don't fix it ;)

73-Erik n0ew

Tim Folkenson wrote:
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> Tim in MN KD0AHR

3000. Re: MFJ Antenna analyzer....help!

Yahoo group: SkyWires
Date: 2008-03-31 19:00:38 UTC
From: Tim Folkenson
Topic: 2993 Message: 3000

I hooked it up in the shack to the ladder line. I expected to see 100ohms and wanted to trim the line so I get a dip in SWR within the Ham band range on 80m, 40m, 20m. I am going on the assumption that my old Tempo One will put out around 100w and I want every electron to leave my wire in the most efficient way.

My understanding of a tuner is that it does not fix an inefficient antenna, it just masks the symptoms. I don't have power to spare, so I want an antenna that resonates well where I tune most. That would be SSB 20m and 40m first; PSK 20m and 40m second; and 80m DX SSB third. I have had some contacts on 80m but find less CQ calling on 80m SSB than the other bands. My perception is that 80m SSB is more of a rag chewing arena?

Sorry if I ramble,

Tim
KD0AHR

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3001. RE: [SkyWires] MFJ Antenna analyzer....help!

Yahoo group: SkyWires
Date: 2008-03-31 19:18:09 UTC
From: Callum M0MCX
Topic: 2993 Message: 3001
Attachments: 2 described; binary payloads are missing from this source WARC

Erik,

This is a wonderful answer and should be mandatory reading for all antenna builders :)

Callum McCormick

http://www.m0mcx.co.uk/

While others were busy thinking outside the box, I cut it up because I needed some cardboard for a project I was making.

From: SkyWires@yahoogroups.com [mailto:SkyWires@yahoogroups.com] On Behalf Of Erik Weaver
Sent: 31 March 2008 18:33
To: SkyWires@yahoogroups.com
Subject: Re: [SkyWires] MFJ Antenna analyzer....help!

Hi Tim,

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3002. RE: [SkyWires] MFJ Antenna analyzer....help!

Yahoo group: SkyWires
Date: 2008-03-31 19:20:04 UTC
From: Callum M0MCX
Topic: 2993 Message: 3002

Grrr.

I forget about HTML email and attachments issue sometimes with the SkyWires group Sorry!

Callum McCormick
http://www.m0mcx.co.uk/

While others were busy thinking outside the box, I cut it up because I needed some cardboard for a project I was making.

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To: SkyWires@yahoogroups.com
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Of course, this doesn't answer your question, nor point out other questions you may wish to ask. Read on!

When does "too high" swr matter? Certainly *not* when you are using open/balanced line (such as the 450-ohm ladder line you are using). Why? Because the loss is so very low! In fact, it is almost not worth measuring. That means you can even have 50:1 swr on open/balanced line and not really care, because there is not enough to notice as you operate.

Coax is an entirely different animal! Most of us think 10:1 swr is usually too high on coax. But even then it depends how long the length is, because a 6-inch or 1-foot length still won't have much loss at 10:1 swr. But if it is 100-feet, the odds are the losses at 10:1 swr will be quite large and very noticeable.

So much for the transmission line.

What about the antenna?

Well, the antenna doesn't care about swr either. As the RF travels from the XCVR to the antenna, some of the RF is 'lost' inside the antenna, but that is our desired goal: RF 'lost' in the antenna radiates into the sky!

What RF doesn't radiate from the antenna bounces back toward the your XCVR (or transmatch if you are using one) and we call it the 'reflected' wave. When this reflected RF hits the XCVR/transmatch, none of the RF is 'lost' inside the XCVR/transmatch (it all re-reflects back toward the antenna). When the RF reaches the antenna, this all starts over again: some RF radiates; some reflects. Over and over until all the RF has escaped the system from the antenna. ... With one exception: transmission line attenuation, which can be thought of as the "heat loss" taking place inside the transmission line as the RF travels from one end of the line to the other.

And *that* is why the quality of the transmission line is so important!

If it is open/balanced line this "attenuation" is so small it is seldom worth worrying about, and therefore swr is equally unimportant. You do have to keep the line "balanced" however, or the situation needs to be reevaluated. Maintaining balance basically means keeping the ladder line a minimum clearance of a couple inches away from other objects, especially those that are metal or magnetic. Maintaining this clearance is not always possible, such as when going through attics and walls for example. If the line becomes unbalanced it will begin to radiate just like an antenna. If fact, it becomes an antenna.

When you use coax there are more variables to consider. A big plus of coax is you can route it just about anywhere; the downside is it is much lossier than balanced line. The condition of the coax is important (age, cuts, etc), the quality (attenuation loss at the frequencies you are using), and the total length used, are all important to consider. You weigh all these variables and end up with a total loss for your situation. Then you consider the swr on all the bands you intend to use this with, and look up the additional losses due to that swr.

The other thing to consider about swr is how it interacts with your XCVR/transmatch. If you use a transmatch, the XCVR is protected from any unusual swr because the transmatch transforms the impedance to something close to 50 ohms. Assuming you can 'tune' the antenna system, of course.

Sometimes the antenna system presents too high or too low an impedance for the transmatch to successfully transform: we can't get a 'tune' in these cases. Now you need to change something in the system if you are going to use this antenna on that band. But what?

You can try a different transmatch. These are generally most efficient when not pushed to their extremes, and when pushed beyond their extremes internal arcing or damage may occur inside the device.

You can try altering the geometry of the antenna too. Shorten it, lengthen it, angle it differently, change the angle the transmission line approaches it, change the height, and on and on.

You can also alter the length of the transmission line. Sometimes that will change the impedance presented to the transmatch enough that it can now 'tune' the system.

Questions:

What was the worse swr? What was the swr on each of the amateur radio bands you wish to use? Has your transmatch (aka tuner) been working fine?

All of which can be summed up with the popular phrase: if it ain't broke don't fix it ;)

73-Erik n0ew

Tim Folkenson wrote:
> I have been using my 80m loop w/TenTec tuner all winter with great
> reults. Yesterday I replaced my 22ga temp wire with a 14ga permenant
> solution. I am running 450ohm ladder line through the attic past all
> kinds of duct work etc. The system works well with a tuner (so I
> thought) until I hooked up the MFJ analyzer to find resonance,
> The best SWR I get is 3:1 @ 100ohms. What's up with that? Should I run
> it through a ballun before the analyzer? Maybe run the ladder line to
> coax like a G5RV?
> Tim in MN KD0AHR

3003. Re: [SkyWires] Re: farg - loop down - no more coated cable

Yahoo group: SkyWires
Date: 2008-03-31 20:36:55 UTC
From: Ben Worrell
Topic: 2979 Message: 3003

I've been using 14 gauge insulated wire I bought at
HomeDepot when I got my HF priveledges back in 1996.
I think it started out as a 500' spool. Seems I paid
less than $25 for it!

The only breaks I've had were not the wire but where my
heavy nylon cord (trotline string from a sporting goods
store failed after years in the sun) and abuse by the
trees that never seem to move together.
The wires I cut in 1996 for my original 17m and 40m
dipoles are weathered but still intact.

Recently (December '07) I picked up some 18 gauge aluminum
Electric fence wire from Tractor supply, after a little
over 3 months it's still holding up)

73 Ben - ne5B

On Mon, 31 Mar 2008 11:08:50 -0600
"Alan Wilson" <ke4nu7@...> wrote:
> Hi Don, read your article on the loop, good one. I
>worked quite a bit of dx
> on my 75m loop over the past weekend during the contest
>with 100 watts. BTW,
> I remember listening to you on the might 690 (WVOK) when
>I was a kid growing
> up in winston county Alabama. Those were the good ole
>days...73, Alan Wilson
> in Victor, MT http://montanaham.tripod.com
>
> On 3/31/08, Don Keith <n4kc@...> wrote:
>>
>> I, too, use the 14 ga. insulated electrical wire. I
>>get mine from
>> Lowe's when (if ever again) it is on sale. My 475-foot
>>loop's been
>> up for almost two years with no failures. My neighbor
>>did have some
>> pine trees taken down and, in the process, they let a
>>tree get into
>> the loop and it broke it, but only in one spot. That
>>gave me the
>> chance to inspect the wire and, though the black outer
>>insulation
>> showed some damage where it went through one of my
>>insulators (I'm

>> sure that happened when the tree hit the antenna), the
>>inner plastic--
>> next to the conductor--was still untouched. I did the
>>best splice I
>> could manage and it has stayed up fine for five months
>>now, including
>> during some pretty good thunderstorms.
>>
>> I use PVC 45-degree elbows at most of the support
>>points. That
>> allows the wire to move within the elbow without causing
>>undue
>> friction on the insulation. See my site at www.n4kc.com
>>if you are
>> interested in what I did.
>>
>> I have to use insulated wire since my loop necessarily
>>runs through
>> some branches, but the typical Lowes stuff seems to be
>>holding up
>> just fine.
>>
>> I also use the 14 ga. insulated wire for a 135-foot
>>doublet and it
>> got hit by the same tree. It broke at the end, at the
>>insulator.
>> Very convenient! I was able to re-hang it on a higher
>>limb. Sweet!
>>
>> Don N4KC
>> www.n4kc.com
>> www.n4kc.blogspot.com
>> www.donkeith.com
>>
>> --- In SkyWires@yahoogroups.com
>><SkyWires%40yahoogroups.com>, Jim Dunstan
>> <jdunstan@...> wrote:
>> >
>> > At 09:07 AM 3/31/2008 -0600, you wrote:
>> >
>> > >Hello all, I've been using 14 ga coated solid wire in
>>a 75 meter
>> loop now
>> > >for 3 years here in western montana where the wind
>>howls quite a
>> bit. No
>> > >problem with the wire, the support rope has broken a
>>couple of
>> times. I
>> > >feed the loop with 450 ohm ladderline down to a 4 to

>>1 balun.
>> Works very
>> > >well...73, Alan
>> > >
>> > >--
>> > >Alan Wilson
>> > >67 Bullseye Lane
>> > >Victor, MT 59875
>> >
>> > Hi,
>> >
>> > I concur ... solid copper coated or not if properly
>>installed is
>> all but
>> > indestructible. I have put up any number of wire
>>antennas and
>> never have
>> > to special order the wire ... I go to an electrical
>>supply store
>> and get
>> > standard #14 gauge insulated wire. The only thing that
>>ever
>> deteriorates
>> > and breaks are halyards ... and there are tricks that
>>can be used
>> in these
>> > cases. You must properly terminate the wire in a good
>>size smooth
>> strain
>> > insulator ... so any movement is against the insulator
>>and not the
>> > wire. This wire will easily hold 150 ft with a
>>suspended feed line
>> in the
>> > middle. If there is no suspended feed line you can
>>easily go
>> beyond 150
>> > ft.. In the case of a loop the main problem is usually
>>'cutting
>> corners'
>> > at the corners (no pun intended). One is tempted to
>>use a single
>> insulator
>> > and put the wire through ... sometimes to even allow
>>it to move.
>> This will
>> > always be the breaking point. On a 4 sided loop each
>>side should
>> terminate
>> > in its own egg (strain) insulator and there should be

>>no movement
>> of the
>> > wire at this join. The should only be a tensile strain
>>(if that is
>> the word).
>> >
>> > I have a particular 150' length with feed line in the
>>middle out at
>> the
>> > farm that has been up there for at least 15 years ...
>>tied between
>> swaying
>> > branches of large trees ... there have been uncounted
>>halyard
>> breaks
>> > ...even a couple of feed line breaks ... but never a
>>break in the
>> > horizontal wire.
>> >
>> > Jim, VE3CI
>> >
>>
>>
>>
>
>
>
> --
> Alan Wilson
> 67 Bullseye Lane
> Victor, MT 59875
> http://montanaham.tripod.com

3004. Re: [SkyWires] Re: MFJ Antenna analyzer....help!

Yahoo group: SkyWires
Date: 2008-03-31 22:42:55 UTC
From: Erik Weaver
Topic: 2993 Message: 3004

> My understanding of a tuner is that it does not fix an inefficient
> antenna, it just masks the symptoms. I don't have power to spare, so
> I want an antenna that resonates well where I tune most.

Hi Tim,

This is a common debate. Sometimes a heated one, hehehe. The correct answer depends on how you look at the variables and what you wish to use as your yardstick of success.

Point #1.

The antenna itself is usually very efficient. Once RF gets to it, the percentage of RF that escapes the system from the antenna is quite high. We're talking high-90% here, so it isn't usually the antenna that is the problem.

The antenna "feed point" can present a barrier however. This is true when the impedance is greatly different than the impedance arriving at the transmission line attached to the antenna feed point. If these are the same --or close-- the RF easily flows into the antenna, and it radiated efficiently.

If the impedances are greatly different values, then only a fraction of the RF will enter the antenna and the rest will reflect off the antenna feed point back toward the XCVR (or transmatch).

When this reflected waves reaches the XCVR (or transmatch) it will then re-reflect in the original direction toward the antenna.

Point #2.

Masking symptoms? I think I'd prefer to say it corrects the underlying situation. The only 'masked symptom' that the transmatch will fix is to remove reactance and transform the non-reactive resistance to that into which the XCVR may properly load.

That is all a transmatch does. Both are important, but they aren't occult goals or anything.

Point #3.

Resonance is only the lack of reactance. An antenna does not need to be resonate to efficiently radiate RF. This is fortunate because an antenna can only be resonate for a single frequency, and that would make for a severely limited ham radio antenna!

Don't worry so much about resonance. Now if you care about the shape of the RF envelope being radiated by your antenna, *that* is a valid reason to consider the geometry of the antenna.

The Forgotten Point.

Transmission line losses (attenuation) is the real point here. The RF will bounce back and forth between the XCVR (or transmatch) and the antenna until the RF either escapes out the antenna --which we deem good-- or until it is absorbed by the transmission line as heat --which we deem bad.

Therefore, your time and efforts are better spent worrying about ways to improve your transmission line than trimming the antenna for perfect resonance. (And recall, the antenna will no longer be resonate once you spin your VFO to a new frequency.)

So all of this is a balancing act. Remember to think about the antenna *system* as a whole, and don't focus too much on any one part of that system, and you'll be off to a goo start.

73-Erik n0ew

3005. Re: [SkyWires] MFJ Antenna analyzer....help!

Yahoo group: SkyWires
Date: 2008-03-31 22:45:24 UTC
From: Andy
Topic: 2993 Message: 3005

I got confused when you said that the SWR is "3:1 @ 100 ohms."

Did you mean the SWR is 3:1 expressed with respect to a Zo of 100 ohms? Or did the SWR meter read 3:1, and the (real? magnitude?) part of the impedance was 100 ohms?

It is important to realize, an SWR meter does not measure SWR. It effectively measures impedance. Then it calculates what the SWR would be, assuming some nominal reference impedance. Virtually all SWR meters refer to a 50 ohm nominal impedance. This might not be what you want.

Let's say you have a perfectly matched 450 ohm ladder line. Hook almost any antenna/impedance analyzer to it, and it will show what looks like a poor 9:1 SWR, even though it has a perfect match and has no standing waves! You'd need an SWR meter calibrated to 450 ohms rather than 50 ohms; or use a 3:1 transformer to transform that 450 ohms down to 50 ohms. Otherwise, the SWR number is meaningless for that ladder line.

Unless your environment is 50 ohm coax, it is better to look at the complex impedance than the SWR number.

Even then, you might not care what the impedance reads, especially if you have ladderline and an antenna tuner and you are measuring between the tuner and the antenna. But it is helpful to tell you when the antenna is resonant: when the impedance's imaginary part goes to zero.

Andy

3006. Re: [SkyWires] Re: MFJ Antenna analyzer....help!

Yahoo group: SkyWires
Date: 2008-04-01 00:07:22 UTC
From: Jim Dunstan
Topic: 2993 Message: 3006

At 07:00 PM 3/31/2008 +0000, you wrote:

>I hooked it up in the shack to the ladder line. I expected to see
>100ohms and wanted to trim the line so I get a dip in SWR within the
>Ham band range on 80m, 40m, 20m. I am going on the assumption that
>my old Tempo One will put out around 100w and I want every electron
>to leave my wire in the most efficient way.
>
>My understanding of a tuner is that it does not fix an inefficient
>antenna, it just masks the symptoms. I don't have power to spare, so
>I want an antenna that resonates well where I tune most. That would
>be SSB 20m and 40m first; PSK 20m and 40m second; and 80m DX SSB
>third. I have had some contacts on 80m but find less CQ calling on
>80m SSB than the other bands. My perception is that 80m SSB is more
>of a rag chewing arena?
>
>Sorry if I ramble,
>
>Tim
>KD0AHR

Hi Tim,

No problem. First, lets ease your anxiety about the efficiency of your antenna/system ..... it is just fine. The efficiency of your antenna first depends on its size (in relation to frequency) and height above ground. Your antenna is a full wavelength on 80M and it will be very efficient on all bands 80 - 10 mtrs (height is then only thing that will make it more efficient ... you didn't mention height).

Having said all that, the rest of the system (feed line and tuner) serves 2 objectives; the first objective is to feed as much RF to the antenna as possible and the second objective is to provide a workable impedance load to your transceiver. Generally speaking there are 2 ways to achieve this. The first method is to design the antenna so that it represents a specific impedance at a specific frequency. Then carefully match that impedance to a feed line (very often coax is used) which usually results in a mono band antenna. Here the efficiency of the 'system' largely depends on keeping the SWR low on the coax feed line as coax is very susceptible to dramatic increase in losses with SWR.

The other tack is to largely ignore 'resonance' and the careful matching of the antenna to the feed line and to use open wire feed line instead of coax. The reason is that open wire feed line will not loose much power due to high SWR on the feed line. The objective of this system is to make the particular frequencies of interest (you carefully pointed out frequencies

of interest to you) tuneable .... eg will your tuner at the operating position convert the impedance at the end of the feed line to 50 ohms resistive .... the impedance your Tempo One likes to see. The SWR on the feed line will cause the reflected power to move back and forth in the feed line finally putting most of it into the antenna as radiation ... very little will be lost in the feed line.

Your antenna system is the second kind ... which by definition will represent a great range of impedances depending on frequency and feed line length. The result is that measuring the impedance at the end of your feed line can serve only one purpose .... to see if it is within the range of your tuner .... eg .. it might give you an idea of why your tuner is having difficulty producing that 50 ohm load for your radio. In summation then, you need only measure your SWR at the output of your tuner .... ideally it should be 50 ohm no inductive or capacitive reactance. If you can't achieve this at your favorite frequencies then you might look at adding or trimming feed line etc..

Jim, VE3CI

3007. Re: MFJ Antenna analyzer....help!

Yahoo group: SkyWires
Date: 2008-04-01 13:30:18 UTC
From: Tim Folkenson
Topic: 2993 Message: 3007

Thanks for all the good info. I will leave things as they are. My last question is about directing a loop and DB gain. I recently heard about Hams tilting their loop and/or adding a 2nd loop to increase the gain and/or direct their signal in a specific direction.

I am on a suburban lot with plenty of trees so wire antenna(s) are my best way to stay under the radar of the neighbors. I was thinking of either a 20m loop or a wire Yagi pointed at Europe using coax as a feed. Multiple loops? Any thoughts about my crazy idea?

--- In SkyWires@yahoogroups.com, Jim Dunstan <jdunstan@...> wrote:
>
> At 07:00 PM 3/31/2008 +0000, you wrote:
>
> >I hooked it up in the shack to the ladder line. I expected to see
> >100ohms and wanted to trim the line so I get a dip in SWR within
the
> >Ham band range on 80m, 40m, 20m. I am going on the assumption that
> >my old Tempo One will put out around 100w and I want every
electron
> >to leave my wire in the most efficient way.
> >
> >My understanding of a tuner is that it does not fix an inefficient
> >antenna, it just masks the symptoms. I don't have power to spare,
so
> >I want an antenna that resonates well where I tune most. That
would
> >be SSB 20m and 40m first; PSK 20m and 40m second; and 80m DX SSB
> >third. I have had some contacts on 80m but find less CQ calling on
> >80m SSB than the other bands. My perception is that 80m SSB is
more
> >of a rag chewing arena?
> >
> >Sorry if I ramble,
> >
> >Tim
> >KD0AHR
>
> Hi Tim,
>
> No problem. First, lets ease your anxiety about the efficiency of
your
> antenna/system ..... it is just fine. The efficiency of your
antenna first
> depends on its size (in relation to frequency) and height above

> ground. Your antenna is a full wavelength on 80M and it will be
very
> efficient on all bands 80 - 10 mtrs (height is then only thing
that will
> make it more efficient ... you didn't mention height).
>
> Having said all that, the rest of the system (feed line and tuner)
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> possible and the second objective is to provide a workable
impedance load
> to your transceiver. Generally speaking there are 2 ways to
achieve
> this. The first method is to design the antenna so that it
represents a
> specific impedance at a specific frequency. Then carefully match
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> impedance to a feed line (very often coax is used) which usually
results in
> a mono band antenna. Here the efficiency of the 'system' largely
depends on
> keeping the SWR low on the coax feed line as coax is very
susceptible to
> dramatic increase in losses with SWR.
>
> The other tack is to largely ignore 'resonance' and the careful
matching of
> the antenna to the feed line and to use open wire feed line
instead of
> coax. The reason is that open wire feed line will not loose much
power due
> to high SWR on the feed line. The objective of this system is to
make the
> particular frequencies of interest (you carefully pointed out
frequencies
> of interest to you) tuneable .... eg will your tuner at the
operating
> position convert the impedance at the end of the feed line to 50
ohms
> resistive .... the impedance your Tempo One likes to see. The SWR
on the
> feed line will cause the reflected power to move back and forth in
the feed
> line finally putting most of it into the antenna as radiation ...
very
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>
> Your antenna system is the second kind ... which by definition
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> represent a great range of impedances depending on frequency and
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> length. The result is that measuring the impedance at the end of
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> line can serve only one purpose .... to see if it is within the
range of
> your tuner .... eg .. it might give you an idea of why your tuner
is having
> difficulty producing that 50 ohm load for your radio. In
summation then,
> you need only measure your SWR at the output of your tuner ....
ideally it
> should be 50 ohm no inductive or capacitive reactance. If you
can't
> achieve this at your favorite frequencies then you might look at
adding or
> trimming feed line etc..
>
> Jim, VE3CI
>

3008. Re: [SkyWires] Re: MFJ Antenna analyzer....help!

Yahoo group: SkyWires
Date: 2008-04-01 14:00:34 UTC
From: Erik Weaver
Topic: 2993 Message: 3008

Hi Tim,

You can certainly make wire beams if you wish. Obviously you would be using fix-orientation as you describe. Height, size, and orientation should normally be considered when thinking about what part of the planet your antenna is likely to "illuminate." One of the best sites I know of to start reading up on antennas, and that includes various directional antennas, is offered by L.B. Cebik W4RNL:

http://www.cebik.com/

When you get the opportunity to order some books, I'd recommend the following:

Practical Antenna Handbook by J. Carr

And the two ARRL books to which many people will refer you over the years (you can often find older copies at hamfests, and any in the last 5 years will certainly be fine; maybe even 10-years old):

ARRL Handbook
ARRL Antenna Book

I haven't checked the prices of these lately, but I suspect they are close to $40 each. The newer editions of the ARRL books come with a searchable CD-ROM which some people like. In some cases (all?) that CD-ROM also has some small software programs that you may find of interest. I'm sure the 'book store' section of the ARRL web site would have more information (http://www.arrl.org/)

73-Erik n0ew

3009. Re: [SkyWires] Re: MFJ Antenna analyzer....help!

Yahoo group: SkyWires
Date: 2008-04-01 16:36:44 UTC
From: Jim Dunstan
Topic: 2993 Message: 3009

At 01:30 PM 4/1/2008 +0000, you wrote:

>Thanks for all the good info. I will leave things as they are. My
>last question is about directing a loop and DB gain. I recently
>heard about Hams tilting their loop and/or adding a 2nd loop to
>increase the gain and/or direct their signal in a specific direction.
>
>I am on a suburban lot with plenty of trees so wire antenna(s) are
>my best way to stay under the radar of the neighbors. I was thinking
>of either a 20m loop or a wire Yagi pointed at Europe using coax as
>a feed. Multiple loops? Any thoughts about my crazy idea?

Hi Tim,

Not crazy ... I just sent a description of a vertically oriented loop antenna system with a second element that I used many years ago (cubical quad). At that time I used bamboo spreaders etc ... however similar antenna can be built from light wire and suspended from trees .... here is a copy of what I sent on the other message list:

As with most things when you go big everything is magnified .... a quad for 20m is approx. 17' per side. I arranged the spreaders so they would be on a 45 deg angle to either the vertical or horizontal plane. The distance from the center to each corner is exactly 12'. I tied on small metal fittings to the ends and spread thin flexible braided type copper wire around the 4 corners (approx. 68' total) ... I fed the center of the bottom horizontal portion with 72 ohm balanced line. The 72 ohm balanced line (they don't make it any more as far as I know) came down to the shack and a 1:1 voltage balun (made by Heathkit from air-dux coils).

It was a perfect match ... and the antenna will take any legal level of power you would wish to put to it.

I used approx 6' to 8' for an aluminium boom. I used a second loop as a reflector ... and tuned it with a piece of open wire line for maximum front to back ratio. I later mounted a second set of loops within the first loop for 15 m and fed it from the same feed point with the same feed line. I never noted any deterioration in performance.

The only maintenance problem was ICE .... the antenna was very gud in the wind, but if there should be freezing rain with a build up of ice load the whole thing will droop like a wilted flower. The other problem was general weathering of the bamboo ... eg getting dry and brittle over time. The whole thing is quite light.

The spreaders in this arrangement are not under much tension. I used home brew flanges at each end of the boom to clamp the 4 bamboo poles for each loop. The tricky part is building this thing and then getting it up there. My 30' tv mast was made of 3 pieces that would nest together. I could build and adjust the antenna on the top of the 10' piece then push it up by hand. the bottom of the mast sat in a smooth cup on the base ... and the guys were attached to rings that allowed the mast to turn. so the only thing holding the antenna from turning was the friction in the cup at the base. The 2' pipe wrench was more than enough to rotate the whole mast/antenna assembly.

The quad worked very well on 20m at 30' height. A friend of mine had a quad on a 60 ft tower (a commercial quad ... GEM quad) and it was exceptional.

This is a description of a Quad (2 loop elements) I once built using bamboo spreaders. It could easily be hung like a 'sheet' between two supports. A second 'sheet' would be hung behind it about 8'. You feed the center of the bottom of the first loop and you tune the bottom of the second loop for either maximum gain or maximum front to back ratio. The wire loop is 17' square and you could feed the bottom of the loop with coax. It would be for a single band ... but will guarantee you dx contacts hi hi The higher the better ... but if you can get the bottom part of the loop up at least 10' ... with the top at 27' it will work vy well.

Jim, VE3CI

3010. Re: [SkyWires] Re: MFJ Antenna analyzer....help!

Yahoo group: SkyWires
Date: 2008-04-02 18:04:24 UTC
From: Jeff Stevens
Topic: 2993 Message: 3010

On Tue, 2008-04-01 at 13:30 +0000, Tim Folkenson wrote:
> Thanks for all the good info. I will leave things as they are. My
> last question is about directing a loop and DB gain. I recently
> heard about Hams tilting their loop and/or adding a 2nd loop to
> increase the gain and/or direct their signal in a specific direction.
>
> I am on a suburban lot with plenty of trees so wire antenna(s) are
> my best way to stay under the radar of the neighbors. I was thinking
> of either a 20m loop or a wire Yagi pointed at Europe using coax as
> a feed. Multiple loops? Any thoughts about my crazy idea?

If you are looking at wire antennas, there is a book you should take a look at. It's "The Easy Wire Antenna Handbook" by Dave Ingram K4TWJ.

I believe the book is out of print, however copies turn up online frequently.

This isn't an antenna theory book. It's pure cookie cutter. For each of the antennas he even provides a table with the antenna dimensions for the various amateur bands. You'll have to look elsewhere to find information on how each of the antennas really work, but this book still belongs on any wire antenna builders bookshelf.

-Jeff
KE7FRJ

3011. Loop shape

Yahoo group: SkyWires
Date: 2008-04-09 16:16:36 UTC
From: ira_ira_ira
Topic: 3011 Message: 3011

Hi, I want to build SkyWire, but have only space 20x10 meters so I was thinking to kinda fold this antenna to make it longer. Here is a little picture of antenna I have in mind. This antenna is only for receiving NOT for transmittion.
http://ph.groups.yahoo.com/group/SkyWires/photos/view/c093?b=1

There are two major questions I have conserning this antenna:
1. What is better - to have it shorter but single square or to have it this shape but longer?
2. As it's receiving antenna, and planned to be fed by 10m 75om coax do I really need balun there?

Thank you.
Yury

3012. Re: [SkyWires] Loop shape

Yahoo group: SkyWires
Date: 2008-04-09 17:06:35 UTC
From: Jim Dunstan
Topic: 3011 Message: 3012

At 04:16 PM 4/9/2008 +0000, you wrote:

>Hi, I want to build SkyWire, but have only space 20x10 meters so I was
>thinking to kinda fold this antenna to make it longer. Here is a
>little picture of antenna I have in mind. This antenna is only for
>receiving NOT for transmittion.
><http://ph.groups.yahoo.com/group/SkyWires/photos/view/c093?b=1>http://ph.groups.yahoo.com/group/SkyWires/photos/view/c093?b=1
>
>There are two major questions I have conserning this antenna:
>1. What is better - to have it shorter but single square or to have it
>this shape but longer?

The only possible reason for the added linear loading stubs is to achieve resonance at a particular frequency which may be useful when using the loop for transmission. Resonance is usually not necessary or desirable in a receiving antenna. The efficiency .... or at least, the capture area is related to the circumference of the loop and not the length of the wire. The capture area is related to area ... 200 mtr sq. and not how much wire you use e.g. 2 or 3 turns or added stubs.

>2. As it's receiving antenna, and planned to be fed by 10m 75om coax
>do I really need balun there?

>Thank you.
>Yury

A loop is a balanced antenna and coax is an unbalanced feed line. This means that direct connection of coax causes transmit current to flow on both the inside and outside of the shield (radiation). In the case of a receive only setup the reverse happens .... that is signals that are picked up on the outside of the shield (desired and undesired RFI) find their way to the inside conductor and go to the receiver. A balun helps in both cases. For a receive only antenna I would recommend a simple RF transformer wound on a powdered iron core. This would provide broadband coupling with maximum isolation for the shield. Such an antenna/feed line would make an excellent HF system.

Jim

3014. Delta match to help feed my loop?

Yahoo group: SkyWires
Date: 2008-04-17 20:06:02 UTC
From: Bruce Conner
Topic: 3014 Message: 3014

I've got my horizontal delta loop back up in the air after the winter weather took it down and all's mostly well, except for one thing. It seems to dislike 30 meters, no matter how I twiddle the knobs on the tuner.

The antenna is a horizontal triangular loop (corner fed) with about 290 feet of wire in the loop itself and about 100 feet of feeder made from the same 14 ga insulated wire. The ladder line spacing is 3 inches, and in fact it is just an extension of the loop, there is not joint out at the antenna, I just ran the spacers up the doubled line. It's all one piece!(that was a job)

Anyway, I know the usual culprit for this sort of thing is the feed line length, but I was wondering if I made a delta feed section into the loop instead of an abrupt change from the 3 inch ladder to a 60 degree angle at the corner of the loop if that would help me get a better match.

It does tune quite well on everything but 30, so I suspect a resonance issue of some sort. If I have to fiddle with the feedline length, I have to, but if there are other things to try first, why not?

Bruce
WB8OGK

3015. Re: Delta match to help feed my loop?

Yahoo group: SkyWires
Date: 2008-04-17 20:48:42 UTC
From: Don Keith
Topic: 3014 Message: 3015

I think you said it. I'd take 18 to 20 feet off the feed line and
see what happens.

Good luck.

Don N4KC
www.n4kc.com
www.n4kc.blogspot.com

--- In SkyWires@yahoogroups.com, "Bruce Conner" <bruce.conner@...>
wrote:
>
> I've got my horizontal delta loop back up in the air after the
winter
> weather took it down and all's mostly well, except for one thing.
It
> seems to dislike 30 meters, no matter how I twiddle the knobs on the
> tuner.
>
> The antenna is a horizontal triangular loop (corner fed) with about
> 290 feet of wire in the loop itself and about 100 feet of feeder
made
> from the same 14 ga insulated wire. The ladder line spacing is 3
> inches, and in fact it is just an extension of the loop, there is
not
> joint out at the antenna, I just ran the spacers up the doubled
line.
> It's all one piece!(that was a job)
>
> Anyway, I know the usual culprit for this sort of thing is the feed
> line length, but I was wondering if I made a delta feed section into
> the loop instead of an abrupt change from the 3 inch ladder to a 60
> degree angle at the corner of the loop if that would help me get a
> better match.
>
> It does tune quite well on everything but 30, so I suspect a
resonance
> issue of some sort. If I have to fiddle with the feedline length, I
> have to, but if there are other things to try first, why not?
>
> Bruce
> WB8OGK
>

3016. Re: Delta match to help feed my loop?

Yahoo group: SkyWires
Date: 2008-04-17 21:18:00 UTC
From: Bruce Conner
Topic: 3014 Message: 3016

>
> I think you said it. I'd take 18 to 20 feet off the feed line and
> see what happens.

Can't take any length off unless I want to move my rig outside! ;')
Might be able to add some. I wish I could make a stub that I could
clamp on without breaking the wire. Hmmm.

Bruce
WB8OGK

3019. Liquid ion antenna solution

Yahoo group: SkyWires
Date: 2008-05-04 01:40:29 UTC
From: icra@galaxynet.com
Topic: 3019 Message: 3019

Looking for some info on liquid ion antenna solutions...

Went to the local city auction....not sure it was a wise buy, but picked up some liquid ice melter containing magnesium chloride....8 gals for a buck.....

Is this good stuff to use?

Mel
N7OKL

3020. Re: [SkyWires] Liquid ion antenna solution

Yahoo group: SkyWires
Date: 2008-05-04 02:06:24 UTC
From: Facility 406 DM09
Topic: 3019 Message: 3020

Most people use sulfuric acid. Quite a bit of chit-chat on these on the AntenneX list a while back, verticals, Yagis...

Kurt

----- Original Message -----
From: <icra@...>

: Looking for some info on liquid ion antenna solutions...

3021. Re: [SkyWires] Liquid ion antenna solution

Yahoo group: SkyWires
Date: 2008-05-04 16:37:04 UTC
From: erik@n0ew.org
Topic: 3019 Message: 3021

Hi,

Try these yahoo groups:

Liquid Metal Antenna
http://groups.yahoo.com/group/LiquidMetalAntenna/

THE LIVE-WIRE GROUP
http://groups.yahoo.com/group/Live-Wire/

Then when you get it up and running, why how set yourself up as a
"Satellite K0S Station" for the K0S Strange Antenna Challenge?

http://www.StrangeAntennaChallenge.com
http://www.n0ew.org/k0s/

Have fun!
Erik Weaver n0ew

3022. Loop Configuration Question

Yahoo group: SkyWires
Date: 2008-05-08 12:25:11 UTC
From: Jason
Topic: 3022 Message: 3022

Hi All,

I moved to the country and am trying to configure a loop that does not seem to be working for me.

Here's the break down:

a) 272' of stranded 12 gauge wire in a relatively rectangular shape.

b) Van Gorden Antenna Center Insulator connects the 12 gauge wire in a tree.

c) 450 OHM 14GA Van Gorden Ladderline connects to my Insulator on one end and connects to a HI-Q 4:1 Balun on the other end.

d) From the 4:1 Balun a coax run goes into my shack on a Kenwood TS480SAT rig. (auto tuner)

I can tune just fine on 10, 15, 20, 40 meters! (even 160 and 6 meters tune at certain locations) Audio and SWR are perfect.

However, I cannot tune any higher than 3.800 on 75/80 meters. I have cut down the ladder line and no change. When I cut down the ladder line I tuned in the other bands perfectly. Ladder line sits at about 93 feet in length now. I tried cutting down further and I ended up taking out all the bands, so I reached the limit I believe. I cut back the last piece cut and back to where I was.

I thought maybe the hardware store made a mistake and my 12 gauge wire was short. So I added 25 feet to it in the middle. It actually made 75/80 meters worse, as it didn't want to tune above 3.700. So I reverted back.

Any thoughts on what is happening? I seem to be stuck at 3.800. I don't know if this frequency, exactly, is telling me something? Any suggestions would be greatly appreciated!

3023. Re: [SkyWires] Loop Configuration Question

Yahoo group: SkyWires
Date: 2008-05-08 15:50:35 UTC
From: Jim Dunstan
Topic: 3022 Message: 3023

At 12:25 PM 5/8/2008 +0000, you wrote:

>Hi All,
>
>I moved to the country and am trying to configure a loop that does not
>seem to be working for me.
>
>Here's the break down:
>
>a) 272' of stranded 12 gauge wire in a relatively rectangular shape.
>
>b) Van Gorden Antenna Center Insulator connects the 12 gauge wire in a
>tree.
>
>c) 450 OHM 14GA Van Gorden Ladderline connects to my Insulator on one
>end and connects to a HI-Q 4:1 Balun on the other end.
>
>d) From the 4:1 Balun a coax run goes into my shack on a Kenwood
>TS480SAT rig. (auto tuner)
>
>I can tune just fine on 10, 15, 20, 40 meters! (even 160 and 6 meters
>tune at certain locations) Audio and SWR are perfect.
>
>However, I cannot tune any higher than 3.800 on 75/80 meters. I have
>cut down the ladder line and no change. When I cut down the ladder
>line I tuned in the other bands perfectly. Ladder line sits at about
>93 feet in length now. I tried cutting down further and I ended up
>taking out all the bands, so I reached the limit I believe. I cut back
>the last piece cut and back to where I was.
>
>I thought maybe the hardware store made a mistake and my 12 gauge wire
>was short. So I added 25 feet to it in the middle. It actually made
>75/80 meters worse, as it didn't want to tune above 3.700. So I
>reverted back.
>
>Any thoughts on what is happening? I seem to be stuck at 3.800. I
>don't know if this frequency, exactly, is telling me something? Any
>suggestions would be greatly appreciated!

Hi,

First, your antenna system works very well with full coverage of
10,15,20,40 mtrs and 80/75 up to 3.8mhz ! Apparently the tuner in the
TS480SAT has an issue with 75m and the particular impedance it sees at that
frequency. You mentioned 272'. If you work backwards from the formula
1004/F it would be resonant at 3.7mhz while adding 25' would work out to

3.4 mhz ... Perhaps reducing the original 272' might be more to the tuner's liking.

putting an antenna analyzer on the end of the balanced line would be useful ... (I may get one some day hi hi).

Jim, VE3CI

3024. Re: Loop Configuration Question

Yahoo group: SkyWires
Date: 2008-05-08 15:57:39 UTC
From: Jason
Topic: 3022 Message: 3024

Thanks for the response. My goal is to get on nets that are between 3.932 and 3.952.

Do you think shortning the 12 gauge wire would do the trick? I'm sitting right at at 270'....

We did put an analyzer on the line and it confirms what the tuner is saying. VERY high SWR readings up near 3.9.

Thanks again!

--- In SkyWires@yahoogroups.com, Jim Dunstan <jdunstan@...> wrote:
>
> At 12:25 PM 5/8/2008 +0000, you wrote:
>
> >Hi All,
> >
> >I moved to the country and am trying to configure a loop that does not
> >seem to be working for me.
> >
> >Here's the break down:
> >
> >a) 272' of stranded 12 gauge wire in a relatively rectangular shape.
> >
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> >tree.
> >
> >c) 450 OHM 14GA Van Gorden Ladderline connects to my Insulator on one
> >end and connects to a HI-Q 4:1 Balun on the other end.
> >
> >d) From the 4:1 Balun a coax run goes into my shack on a Kenwood
> >TS480SAT rig. (auto tuner)
> >
> >I can tune just fine on 10, 15, 20, 40 meters! (even 160 and 6 meters
> >tune at certain locations) Audio and SWR are perfect.
> >
> >However, I cannot tune any higher than 3.800 on 75/80 meters. I have
> >cut down the ladder line and no change. When I cut down the ladder
> >line I tuned in the other bands perfectly. Ladder line sits at about

> >93 feet in length now. I tried cutting down further and I ended up
> >taking out all the bands, so I reached the limit I believe. I cut
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> >the last piece cut and back to where I was.
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> >I thought maybe the hardware store made a mistake and my 12 gauge
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> >was short. So I added 25 feet to it in the middle. It actually made
> >75/80 meters worse, as it didn't want to tune above 3.700. So I
> >reverted back.
> >
> >Any thoughts on what is happening? I seem to be stuck at 3.800. I
> >don't know if this frequency, exactly, is telling me something? Any
> >suggestions would be greatly appreciated!
>
>
> Hi,
>
> First, your antenna system works very well with full coverage of
> 10,15,20,40 mtrs and 80/75 up to 3.8mhz ! Apparently the tuner in
the
> TS480SAT has an issue with 75m and the particular impedance it sees
at that
> frequency. You mentioned 272'. If you work backwards from the
formula
> 1004/F it would be resonant at 3.7mhz while adding 25' would work
out to
> 3.4 mhz ... Perhaps reducing the original 272' might be more to the
tuner's
> liking.
>
> putting an antenna analyzer on the end of the balanced line would
be useful
> ... (I may get one some day hi hi).
>
> Jim, VE3CI
>

3025. RE: [SkyWires] Re: Loop Configuration Question

Yahoo group: SkyWires
Date: 2008-05-08 17:00:25 UTC
From: Scott MacKenzie
Topic: 3022 Message: 3025

I always use a bit shorter wire - about 240 to 260 feet. I seem to have a better time matching on 80M and higher. But I also don't have an issue with matching at 3.9 or so. I use a Kenwood TS 830AT and a MFJ Versatuner V

Scott

From: SkyWires@yahoogroups.com [mailto:SkyWires@yahoogroups.com] On Behalf Of Jason
Sent: Thursday, May 08, 2008 11:58 AM
To: SkyWires@yahoogroups.com
Subject: [SkyWires] Re: Loop Configuration Question

Thanks for the response. My goal is to get on nets that are between 3.932 and 3.952.

Do you think shortning the 12 gauge wire would do the trick? I'm sitting right at at 270'....

We did put an analyzer on the line and it confirms what the tuner is saying. VERY high SWR readings up near 3.9.

Thanks again!

--- In SkyWires@yahoogroup <mailto:SkyWires%40yahoogroups.com> s.com, Jim Dunstan <jdunstan@...> wrote:
>
> At 12:25 PM 5/8/2008 +0000, you wrote:
>
> >Hi All,
> >
> >I moved to the country and am trying to configure a loop that does not
> >seem to be working for me.
> >
> >Here's the break down:
> >
> >a) 272' of stranded 12 gauge wire in a relatively rectangular shape.
> >
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> >tree.
> >
> >c) 450 OHM 14GA Van Gorden Ladderline connects to my Insulator on one

> >end and connects to a HI-Q 4:1 Balun on the other end.
> >
> >d) From the 4:1 Balun a coax run goes into my shack on a Kenwood
> >TS480SAT rig. (auto tuner)
> >
> >I can tune just fine on 10, 15, 20, 40 meters! (even 160 and 6
meters
> >tune at certain locations) Audio and SWR are perfect.
> >
> >However, I cannot tune any higher than 3.800 on 75/80 meters. I
have
> >cut down the ladder line and no change. When I cut down the ladder
> >line I tuned in the other bands perfectly. Ladder line sits at
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> >93 feet in length now. I tried cutting down further and I ended up
> >taking out all the bands, so I reached the limit I believe. I cut
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> >the last piece cut and back to where I was.
> >
> >I thought maybe the hardware store made a mistake and my 12 gauge
wire
> >was short. So I added 25 feet to it in the middle. It actually made
> >75/80 meters worse, as it didn't want to tune above 3.700. So I
> >reverted back.
> >
> >Any thoughts on what is happening? I seem to be stuck at 3.800. I
> >don't know if this frequency, exactly, is telling me something? Any
> >suggestions would be greatly appreciated!
>
>
> Hi,
>
> First, your antenna system works very well with full coverage of
> 10,15,20,40 mtrs and 80/75 up to 3.8mhz ! Apparently the tuner in
the
> TS480SAT has an issue with 75m and the particular impedance it sees
at that
> frequency. You mentioned 272'. If you work backwards from the
formula
> 1004/F it would be resonant at 3.7mhz while adding 25' would work
out to
> 3.4 mhz ... Perhaps reducing the original 272' might be more to the
tuner's
> liking.
>
> putting an antenna analyzer on the end of the balanced line would
be useful
> ... (I may get one some day hi hi).
>
> Jim, VE3CI

>

3026. Re: [SkyWires] Re: Loop Configuration Question

Yahoo group: SkyWires
Date: 2008-05-08 16:53:02 UTC
From: erik@n0ew.org
Topic: 3022 Message: 3026

> Do you think shortning the 12 gauge wire would do the trick? I'm
> sitting right at at 270'....
>
> We did put an analyzer on the line and it confirms what the tuner is
> saying. VERY high SWR readings up near 3.9.

Since you are using balanced line the high swr won't cause much additional loss (transmission line attenuation) as it would when using coax. That is one of the big reasons swr receives so much attention these days... high losses on coax. But that is almost never a concern with ladder line, or open wire, etc.

However, the other side of high swr is the impedance presented to the XCVR (or transmatch when used) and when that falls outside the range the device (XCVR or transmatch) is capable of matching (too high or too low) you can't use that antenna configuration without some modifications.

The 'modifications' can be all kinds of different things.

Perhaps the simplest would be to try a different transmatch. One that has 'bigger bits' -- those internal to the XCVR are well known to have rather small matching ranges.

You have already tried changing the length of feed line, and the loop itself. Both can work, but as you have observed they effect all the other bands too. Some people carry extra lengths of transmission line. In your case, you might go back to what worked for the majority of bands, and then play around with adding transmission line to get that last band.

Or, you could use the analyzer to see how much reactance is present on the 'bad' band and then make an insert to add in line when trying that band. For example, if you find it is adding 100 ohms capacitive reactance, make a coil you can plug in line that adds 100 ohms of inductive reactance. Or vice versa.

Or, you could add a LC-match and accomplish the same thing with greater flexibility. But these days it might be simpler to get the bigger transmatch.

73-Erik Weaver n0ew

3027. Re: [SkyWires] Re: Loop Configuration Question

Yahoo group: SkyWires
Date: 2008-05-08 20:36:53 UTC
From: Jim Dunstan
Topic: 3022 Message: 3027

At 03:57 PM 5/8/2008 +0000, you wrote:

>Thanks for the response. My goal is to get on nets that are between
>3.932 and 3.952.
>
>Do you think shortning the 12 gauge wire would do the trick? I'm
>sitting right at at 270'....
>
>We did put an analyzer on the line and it confirms what the tuner is
>saying. VERY high SWR readings up near 3.9.
>
>Thanks again!

Hi,

I would give it a try. An SWR of 3.9 doesn't really give you much information on its own. It appears that the tuner is unable to compensate for the reactive component that appears at the load. Since this portion of the band is of special interest you should be able to find a combination that works. Using the 1004/f formula the circumference at 3.95 is about 254 ft or almost 20ft less than what you started with. It won't hurt to give it a try ... after all you want to use that portion. Good luck ... let us know how it works out.

Jim, VE3CI

3028. Re: [SkyWires] Loop Configuration Question

Yahoo group: SkyWires
Date: 2008-05-08 20:43:39 UTC
From: Paul@N4LCD.com
Topic: 3022 Message: 3028

>Hi All,
>
>I moved to the country and am trying to configure a loop that does not
>seem to be working for me.
>
>Here's the break down:
>
>a) 272' of stranded 12 gauge wire in a relatively rectangular shape.
>
>b) Van Gorden Antenna Center Insulator connects the 12 gauge wire in a
>tree.
>
>c) 450 OHM 14GA Van Gorden Ladderline connects to my Insulator on one
>end and connects to a HI-Q 4:1 Balun on the other end.
>
>d) From the 4:1 Balun a coax run goes into my shack on a Kenwood
>TS480SAT rig. (auto tuner)
>
>I can tune just fine on 10, 15, 20, 40 meters! (even 160 and 6 meters
>tune at certain locations) Audio and SWR are perfect.
>
>However, I cannot tune any higher than 3.800 on 75/80 meters. I have
>cut down the ladder line and no change. When I cut down the ladder
>line I tuned in the other bands perfectly. Ladder line sits at about
>93 feet in length now. I tried cutting down further and I ended up
>taking out all the bands, so I reached the limit I believe. I cut back
>the last piece cut and back to where I was.
>
>I thought maybe the hardware store made a mistake and my 12 gauge wire
>was short. So I added 25 feet to it in the middle. It actually made
>75/80 meters worse, as it didn't want to tune above 3.700. So I
>reverted back.
>
>Any thoughts on what is happening? I seem to be stuck at 3.800. I
>don't know if this frequency, exactly, is telling me something? Any
>suggestions would be greatly appreciated!

Try shortening the loop slightly.

3029. Re: Loop Configuration Question

Yahoo group: SkyWires
Date: 2008-05-08 21:38:19 UTC
From: Jason
Topic: 3022 Message: 3029

Looks like taking out 12 feet did the trick. I can now tune where I
want and the other bands appear to be working as well! I'll do some
testing this weekend and we'll see how it works out.

Thank you all for your responses!

73,

Jason
W9JTL

--- In SkyWires@yahoogroups.com, Jim Dunstan <jdunstan@...> wrote:
>
> At 03:57 PM 5/8/2008 +0000, you wrote:
>
> >Thanks for the response. My goal is to get on nets that are between
> >3.932 and 3.952.
> >
> >Do you think shortning the 12 gauge wire would do the trick? I'm
> >sitting right at at 270'....
> >
> >We did put an analyzer on the line and it confirms what the tuner
is
> >saying. VERY high SWR readings up near 3.9.
> >
> >Thanks again!
>
>
> Hi,
>
> I would give it a try. An SWR of 3.9 doesn't really give you much
> information on its own. It appears that the tuner is unable to
compensate
> for the reactive component that appears at the load. Since this
portion of
> the band is of special interest you should be able to find a
combination
> that works. Using the 1004/f formula the circumference at 3.95 is
about
> 254 ft or almost 20ft less than what you started with. It won't
hurt to
> give it a try ... after all you want to use that portion. Good
luck ...
> let us know how it works out.
>
> Jim, VE3CI

>

3030. Re: [SkyWires] Re: Loop Configuration Question

Yahoo group: SkyWires
Date: 2008-05-08 21:45:48 UTC
From: Jim Dunstan
Topic: 3022 Message: 3030

At 09:38 PM 5/8/2008 +0000, you wrote:

>Looks like taking out 12 feet did the trick. I can now tune where I
>want and the other bands appear to be working as well! I'll do some
>testing this weekend and we'll see how it works out.
>
>Thank you all for your responses!
>
>73,
>
>Jason
>W9JTL

Congratulations .... I'm glad u were able to get it working on the band section of choice. Your experiment is actually quite edifying ... removing 12' from the 272' loop made the difference between working and not working on its fundamental band.

73

Jim, VE3CI

3031. free invitation to all members

Yahoo group: SkyWires
Date: 2008-05-09 09:39:40 UTC
From: rachaelharvey50
Topic: 3031 Message: 3031

Dear Members

I just wanted to say a quick hello to the group as I am a newbie!

I have just become a member of a fantastic group where you can
collect tons of great stuff for free, including, books & audio books,
games, music, cosmetics, toys and thousands of other things!
It is free and easy to join, just follow the link in my tag line below

Take care and have a great weekend

Regards
Rachael

"I never knew finding freebies was so much fun"
http://groups.google.com/group/freebiemaster

3032. Re: Loop Configuration Question

Yahoo group: SkyWires
Date: 2008-05-09 22:42:03 UTC
From: oldlongbeard
Topic: 3022 Message: 3032

Jason- congrats on your loop. You will really like it once you get it working well. I would not trust the HI-Q balun. Have seen and heard of issues with them - I won't expound any futher than that right now. I have almost the same loop, and have fed it with coax all the way to an external tuner (Ten Tec 229), and have fed it with open wire line to an old Johnson Matchbox. Both worked well. No Balun on the coax feed. If you DO want to use a remote balun, as you are, you might want to go to the DX Engineeering web site, and read the material there on Baluns. Very educational.

Let us know how you make out.

73-
Greg, KC8HXO

SNIPPED
> c) 450 OHM 14GA Van Gorden Ladderline connects to my Insulator on one
> end and connects to a HI-Q 4:1 Balun on the other end.
SNIPPED

3033. Re: Loop Configuration Question

Yahoo group: SkyWires
Date: 2008-05-10 00:44:33 UTC
From: Jonathan Helis KB5IAV
Topic: 3022 Message: 3033

> Here's the break down:
>
> a) 272' of stranded 12 gauge wire in a relatively rectangular shape.
>
> b) Van Gorden Antenna Center Insulator connects the 12 gauge wire in a
> tree.
>
> c) 450 OHM 14GA Van Gorden Ladderline connects to my Insulator on one
> end and connects to a HI-Q 4:1 Balun on the other end.
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> d) From the 4:1 Balun a coax run goes into my shack on a Kenwood
> TS480SAT rig. (auto tuner)
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> I can tune just fine on 10, 15, 20, 40 meters! (even 160 and 6 meters
> tune at certain locations) Audio and SWR are perfect.
>
> However, I cannot tune any higher than 3.800 on 75/80 meters. I have
> cut down the ladder line and no change. When I cut down the ladder
> line I tuned in the other bands perfectly. Ladder line sits at about
> 93 feet in length now. I tried cutting down further and I ended up
> taking out all the bands, so I reached the limit I believe. I cut back
> the last piece cut and back to where I was.

Sounds like a nice setup, wish I had that much space to work with.

Have you tried another tuner? Sometimes a manual tuner can do better
than an autotuner.

--
73,

Jonathan Helis, KB5IAV
Baton Rouge, Louisiana, USA

3034. Re: [SkyWires] Re: Loop Configuration Question

Yahoo group: SkyWires
Date: 2008-05-10 03:16:38 UTC
From: Facility 406 DM09
Topic: 3022 Message: 3034

"Sounds like a nice setup, wish I had that much space to work with."

That's only an average of 68' per side if it were square, smaller than most houses, how small of an area do you have?

Kurt

3035. Re: Loop Configuration Question

Yahoo group: SkyWires
Date: 2008-05-10 12:46:32 UTC
From: k9arm
Topic: 3022 Message: 3035

For baluns, check out: http://www.balundesigns.com/servlet/StoreFront

He gets great eham reviews, is reasonably priced and he'll discuss
your needs. Looks like a great product. I don't own one yet, but
will soon.

Wish I had room for a loop, managed to get away with a doublet on
the apartment roof, soon to be fed with ladder line.

Andy K9ARM
--- In SkyWires@yahoogroups.com, "Facility 406 DM09"
<facility_406@...> wrote:
>
> "Sounds like a nice setup, wish I had that much space to work
with."
>
> That's only an average of 68' per side if it were square, smaller
than most
> houses, how small of an area do you have?
>
> Kurt
>

3040. Re: 6 meter loop

Yahoo group: SkyWires
Date: 2008-05-17 23:38:48 UTC
From: w4dsb
Topic: 2969 Message: 3040

--- In SkyWires@yahoogroups.com, "w4dsb" <w4dsb@...> wrote:
Just as quick than you to everyone on here that helped with my questions, the 6 meter band has openings and the loop works great! worked several west coast stations today from EM83 (Georgia) with 70 watts

> Thanks All
> I have built the 6 meter loop and have it hanging on a wooden pole
> (old power co pole) in the back yard. I have one spreader in the
> middle made from 1 1/4" pvc.
> I hung it at the top from a block of teflon with a V notch cut in it
> for the wire to hang in.at the bottom I built a Teflon terminal block
> to terminate the ends of the loop to and used a rubber bungee cord to
> pull it down and keep it tight.
> I used rg-6 for my Q section and the SWR is Great over a Wide portion
> of the band!
>
> --- In SkyWires@yahoogroups.com, "Dr.Ace" <wh2t@> wrote:
> >
> > Hi Dwayne,
> >
> > No real cons, but it's not as good as a 5 element yagi. If you want
> > to beat the yagi go with a rhombic antenna. Pros = good band width,
> > quiet noise floor, easy to match, low cost, gain over a dipole, easy
> > to construct, etc.
> >
> >
> > Fed at the bottom corner of a diamond a loop antenna has horizontal
> > polarization.
> >
> > If you hang it from a tower, you could use a single 1 inch PVC pipe
> > spreader horizontal inside the diamond. I would put a PVC T connector
> > in the center of the 1 inch PVC pipe spreader then attach a 1 inch
> > PVC pipe from the tower to the PVC T connector to hold the antenna
> > stationary.
> >
> >
> > "A vertically oriented horizontally polarized one wavelength loop
> > antenna with the bottom of the loop 1/2 wave length above ground is a
> > FINE antenna".
> >
> > Do NOT put the bottom of the vertically oriented loop more than 1/2
> > wave length above ground.
> >
> > The impedance of a Full Wave Loop antenna is theoretically in the

> > vicinity of 100 ohms. That is why I use a 75 ohm "Q section" to
> > provide a perfect match to the 50 ohm coax. My Loop antenna is flat
> > 1:1 VSWR without using a tuner.
> >
> > Here is How I Do It.
> >
> > IMPORTANT - Connect the shield of a "Short Piece" of 75 ohm coax to
> > one end of the loop antenna , Connect the center of the 75 ohm coax
> > to the other end of the loop antenna. The length of the 75 ohm coax
> > is most important. It will be used as a Q section.
> >
> > To determine the length to use, Use this formula "Length in feet =
> > 246 x VF / Freq in Mhz" VF = the Velocity Factor of the coax. So
> > multiply 246 by the Velocity Factor of the coax , Then divide by the
> > frequency .
> >
> > If you use RG59 or RG11 with a Velocity Factor of 0.66 , For the 75
> > meter band the Piece of 75 ohm coax should be about 42 feet long , It
> > doesn't need to be exact . RG59 and RG11 coax usually have a Velocity
> > Factor of 0.66 , Foam dielectric coax such as RG6 might have a
> > Velocity Factor of 0.81 or more.
> >
> > Put a PL259 coax connector on the unused end of the 75 ohm coax,
> > Screw a PL258 double female coax connector onto this PL259 coax
> > connector. Then connect 50 ohm coax to the other side of the PL258
> > double female coax connector, Use any length 50 ohm coax needed to
> > reach your Transceiver.
> >
> > Here's the only con I could think of, and it would not apply if the
> > antenna was oriented horizontally. Vertically oriented it would have
> > some (not sure how much) directivity.
> >
> > You could construct the antenna and then spin it to check it's
> > directivity. If you thought it had too much directivity (I don't
> > think it will) You could make 2 antennas and switch between them.
> >
> > 73, Ace -WH2T
> >
> > --
> >
> > Dr.Ace Ratliff
> >
> > www.WH2T.com
> >
> >
> > --- In SkyWires@yahoogroups.com, "w4dsb" <w4dsb@> wrote:
> > >
> > > --- In SkyWires@yahoogroups.com, "Scott MacKenzie" <kb0fhp@> wrote:
> > > >
> > > > It works - mount it vertically, feed it for horizontal

> > polarization,
> > > and it
> > > > will work OK.not as good as a 5 element beam - but it will work
> > in a
> > > pinch.
> > >
> > > Hoping to use it as a omni directional for monitoring and then i can
> > > point the moxon antenna toward the station
> > >
> > > >
> > > >
> > > >
> > > > _____
> > > >
> > > > From: SkyWires@yahoogroups.com [mailto:SkyWires@yahoogroups.com]
> > On
> > > Behalf
> > > > Of w4dsb
> > > > Sent: Wednesday, March 19, 2008 12:35 PM
> > > > To: SkyWires@...m
> > > > Subject: [SkyWires] 6 meter loop
> > > >
> > > >
> > > >
> > > > anyone here use a 6 meter loop?
> > > > any pro's or cons on using one for 6 meters?
> > > >
> > >
> >
>

3041. Re: [SkyWires] Free Instant Gift ! Say What?

Yahoo group: SkyWires
Date: 2008-05-18 02:44:17 UTC
From: Facility 406 DM09
Topic: 3039 Message: 3041

It's a test to see if your delete key is working.

Kurt

----- Original Message -----
From: <DVC3565@...>

What does this have to do with Antennas? Just wondering. Dave-KJ4PF

3044. Re: [SkyWires] Loop Configuration Question

Yahoo group: SkyWires
Date: 2008-05-25 13:52:46 UTC
From: Steve Ward
Topic: 3022 Message: 3044

It sounds like the load seen at the transmitter is outside the range of the auto tuner. MFJ makes an auto tuner range extender that could be added to help the inernal tuner match the load. Good Luck with the loop. I know you will be pleased once you work thru this problem.

73 Steve NE5J

Paul@... wrote:
Hi All,

I moved to the country and am trying to configure a loop that does not seem to be working for me.

Here's the break down:

a) 272' of stranded 12 gauge wire in a relatively rectangular shape.

b) Van Gorden Antenna Center Insulator connects the 12 gauge wire in a tree.

c) 450 OHM 14GA Van Gorden Ladderline connects to my Insulator on one end and connects to a HI-Q 4:1 Balun on the other end.

d) From the 4:1 Balun a coax run goes into my shack on a Kenwood TS480SAT rig. (auto tuner)

I can tune just fine on 10, 15, 20, 40 meters! (even 160 and 6 meters tune at certain locations) Audio and SWR are perfect.

However, I cannot tune any higher than 3.800 on 75/80 meters. I have cut down the ladder line and no change. When I cut down the ladder line I tuned in the other bands perfectly. Ladder line sits at about 93 feet in length now. I tried cutting down further and I ended up taking out all the bands, so I reached the limit I believe. I cut back the last piece cut and back to where I was.

I thought maybe the hardware store made a mistake and my 12 gauge wire was short. So I added 25 feet to it in the middle. It actually made 75/80 meters worse, as it didn't want to tune above 3.700. So I reverted back.

Any thoughts on what is happening? I seem to be stuck at 3.800. I don't know if this frequency, exactly, is telling me something? Any suggestions would be greatly appreciated!
Try shortening the loop slightly.

3045. Re: Loop Configuration Question

Yahoo group: SkyWires
Date: 2008-05-25 18:32:41 UTC
From: Dr.Ace
Topic: 3022 Message: 3045

--- In SkyWires@yahoogroups.com,>

I would try making the loop about 3 - 5 feet longer than 272 feet.Good Luck and 73, Ace - WH2T

> Paul@... wrote:
> Hi All,
>
> I moved to the country and am trying to configure a loop that does not
> seem to be working for me.
>
> Here's the break down:
>
> a) 272' of stranded 12 gauge wire in a relatively rectangular shape.
>
> b) Van Gorden Antenna Center Insulator connects the 12 gauge wire in a
> tree.
>
> c) 450 OHM 14GA Van Gorden Ladderline connects to my Insulator on one
> end and connects to a HI-Q 4:1 Balun on the other end.
>
> d) From the 4:1 Balun a coax run goes into my shack on a Kenwood
> TS480SAT rig. (auto tuner)
>
> I can tune just fine on 10, 15, 20, 40 meters! (even 160 and 6 meters
> tune at certain locations) Audio and SWR are perfect.
>
> However, I cannot tune any higher than 3.800 on 75/80 meters. I have
> cut down the ladder line and no change. When I cut down the ladder
> line I tuned in the other bands perfectly. Ladder line sits at about
> 93 feet in length now. I tried cutting down further and I ended up
> taking out all the bands, so I reached the limit I believe. I cut back
> the last piece cut and back to where I was.
>
> I thought maybe the hardware store made a mistake and my 12 gauge wire
> was short. So I added 25 feet to it in the middle. It actually made
> 75/80 meters worse, as it didn't want to tune above 3.700. So I

> reverted back.
>
> Any thoughts on what is happening? I seem to be stuck at 3.800. I
> don't know if this frequency, exactly, is telling me something? Any
> suggestions would be greatly appreciated!
> Try shortening the loop slightly.
>

3047. RE: [SkyWires] more free-stuff to collect instantly

Yahoo group: SkyWires
Date: 2008-05-26 12:15:04 UTC
From: David Shrum
Topic: 3047 Message: 3047

Has been banned, so he/she needs to say goodbye. :)
Dave N8PU

Dear Members

Just wanted to say a quick hello to the group,

3048. Loop feeding

Yahoo group: SkyWires
Date: 2008-05-27 12:58:45 UTC
From: Andrew
Topic: 3048 Message: 3048

Hello All,
I have an 80 meter loop and have used 40 meters loop, coax and twin lead feeds. Has any one tried a closed full wave loop with a single wire feed against earth? Like a classic Windom dipole.
My 80m loop that is 1:1 at 3.8 MHz without tuner but fairly low would not tune in band with my LDG Z100. It would tune on 1.85MHz but was 20DB down on an inverted L. It did tune on 7 and 14 but no time yet to test further.
Andrew

3049. loop

Yahoo group: SkyWires
Date: 2008-05-27 13:33:45 UTC
From: gw02639
Topic: 3049 Message: 3049

hi all i am going to put up a 190ft 90ft 80ft triangle loop
flat top config can any one let me know if it will work ok
alun gw0fjq

3050. Re: [SkyWires] Loop feeding

Yahoo group: SkyWires
Date: 2008-05-27 13:49:43 UTC
From: Earl Needham
Topic: 3048 Message: 3050

At 06:58 AM 5/27/2008, Andrew wrote:
>Has any one tried a closed full wave loop with a single
>wire feed against earth?

Doesn't this become a vertical with a BIG cap hat?

7 3
Earl

KD5XB -- Earl Needham
Clovis, New Mexico DM84jk
http://groups.yahoo.com/group/cw_bugs
Quoting from the Coast Guard: ZUT

3051. Re: [SkyWires] loop

Yahoo group: SkyWires
Date: 2008-05-27 15:03:21 UTC
From: kb0fhp@comcast.net
Topic: 3049 Message: 3051

How high were you planning to put the loop, and how were you planning to feed it? What is your goal - DX, local or?

Scott
--- Original message ---
From: "gw02639" <GW0FJQ@...>
> hi all i am going to put up a 190ft 90ft 80ft triangle loop
> flat top config can any one let me know if it will work ok
> alun gw0fjq
>
>

3052. Re: Loop feeding

Yahoo group: SkyWires
Date: 2008-05-27 15:06:12 UTC
From: norlink88
Topic: 3048 Message: 3052

--- In SkyWires@yahoogroups.com, "Andrew" <vk5zuc@...> wrote:
>
> Hello All,
> I have an 80 meter loop and have used 40 meters loop, coax and twin
> lead feeds. Has any one tried a closed full wave loop with a single
> wire feed against earth? Like a classic Windom dipole.

A horizontal loop fed with a single wire (or shorted feed line) will
be a vertical antenna with a large capacity hat. Unlike the Windom
there will be no horizontal component. The reason is that the loop is
symmetrical while the Windom is asymmetrical (off center fed).

> My 80m loop that is 1:1 at 3.8 MHz without tuner but fairly low would
> not tune in band with my LDG Z100. It would tune on 1.85MHz but was
> 20DB down on an inverted L. It did tune on 7 and 14 but no time yet to
> test further.
> Andrew
>

3053. Re: loop

Yahoo group: SkyWires
Date: 2008-05-27 18:35:11 UTC
From: gw02639
Topic: 3049 Message: 3053

--- In SkyWires@yahoogroups.com, kb0fhp@... wrote:
>
> How high were you planning to put the loop, and how were you planning to feed it? What is your goal - DX, local or?
>
> Scott
> -------------- Original message ----------------------
> From: "gw02639" <GW0FJQ@...>
> > hi all tnx for ur reaply it will be up abt 20ft high and i will feed it 450 ladder line my goal is to work dx and local alun
> >
> >
>

3054. Maltese Cross loop antenna

Yahoo group: SkyWires
Date: 2008-05-29 00:35:45 UTC
From: Jonathan Helis KB5IAV
Topic: 3054 Message: 3054

I've read in a couple of other ham forums about hams pulling in the corners on a loop making a shape similar to a Maltese Cross.

Right now I'm running an attic mounted 25ft by 5ft open loop(basically a dipole bent into a rectangle) fed with Radio Shack TV twinlead, an MFJ balun, and an LDG Z-10 Por Autotuner. It loads on 60-10 and sometimes will load on 80, but I've never made a QSO down that low.

So far it seems to work well making contacts to the northeast and southwest, working mostly the New England states, and I've worked France, Mexico, Cuba, and Nicaragua on it.

The only complaint I have is it's very noisy, which I know is partially due to it being in the attic. I was wondering if anyone had tried a Maltese Cross configuration of a closed loop. I was thinking of doing that so I can get more wire into the space.

I went with the open design because I thought it would have a better chance of getting on 40 than a closed 60 foot loop would. I may be able to get another 20 or 30 feet of wire up there if do a Maltese Cross, which would give me around 80 feet for a closed loop.

I'm wondering if that might work at getting to where I want to be.

Thanks.

--
73,

Jonathan Helis, KB5IAV
Baton Rouge, Louisiana, USA

3056. RE: [SkyWires] You've received...

Yahoo group: SkyWires
Date: 2008-05-31 15:33:24 UTC
From: David Shrum
Topic: 3056 Message: 3056

Has been banned.
Dave N8PU

-----Original Message-----
From: SkyWires@yahoogroups.com [mailto:SkyWires@yahoogroups.com] On Behalf Of cvergreere
Sent: Saturday, May 31, 2008 7:44 AM
To: SkyWires@yahoogroups.com
Subject: [SkyWires] You've received...

3057. Re: [SkyWires] You've received...

Yahoo group: SkyWires
Date: 2008-06-01 17:31:59 UTC
From: Facility 406 DM09
Topic: 3056 Message: 3057

Can you ban the next 27,834 spammers ahead of time? Don't stress yourself, it's easier for us to just hit delete.

Kurt

3058. RE: [SkyWires] You've received...

Yahoo group: SkyWires
Date: 2008-06-01 17:50:39 UTC
From: David Shrum
Topic: 3056 Message: 3058

Don't I wish I could. :)
Dave N8PU

-----Original Message-----
From: SkyWires@yahoogroups.com [mailto:SkyWires@yahoogroups.com] On Behalf Of Facility 406 DM09
Sent: Sunday, June 01, 2008 1:32 PM
To: SkyWires@yahoogroups.com
Subject: Re: [SkyWires] You've received...

Can you ban the next 27,834 spammers ahead of time? Don't stress yourself, it's easier for us to just hit delete.

Kurt

3059. 160m loop

Yahoo group: SkyWires
Date: 2008-06-01 19:40:51 UTC
From: william hawkins
Topic: 3059 Message: 3059

hi to all my frist go at the 160m loop the problem appears that the
radio is not very responsive to this antenna swr is very narrow about
30khz but good no tuner is there something that i am missing
thakyou willie

3060. Re: 160m loop

Yahoo group: SkyWires
Date: 2008-06-03 11:21:00 UTC
From: cewyattjr
Topic: 3059 Message: 3060

--- In SkyWires@yahoogroups.com, "william hawkins" <willie_hawkins@...>
wrote:
>
> hi to all my frist go at the 160m loop the problem appears that the
> radio is not very responsive to this antenna swr is very narrow about
> 30khz but good no tuner is there something that i am missing
> thakyou willie
>

How are you feeding it, Willie? If you use ladderline and a tuner you shouldn't need to care about the specific SWR, and by nature I've found it to be "effectively" a broadband antenna. I wouldn't in a million years feed it with unbalanced line, however.

73,

Chuck
W1CEW

3061. Re: 160m loop

Yahoo group: SkyWires
Date: 2008-06-03 15:18:36 UTC
From: Bob Jones
Topic: 3059 Message: 3061

I agree with Chuck,do it right with balanced line and tuner and it's a marvelous all band antenna.I don't know where all the talk of coax and baluns started with loops and doublets but that defeats the purpose of these great antennas.If you have a problem on 1 or 2 bands just prune the ladderline until the problem goes away.

Forget one button band hopping,tune the tuner and hear and work things you have been missing with the compromise antennas.

73,
Bob
W0OXJ

3062. Re: [SkyWires] Re: 160m loop

Yahoo group: SkyWires
Date: 2008-06-03 19:36:26 UTC
From: frank
Topic: 3059 Message: 3062

Hi
I have a 80M loop thats my favorite antenna for all bands and I agree fully with W0OXJ`s statement.
I use a AG6K " balanced balanced tuner" and it tunes every possible band. (except) 160M
Tuning is quick and takes only a few seconds.Forget the baluns and the coax.

73
Frank
SM5QU/KC0YQI

----- Original Message -----
From: Bob Jones
To: SkyWires@...m
Sent: Tuesday, June 03, 2008 5:18 PM
Subject: [SkyWires] Re: 160m loop

I agree with Chuck,do it right with balanced line and tuner and it's a marvelous all band antenna.I don't know where all the talk of coax and baluns started with loops and doublets but that defeats the purpose of these great antennas.If you have a problem on 1 or 2 bands just prune the ladderline until the problem goes away.

Forget one button band hopping,tune the tuner and hear and work things you have been missing with the compromise antennas.

73,
Bob
W0OXJ

3063. Re: [SkyWires] Re: 160m loop

Yahoo group: SkyWires
Date: 2008-06-03 20:23:15 UTC
From: icra@galaxynet.com
Topic: 3059 Message: 3063

> I agree with Chuck,do it right with balanced line and tuner and it's
> a marvelous all band antenna.I don't know where all the talk of coax
> and baluns started with loops and doublets but that defeats the
> purpose of these great antennas.If you have a problem on 1 or 2
> bands just prune the ladderline until the problem goes away.
>
> Forget one button band hopping,tune the tuner and hear and work
> things you have been missing with the compromise antennas.
>
Every time I turn around, hams are bashing the use of coax....

Yes, on long runs, coax is not a good option.....

My first antenna was a loop a little longer than 80 mtrs. Worked every thing I could hear with
just 35W. There was no difference in what I could hear/work between coax and ladder line...coax tuned a little better on the higher bands, ladder line tuned a little better on 40, due
to the error in loop size, both had issues on 80. The catch....was only about a 30 foot run....

When I convince the city to let me put a loop up again (more of a Maltese cross this time to
try to get down to 160), will again be a short run and will be coax.

On short runs, I feel that the removal of any chance of RF in the shack makes coax a much better option....and it works just fine....

Just my $.02.....with the economy the way it is....that makes it more like $.002

Mel
N7OKL

3064. Re: [SkyWires] Re: 160m loop

Yahoo group: SkyWires
Date: 2008-06-03 21:25:28 UTC
From: Jim Dunstan
Topic: 3059 Message: 3064

At 09:36 PM 6/3/2008 +0200, you wrote:

>
>Hi
>I have a 80M loop thats my favorite antenna for all bands and I agree
>fully with W0OXJ`s statement.
>I use a AG6K " balanced balanced tuner" and it tunes every possible band.
>(except) 160M
>Tuning is quick and takes only a few seconds.Forget the baluns and the coax.
>
>73
>Frank
>SM5QU/KC0YQI
>
>
>>----- Original Message -----
>>From: <mailto:rjones08@...>Bob Jones
>>To: <mailto:SkyWires@yahoogroups.com>SkyWires@yahoogroups.com
>>Sent: Tuesday, June 03, 2008 5:18 PM
>>Subject: [SkyWires] Re: 160m loop
>>
>>I agree with Chuck,do it right with balanced line and tuner and it's a
>>marvelous all band antenna.I don't know where all the talk of coax and
>>baluns started with loops and doublets but that defeats the purpose of
>>these great antennas.If you have a problem on 1 or 2 bands just prune the
>>ladderline until the problem goes away.
>>
>>Forget one button band hopping,tune the tuner and hear and work things
>>you have been missing with the compromise antennas.
>>
>>73,
>>Bob
>>W0OXJ

Hi,

Another agreement. If you are planning to use either a loop or a dipole as a multi-band antenna there are basically 2 methods of doing so. The first method is to place an automatic antenna tuner/coupler right at the feed point .... which couples the antenna to a coax feed line. The second more common method is to bring the feed point down to the station with a balanced feed line (low loss) where the impedance is transformed to an acceptable value (to your transmitter). The second, with the parallel balanced feed line is the by far the most commonly used method.

Rule #1 is that the physical dimension of the loop is at least 1 wavelength at the lowest frequency to be used.
Rule #2 is that the feed point is connected to the transceiver with good quality balanced feed line.
Rule #3 is that an antenna tuner is required to convert the impedance at the end of the feed line to the 50 ohm impedance of the transceiver.
Rule #4 is the conversion of the balanced feed line impedance to the 50 ohm unbalanced input of the transceiver takes place as close to the transceiver as possible.

problem #1 The antenna tuner .... the majority of antenna tuners hereto generally available are designed to convert impedances from one unbalanced source to another and are generally capable of a limited range of impedance transformation.
Problem #2 since antenna tuners are generally UN_UN the practice has been to use BAL-UN transformer (balun). Further, there is a practice of placing this balun a distance from the tuner ... further complicating the problem.

Very often when you find you are unable to tune/match a portion of a band the problem is simply limitations created by the antenna tuner and balun. Trimming the feed line doesn't improve much except perhaps bring the end impedance within the range of the tuner/balun capablility. Don't get me wrong there are feed line lengths (sweet spots) that provide the maximum efficiency (measured in different terms ... another story).

I would say that the majority of the problems of tuning particular band portions are avoided by eliminating the use of a balun between the feed line and the antenna tuner ..... and using a balanced antenna tuner. In this arrangement the balanced antenna feed line comes into the shack right next the operating position and the balanced antenna tuner converts the bal-un and converts the impedance directly. It is well worth the effort in making this arrangment.

There are 2 key objections to this, 'feed line radiation', and difficulty in dressing the feed line. The first is a myth as properly dressed balanced feed line is as immune to picking up RFI and radiating as a good coax installation. The second is of course valid. It takes more thought/planning and work to make a proper installation ... but as I said, 'it is worth it'.

I have done comparative experiments and give you one as an example.

I have a large balanced antenna fed with 450 ohm balanced line which I bring right into the shack. I have 2 side by side antenna tuners. The first is a good quality UN_UN tuner with a 1:1 Balun. The first problem is that that it will not match the transceiver on all frequencies on all bands (keeping the power to 20W output). If I increase the power much beyond 20W (on some frequencies) I notice added tuning 'skittishness'.

I switch the balanced feed line to my low power balanced tuner (Z-match) ... I immediately have smooth (un-skittish) tuning on all frequencies and can easily run full power (100 watts for me).

I have mentioned transmitter power level. The reason is that at some particular frequencies the balanced antenna tuner handles the impedance transformation with high RF voltages. These voltages may be within the tolerance of the tuner at 20 watts output but move outside it's tolerance when the power is doubled. The fact of life is that an antenna/feed line/tuner system may cover all bands at 20 or 100 watts but be quite limited in coverage when you run 200 or 1000 watts!!

If you are a QRP operator then it is quite easy to operate all bands, all frequencies with a single antenna. But, difficult when you run QRO.

Jim, VE3CI

3066. RE: [SkyWires] 250 Free Books for Members

Yahoo group: SkyWires
Date: 2008-06-04 20:53:17 UTC
From: David Shrum
Topic: 3066 Message: 3066

Yes Dear Members, Karen just got herself banned too; another one down...

Hey Kurt, how many more is that to go before I get them (the spammers) all banned? :(

Dave N8PU

-----Original Message-----
From: SkyWires@yahoogroups.com [mailto:SkyWires@yahoogroups.com] On Behalf Of karen.hall35
Sent: Wednesday, June 04, 2008 5:30 AM
To: SkyWires@yahoogroups.com
Subject: [SkyWires] 250 Free Books for Members

Dear Members

3067. Spam Problems

Yahoo group: SkyWires
Date: 2008-06-04 21:14:45 UTC
From: Lake Hodges Radio
Topic: 3066 Message: 3067

At 01:53 PM 6/4/2008, David Shrum wrote:
>Hey Kurt, how many more is that to go before I get them (the
>spammers) all banned? :(

You'll never get them all. The spammers keep creating new phoney names. And they share your address with spammers.

The only solution is to set the group default to "moderate." Click on "delete as spam" when you get a spam message.

Then, you can set people to "unmoderated" individually as you get to know them and they can post without moderation.

Sorry, this is sad but true.

-- Kurt, N6MD

3068. Re: Spam Problems

Yahoo group: SkyWires
Date: 2008-06-04 21:38:05 UTC
From: Ben - ne5B
Topic: 3066 Message: 3068

Eliminating spam is why http://groups.yahoo.com/group/loopskywire/
was created. Only "real" people can subscribe and you have to be
approved by a moderator, by either giving your verifiable callsign or
telling us somethign that shows a genuine interest in SkyWires.

73 Ben-ne5B

--- In SkyWires@yahoogroups.com, Lake Hodges Radio
<lakehodgesradio@...> wrote:
>
> At 01:53 PM 6/4/2008, David Shrum wrote:
> >Hey Kurt, how many more is that to go before I get them (the
> >spammers) all banned? :(
>
> You'll never get them all. The spammers keep creating new phoney
> names. And they share your address with spammers.
>
> The only solution is to set the group default to "moderate." Click
> on "delete as spam" when you get a spam message.
>
> Then, you can set people to "unmoderated" individually as you get
to
> know them and they can post without moderation.
>
> Sorry, this is sad but true.
>
> -- Kurt, N6MD
>

3069. RE: [SkyWires] Spam Problems

Yahoo group: SkyWires
Date: 2008-06-04 21:45:36 UTC
From: David Shrum
Topic: 3066 Message: 3069

Unfortunately the group owner never gave the moderators that option, it HAS been gone over and over too many times to want to get into again so we just ban them as they post. But because of this problem there was another group started called LoopSkyWire. As of right now it has 78 members and the list owner has given the moderators more leeway in this respect to guard against this type of thing happening; I'm sure there'll be some that slip through but not as many as do here. If you're so inclined why not check out that group too, it's just as friendly as this group and knowledgeable group of people too.
Dave N8PU

-----Original Message-----
From: SkyWires@yahoogroups.com [mailto:SkyWires@yahoogroups.com] On Behalf Of Lake Hodges Radio
Sent: Wednesday, June 04, 2008 5:15 PM
To: SkyWires@yahoogroups.com
Subject: [SkyWires] Spam Problems

At 01:53 PM 6/4/2008, David Shrum wrote:
>Hey Kurt, how many more is that to go before I get them (the
>spammers) all banned? :(

You'll never get them all. The spammers keep creating new phoney names. And they share your address with spammers.

The only solution is to set the group default to "moderate." Click on "delete as spam" when you get a spam message.

Then, you can set people to "unmoderated" individually as you get to know them and they can post without moderation.

Sorry, this is sad but true.

-- Kurt, N6MD
No virus found in this outgoing message.
Checked by AVG.
Version: 8.0.100 / Virus Database: 270.0.0/1484 - Release Date: 6/4/2008 4:40 PM

3070. Re: [SkyWires] 250 Free Books for Members

Yahoo group: SkyWires
Date: 2008-06-05 00:06:00 UTC
From: Facility 406 DM09
Topic: 3066 Message: 3070

All of them, then it gets worse...

Kurt

----- Original Message -----
From: "David Shrum" <aq392@...>

: Hey Kurt, how many more is that to go before I get them (the spammers) all
: banned? :(

3071. Lock or run free on insulators?

Yahoo group: SkyWires
Date: 2008-06-05 03:04:38 UTC
From: Paul
Topic: 3071 Message: 3071

It has stopped raining for two days in a row so I am itching to put up wire. My Plan is a 40M loop of bare wire up 40 feet . Depending upon which formula I use, I come up with 137 to 143 feet. I plan to run 450 window line from a close to middle side leg to a 4:1 Balun and short (10 feet or less) run of coax to shack/tuner. The loop will be in a rectangle pattern with the narrow widths at 30 feet and the long ends to be determined.

I hope to use in on 40M - 10M. I'm guessing it won't serve well on 80M.

Questions:
I have the space to add about 20 more feet over all (10 feet per long leg length). Will I gain anything or should I keep it closer to the shorter formula 40M length?

Is it better to "lock" the insulator at a fixed distance on the wire or should I let the wire slide free?

If I lock it, I was thinking of attaching an extra short length of wire through the insulator for increased wear life.

If I lock it, should I just twist the extra wire on or solder it. With solder I'm concerned about creating a "hard" spot where the wire will bend back and forth, fatigue and break. If I twist it I'm concerned that over time the electrical connection might cause grief. I could twist and wrap with good quality outdoor electrical tape.

What is the best way to manage the wire at the insulator points?

Thank you and 73,
Paul

3072. Re: 6 meter loop

Yahoo group: SkyWires
Date: 2008-06-06 03:44:24 UTC
From: Jim Stafford W4QO
Topic: 2969 Message: 3072

Just checking but wouldn't the matching section, 246*.66/50? That
would 3.24 feet for 6 meters? Just checking my math..

--- In SkyWires@yahoogroups.com, "Dr.Ace" <wh2t@...> wrote:
>
>
> To determine the length to use, Use this formula "Length in feet =
> 246 x VF / Freq in Mhz" VF = the Velocity Factor of the coax. So
> multiply 246 by the Velocity Factor of the coax , Then divide by the
> frequency .
>
> If you use RG59 or RG11 with a Velocity Factor of 0.66 , For the 75
> meter band the Piece of 75 ohm coax should be about 42 feet long ,

3073. Re: Lock or run free on insulators?

Yahoo group: SkyWires
Date: 2008-06-06 03:46:59 UTC
From: Jim Stafford W4QO
Topic: 3071 Message: 3073

I've sent in an answer but probably didn't use the correct email to mail from. But in a nutshell, lock the insulator and don't solder anything. If my message doesn't get by the moderator, I'll post the details.

jim/w4qo

3074. Re: 6 meter loop

Yahoo group: SkyWires
Date: 2008-06-06 03:49:25 UTC
From: Dr.Ace
Topic: 2969 Message: 3074

Jim,
Yes, your math is correct.
73, Ace - WH2T

--- In SkyWires@yahoogroups.com, "Jim Stafford W4QO" <qrp@...> wrote:
>
> Just checking but wouldn't the matching section, 246*.66/50? That
> would 3.24 feet for 6 meters? Just checking my math..
>
> --- In SkyWires@yahoogroups.com, "Dr.Ace" <wh2t@> wrote:
> >
> >
> > To determine the length to use, Use this formula "Length in feet =
> > 246 x VF / Freq in Mhz" VF = the Velocity Factor of the coax. So
> > multiply 246 by the Velocity Factor of the coax , Then divide by
the
> > frequency .
> >
> > If you use RG59 or RG11 with a Velocity Factor of 0.66 , For the 75
> > meter band the Piece of 75 ohm coax should be about 42 feet long ,
>

3075. Re: Lock or run free on insulators?

Yahoo group: SkyWires
Date: 2008-06-07 03:39:02 UTC
From: Paul
Topic: 3071 Message: 3075

Jim,
Your message below is all there is. I'm wondering about how critical the length is - given that I hope to run it 40-10 (80 if it will tune) with ladderline to a 4:1 to a auto tuner? Depending on which formula I use, I come up with 137-143 feet for the low end of 40M.

I can go with longer wire (about 20ft, 10 per side) and get closer to the support masts or I can use more line and suspend the antenna further out from the poles. I might be able to bring the poles in so they are closer to the rectangle of formula size, but I don't have a lot of altitude because of guy line anchor placement and angle.
Paul

--- In SkyWires@yahoogroups.com, "Jim Stafford W4QO" <qrp@...> wrote:
>
> I've sent in an answer but probably didn't use the correct email to
> mail from. But in a nutshell, lock the insulator and don't solder
> anything. If my message doesn't get by the moderator, I'll post the
> details.
>
> jim/w4qo
>

3076. Re: [SkyWires] Re: Lock or run free on insulators?

Yahoo group: SkyWires
Date: 2008-06-07 12:45:30 UTC
From: Erik Weaver
Topic: 3071 Message: 3076

Hi Paul,

I'd probably first try keeping about a foot or two distance from the loop and the supporting masts. Other than that I'd go for maximizing the area inside the loop.

I'm with you. You're going for a multi-band antenna, using very low loss line with a transmatch. I'd not worry about small length differences at this point.

That said, it is always possible to hit a "bad spot" so if you find it does *not* work, then alter either the length of wire in the antenna wire or in the length of the transmission line.

Also, scan through the frequency ranges of interest with an antenna analyzer if that is possible. Then you know what range of complex impedances you are asking your transmatch to transform for your XCVR. If there are problems this is often useful information.

Good luck and have fun!
73-Erik Weaver n0ew

> I'm wondering about how critical
> the length is - given that I hope to run it 40-10 (80 if it will tune)
> with ladderline to a 4:1 to a auto tuner? Depending on which formula I
> use, I come up with 137-143 feet for the low end of 40M.
>
> I can go with longer wire (about 20ft, 10 per side) and get closer to
> the support masts or I can use more line and suspend the antenna
> further out from the poles. I might be able to bring the poles in so
> they are closer to the rectangle of formula size, but I don't have a
> lot of altitude because of guy line anchor placement and angle.
> Paul

3081. Re: Spam Problems

Yahoo group: SkyWires
Date: 2008-06-17 03:30:25 UTC
From: dslrguy
Topic: 3066 Message: 3081

--- In SkyWires@yahoogroups.com, "David Shrum" <aq392@...> wrote:
>
> Unfortunately the group owner never gave the moderators that option,
it HAS

Dave,

Sorry. I'm the owner of the group. I killed my exemptfromlife account
because of too much mail but I thought I had granted you guys all the
privileges you needed. Sorry.

I had gotten out of the hobby back in 2004 or so and now I'm starting
to get back into it. I tried to get my account reactivated, but the
yahoo automatic activation wouldn't recognize me.

If you have any suggestions, I'd be happy to try them.
thanks

3082. Re: [SkyWires] Re: Spam Problems

Yahoo group: SkyWires
Date: 2008-06-17 04:10:59 UTC
From: Facility 406 DM09
Topic: 3066 Message: 3082

I've offered to make a mirror image of the group many times, users, files, links, everything except the original posts, which would be archived here for reference. Seems people would rather bitch about spam and ignore their delete key than get what they demand at no effort to them. Human nature I guess.

Good luck.

Kurt

----- Original Message -----
From: "dslrguy" <dslrguy@...>

If you have any suggestions, I'd be happy to try them.
thanks

3084. Re: [SkyWires] Re: Spam Problems

Yahoo group: SkyWires
Date: 2008-06-17 06:00:11 UTC
From: Hans Remeeus
Topic: 3066 Message: 3084

Hello Kurt,

IMHO there are too much SPAM messages in this group; almost every day.

The new Yahoo-group 'LoopSkyWire' is without SPAM and has more than one moderator. Files etc. have already been transferred.

--

73,
Hans Remeeus (PA1HR)
http://www.remeeus.eu
Communication is about people, the rest is technology.

Facility 406 DM09 schreef:
> I've offered to make a mirror image of the group many times, users, files,
> links, everything except the original posts, which would be archived here
> for reference. Seems people would rather bitch about spam and ignore their
> delete key than get what they demand at no effort to them. Human nature I
> guess.
>
> Good luck.
>
> Kurt
>

3087. Moderators, here's how to fix the "spam" problem

Yahoo group: SkyWires
Date: 2008-06-21 16:18:33 UTC
From: eudamac3
Topic: 3087 Message: 3087

A suitable replacement group has already been formed.

Any moderator can change this remaining group's description. Do so, removing the picture of the antenna, and simply replace it with text saying:

"This group's creator, due to a technical glitch, can no longer prevent spammers from joining. Therefore, this group is no longer an active discussion group for the subject in the title and is going to be taken over by spammers until Yahoo shuts it down.

If you are seriously interested in SkyWire antennas, please join our new group at:

http://groups.yahoo.com/group/loopskywire/

This won't stop spammers from joining this group - but it WILL stop people from joining the group, expecting it to be useful.

Frank

3088. RE: [SkyWires] Moderators, here's how to fix the "spam" problem

Yahoo group: SkyWires
Date: 2008-06-21 17:52:45 UTC
From: Scott MacKenzie
Topic: 3087 Message: 3088

I can't believe this....we get one spam email - and 25+ complaining about the spam. Just hit the delete key - and reduce the whining bandwidth

---

From: SkyWires@yahoogroups.com [mailto:SkyWires@yahoogroups.com] On Behalf Of eudamac3
Sent: Saturday, June 21, 2008 12:19 PM
To: SkyWires@yahoogroups.com
Subject: [SkyWires] Moderators, here's how to fix the "spam" problem

A suitable replacement group has already been formed.

Any moderator can change this remaining group's description. Do so, removing the picture of the antenna, and simply replace it with text saying:

"This group's creator, due to a technical glitch, can no longer prevent spammers from joining. Therefore, this group is no longer an active discussion group for the subject in the title and is going to be taken over by spammers until Yahoo shuts it down.

If you are seriously interested in SkyWire antennas, please join our new group at:

http://groups. <http://groups.yahoo.com/group/loopskywire/> yahoo.com/group/loopskywire/

This won't stop spammers from joining this group - but it WILL stop people from joining the group, expecting it to be useful.

Frank

3089. Re: [SkyWires] Moderators, here's how to fix the "spam" problem

Yahoo group: SkyWires
Date: 2008-06-21 18:45:17 UTC
From: DVC3565@aol.com
Topic: 3087 Message: 3089

Much, MUCH more than ONE SPAM E-mail my fellow ham! Plus you miss the whole concept: We joined this group THIS way, to stop the SPAM.
Use your delete key my "young apprentice" to your hearts content. THEN read why we are doing this! The founder of this site has lost CONTROL of it due to a Yahoo glitch! I know you don't want to, (as it takes less then 90 seconds), just go to the new site & reregister. THEN hope they don't use YOUR call to send SPAM in the future!
Trying to
Educate! (A lost art in the USA School system!)

Dave-KJ4PF

**********Gas prices getting you down? Search AOL Autos for fuel-efficient used cars. (http://autos.aol.com/used?ncid=aolaut00050000000007)

3090. RE: [SkyWires] Moderators, here's how to fix the "spam" problem

Yahoo group: SkyWires
Date: 2008-06-21 19:04:11 UTC
From: Scott MacKenzie
Topic: 3087 Message: 3090

You can not eliminate spam - it is not possible. It can be minimized, but not eliminated.

For instance, your AOL account sends a piece of spam each time you use email. But being a AOL user, you obviously missed that.

From: SkyWires@yahoogroups.com [mailto:SkyWires@yahoogroups.com] On Behalf Of DVC3565@...
Sent: Saturday, June 21, 2008 2:45 PM
To: SkyWires@yahoogroups.com
Subject: Re: [SkyWires] Moderators, here's how to fix the "spam" problem

Much, MUCH more than ONE SPAM E-mail my fellow ham! Plus you miss the whole concept: We joined this group THIS way, to stop the SPAM.
Use your delete key my "young apprentice" to your hearts content. THEN read why we are doing this! The founder of this site has lost CONTROL of it due to a Yahoo glitch! I know you don't want to, (as it takes less then 90 seconds), just go to the new site & reregister. THEN hope they don't use YOUR call to send SPAM in the future!
Trying to
Educate! (A lost art in the USA School system!)

Dave-KJ4PF

Gas prices getting you down? Search AOL Autos for fuel-efficient used <http://autos.aol.com/used?ncid=aolaut00050000000007> cars.

3091. Re: [SkyWires] Moderators, here's how to fix the "spam" problem

Yahoo group: SkyWires
Date: 2008-06-21 23:24:57 UTC
From: icra@galaxynet.com
Topic: 3087 Message: 3091

> A suitable replacement group has already been formed.
>
Why does there need to be a 'replacement' for this group?

> Any moderator can change this remaining group's description. Do
> so,
> removing the picture of the antenna, and simply replace it with
> text
> saying:
>
> "This group's creator, due to a technical glitch, can no longer
> prevent spammers from joining. Therefore, this group is no longer
> an
> active discussion group for the subject in the title and is going
> to
> be taken over by spammers until Yahoo shuts it down.
>
The above statement is so wrong, I am having a very hard time cleaning up my response to keep it suitable for public viewing..

Since *you* have not made the changes that *you* think are needed, *you* do not own the group....if *you* are not happy with how it is being run, *you* have a very simple remedy...drop from the group...

To call for someone that does not own the group to change the groups logo in such a way as to render the group (that *you* DO NOT OWN) useless is so off the charts there is no way to describe it.....

If *you* are so unhappy with the group, then drop from the group.....please...pretty please

If it was my group, there would be no need for you to drop...I would kick you out of the group
for such a post.....

> If you are seriously interested in SkyWire antennas, please join
> our
> new group at:
>
If you are seriously interested in discussing antennas, stop trying to control how someone runs their group.....

I have gotten tons of interesting info and ideas from this group......I hope more people join to
benefit from the info here....

> This won't stop spammers from joining this group - but it WILL
> stop

> people from joining the group, expecting it to be useful.
>
This group is very useful....the only spam (have seen is the same stuff that I get from every
Yahoo group I belong to...moderated or not.....

I would hope you would stop attacking someone that has made such a great group available. If you are so unhappy, just go away.....

Now....can we please get back to antennas......and get off a very mean-spirited attack on those that make such a great resource available........

Mel
N7OKL

3092. Re: [SkyWires] Moderators, here's how to fix the "spam" problem

Yahoo group: SkyWires
Date: 2008-06-22 02:50:10 UTC
From: Keith Currie
Topic: 3087 Message: 3092

Very well said Mel, I couldnt agree more.
73s VE5HKC Keith
----- Original Message -----
From: icra@...
To: SkyWires@yahoogroups.com
Sent: Saturday, June 21, 2008 5:24 PM
Subject: Re: [SkyWires] Moderators, here's how to fix the "spam" problem

> A suitable replacement group has already been formed.
>
Why does there need to be a 'replacement' for this group?

> Any moderator can change this remaining group's description. Do
> so,
> removing the picture of the antenna, and simply replace it with
> text
> saying:
>
> "This group's creator, due to a technical glitch, can no longer
> prevent spammers from joining. Therefore, this group is no longer
> an
> active discussion group for the subject in the title and is going
> to
> be taken over by spammers until Yahoo shuts it down.
>
The above statement is so wrong, I am having a very hard time cleaning up my response to keep it suitable for public viewing..

Since *you* have not made the changes that *you* think are needed, *you* do not own the group....if *you* are not happy with how it is being run, *you* have a very simple remedy...drop from the group...

To call for someone that does not own the group to change the groups logo in such a way as to render the group (that *you* DO NOT OWN) useless is so off the charts there is no way to describe it.....

If *you* are so unhappy with the group, then drop from the group.....please...pretty please

If it was my group, there would be no need for you to drop...I would kick you out of the group
for such a post.....

> If you are seriously interested in SkyWire antennas, please join
> our
> new group at:
>
If you are seriously interested in discussing antennas, stop trying to control how someone

runs their group.....

I have gotten tons of interesting info and ideas from this group......I hope more people join to
benefit from the info here....

> This won't stop spammers from joining this group - but it WILL
> stop
> people from joining the group, expecting it to be useful.
>
This group is very useful....the only spam (have seen is the same stuff that I get from every
Yahoo group I belong to...moderated or not.....

I would hope you would stop attacking someone that has made such a great group available. If you are so unhappy, just go away.....

Now....can we please get back to antennas......and get off a very mean-spirited attack on those that make such a great resource available........

Mel
N7OKL

3093. Re: [SkyWires] Moderators, here's how to fix the "spam" problem

Yahoo group: SkyWires
Date: 2008-06-22 04:04:22 UTC
From: Jim Dunstan
Topic: 3087 Message: 3093

At 08:50 PM 6/21/2008 -0600, you wrote:

I concur .... I like the group .... what it doesn't need is this
hassle. If anyone is unsatisfied all they need to do is leave .....
without causing disruption.

Jim, VE3CI

>Very well said Mel, I couldnt agree more.
>73s VE5HKC Keith
>>----- Original Message -----
>>From: <mailto:icra@...>icra@...
>>To: <mailto:SkyWires@yahoogroups.com>SkyWires@yahoogroups.com
>>Sent: Saturday, June 21, 2008 5:24 PM
>>Subject: Re: [SkyWires] Moderators, here's how to fix the "spam" problem
>>
>> > A suitable replacement group has already been formed.
>> >
>>Why does there need to be a 'replacement' for this group?
>>
>> > Any moderator can change this remaining group's description. Do
>> > so,
>> > removing the picture of the antenna, and simply replace it with
>> > text
>> > saying:
>> >
>> > "This group's creator, due to a technical glitch, can no longer
>> > prevent spammers from joining. Therefore, this group is no longer
>> > an
>> > active discussion group for the subject in the title and is going
>> > to
>> > be taken over by spammers until Yahoo shuts it down.
>> >
>>The above statement is so wrong, I am having a very hard time cleaning up
>>my response to
>>keep it suitable for public viewing..
>>
>>Since *you* have not made the changes that *you* think are needed, *you*
>>do not own the
>>group....if *you* are not happy with how it is being run, *you* have a
>>very simple
>>remedy...drop from the group...
>>
>>To call for someone that does not own the group to change the groups logo
>>in such a way as
>>to render the group (that *you* DO NOT OWN) useless is so off the charts

>>there is no way to
>>describe it.....
>>
>>If *you* are so unhappy with the group, then drop from the
>>group.....please...pretty please
>>
>>If it was my group, there would be no need for you to drop...I would kick
>>you out of the group
>>for such a post.....

3094. Re: [SkyWires] Moderators, here's how to fix the "spam" problem

Yahoo group: SkyWires
Date: 2008-06-22 11:49:36 UTC
From: Hans Remeeus
Topic: 3087 Message: 3094

icra@... schreef:
>> A suitable replacement group has already been formed.
>>
> Why does there need to be a 'replacement' for this group?
>

IMHO Frank (eudamac3) wrote us from the positive side. I read no
offense, attack, harm of whatsoever in his message.

Just keep on going with the Loop antennas...

My 400 ft horizontal loop is the best antenna I used during the last 40
years I do Ham Radio. When the groups are interested I can ask somebody
to translate: http://www.remeeus.eu/hamradio/antennes_tuners/deltaloop.htm

--

73,
Hans Remeeus (PA1HR)
http://www.remeeus.eu
Communication is about people, the rest is technology.

3095. Balun or not to Balun, that is the question!

Yahoo group: SkyWires
Date: 2008-06-22 13:14:05 UTC
From: dslrguy
Topic: 3095 Message: 3095

Sorry for the korny title, but its early and the coffee hasn't kicked in.

So what is the verdict? A balun on a skywire or not? If so, then what a 1:1 or a 4:1?

thanks

3096. Re: [SkyWires] Moderators, here's how to fix the "spam" problem

Yahoo group: SkyWires
Date: 2008-06-22 14:06:28 UTC
From: Earl Needham
Topic: 3087 Message: 3096

Good idea, Jim. I'm tired of hearing the arguing --
somebody posted a suggestion -- one message. Now we have numerous
posts telling how bad he was. Not my idea of the friendship and
fraternity of ham radio.

Bye all.

Earl

KD5XB -- Earl Needham
Clovis, New Mexico DM84jk
http://groups.yahoo.com/group/cw_bugs
Quoting from the Coast Guard: ZUT

At 10:04 PM 6/21/2008, Jim Dunstan wrote:

>At 08:50 PM 6/21/2008 -0600, you wrote:
>
>I concur .... I like the group .... what it doesn't need is this
>hassle. If anyone is unsatisfied all they need to do is leave .....
>without causing disruption.
>
>Jim, VE3CI
>
>
>>Very well said Mel, I couldnt agree more.
>>73s VE5HKC Keith
>>>----- Original Message -----
>>>From: <mailto:icra@...>icra@...
>>>To: <mailto:SkyWires@yahoogroups.com>SkyWires@yahoogroups.com
>>>Sent: Saturday, June 21, 2008 5:24 PM
>>>Subject: Re: [SkyWires] Moderators, here's how to fix the "spam" problem
>>>
>>> > A suitable replacement group has already been formed.
>>> >
>>>Why does there need to be a 'replacement' for this group?
>>>
>>> > Any moderator can change this remaining group's description. Do
>>> > so,
>>> > removing the picture of the antenna, and simply replace it with
>>> > text
>>> > saying:
>>> >
>>> > "This group's creator, due to a technical glitch, can no longer
>>> > prevent spammers from joining. Therefore, this group is no longer
>>> > an

>>> > active discussion group for the subject in the title and is going
>>> > to
>>> > be taken over by spammers until Yahoo shuts it down.
>>> >
>>>The above statement is so wrong, I am having a very hard time
>>>cleaning up my response to
>>>keep it suitable for public viewing..
>>>
>>>Since *you* have not made the changes that *you* think are needed,
>>>*you* do not own the
>>>group....if *you* are not happy with how it is being run, *you*
>>>have a very simple
>>>remedy...drop from the group...
>>>
>>>To call for someone that does not own the group to change the
>>>groups logo in such a way as
>>>to render the group (that *you* DO NOT OWN) useless is so off the
>>>charts there is no way to
>>>describe it.....
>>>
>>>If *you* are so unhappy with the group, then drop from the
>>>group.....please...pretty please
>>>
>>>If it was my group, there would be no need for you to drop...I
>>>would kick you out of the group
>>>for such a post.....

3097. Re: [SkyWires] Balun or not to Balun, that is the question!

Yahoo group: SkyWires
Date: 2008-06-22 14:31:34 UTC
From: Erik Weaver
Topic: 3095 Message: 3097

> So what is the verdict? A balun on a skywire or not? If so, then what
> a 1:1 or a 4:1?

Ultimately, I think the answer depends upon the matching range of your transmatch as compared to the upper and lower impedances of your loop.

A balanced transmatch would be best. Few of us have one however.

My real-world druthers are to use balanced line to feed the skywire --horz. loop-- if you can use it, the balanced line has extremely low loss, and that may be important when feeding any antenna across multiple bands. Then to use a 1:1 current balun where the feed line goes through the wall. As opposed to simply smashing the ladder line with the (vinyl) window. (Yes, guilty; I have done that. ;)) But depending upon your transmatch that may not always allow an impedance match.

If not, then the next most likely candidate is to replace the 1:1 balun with a greater ratio balun, of which the 4:1 is the most common. These are generally the baluns found in most commercial transmatches. These are voltage baluns.

You might ask around about the hybrid balun discussed in QEX several months ago. I haven't heard much about it, nor have I tried one myself. The details are fading in my mind, but as I recall it was a voltage and current balun in series with one another. Perhaps someone reading recalls this better than I?

That's my 2-cents. Back in my hole! :)

73-Erik n0ew

3098. Re: [SkyWires] Just keep on going with the Loop antennas...

Yahoo group: SkyWires
Date: 2008-06-22 15:23:26 UTC
From: rev. don
Topic: 3087 Message: 3098

Great antena pictures. Wish we could find glass/pyrex insulators like those in the states. Also the standoff spreaders used on the feed line are very nice. Gives me good ideas for my next loop.
Don W4BWS
----- Original Message -----
From: Hans Remeeus
To: SkyWires@yahoogroups.com
Sent: Sunday, June 22, 2008 6:49 AM
Subject: Re:Just keep on going with the Loop antennas...

My 400 ft horizontal loop is the best antenna I used during the last 40
years I do Ham Radio. When the groups are interested I can ask somebody
to translate: http://www.remeeus.eu/hamradio/antennes_tuners/deltaloop.htm

--

73,
Hans Remeeus (PA1HR)
http://www.remeeus.eu
Communication is about people, the rest is technology.

3099. Re: [SkyWires] Just keep on going with the Loop antennas...

Yahoo group: SkyWires
Date: 2008-06-22 15:47:41 UTC
From: Dean
Topic: 3087 Message: 3099

You can...
Go to a Farm and Home type of store and get electric fence
insulators. The knob type.
They are Cheep and work at very high voltages.

73 Dean W5GXL

W5GXL@...

On Jun 22, 2008, at 10:23 AM, rev. don wrote:

>
> Great antena pictures. Wish we could find glass/pyrex insulators
> like those in the states.
> Also the standoff spreaders used on the feed line are very nice.
> Gives me good ideas for my next loop.
> Don W4BWS
> ----- Original Message -----
> From: Hans Remeeus
> To: SkyWires@yahoogroups.com
> Sent: Sunday, June 22, 2008 6:49 AM
> Subject: Re:Just keep on going with the Loop antennas...
>
>
>
>
>
>
> My 400 ft horizontal loop is the best antenna I used during the last
> 40
> years I do Ham Radio. When the groups are interested I can ask
> somebody
> to translate: http://www.remeeus.eu/hamradio/antennes_tuners/deltaloop.htm
>
> --
>
> 73,
> Hans Remeeus (PA1HR)
> http://www.remeeus.eu
> Communication is about people, the rest is technology.
>
>
>

3100. Hans Remeeus's loop antenna page (was: Moderators, here's how to fix the "spam" problem)

Yahoo group: SkyWires
Date: 2008-06-22 16:42:28 UTC
From: Andy
Topic: 3100 Message: 3100

> My 400 ft horizontal loop is the best antenna I used during the last 40
> years I do Ham Radio. When the groups are interested I can ask somebody
> to translate: http://www.remeeus.eu/hamradio/antennes_tuners/deltaloop.htm

English translated page:

http://translate.google.com/translate?sourceid=navclient-menuext&hl=en&u=http%3A%2F%2Fwww%2Eremeeus%2Eu%2Fhamradio%2Fantennes%5Ftuners%2Fdeltaloop%2Ehtm

which shortens to: http://tinyurl.com/6b7u6g

3101. Re: [SkyWires] Moderators, here's how to fix the "spam" problem

Yahoo group: SkyWires
Date: 2008-06-22 16:50:58 UTC
From: Jim Dunstan
Topic: 3087 Message: 3101

At 01:49 PM 6/22/2008 +0200, you wrote:

><mailto:icra%40galaxynet.com>icra@... schreef:
> >> A suitable replacement group has already been formed.
> >>
> > Why does there need to be a 'replacement' for this group?
> >
>
>IMHO Frank (eudamac3) wrote us from the positive side. I read no
>offense, attack, harm of whatsoever in his message.
>
>Just keep on going with the Loop antennas...
>
>My 400 ft horizontal loop is the best antenna I used during the last 40
>years I do Ham Radio. When the groups are interested I can ask somebody
>to translate:
><http://www.remeeus.eu/hamradio/antennes_tuners/deltaloop.htm>http://www.remeeus.eu/hamra
dio/antennes_tuners/deltaloop.htm
>
>--
>
>73,
>Hans Remeeus (PA1HR)

Hi,

Very interesting antenna/feed system. In many ways it looks like the commercial system we used many years ago when I worked in the Arctic. Our horizontal loop was actually formed into a Rhombic antenna with a resistive termination at the far corner opposite the feed point. The losses are very low .... almost an anti-climax to hook a 5 watt transmitter on the end hi hi.

Jim, VE3CI

3102. Re: [SkyWires] Balun or not to Balun, that is the question!

Yahoo group: SkyWires
Date: 2008-06-22 17:43:42 UTC
From: Jim Dunstan
Topic: 3095 Message: 3102

At 01:14 PM 6/22/2008 +0000, you wrote:

>Sorry for the korny title, but its early and the coffee hasn't kicked
>in.
>
>So what is the verdict? A balun on a skywire or not? If so, then what
>a 1:1 or a 4:1?
>
>thanks

A lot depends on where you want to put it (sorry for the korny start hi hi). But it is true. You are starting with a balanced antenna feed point way up there which ultimately is to be connected to an unbalanced output on the back of the radio in the shack. In fact, you may choose not to use a balun at all.

Generally speaking baluns are devices that work best at low impedances and in situations where you want to eliminate currents on the shield of coax cable that results from connecting it to a balanced antenna or feed line. Baluns that transform impedance as in a 4:1 balun are generally more susceptible to 'wonkey' behaviour .... especially when subjected to high impedances and substantial power.

So, If you are building a skywire for a single band it is quite possible to feed it directly with coax as the impedance mismatch will be low. However, there will be antenna current on the outside of the shield and a current balun, 1:1, located right at the feed point is a good idea. The 1:1 current balun can simply be a coil of coax feed line (20' is considered adequate) at the feed point.

However, most operators want their skywire to be a multi-band affair .... after all, it represents a lot of work putting it up ... the least it can do is serve as a multi-band unit. The feed point impedance is a close match to the coax feed line on the band for which it is designed, but the impedance varies widely up and down (mostly up) as you switch to other bands. It is possible to simply leave the coax feed line in place and match it at the point it meets the radio (using a coax transmatch). It will be possible to keep the radio happy but the efficiency (the amount of power that actually gets radiated from the antenna) will drop dramatically. You will still make contacts .... but the ERP Effective Radiated Power will be rock bottom.

So, if you build your skywire for 80m and feed it with coax (with or without a current balun at the feed point) it will operate very efficiently with your 100 w transmitter. As you switch your transceiver to other bands and tune the coax to match the radio you will have the radio happy but in

effect you will now be QRP (still feeding your 100 w to the system).

For many operators the solution is first to drop the coax feed line and to use a hi efficiency balanced feed line. The actual impedance of the feed line is not that important ... eg 300, 450, or 600 ohms is neither here nor there .... since impedance matching is not a consideration (since impedances of the antenna can be anywhere from 10 to 3000 ohms) what is important is its efficiency ... eg ... if the feed line is carrying a high SWR of say 20:1 the amount lost in the feed line (converted to heat) is low enough to be acceptable .... certainly nothing like the loss if the feed line were to be coax.

Now, somewhere along the route between the antenna and the radio the balanced feed line has to be transformed to balanced feed at 50 ohms impedance. This can be done with a single device (a balanced antenna tuner) or more commonly 2 devices, a balun and an unbalanced antenna tuner. The latter combination is the point where most of the problems arise. Most coax antenna tuners have a limited range of impedances they can match (eg tuners with coax in and coax out), and baluns 1:1 or 4:1 are susceptible to 'wonkey' behaviour when used at high impedances ... eg 1500 ohm balance to 50 ohms unbalanced. The manifestation of the problems (symptoms) are particular frequencies within certain bands where you experience inability to match to the radio, or you get flashover at some points when you apply power.

However, with the recent popularity of mult-band skywires there has been a resurgence of balanced antenna tuners. They are actually quite easy to build .... a simple L-match across the balanced feed line which then feeds a simple current balun at the output to the radio.

So, Balun or not Balun .... may not be the question.

Jim, VE3CI

3103. Re: [SkyWires] Hans Remeeus's loop antenna page

Yahoo group: SkyWires
Date: 2008-06-22 19:17:27 UTC
From: Hans Remeeus
Topic: 3100 Message: 3103

Thanks Andy.

I will give it a try.

--

73,
Hans Remeeus (PA1HR)
http://www.remeeus.eu
Communication is about people, the rest is technology.

Andy schreef:
>> My 400 ft horizontal loop is the best antenna I used during the last 40
>> years I do Ham Radio. When the groups are interested I can ask somebody
>> to translate: http://www.remeeus.eu/hamradio/antennes_tuners/deltaloop.htm
>
> English translated page:
>
> http://translate.google.com/translate?sourceid=navclient-menuext&hl=en&u=http%3A%2F%2Fww
w%2Eremeeus%2Eeu%2Fhamradio%2Fantennes%5Ftuners%2Fdeltaloop%2Ehtm
>
> which shortens to: http://tinyurl.com/6b7u6g
>
>

3104. alighty off topic

Yahoo group: SkyWires
Date: 2008-06-22 20:12:33 UTC
From: Dave Fales
Topic: 3104 Message: 3104

ok here is a slightly off topic question yesterday they had a high school giveaway because they built a new high school and wanted to get rid of stuff from the old high school there was an electronic du dad that I grabbed but not sure what it does it is a heath kit Sine Square Audio Generator what is it what does it do

3105. Re: [SkyWires] alighty off topic

Yahoo group: SkyWires
Date: 2008-06-23 03:01:58 UTC
From: Andy
Topic: 3104 Message: 3105

> it is a heath kit Sine Square Audio Generator what is it what does it do

It generates sine and square waves. In other words, it is an oscillator, with both sine and square wave outputs.

The Heathkit IG-18 (if that's the one you got) was an excellent audio oscillator in its day. There were some improvements you could do to it to make it top-notch, and its performance is still no slouch today.

We used one for all our audio testing including annual FCC tests at an FM radio station I worked for.

Andy

3106. Re: [SkyWires] alighty off topic

Yahoo group: SkyWires
Date: 2008-06-23 03:40:52 UTC
From: Dave Fales
Topic: 3104 Message: 3106

it says model ig 5218
----- Original Message -----
From: Andy
To: SkyWires@yahoogroups.com
Sent: Sunday, June 22, 2008 9:01 PM
Subject: Re: [SkyWires] alighty off topic

> it is a heath kit Sine Square Audio Generator what is it what does it do

It generates sine and square waves. In other words, it is an oscillator,
with both sine and square wave outputs.

The Heathkit IG-18 (if that's the one you got) was an excellent audio
oscillator in its day. There were some improvements you could do to it to
make it top-notch, and its performance is still no slouch today.

We used one for all our audio testing including annual FCC tests at an FM
radio station I worked for.

Andy

3107. Re: [SkyWires] alighty off topic

Yahoo group: SkyWires
Date: 2008-06-23 03:40:05 UTC
From: Dave Fales
Topic: 3104 Message: 3107

do you know od any one with a use for it
----- Original Message -----
From: Andy
To: SkyWires@yahoogroups.com
Sent: Sunday, June 22, 2008 9:01 PM
Subject: Re: [SkyWires] alighty off topic

> it is a heath kit Sine Square Audio Generator what is it what does it do

It generates sine and square waves. In other words, it is an oscillator,
with both sine and square wave outputs.

The Heathkit IG-18 (if that's the one you got) was an excellent audio
oscillator in its day. There were some improvements you could do to it to
make it top-notch, and its performance is still no slouch today.

We used one for all our audio testing including annual FCC tests at an FM
radio station I worked for.

Andy

3109. Re: [SkyWires] alighty off topic

Yahoo group: SkyWires
Date: 2008-06-24 03:39:34 UTC
From: Andy
Topic: 3104 Message: 3109

> it says model ig 5218

I think the IG-5218 was a somewhat improved version of the IG-18 ... and come to think of it, I think that's the model we actually had, not the IG-18.

Someone who occasionally needs to test and repair audio equipment, or audio sections of radio or computer equipment, could use it. It is an admittedly old, but tried and true technology. I might be interested, if I had any spare cash to spend. I miss having any test equipment of my own.

Andy

3113. experience with this "new" broadband loop?

Yahoo group: SkyWires
Date: 2008-06-30 16:14:08 UTC
From: Gerhard Baumgartner
Topic: 3113 Message: 3113

hi from austria,

i am member of this group since the end of february and i would like to build a broadband loop (50khz - 30 mhz) for my perseus sdr. i found a very interesting curcuit- and building plan here http://wl1030.com/content/ , there was a group which has build several broadband loops http://www.ng-ronde.nl/wl1030/ . those who are interested in this loop can download the general info of this loop here, it´s the file "WL1030": http://www.4shared.com/account/dir/6459794/8254f480/sharing.html?rnd=0

does anyone of you already has built such a loop or heard something about it´s usefulness in practice? any comment is welcome!

thx
gerhard

3116. Of Gutters and Overhead Wires

Yahoo group: SkyWires
Date: 2008-07-07 14:52:52 UTC
From: Keith
Topic: 3116 Message: 3116

I need an NVIS-type antenna for 80 & 40 Meters and am considering a full wave 80 meter loop. My property will just barely allow it. However, it will be at most 11 feet off the ground and 1-1/4 of the legs will be hanging from rain gutters. One other leg will be under power lines, way under.

Question: Will the rain gutters, power lines, or the low antenna height make this a fair antenna or just a poor dummy load and waste of copper?

K7KEV

3117. Re: [SkyWires] Of Gutters and Overhead Wires

Yahoo group: SkyWires
Date: 2008-07-07 15:36:45 UTC
From: Jim Dunstan
Topic: 3116 Message: 3117

At 02:52 PM 7/7/2008 +0000, you wrote:

>I need an NVIS-type antenna for 80 & 40 Meters and am considering a
>full wave 80 meter loop. My property will just barely allow it.
>However, it will be at most 11 feet off the ground and 1-1/4 of the
>legs will be hanging from rain gutters. One other leg will be under
>power lines, way under.
>
>Question: Will the rain gutters, power lines, or the low antenna height
>make this a fair antenna or just a poor dummy load and waste of copper?
>
>K7KEV

Yes and no. Depends a bit on who you want to talk to. Low eg 15 ft or less, resonant antennas 1/2 wave dipoles or 1 wave length loops, at frequencies in the 80-40 m. range work very well at distances up to 100 miles. The reason I say 100 miles is that that is my experience with Northern Trappers radio communications. Often trappers will have 3 watt SSB radios in 5 mhz range which they use to communicate back to their villages. I have seen them work very well at a distance of 40 miles using a dipole with center up 10 ft on a pole and the ends only 4 ft off the ground. I suppose that is about as NVIS as you can get.

Certainly keeping as much of it away from power absorbing objects as possible/practical would be in order. If you are looking to make contact with stations beyond that 100 miles your antenna will in effect become a dummy load.

Jim, VE3CI

3119. New file uploaded to SkyWires

Yahoo group: SkyWires
Date: 2008-07-10 17:23:16 UTC
From: SkyWires@yahoogroups.com
Topic: 434 Message: 3119

Hello,

This email message is a notification to let you know that
a file has been uploaded to the Files area of the SkyWires
group.

File : /kc8hps/rf-circuit-assistant.zip
Uploaded by : kc8hps_2003 <kc8hps_2003@...>
Description : RF Circuit Assistant runs in Windows comes with great documentation and is of wonderful help in making traps, coils,tuner circuits,impedance matching and the like.

You can access this file at the URL:
http://groups.yahoo.com/group/SkyWires/files/kc8hps/rf-circuit-assistant.zip

To learn more about file sharing for your group, please visit:
http://help.yahoo.com/l/us/yahoo/groups/original/members/web/index.htmlfiles

Regards,

kc8hps_2003 <kc8hps_2003@...>

3131. Whats up with this stuff?

Yahoo group: SkyWires
Date: 2008-07-30 15:17:46 UTC
From: n9nbn
Topic: 3131 Message: 3131

I subscribed to this group for antenna info....Not daily postings on freebies and other spam. Is there any intelligent antenna discussions here?

Mike N9NBN

3132. Re: [SkyWires] Whats up with this stuff?

Yahoo group: SkyWires
Date: 2008-07-30 17:03:25 UTC
From: DVC3565@aol.com
Topic: 3131 Message: 3132

Mike:

Go to: _LoopSkyWire@yahoogroups.com_
(mailto:LoopSkyWire@yahoogroups.com)

The "old" group got taken over by SPAM, and the originator of it is the only one who could eradicate it. He/she chose not to deal with it.

Dave-KJ4PF

**********Get fantasy football with free live scoring. Sign up for FanHouse Fantasy Football today.
(http://www.fanhouse.com/fantasyaffair?ncid=aolspr00050000000020)

3134. Re: [SkyWires] Whats up with this stuff?

Yahoo group: SkyWires
Date: 2008-07-30 18:40:59 UTC
From: n8nne@comcast
Topic: 3131 Message: 3134

The problem is that Yahoo is pathetic. They cannot re-assign ownership nor can they reset the group owner's password.

Went through that crud on another yahoo group.

73 de N8NNE
Rus

----- Original Message -----
From: <DVC3565@...>
To: <SkyWires@yahoogroups.com>
Sent: Wednesday, July 30, 2008 10:03 AM
Subject: Re: [SkyWires] Whats up with this stuff?

>
> Mike:
>
> Go to: _LoopSkyWire@yahoogroups.com_
> (mailto:LoopSkyWire@yahoogroups.com)
>
> The "old" group got taken over by SPAM, and the originator of it is the
> only
> one who could eradicate it. He/she chose not to deal with it.
>
>
> Dave-KJ4PF
>
>
>
> **********Get fantasy football with free live scoring. Sign up for
> FanHouse Fantasy Football today.
> (http://www.fanhouse.com/fantasyaffair?ncid=aolspr00050000000020)
>

3135. Re: [SkyWires] Whats up with this stuff?

Yahoo group: SkyWires
Date: 2008-07-30 21:57:00 UTC
From: mike witkowski
Topic: 3131 Message: 3135
Attachments: 2 described; binary payloads are missing from this source WARC

Hi Mike. I might be able to shed a little light on the subject. I am a moderator for a group called dxer. I have had the group for some seven years. Within the past week or too I can send messages log into my group but nothing is being posted. For one thing it is very difficult to get ahold of yahoo by any phone number. There email is more of a one sided converstation. Anotherwords you cannot tell them about any problems. If any one knows how to get someone at yahoo a little attention it might help every ones problems. So don't blame the moderator he can't do much about it. Balme yahoo. I have been trying for two weeks with no luck. The only thing I hear from them is each time I post they send me an error code and that they have given up trying to fix the problem. hope this helps. 73's mike kc9ldo

At 03:17 PM 7/30/08 +0000, you wrote:

>I subscribed to this group for antenna info....Not daily postings on
>freebies and other spam. Is there any intelligent antenna discussions
>here?
>
>Mike N9NBN
>
>
>No virus found in this incoming message.
>Checked by AVG.
>Version: 7.5.526 / Virus Database: 270.5.7/1581 - Release Date: 7/30/08
>6:56 AM

3136. Re: [SkyWires] Whats up with this stuff?

Yahoo group: SkyWires
Date: 2008-07-30 20:06:10 UTC
From: Andy
Topic: 3131 Message: 3136

> I subscribed to this group for antenna info....Not daily postings on
> freebies and other spam. Is there any intelligent antenna discussions
> here?

Yes, there are intelligent antenna discussions here ... lots of them.

Just use your delete key on the spam messages. Unfortunately, that's all the moderators can do too; they don't have privileges (in this group) to prevent spammers from joining, so this group will not be spam-free.

If your email program allows filtering incoming emails, searching for "freebies" will catch about 75% of the recent spam.

There's at least two other loop antenna Yahoogroups. Feel free to join them too.

Andy

3138. RE: [SkyWires] unsubscribe

Yahoo group: SkyWires
Date: 2008-07-30 21:51:22 UTC
From: David Shrum
Topic: 3137 Message: 3138

I can do that for you if you wish, but at the bottom of each email you can do that for yourself if you choose, it’s up to you.

Dave N8PU Co-Moderator

From: SkyWires@yahoogroups.com [mailto:SkyWires@yahoogroups.com] On Behalf Of Scott MacKenzie
Sent: Wednesday, July 30, 2008 5:26 PM
To: SkyWires@yahoogroups.com
Subject: [SkyWires] unsubscribe

No virus found in this incoming message.
Checked by AVG - http://www.avg.com
Version: 8.0.138 / Virus Database: 270.5.8/1582 - Release Date: 7/30/2008 6:37 PM

3139. RE: [SkyWires] Whats up with this stuff?

Yahoo group: SkyWires
Date: 2008-07-31 05:05:42 UTC
From: satyan
Topic: 3131 Message: 3139

Hello group - to unsubscribe juz coz of spam messages looks cowardly,
instead we all can use the delete keys happly - vu3mes

-----Original Message-----
From: SkyWires@yahoogroups.com [mailto:SkyWires@yahoogroups.com] On Behalf
Of Andy
Sent: 31 July 2008 01:36
To: SkyWires@yahoogroups.com
Subject: Re: [SkyWires] Whats up with this stuff?

> I subscribed to this group for antenna info....Not daily postings on
> freebies and other spam. Is there any intelligent antenna discussions
> here?

Yes, there are intelligent antenna discussions here ... lots of them.

Just use your delete key on the spam messages. Unfortunately, that's all
the moderators can do too; they don't have privileges (in this group) to
prevent spammers from joining, so this group will not be spam-free.

If your email program allows filtering incoming emails, searching for
"freebies" will catch about 75% of the recent spam.

There's at least two other loop antenna Yahoogroups. Feel free to join them
too.

Andy

3142. RE: [SkyWires] Whats up with this stuff?

Yahoo group: SkyWires
Date: 2008-07-31 12:45:22 UTC
From: kb0fhp@comcast.net
Topic: 3131 Message: 3142

Nope - it is the constant bickering. The old men fighting, the cross posting - recommendations to other groups, etc.

---------- Original message ----------

From: satyan <gladsarul@...>

> Hello group - to unsubscribe juz coz of spam messages looks cowardly,
> instead we all can use the delete keys happly - vu3mes
>
>
>
> -----Original Message-----
> From: SkyWires@yahoogroups.com [mailto:SkyWires@yahoogroups.com] On Behalf
> Of Andy
> Sent: 31 July 2008 01:36
> To: SkyWires@yahoogroups.com
> Subject: Re: [SkyWires] Whats up with this stuff?
>
>
>
> > I subscribed to this group for antenna info....Not daily postings on
> > freebies and other spam. Is there any intelligent antenna discussions
> > here?
>
> Yes, there are intelligent antenna discussions here ... lots of them.
>
> Just use your delete key on the spam messages. Unfortunately, that's all
> the moderators can do too; they don't have privileges (in this group) to
> prevent spammers from joining, so this group will not be spam-free.
>
> If your email program allows filtering incoming emails, searching for
> "freebies" will catch about 75% of the recent spam.
>
> There's at least two other loop antenna Yahoogroups. Feel free to join them
> too.
>
> Andy
>
>
>

3143. Re: [SkyWires] Unsubscribe

Yahoo group: SkyWires
Date: 2008-07-31 13:00:17 UTC
From: Garth Conover
Topic: 3133 Message: 3143

Please use leave group from the edit membership area accessible from the group home page. You are not going to unsubscribe using a standard posting. I am growing very weary of deleting your failed efforts to unsubscribe

----- Original Message -----
From: Steve<mailto:minimustangs@sympatico.ca>
To: SkyWires@yahoogroups.com<mailto:SkyWires@yahoogroups.com>
Sent: Thursday, July 31, 2008 8:01 AM
Subject: [SkyWires] Unsubscribe

Unsubscribe

3144. Re: Whats up with this stuff?

Yahoo group: SkyWires
Date: 2008-07-31 14:18:28 UTC
From: n9nbn
Topic: 3131 Message: 3144

Wow! At least I stirred up some activity. The delete button is used
daily, as the spam is usually the only posts in this group.
Hopefully this will be different in the future.

Mike N9NBN

--- In SkyWires@yahoogroups.com, kb0fhp@... wrote:
>
> Nope - it is the constant bickering. The old men fighting, the
cross posting - recommendations to other groups, etc.
> -------------- Original message ----------------------
> From: satyan <gladsarul@...>
> > Hello group - to unsubscribe juz coz of spam messages looks
cowardly,
> > instead we all can use the delete keys happly - vu3mes
> >
> >
> >
> > -----Original Message-----
> > From: SkyWires@yahoogroups.com [mailto:SkyWires@yahoogroups.com]
On Behalf
> > Of Andy
> > Sent: 31 July 2008 01:36
> > To: SkyWires@yahoogroups.com
> > Subject: Re: [SkyWires] Whats up with this stuff?
> >
> >
> >
> > > I subscribed to this group for antenna info....Not daily
postings on
> > > freebies and other spam. Is there any intelligent antenna
discussions
> > > here?
> >
> > Yes, there are intelligent antenna discussions here ... lots of
them.
> >
> > Just use your delete key on the spam messages. Unfortunately,
that's all
> > the moderators can do too; they don't have privileges (in this
group) to
> > prevent spammers from joining, so this group will not be spam-
free.
> >
> > If your email program allows filtering incoming emails, searching

for
> > "freebies" will catch about 75% of the recent spam.
> >
> > There's at least two other loop antenna Yahoogroups. Feel free to
join them
> > too.
> >
> > Andy
> >
> >
> >
>

3145. Re: [SkyWires] Whats up with this stuff?

Yahoo group: SkyWires
Date: 2008-07-31 16:10:59 UTC
From: Andy
Topic: 3131 Message: 3145

Me, I don't see very much spam on this group. I am subscribed through Gmail, which filters out 95+% of the spam (controllable by me), and what gets through, is either caught by my own filter, or easily zapped using my keyboard's Delete key.

Looking back a few weeks, I see discussions about baluns, insulators, 6 meter and 160 meter loops, wire gauge, trimming loops, etc. Stay tuned, and it will come.

> For one thing it is very difficult to get ahold of yahoo by any phone
> number.
...
> If any one knows how to get someone at yahoo a little attention it might
> help every ones problems.

Unfortunately, getting a hold of someone at Yahoo won't help (for this group).

The problem is the "owner" of the group is gone, and he didn't leave the "moderators" with enough control to prevent spammers from joining. Yahoo's policy is, and has always been, that the owner has supreme control over their group and even they (Yahoo) will never, ever, intervene. Even if the owner dies, Yahoo will not appoint someone else the new owner, or increase the moderators' privileges, no matter how hard you plead and beg.

Like it or not, it's Yahoo's policy. You may say it is stupid, but the other side of the argument is it prevents some dude from hijacking a group against the owner's wishes. Yahoo sides with the owner, which (I think) is the only thing that makes sense; he is after all the one who owns the group.

Any good group must have multiple moderators with FULL privileges.

Andy

3146. Re: Whats up with this stuff?

Yahoo group: SkyWires
Date: 2008-07-31 16:26:49 UTC
From: Don Keith
Topic: 3131 Message: 3146

Once again, we have had more complaints about and comments on the presence of spam messages on this reflector than we have had actual spam.

Delete it. Post something about a new variation of a skywire loop or something instead.

Mine's still working well, thank you. That despite my neighbor hiring some guys to take down some trees who managed to take down one leg of mine. Of course, one support may have strayed over onto his property just a tad!

73,

Don Keith N4KC
www.n4kc.com
www.n4kc.blogspot.com
www.donkeith.com
Look for special event station N9N from the USS Nautilus and Submarine Force Museum, August 2 and 3, commemorating the 50th anniversary of the North Pole voyage of Nautilus

--- In SkyWires@yahoogroups.com, satyan <gladsarul@...> wrote:
>
> Hello group - to unsubscribe juz coz of spam messages looks cowardly,
> instead we all can use the delete keys happly - vu3mes
>
>
>
> -----Original Message-----
> From: SkyWires@...m [mailto:SkyWires@yahoogroups.com] On Behalf
> Of Andy
> Sent: 31 July 2008 01:36
> To: SkyWires@yahoogroups.com
> Subject: Re: [SkyWires] Whats up with this stuff?
>
>
>
> > I subscribed to this group for antenna info....Not daily postings on
> > freebies and other spam. Is there any intelligent antenna discussions
> > here?
>

> Yes, there are intelligent antenna discussions here ... lots of
them.
>
> Just use your delete key on the spam messages. Unfortunately,
that's all
> the moderators can do too; they don't have privileges (in this
group) to
> prevent spammers from joining, so this group will not be spam-free.
>
> If your email program allows filtering incoming emails, searching
for
> "freebies" will catch about 75% of the recent spam.
>
> There's at least two other loop antenna Yahoogroups. Feel free to
join them
> too.
>
> Andy
>

3147. Re: skywire question

Yahoo group: SkyWires
Date: 2008-07-31 16:32:20 UTC
From: Jim Dunstan
Topic: 3131 Message: 3147

I don't know if this is off topic (since I am not giving away (fr----bies).... but I have a question or topic of discussion ... concerning radiation pattern of a horizontal loop. I have heard a number of people talking about the 'best' place to insert the feed-point. Now I can understand that there are physical considerations ... e.g. the orientation of the supports vis-a-vis the operating shack, and placing the feed point near a support in order to carry the weight of the feed-line etc.

Leaving physical considerations aside, it seems to me that if the loop was perfectly symetrical e.g. circular in shape it would make no difference at which point the feed line was inserted .... unless the feed line has some influence. Most horizontal loops are supported by at least 3 supports (triangular) or 4 (rectangular). Does the feed point have any significant influence on the radiation pattern as a result.

Jim, VE3CI

3148. Re: [SkyWires] Re: skywire question

Yahoo group: SkyWires
Date: 2008-07-31 17:10:40 UTC
From: Bill Graham
Topic: 3131 Message: 3148

Jim,

There is indeed a difference in the radiation patterns of a (square/rectangular) horizontal loop when from a corner vs (the middle of a) side. This is modeled by the late Mr. Cebik W4RNL, and can be viewed on his website at:

http://www.cebik.com/radio.html

I see that the person maintaining the site now requires a login and password, but you'll find several very good papers there on the horizontal loop antenna.

Regarding your hypothesis on the symmetrical radiation pattern of a circular loop, I suspect that you might be correct if the loop was high enough (e.g., 1.0 wavelengths high or greater). But, I suspect that when the loop is much lower that 1.0 wavelengths, that the feed pattern is affected by the feedline and the relationship of the antenna to ground. Many horizontal loops are used in the lower bands, especially for NVIS type work (80M & 160M bands especially) which are only 30-40 feet high. In these circumstances, the loop is only 0.1 or so wavelengths high (80M), and I suspect that the radiation pattern will not be symmetrical in a true circular loop.

Note that Mr. Cebik also modeled antennas for NVIS, and determined that the optimal antenna height for working NVIS was (as I remember) ~0.15 wavelengths high.

I do not have a login to Mr. Cebik's website (yet), so this is all from memory. I hope that I haven't made a mistake.

Bill
AG4SI

Jim Dunstan wrote:
>
>
> I don't know if this is off topic (since I am not giving away
> (fr----bies).... but I have a question or topic of discussion ...
> concerning radiation pattern of a horizontal loop. I have heard a
> number of people talking about the 'best' place to insert the
> feed-point. Now I can understand that there are physical
> considerations ... e.g. the orientation of the supports vis-a-vis the
> operating shack, and placing the feed point near a support in order to
> carry the weight of the feed-line etc.
>
> Leaving physical considerations aside, it seems to me that if the loop

> was perfectly symetrical e.g. circular in shape it would make no
> difference at which point the feed line was inserted .... unless the
> feed line has some influence. Most horizontal loops are supported by
> at least 3 supports (triangular) or 4 (rectangular). Does the feed
> point have any significant influence on the radiation pattern as a result.
>
> Jim, VE3CI
>
>

3149. Re: [SkyWires] Re: skywire question

Yahoo group: SkyWires
Date: 2008-07-31 21:41:55 UTC
From: Jim Dunstan
Topic: 3131 Message: 3149

At 01:10 PM 7/31/2008 -0400, you wrote:

>Jim,
>
>There is indeed a difference in the radiation patterns of a
>(square/rectangular) horizontal loop when from a corner vs (the middle of
>a) side. This is modeled by the late Mr. Cebik W4RNL, and can be viewed
>on his website at:
>
><http://www.cebik.com/radio.html>http://www.cebik.com/radio.html
>
>I see that the person maintaining the site now requires a login and
>password, but you'll find several very good papers there on the horizontal
>loop antenna.
>
>Regarding your hypothesis on the symmetrical radiation pattern of a
>circular loop, I suspect that you might be correct if the loop was high
>enough (e.g., 1.0 wavelengths high or greater). But, I suspect that when
>the loop is much lower that 1.0 wavelengths, that the feed pattern is
>affected by the feedline and the relationship of the antenna to
>ground. Many horizontal loops are used in the lower bands, especially for
>NVIS type work (80M & 160M bands especially) which are only 30-40 feet
>high. In these circumstances, the loop is only 0.1 or so wavelengths high
>(80M), and I suspect that the radiation pattern will not be symmetrical in
>a true circular loop.
>
>Note that Mr. Cebik also modeled antennas for NVIS, and determined that
>the optimal antenna height for working NVIS was (as I remember) ~0.15
>wavelengths high.
>
>I do not have a login to Mr. Cebik's website (yet), so this is all from
>memory. I hope that I haven't made a mistake.
>
>Bill
>AG4SI
>

Hi Bill,

Interesting ... I'll have to check out some of Mr. Cebik's research on the horizontal loop. I assume the 'deformation' of the radiation pattern provides some directional properties. I know I have quite a few of his articles in .PDF format. I know that .15 wavelength for NVIS is pretty much on .... In my earlier years in the north country ... (still within the tree line) ... Native trappers used SSB radios in the 5 mhz range for communications back from their camps to the village.... usually 40 to 90

miles apart. They would string dipoles up in the trees about 15 to 20 ft high and had no problems with reliable communications using 2 to 3 watts output. Not being aware of NVIS for short communications I thought and suggested hanging the antennas higher up would be better. Being very polite, they would tell me the low antennas worked just fine hi hi .

I have seen portable stations set up with the antenna only 10 - 15 ft high which proved reliable at short distances ... and in the Arctic I have even seen HF antennas set up using ski poles !! At a distance of a few hundred miles the frequencies would be silent.

In addition I assume NVIS is only useable with relatively low HF frequencies .... perhaps up to 40M. Beyond 40M I would assume NVIS would account for almost zero propogation. The 5 mhz range seems to be the magic frequency for reliable NVIS communications.

Jim, VE3CI

3150. Horizontal Half Wave Open Loop in the attic

Yahoo group: SkyWires
Date: 2008-08-02 01:57:16 UTC
From: Jonathan Helis KB5IAV
Topic: 3150 Message: 3150

For the last several months, I've been experimenting with a horizontal half wave open loop in the attic of my 1 story house. It's basically a dipole in the shape of a horizontal loop 25ft x 5ft, for a total of 60 feet of wire. It's fed with 300ohm TV Twinlead, a 4:1 balun, and it's tuned with an LDG Z-11 Pro autotuner.

I've been working alot of PSK31 not running more than 40 watts and here are the results I'm getting:

On 20 meters, I've been able to work Alabama, Floriday, Georgia, Kansas, Kentucky, Michigan, Missouri, New Mexico, New York, Ohio, Pennsylvania, Tennessee, Texas, and Wisconsin. On the DX front, I've worked Guatemala, Cuba, Costa Rica, and Puerto Rico from my Louisiana QTH.

On 40, I've worked Florida, Indiana, Kentucky, and Oklahoma.

With some of those close in QSOs on 20, I wonder if my antenna is a cloud warmer.

I've tried loading on 17, 15, 12, and 10 and haven't made any PSK31 contacts.

I was wondering how that performance compares to what others are getting right now. I'm thinking of replacing the antenna once summer is over and I can get into the attic, possibly with an OCF dipole or something like that.

Any comments are welcome.

--
73,

Jonathan Helis, KB5IAV
Baton Rouge, Louisiana, USA

3155. Re:A list of Software that we must have on our computer

Yahoo group: SkyWires
Date: 2008-08-12 13:22:38 UTC
From: Jose HF Silva
Topic: 3155 Message: 3155

Is this spam?

joe

NOTICE: We collect personal information on this site.
To learn more about how we use your information, see our Privacy Policy

3156. Re: [SkyWires] Re:A list of Software that we must have on our computer

Yahoo group: SkyWires
Date: 2008-08-13 01:24:45 UTC
From: Andy
Topic: 3155 Message: 3156

> Is this spam?

Yes.

3159. Re: [SkyWires] Freebies go to Hell!

Yahoo group: SkyWires
Date: 2008-08-18 11:19:22 UTC
From: Jose HF Silva
Topic: 3159 Message: 3159

Why can't we get protected for ever from this pest?

--- On Mon, 8/18/08, SkyWires@yahoogroups.com <SkyWires@yahoogroups.com> wrote:

From: SkyWires@yahoogroups.com <SkyWires@yahoogroups.com>
Subject: [SkyWires] Digest Number 970
To: SkyWires@yahoogroups.com
Date: Monday, August 18, 2008, 12:01 PM

SkyWire Loop Antennas

Messages In This Digest (1 Message)

1.
Freebies 18th August From: christiedurning
View All Topics | Create New Topic
Message

1.

Freebies 18th August
Posted by: "christiedurning" christiedurning@... christiedurning
Mon Aug 18, 2008 2:49 am (PDT)
This is a link to a NEW FREEBIE PAGE for this week so I thought I would,
share it with the group...enjoy!

The link goes to the latest freebie page where you can collect TONS of
items for FREE! There is so much on offer that its definately worth the visit.

http://www.freebiet elegraph. com/?page= 13

When you have had your freebies, be nice to your family and friends and
pass on the link above, like I did!

Take care and have a great week!

Back to top Reply to sender | Reply to group | Reply via web post
Messages in this topic (1)

Recent Activity

 4
New MembersVisit Your Group

Yahoo! Groups
Join a program
to help you find
balance in your life.

Cat Zone
on Yahoo! Groups
Join a Group
all about cats.

Real Food Group
Share recipes,
restaurant ratings
and favorite meals.

Need to Reply?
Click one of the "Reply" links to respond to a specific message in the Daily Digest.
Create New Topic | Visit Your Group on the Web
Messages | Files | Photos | Links | Database | Polls | Members | Calendar

Change settings via the Web (Yahoo! ID required)
Change settings via email: Switch delivery to Individual | Switch format to Traditional
Visit Your Group | Yahoo! Groups Terms of Use | Unsubscribe

3160. RE: [SkyWires] Freebies go to Hell!

Yahoo group: SkyWires
Date: 2008-08-18 14:45:27 UTC
From: Paul T
Topic: 3159 Message: 3160

You can.. just create a rule in your email client to delete them on receipt.

If you don't use an email client, but read them via a web browser then
you'll just have to live with it and use your DELete key.

For a peaceful and stress free experience, use an email client and rules
instead of a web browser!

Paul MW0CDO.

From: SkyWires@yahoogroups.com [mailto:SkyWires@yahoogroups.com] On Behalf
Of Jose HF Silva
Sent: 18 August 2008 12:19
To: SkyWires@yahoogroups.com
Subject: Re: [SkyWires] Freebies go to Hell!

Why can't we get protected for ever from this pest?

--- On Mon, 8/18/08, SkyWires@yahoogroups.com <SkyWires@yahoogroups.com>
wrote:

From: SkyWires@yahoogroups.com <SkyWires@yahoogroups.com>
Subject: [SkyWires] Digest Number 970
To: SkyWires@yahoogroups.com
Date: Monday, August 18, 2008, 12:01 PM

SkyWire Loop Antennas
<http://groups.yahoo.com/group/SkyWires;_ylc=X3oDMTJlbjFpYzRzBF9TAzk3MzU5NzE
1BGdycElkAzEwOTQ2MTE5BGdycHNwSWQDMTcwNTA2MzEwOARzZWMDaGRyBHNsawNocGgEc3RpbWU
DMTIxOTA1NzMxMg-->

Messages In This Digest (1 Message)

1.

Freebies
<http://us.mc655.mail.yahoo.com/mc/compose?&.rand=741290454&da=0&replyall#1>
18th August From: christiedurning

View All Topics
<http://groups.yahoo.com/group/SkyWires/messages;_ylc=X3oDMTJnYXVsZGFyBF9TAz
k3MzU5NzE1BGdycElkAzEwOTQ2MTE5BGdycHNwSWQDMTcwNTA2MzEwOARzZWMDZG1zZwRzbGsDYX
RwYwRzdGltZQMxMjE5MDU3MzEy?xm=1&m=p&tidx=1> | Create New Topic
<http://groups.yahoo.com/group/SkyWires/post;_ylc=X3oDMTJndDZncWtqBF9TAzk3Mz
U5NzE1BGdycElkAzEwOTQ2MTE5BGdycHNwSWQDMTcwNTA2MzEwOARzZWMDZG1zZwRzbGsDbnRwYw
RzdGltZQMxMjE5MDU3MzEy>

Message

1.

Freebies 18th August
<http://groups.yahoo.com/group/SkyWires/message/3158;_ylc=X3oDMTJyaDBpMGRvBF
9TAzk3MzU5NzE1BGdycElkAzEwOTQ2MTE5BGdycHNwSWQDMTcwNTA2MzEwOARtc2dJZAMzMTU4BH
NlYwNkbXNnBHNsawN2bXNnBHN0aW1lAzEyMTkwNTczMTI->

3161. Re: [SkyWires] Freebies go to Hell!

Yahoo group: SkyWires
Date: 2008-08-18 19:05:43 UTC
From: Andy
Topic: 3159 Message: 3161

> Why can't we get protected for ever from this pest?

FYI, this particular spammer ("christiedurning") joined this group on August 18 ... today.

That's how they work. They sign up and send spam, then either quit the group or let themselves be dropped before signing up again with a different name.

As you know if you've read any of the discussions about spam on this group, the moderators are powerless to *prevent* spammers from signing up here. They can only ban them after they've done their stuff.

Do what I do ... just ignore them. It only raises your blood pressure if you let them get to you! I get lots of unwanted mail in my postal (snail) mailbox too, but there's not much I can do about it.

I see you read the Digests so you can't just delete them or use a Rule to auto-delete them.

Andy

3162. RE: [SkyWires] Freebies go to Hell!

Yahoo group: SkyWires
Date: 2008-08-18 22:04:06 UTC
From: David Shrum
Topic: 3159 Message: 3162

What I've been doing is to moderate their post once they hit us the first time, I haven't seen a request come through to approve a second post. If you look at the member list they set it to 'no email' for their self, I do believe they do just that, hit and run and change their name.
Dave N8PU Co-moderator

-----Original Message-----
From: SkyWires@yahoogroups.com [mailto:SkyWires@yahoogroups.com] On Behalf Of Andy
Sent: Monday, August 18, 2008 3:06 PM
To: SkyWires@yahoogroups.com
Subject: Re: [SkyWires] Freebies go to Hell!

> Why can't we get protected for ever from this pest?

FYI, this particular spammer ("christiedurning") joined this group on August 18 ... today.

That's how they work. They sign up and send spam, then either quit the group or let themselves be dropped before signing up again with a different name.

As you know if you've read any of the discussions about spam on this group, the moderators are powerless to *prevent* spammers from signing up here. They can only ban them after they've done their stuff.

Do what I do ... just ignore them. It only raises your blood pressure if you let them get to you! I get lots of unwanted mail in my postal (snail) mailbox too, but there's not much I can do about it.

I see you read the Digests so you can't just delete them or use a Rule to auto-delete them.

Andy

Yahoo! Groups Links

Checked by AVG - http://www.avg.com
Version: 8.0.138 / Virus Database: 270.6.4/1617 - Release Date: 8/17/2008 12:58 PM
No virus found in this outgoing message.
Checked by AVG - http://www.avg.com
Version: 8.0.138 / Virus Database: 270.6.4/1617 - Release Date: 8/17/2008 12:58 PM

3164. Re: Freebies go to Hell!

Yahoo group: SkyWires
Date: 2008-08-21 17:45:19 UTC
From: Mike
Topic: 3159 Message: 3164

Their profile is still good so they have not yet been deleted by
Yahoo. I forwarded a copy of the spam to abuse@.... That
usually gets the account deleted.

--- In SkyWires@yahoogroups.com, "David Shrum" <aq392@...> wrote:
>
> What I've been doing is to moderate their post once they hit us the
first
> time, I haven't seen a request come through to approve a second
post. If you
> look at the member list they set it to 'no email' for their self, I
do
> believe they do just that, hit and run and change their name.
> Dave N8PU Co-moderator
>
> -----Original Message-----
> From: SkyWires@yahoogroups.com [mailto:SkyWires@yahoogroups.com] On
Behalf
> Of Andy
> Sent: Monday, August 18, 2008 3:06 PM
> To: SkyWires@yahoogroups.com
> Subject: Re: [SkyWires] Freebies go to Hell!
>
> > Why can't we get protected for ever from this pest?
>
> FYI, this particular spammer ("christiedurning") joined this group
on August
> 18 ... today.
>
> That's how they work. They sign up and send spam, then either quit
the
> group or let themselves be dropped before signing up again with a
different
> name.
>
> As you know if you've read any of the discussions about spam on
this group,
> the moderators are powerless to *prevent* spammers from signing up
here.
> They can only ban them after they've done their stuff.
>
> Do what I do ... just ignore them. It only raises your blood
pressure if
> you let them get to you! I get lots of unwanted mail in my postal
(snail)

> mailbox too, but there's not much I can do about it.
>
> I see you read the Digests so you can't just delete them or use a
Rule to
> auto-delete them.
>
> Andy
>
>
>
> ---
>
> Yahoo! Groups Links
>
>
>
> Checked by AVG - http://www.avg.com
> Version: 8.0.138 / Virus Database: 270.6.4/1617 - Release Date:
8/17/2008
> 12:58 PM
> No virus found in this outgoing message.
> Checked by AVG - http://www.avg.com
> Version: 8.0.138 / Virus Database: 270.6.4/1617 - Release Date:
8/17/2008
> 12:58 PM
>

3168. unsubcribe

Yahoo group: SkyWires
Date: 2008-08-28 10:25:23 UTC
From: Larry Wright
Topic: 3168 Message: 3168

unsubcribe

3169. Help With Building A Loop

Yahoo group: SkyWires
Date: 2008-08-28 14:54:32 UTC
From: wargodjd
Topic: 3169 Message: 3169

Putting up a big loop, probably bigger than 160m. This will be my first antenna effort and I could use some advice.

How to de-ice? Up here in Maine a big loop will ice up heavily I should think. Other than transmitting, how to get the loop to melt the ice? Just switching in 115 volts AC seems dangerous.

Going to use homebrew ladder line. Does this mean a 4:1 current balun inside the shack is best? Can I homebrew one that is as good or better than store bought? My rig is a Kenwood 940 with an ATU. Definitely not a balanced line tuner.

Lightning is a worry, should there be a switch outside the shack? Just unscrewing the coax at the ATU seems really risky.

Thanks for the help.

73

Jerry Williams
AA1XX

3170. Re: [SkyWires] Help With Building A Loop

Yahoo group: SkyWires
Date: 2008-08-28 15:29:48 UTC
From: Dean
Topic: 3169 Message: 3170

Greetings,
For Ice and wind take a lesson from your local power
company. Buld it heavy and strong.
Use a dark colored wire if you can as it will absorb
heat and melt the ice.
You should have a Balun inside your tuner. Use it.
Make a Lightning arestor OUTSIDE you shack.
Use a good ground. I have made one from a 4 X 6 inch
3/8 hunk of copper and brazed two spark plugs into it.
I grounded the copper plate and hooked the lader line
to the spark plug tips. It was just some stuff I had
in my garage. Keep your tuner grounded to the same
outside ground as your spark gap.
Best to have ONLY One ground for everything.
And use Heavy copper wire.

Best of luck.
73 Dean W5GXL@...

On Aug 28, 2008, at 9:54 AM, wargodjd wrote:

> Putting up a big loop, probably bigger than 160m. This will be my
> first antenna effort and I could use some advice.
>
> How to de-ice? Up here in Maine a big loop will ice up heavily I
> should think. Other than transmitting, how to get the loop to melt
> the ice? Just switching in 115 volts AC seems dangerous.
>
> Going to use homebrew ladder line. Does this mean a 4:1 current
> balun inside the shack is best? Can I homebrew one that is as good
> or better than store bought? My rig is a Kenwood 940 with an ATU.
> Definitely not a balanced line tuner.
>
> Lightning is a worry, should there be a switch outside the shack?
> Just unscrewing the coax at the ATU seems really risky.
>
> Thanks for the help.
>
> 73
>
> Jerry Williams
> AA1XX
>
>
>

3171. Re: [SkyWires] Help With Building A Loop

Yahoo group: SkyWires
Date: 2008-08-28 17:24:44 UTC
From: Jim Dunstan
Topic: 3169 Message: 3171

At 02:54 PM 8/28/2008 +0000, you wrote:

>Putting up a big loop, probably bigger than 160m. This will be my
>first antenna effort and I could use some advice.
>
>How to de-ice? Up here in Maine a big loop will ice up heavily I
>should think. Other than transmitting, how to get the loop to melt
>the ice? Just switching in 115 volts AC seems dangerous.

I have no experience with de-icing a loop antenna .... however a controlled DC current via the ladder line might be a useful. A variable voltage DC supply might work ... starting at the lowest voltage work up while monitoring the current to see that it stays within the limits of the supply. Your ladder line should be of the same gauge or larger than the antenna wire and be certain all connections are well done. I have used this technique de-icing copper piping.

>Going to use homebrew ladder line. Does this mean a 4:1 current
>balun inside the shack is best? Can I homebrew one that is as good
>or better than store bought? My rig is a Kenwood 940 with an ATU.
>Definitely not a balanced line tuner.

There is almost no way to predict what the impedance is going to be at any particular frequency at the end of the feed line where it joins your tuner. A current balun .... in fact even a voltage balun or transformer does not work well at high impedance values. They are primarily designed and work well at around 50 ohms. As the impedance gets hi they become less efficient and absorb power and become outright dangerous if you are running high power. The ideal is to use a tuner designed for balanced feed line .... or you can feed the balanced line directly to the unbalanced output of your present tuner and then isolate the frame from ground and feed to your xcvr via a 1:1 current balun.

>Lightning is a worry, should there be a switch outside the shack?
>Just unscrewing the coax at the ATU seems really risky.

Yes, there should be a direct path to ground outside the shack at the point where it comes into the shack. The connection can be via a short gap to the ground wire. I would also recommend un-plugging the line to the tuner inside the shack during storms and shorting the input to the radio. Not sure what your wx in Maine is like, but large wire antennas in some locations can build up high static voltages .... the small gap between the feed line and the direct ground connection can serve the second function of providing a route for these voltages. I have seen wires shorter than what u describe drawing sparks to ground in well in excess of 3 inches.

>Thanks for the help.
>
>73
>
>Jerry Williams
>AA1XX

Jim, VE3CI

3172. Re: [SkyWires] Help With Building A Loop

Yahoo group: SkyWires
Date: 2008-08-29 21:32:20 UTC
From: Jeff Stevens
Topic: 3169 Message: 3172

That's a heck of a project! Should be fun!

I spent the first 24 years of my life in Central and Eastern Maine and don't think I would worry too much about melting ice. While I live in Western Washington now, I use Coperweld copper clad steel wire for even my short dipoles and would certainly do the same for a big loop. It comes with a sturdy black insulation as well. It's not as cheap as 14 gauge stranded THHN from Home Depot, but it will lessen the chance that you'll spend more time splicing breaks than operating.

The corner supports would concern me more. A nice gentle bend as opposed to something sharp is preferred. Sharp bends become cantilevered points which will fail prematurely even without ice. With the possibility of ice, it becomes even more important.

-Jeff
W7WWA

On Thu, 2008-08-28 at 14:54 +0000, wargodjd wrote:
> Putting up a big loop, probably bigger than 160m. This will be my
> first antenna effort and I could use some advice.
>
> How to de-ice? Up here in Maine a big loop will ice up heavily I
> should think. Other than transmitting, how to get the loop to melt
> the ice? Just switching in 115 volts AC seems dangerous.
>
> Going to use homebrew ladder line. Does this mean a 4:1 current
> balun inside the shack is best? Can I homebrew one that is as good
> or better than store bought? My rig is a Kenwood 940 with an ATU.
> Definitely not a balanced line tuner.
>
> Lightning is a worry, should there be a switch outside the shack?
> Just unscrewing the coax at the ATU seems really risky.
>
> Thanks for the help.
>
> 73
>
> Jerry Williams
> AA1XX
>
>
>
>
>

3173. AW: [SkyWires] Help With Building A Loop

Yahoo group: SkyWires
Date: 2008-08-30 15:07:19 UTC
From: Siegfried Jackstien
Topic: 3169 Message: 3173
Attachments: 1 described; binary payloads are missing from this source WARC

dear groupmembers
i made a fullsizeloop for topband about 168m .... didn?t really measure just made it 170m long and then cut and try, cut and try .....
it is now about 168m long and it is made of aluminium fence wire (lightweight but strong)
i feed it with a ladderline for 80m with about 18m of ladderline and for topband i switch in another 20m so i feed it with a quarterwave lenght of line
the impedance on these bands are low at the feedingpoint and after the ladderline (in the shack) the impedance is 400 - 500 ohms
i made a homebrew 1:9 balun (not an unun!) with an amidon red 200A and it works great on ANY band with it ...
on 40m it is fed with long or short ladderline and the resonance is for the short line abt. 7.05 and for the longer line abt 7.15
on the higher bands there are many resonance points so you can use it anywhere you want ...
to manage all the measurements i made an excelsheet for all my notes....(see atached file!)
the impedance on the lowbands are low but will be transformed high via the laddelinelenght of a quarterwave
on 40 you have abt 400 ohms and a halfwave or fullwave feedingline so no transforming
i spent abt. 2 days with cut and try for this antenna but now it works superb for me....
the extra lenght is under the roof of my house and i have to switch it in between for the topband or if i want to use the upper part of 40m
the feedingline is a so called windowline of 450 ohms but surely you can use a homebrewed one if you couldn?t buy it somewhere
if somebody wants the desciption of the balun just ask and i will explain it
good luck with building such a superallbandwireantenna :-)
dg9bfc
[Siegfried Jackstien]

-----Urspr?ngliche Nachricht-----
Von: SkyWires@yahoogroups.com [mailto:SkyWires@yahoogroups.com]Im Auftrag von Jeff Stevens
Gesendet: Freitag, 29. August 2008 21:32
An: SkyWires@yahoogroups.com
Betreff: Re: [SkyWires] Help With Building A Loop

That's a heck of a project! Should be fun!

I spent the first 24 years of my life in Central and Eastern Maine and don't think I would worry too much about melting ice. While I live in Western Washington now, I use Coperweld copper clad steel wire for even

my short dipoles and would certainly do the same for a big loop. It comes with a sturdy black insulation as well. It's not as cheap as 14 gauge stranded THHN from Home Depot, but it will lessen the chance that you'll spend more time splicing breaks than operating.

The corner supports would concern me more. A nice gentle bend as opposed to something sharp is preferred. Sharp bends become cantilevered points which will fail prematurely even without ice. With the possibility of ice, it becomes even more important.

-Jeff
W7WWA

On Thu, 2008-08-28 at 14:54 +0000, wargodjd wrote:
> Putting up a big loop, probably bigger than 160m. This will be my
> first antenna effort and I could use some advice.
>
> How to de-ice? Up here in Maine a big loop will ice up heavily I
> should think. Other than transmitting, how to get the loop to melt
> the ice? Just switching in 115 volts AC seems dangerous.
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> Going to use homebrew ladder line. Does this mean a 4:1 current
> balun inside the shack is best? Can I homebrew one that is as good
> or better than store bought? My rig is a Kenwood 940 with an ATU.
> Definitely not a balanced line tuner.
>
> Lightning is a worry, should there be a switch outside the shack?
> Just unscrewing the coax at the ATU seems really risky.
>
> Thanks for the help.
>
> 73
>
> Jerry Williams
> AA1XX
>
>
>
>
>

3174. English translation of DeltaLoop site

Yahoo group: SkyWires
Date: 2008-08-31 07:35:57 UTC
From: Hans Remeeus
Topic: 3174 Message: 3174

Dear all,

Thanks to Andy I transfered an English translation of my DeltaLoop site to:

http://www.remeeus.eu/english/hamradio/deltaloop.htm

--

73,
Hans Remeeus (PA1HR)
http://www.remeeus.eu
Communication is about people, the rest is technology.

3176. first loop entry suggestions

Yahoo group: SkyWires
Date: 2008-09-01 11:37:04 UTC
From: n1dve
Topic: 3176 Message: 3176

I searched around the old messages and didn't come up with much so here we go... I want to put up my first loop and need entry suggestions for my ladder line into the shach. I have a large metal conduit for coax entry so I cannot use that as far as I know. I have storm windows so I need to stay away fronm the metal frame I believe but not sure how far. Thinking about maybe drilling through the wall and using two 1 foot pieces of RG8 as a feedthrough with the ladder line on both sides and tying the shields together without grounding. Then a knife switch to open the feedline and ground when weather gets scary. The ladderline will then go to my Dentron tuner then to the rig. So I am not sure how to go, maybe a wood panel in the window with the laderline popped through without a feedthrough? I kinda like the coax feedthrough idea if it would work OK but I have to tink about drilling through the side of the house. Can I use the feedthrough idea but just let it lay between the metal storm window frames? Consider I would like to use my 1200 watts as well and give me your suggestions or just tell me what you have done so I can consider other alternatives. Thankd in advance for the help! 73, Jacqui

3177. AW: [SkyWires] first loop entry suggestions

Yahoo group: SkyWires
Date: 2008-09-01 14:55:38 UTC
From: Siegfried Jackstien
Topic: 3176 Message: 3177

dear jaqui
if you have the space try to build a fullzizeloop for topband abt. 168m
i feed it with ladderline and it works great on any band
feedthrough the wall with two pieces of koax would work okay
laying the ladderline between the windowframe is not okay because
the isolation could fail with your power
happy dxing
dg9bfc
-----Urspr?ngliche Nachricht-----
Von: SkyWires@yahoogroups.com [mailto:SkyWires@yahoogroups.com]Im Auftrag
von n1dve
Gesendet: Montag, 1. September 2008 11:37
An: SkyWires@yahoogroups.com
Betreff: [SkyWires] first loop entry suggestions

I searched around the old messages and didn't come up with much so here
we go... I want to put up my first loop and need entry suggestions for
my ladder line into the shach. I have a large metal conduit for coax
entry so I cannot use that as far as I know. I have storm windows so I
need to stay away fronm the metal frame I believe but not sure how
far. Thinking about maybe drilling through the wall and using two 1
foot pieces of RG8 as a feedthrough with the ladder line on both sides
and tying the shields together without grounding. Then a knife switch
to open the feedline and ground when weather gets scary. The
ladderline will then go to my Dentron tuner then to the rig. So I am
not sure how to go, maybe a wood panel in the window with the laderline
popped through without a feedthrough? I kinda like the coax
feedthrough idea if it would work OK but I have to tink about drilling
through the side of the house. Can I use the feedthrough idea but just
let it lay between the metal storm window frames? Consider I would
like to use my 1200 watts as well and give me your suggestions or just
tell me what you have done so I can consider other alternatives.
Thankd in advance for the help! 73, Jacqui

3178. Re: [SkyWires] first loop entry suggestions

Yahoo group: SkyWires
Date: 2008-09-01 14:12:58 UTC
From: Dean
Topic: 3176 Message: 3178

To feed ladder line through a window try placing
a couple of 3/8 inch PVC pipes drilled and spaced
into the frame below the window.
This will give you a nice looking feed through that
can be patched latter on if you don't want it.
The PVC pipe will insulate for you .

73 Dean W5GXL

****

> feedthrough idea if it would work OK but I have to tink about drilling
> through the side of the house. Can I use the feedthrough idea but just
> let it lay between the metal storm window frames? Consider I would
> like to use my 1200 watts as well and give me your suggestions or just
> tell me what you have done so I can consider other alternatives.
> Thankd in advance for the help! 73, Jacqui
>
>

3179. Re: [SkyWires] first loop entry suggestions

Yahoo group: SkyWires
Date: 2008-09-01 15:34:55 UTC
From: Jim Dunstan
Topic: 3176 Message: 3179

At 11:37 AM 9/1/2008 +0000, you wrote:

>I searched around the old messages and didn't come up with much so here
>we go... I want to put up my first loop and need entry suggestions for
>my ladder line into the shach. I have a large metal conduit for coax
>entry so I cannot use that as far as I know. I have storm windows so I
>need to stay away fronm the metal frame I believe but not sure how
>far. Thinking about maybe drilling through the wall and using two 1
>foot pieces of RG8 as a feedthrough with the ladder line on both sides
>and tying the shields together without grounding. Then a knife switch
>to open the feedline and ground when weather gets scary. The
>ladderline will then go to my Dentron tuner then to the rig. So I am
>not sure how to go, maybe a wood panel in the window with the laderline
>popped through without a feedthrough? I kinda like the coax
>feedthrough idea if it would work OK but I have to tink about drilling
>through the side of the house. Can I use the feedthrough idea but just
>let it lay between the metal storm window frames? Consider I would
>like to use my 1200 watts as well and give me your suggestions or just
>tell me what you have done so I can consider other alternatives.
>Thankd in advance for the help! 73, Jacqui

Hi,

You Have a lot of good suggestions yourself. Perhaps you could join two of them together to avoid drilling additional holes in the wall. You mention a large metal conduit for coax. If it is large enough for 2 additional runs of RG8 coax you could run a pair taped together of the necessary length to go from the ladder line on the outside right to the antenna tuner at the operating position .... or to the switch ... etc ... your choice. I am sure adding a piece of coax balanced line will have little if any effect on your antenna operation. If you tie the shield together further spacing is not necessary ... if that was the reason you wanted to drill holes in the wall.

Jim, VE3CI

3180. Re: first loop entry suggestions

Yahoo group: SkyWires
Date: 2008-09-01 15:48:04 UTC
From: Don Keith
Topic: 3176 Message: 3180

Jacqui, as mentioned by someone else, you can simply use two pieces of coax run parallel through your current coax feedthrough conduit. Use each of the center conductors hooked to each of the two conductors of the ladder line, then tie the shields together and ground them...some say on both ends, some say on the outside end, but I just ground the rig/tuner end of the shields to my main station ground and it works fine.

If you can switch back to ladder line okay on the inside of the house to the tuner without getting within a few inches of anything metal, go for it. My twin run of coax did run all the way to the tuner, which had a 4:1 balun on the output for balanced line. Now I've gone to a high-power auto-tuner with no balun and I'm using a 1:1 balun inside the shack and a short run of coax to an unbalanced tuner output.

Good luck with the loop. She's a fine antenna. I've got some stuff about loops and ladder line on my web site at www.n4kc.com if you are interested.

Don N4KC
www.n4kc.com
www.n4kc.blogspot.com
www.donkeith.com

--- In SkyWires@yahoogroups.com, "n1dve" <n1dve@...> wrote:
>
> I searched around the old messages and didn't come up with much so here
> we go... I want to put up my first loop and need entry suggestions for
> my ladder line into the shach. I have a large metal conduit for coax
> entry so I cannot use that as far as I know. I have storm windows so I
> need to stay away fronm the metal frame I believe but not sure how
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> foot pieces of RG8 as a feedthrough with the ladder line on both sides
> and tying the shields together without grounding. Then a knife switch
> to open the feedline and ground when weather gets scary. The
> ladderline will then go to my Dentron tuner then to the rig. So I am
> not sure how to go, maybe a wood panel in the window with the

laderline
> popped through without a feedthrough? I kinda like the coax
> feedthrough idea if it would work OK but I have to tink about
drilling
> through the side of the house. Can I use the feedthrough idea but
just
> let it lay between the metal storm window frames? Consider I would
> like to use my 1200 watts as well and give me your suggestions or
just
> tell me what you have done so I can consider other alternatives.
> Thankd in advance for the help! 73, Jacqui
>

3182. Re: first loop entry suggestions

Yahoo group: SkyWires
Date: 2008-09-05 01:43:44 UTC
From: n1dve
Topic: 3176 Message: 3182

OK everyone, thanks for the help! I think I will go with the 2 short RG-8 runs through the wall but it got me thinking. Everywhere I see that I should not get the ladder-line near metal but here I am surrounding each wire with a shield that is grounded. I know everyone does it so it must work. I'm curious, why is this not count as a metal object, especially since it is at a ground potential? Can anyone help me digest this? Why wouldn't two wires unshielded be better? Ya gotta love this hobby, it constantly makes you think! Jacqui

> --- In SkyWires@yahoogroups.com, "n1dve" <n1dve@> wrote:
> >
> > I searched around the old messages and didn't come up with much so
> here
> > we go... I want to put up my first loop and need entry suggestions
> for
> > my ladder line into the shach. I have a large metal conduit for
> coax
> > entry so I cannot use that as far as I know. I have storm windows
> so I
> > need to stay away fronm the metal frame I believe but not sure how
> > far. Thinking about maybe drilling through the wall and using two
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> > and tying the shields together without grounding. Then a knife
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> > to open the feedline and ground when weather gets scary. The
> > ladderline will then go to my Dentron tuner then to the rig. So I
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> > not sure how to go, maybe a wood panel in the window with the
> laderline
> > popped through without a feedthrough? I kinda like the coax
> > feedthrough idea if it would work OK but I have to tink about
> drilling
> > through the side of the house. Can I use the feedthrough idea but
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> > let it lay between the metal storm window frames? Consider I would
> > like to use my 1200 watts as well and give me your suggestions or
> just
> > tell me what you have done so I can consider other alternatives.
> > Thankd in advance for the help! 73, Jacqui
> >
>

3183. increasing size of horizontal loop from 80 to 160 meters

Yahoo group: SkyWires
Date: 2008-09-05 16:05:39 UTC
From: Alan Wilson
Topic: 3183 Message: 3183

Hi all, I just finished almost doubling the wire of my 75 meter horizontal loop. One end has square corners while on the end one end is square while the other corner extends to the property line. The antenna is fed with 450 ladderline, runs to the shack wall and is connected inside via a 4 to 1 balun. 160 will tune fine with the internal tuner as do most bands with the exception of 75 meters which can be tuned in fine with an external tuner. Height varies from 60 feet on one corner to about 40 on the others. I expect to have a little better dx angle on 75 while 160 will be NVIS. I don't know about the other bands, they do load up easily. Has anyone built or modeled this variation of the loop antenna? I'd like to hear some experiences or see a model if someone can do this...thanks es 73, Alan Wilson

3184. Re: [SkyWires] Re: first loop entry suggestions

Yahoo group: SkyWires
Date: 2008-09-05 17:52:56 UTC
From: Jim Dunstan
Topic: 3176 Message: 3184

At 01:43 AM 9/5/2008 +0000, you wrote:

>OK everyone, thanks for the help! I think I will go with the 2 short
>RG-8 runs through the wall but it got me thinking. Everywhere I see
>that I should not get the ladder-line near metal but here I am
>surrounding each wire with a shield that is grounded. I know everyone
>does it so it must work. I'm curious, why is this not count as a
>metal object, especially since it is at a ground potential? Can
>anyone help me digest this? Why wouldn't two wires unshielded be
>better? Ya gotta love this hobby, it constantly makes you think! Jacqui

Hi,

Okay, here is my take on the subject from my experience and what I have read over the years. Balanced feed line has 2 favorable characteristics that make it very desirable for Amateur antenna work: first, it has low loss .... especially in situations with high SWR, and second, as long as you keep it 'balanced' there is little RF radiation from the line. Keeping it balanced is the key .... e.g. the RF voltage and current curves are equal and opposite on each side of the line .... which allows cancellation of the RF fields.

Now, in a situation where the feed line comes close to metal objects it is imperative that the line should be 'dressed' in such a manner that a sufficient distance is kept between the line and the metal object .... eg more than the distance of the small field surrounding the feed line .... and any interaction that does take place should be equal to each side of the line.

First, the distance ... eg how large is the field around the line? Well the extent of the field around the line is proportional to the distance separating the two wires that make up the feed line. Conversely, the efficiency of the line is the opposite ... eg the wider the separation the more efficient (eg line loss ... especially due to SWR) the line. Generally speaking the greater the separation of the wires in the feed line the higher the impedance of the line, the lower the loss, and the larger the radiation field around the line. As a consequence line with wide separation is more susceptible to interaction with surrounding metal objects and more care must be taken in 'dressing' the line between the antenna and radio. Someone posted pictures of a home brew feed line system with wide .... eg 4" to 6" separation and dressed it close to objects like rain gutters etc ... which is not good practice with such wide spaced line.

Now narrowly spaced feed line like 300 ohm TV twin lead is much more immune to surrounding metal objects .... even though it has higher loss ... since the radiation field is very small due to the close spacing. At one time

they used to manufacture 75 ohm balanced line ... which even more immune to metal objects ... in fact you could almost treat it the same as coax. In my experience TV twin lead can be coiled (loosely) with almost zero change (as indicated on an RF bridge).

How to maintain balance given what you got ? Some rules for dressing balanced feed line: - keep it a sufficient distance from metal objects .... the sufficiency depends upon how wide the field is around the line ... which in turn is related to how wide the wires are separated in the line. 6" is sufficient for 300 ohm twinlead ... and goes up with wider spaced line. If the line is running parallel to the metal object ... eg like down a metal tower ...keep it as far away from the towr as practical and put slow twists in the feed line to aid maintaining balance. If crossing the metal object at a 90 degree angle ... there is little interaction as each side is affected equally ... eg going past a rain gutter.

The coax theory is as follows: The center conductors of each of the 2 pieces of coax become the balanced feed line. The 2 pieces are dressed next to each other ... best to actually tape them together along their length and treat them as a single cable. The shields are connected together .... usually at one end .... which in turn may be connected to a short run to ground .... (in my experience not essential). This arrangement seems to be immune to close metal objects, is flexible, and electrically insulated. Remember, the key is to keep them together as one as this insures minimal surrounding RF field due to maximum cancellation. As soon as you separate them you introduce a surrounding field and you are back to where you started.

When you bring them through the wall ... make sure they come through the same hole as one. This balanced feed line introduces additional loss (over the open wire line) that is of little consequence as it is just a short length. However, it maintains balance with a minimal external radiation field as it is totally cancelled with the shields soldered to each other and placed next to each other along their length.

Jim, VE3CI

3185. Re: [SkyWires] Re: first loop entry suggestions

Yahoo group: SkyWires
Date: 2008-09-06 21:33:35 UTC
From: Andy
Topic: 3176 Message: 3185

> ... Everywhere I see
> that I should not get the ladder-line near metal but here I am
> surrounding each wire with a shield that is grounded. I know everyone
> does it so it must work.

I would not say everyone does it. From what I've read, many ladderline users are very hesitant about doing that.

> I'm curious, why is this not count as a
> metal object, especially since it is at a ground potential? Can
> anyone help me digest this?

The main reason to keep ladderline away from metal is it tends to unbalance it.

Also, for another reason, and that's that ladderline is somewhat high impedance. There is greater ability to couple stray signals from that metal into the ladderline, or vice-versa, than would happen at 50 ohms. Also, the presence of the metal (over some length) lowers the ladderline's impedance.

In my judgment, if you are working HF, a foot or two of dual coax is not so bad. The discontinuity it causes to the impedance is electrically short compared to a wavelength, so not to worry about that. Try to keep everything symmetrical going into and out of the coax.

By the way, you would be well advised NOT to rely on a knife switch (or a manual reconnection) to protect your gear and your house in a thunderstorm. You should also have something permanently attached. You don't want your house to burn down if you forget.

Andy

3186. Coax versus ladderline

Yahoo group: SkyWires
Date: 2008-09-07 18:59:34 UTC
From: Ken Kerr
Topic: 3186 Message: 3186

Do I have to use ladderline for a Skywire or can I use 50 ohm coax?

3187. Re: [SkyWires] Coax versus ladderline

Yahoo group: SkyWires
Date: 2008-09-07 19:17:00 UTC
From: Jim Dunstan
Topic: 3186 Message: 3187

At 11:59 AM 9/7/2008 -0700, you wrote:

>Do I have to use ladderline for a Skywire or can I use 50 ohm coax?
You can do both.

If you use 50 ohm coax then the feed point of your antenna must be 50 ohms as well (only a slight mismatch is acceptable). This means the antenna must be resonant at some particular frequency within a particular band. If you want to operate on more than one band then you will either have to put an automatic coupler at the feed point (to deal with the mismatch) or use ladderline with a tuner.

So, if you build a skywire to 80m dimensions and feed it with coax then it will for all practical purposes be a monoband antenna on 80m. If you use the same 80m skywire with either a coupler and coax or ladder line and tuner then you will be able to operate effectively on all bands 80m-10m.

Jim, VE3CI

3188. Re: [SkyWires] Coax versus ladderline

Yahoo group: SkyWires
Date: 2008-09-07 19:36:38 UTC
From: Alan Wilson
Topic: 3186 Message: 3188
Attachments: 2 described; binary payloads are missing from this source WARC

[Attachment content not displayed]

3189. Re: Coax versus ladderline

Yahoo group: SkyWires
Date: 2008-09-08 01:34:46 UTC
From: James Townley
Topic: 3186 Message: 3189

If you plan to use the loop for just one band, a 4:1 balun at the feed point would work just fine. For multi-band usage, the ladder-line would be the best choice. As a multi-band antenna, the higher swr on other bands would convert itself to heat in both your coax and your balun. I use 300 ohm twin-lead to feed my antenna, and a link coupled tuner (Johnson Match Box) as an antenna tuner. I once used a coax 4:1 balun arrangement, but on bands where the SWR was a little higher, the balun would heat up and cause my swr to rise considerably during lengthy conversations, and in extreme cases of higher impedance mismatch, it would happen during tune up. If you use a full wave loop for any given frequency, and don't plan on using it on other bands, then it should work out fine.

It has been widely accepted that using a link-coupled tuner, with balanced feed-line is the most efficient way to transfer power from the transmitter to the antenna. I haven't tried using the balun near the house with a short run of coax into the shack. If you use this arrangement, I would use a heavy-duty balun rated for 4k watts or more. Especially if you plan to run more than 500 watts.

Have fun,
Jim WØHRF
--- In SkyWires@yahoogroups.com, Ken Kerr <kennethdkerr@...> wrote:
>
> Do I have to use ladderline for a Skywire or can I use 50 ohm coax?
>

3191. Hello Skywire Group

Yahoo group: SkyWires
Date: 2008-09-09 01:35:02 UTC
From: Tom
Topic: 3191 Message: 3191

Hello SkyWire Group,

I'm new here.

I've been running a skinny loop....100 feet by 24 feet for about a year
with good results on 80 through 10 meters using a tuner and a 1:1 current
balun from DX Engineering. A 4:1 current balun does not work well with
my ATR-30 tuner and loop, fed with 450 ohm ladder line.

See my loop and system diagram at:

http://ph.groups.yahoo.com/group/SkyWires/photos/view/3cb8?b=1

http://ph.groups.yahoo.com/group/SkyWires/photos/view/3cb8?b=2

Cheers.

Tom
KE6YNH, 73
San Diego, CA

3193. Re: Hello Skywire Group

Yahoo group: SkyWires
Date: 2008-09-09 14:38:42 UTC
From: Don Keith
Topic: 3191 Message: 3193

Tom, I don't know which is most impressive, your antenna or your nicely done diagrams!

I keep hearing various discussion about using 4:1 or 1:1 baluns to make the transition ("transformation," if you will) from balanced to unbalanced to the tuner. The argument that makes most sense to me is that any multiband antenna such as the loop will present myriad impedances across the HF spectrum and it is best to pass along to the tuner pretty much what the feedpoint presents...using a 1:1 current balun rated much higher than the power you will run into it.

The larger matching problem will be very, very low impedances in the vicinity of a few ohms, and if you are stepping down at a ratio of 4:1, that is especially problematic. I'm not surprised the 1:1 works better, and the DX Engineering baluns are superb.

Don N4KC
www.n4kc.com
www.donkeith.com
www.n4kc.blogspot.com

--- In SkyWires@yahoogroups.com, "Tom" <tgleeman@...> wrote:
>
> Hello SkyWire Group,
>
> I'm new here.
>
> I've been running a skinny loop....100 feet by 24 feet for about a year
> with good results on 80 through 10 meters using a tuner and a 1:1 current
> balun from DX Engineering. A 4:1 current balun does not work well with
> my ATR-30 tuner and loop, fed with 450 ohm ladder line.
>
> See my loop and system diagram at:
>
> http://ph.groups.yahoo.com/group/SkyWires/photos/view/3cb8?b=1
>
> http://ph.groups.yahoo.com/group/SkyWires/photos/view/3cb8?b=2
>
> Cheers.
>
> Tom
> KE6YNH, 73
> San Diego, CA

>

3194. AW: [SkyWires] Re: Hello Skywire Group

Yahoo group: SkyWires
Date: 2008-09-10 13:37:31 UTC
From: Siegfried Jackstien
Topic: 3191 Message: 3194

dear antennabuilders :-)
i feed my 168m loop with a 1:9 balun ....
the reason is:
i feed it via a quarterwave lenght of ladderline on the 2 lowest bands
on topband 38m on 80m abt. 18m ....
the low impedance on the feeding point is transformed via the ladderline to
about 400-500 ohms so the balunn will do a fine job
on the higher bands the feeding point impedance is higher (300 - 500 ohms)
and the ladderline is not transforming because it is almost a
matched situation and a halfwave or fullwave lenght....
160m 80m 40m 20m 17m no tuner needed
15m 12m 10m swr is about 1:1.5 - 1:2 ... so the internal tuner will work
fine
or you can use the pi section of your pa tu tune ...
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i can upload the excelsheet i made for my notes
the only thing i have to do is i have to swich in or out the extra lenght of
ladderline of abt. 20m
but the losses will be lower when tuning the antenna with the line instead
tuning it with a tuner
made some test with the shorter lenght and tuner and with the longer run
without tuner
10db difference !!!
maybe it is a nice idea for somebody else
greetz
dg9bfc sigi

-----Urspr?ngliche Nachricht-----
Von: SkyWires@yahoogroups.com [mailto:SkyWires@yahoogroups.com]Im Auftrag
von Don Keith
Gesendet: Dienstag, 9. September 2008 14:39
An: SkyWires@yahoogroups.com
Betreff: [SkyWires] Re: Hello Skywire Group

Tom, I don't know which is most impressive, your antenna or your
nicely done diagrams!

I keep hearing various discussion about using 4:1 or 1:1 baluns to
make the transition ("transformation," if you will) from balanced to
unbalanced to the tuner. The argument that makes most sense to me is
that any multiband antenna such as the loop will present myriad
impedances across the HF spectrum and it is best to pass along to the
tuner pretty much what the feedpoint presents...using a 1:1 current
balun rated much higher than the power you will run into it.

The larger matching problem will be very, very low impedances in the vicinity of a few ohms, and if you are stepping down at a ratio of 4:1, that is especially problematic. I'm not surprised the 1:1 works better, and the DX Engineering baluns are superb.

Don N4KC
www.n4kc.com
www.donkeith.com
www.n4kc.blogspot.com

--- In SkyWires@yahoogroups.com, "Tom" <tgleeman@...> wrote:
>
> Hello SkyWire Group,
>
> I'm new here.
>
> I've been running a skinny loop....100 feet by 24 feet for about a year
> with good results on 80 through 10 meters using a tuner and a 1:1 current
> balun from DX Engineering. A 4:1 current balun does not work well with
> my ATR-30 tuner and loop, fed with 450 ohm ladder line.
>
> See my loop and system diagram at:
>
> http://ph.groups.yahoo.com/group/SkyWires/photos/view/3cb8?b=1
>
> http://ph.groups.yahoo.com/group/SkyWires/photos/view/3cb8?b=2
>
> Cheers.
>
> Tom
> KE6YNH, 73
> San Diego, CA
>

3195. Re: AW: [SkyWires] Re: Hello Skywire Group

Yahoo group: SkyWires
Date: 2008-09-10 20:11:32 UTC
From: Jim Dunstan
Topic: 3191 Message: 3195

At 02:37 PM 9/10/2008 +0100, you wrote:

>dear antennabuilders :-)
>i feed my 168m loop with a 1:9 balun ....
>the reason is:
>i feed it via a quarterwave lenght of ladderline on the 2 lowest bands
>on topband 38m on 80m abt. 18m ....
>the low impedance on the feeding point is transformed via the ladderline
>to about 400-500 ohms so the balunn will do a fine job
>on the higher bands the feeding point impedance is higher (300 - 500
>ohms) and the ladderline is not transforming because it is almost a
>matched situation and a halfwave or fullwave lenght....
>160m 80m 40m 20m 17m no tuner needed
>15m 12m 10m swr is about 1:1.5 - 1:2 ... so the internal tuner will work fine
>or you can use the pi section of your pa tu tune ...
>i think my solution is the best way for going multiband
>i can upload the excelsheet i made for my notes
>the only thing i have to do is i have to swich in or out the extra lenght
>of ladderline of abt. 20m
>but the losses will be lower when tuning the antenna with the line instead
>tuning it with a tuner
>made some test with the shorter lenght and tuner and with the longer run
>without tuner
>10db difference !!!
>maybe it is a nice idea for somebody else
>greetz
>dg9bfc sigi

Hi,

That is an interesting ... but not a new way of ' tuning' the antenna system .... that is of adding and subtracting lengths of balanced feed line in order to match the system to the transceiver. I used a similar system years ago when end feeding a horizontal wire (Zepp). The Zepp is a half wave length at the lowest band and presents a high impedance at the starting band and its harmonics ... eg 80,40,20,10m. This high impedance is transformed to a low impedance near 50 ohms by 1/4 wavelengths of feed line. I used ladder line for the first length and then pieces of 300 ohm line for impedance transformation at the other bands.

Just as a note, I found that laying 300 ohm line straight or in loose coils caused little difference in performance.

If I was designing the system for maximum efficiency I would eliminate that RF transformer .... an obvious weak link. I would choose lengths that transform the impedance at the frequencies/bands of choice directly to 50

ohms and then connect the coax directly to the balanced feed line. All you need is an RF choke at this connection point to maintain feed line balance ... eg remove antenna current from the coax shield. Then feed the coax directly to the transceiver or to a standard unbalanced tuner (which is maximally efficient at this impedance range) in order to 'tweak' the match for best operating conditions for your radio.

Now to be fair, the comparison you made between feed systems .... which produced a 10db difference in radiation .... is really a comment on the efficiency of the particular antenna tuner you were using and the particular band/frequency of the test. I will hazard an opinion that if you use a well constructed tuner designed for balanced feed lines, feeding quality balanced feed line between the tuner and the antenna .... with no intervening RF transformers or baluns .... that comparable measurements at randomly selected frequencies across the bands would seldom ... if ever demonstrate a full 10db difference.

To obtain a 10db difference the feed system would have to absorb almost 90% of the power .... which would make me guess you ran the test using QRP .... or your tuner would go up in smoke hi hi.

My suggestion for efficient all band operation at all frequencies would be as follows:

1. Use a well designed balanced tuner with quality components.
2. Feed the antenna directly from the tuner with quality balanced feed line
3. Eliminate all RF transformers or baluns between the antenna and the tuner.
4. Modify the balanced feed line .... eg by adding/subtracting lengths of line only on those bands/frequencies that present difficulties.

Jim, VE3CI

3197. AW: AW: [SkyWires] Re: Hello Skywire Group

Yahoo group: SkyWires
Date: 2008-09-11 15:59:41 UTC
From: Siegfried Jackstien
Topic: 3191 Message: 3197

dear jim
you are right
it is not the best to use a balun cause its losses BUT
i could not find a solution better than used now
i wanted an allband antenna with good performance
the abt 10db losses i recognized on topband with the short feeding line
this is caused by the tuner (differencial highpass t) and the mismatch the
balun has to handle when not using the longer feedline on topband
and i am sure with a high perfonance ballanced tuner the losses will be
lower
but i had to use what i have ... an unbalanced tuner with a balun for
ladderlinefeeding
i recognized that the swr was low with some more or less lenght of
feedingline and just tried what will happen when changing
the 1:4 balun to a 1:9 balun ....i wrote before that it was SUPERB to use
this antennasystem on many bands with
the tuner switched OFF!!! if you don?t need the tuning parts in the tuner
only the balun then the losses will be lower than with the tuning parts
switched in
(no coil=no coil losses)
i could not find a point on my different lenght of feeding line where the
impedance is almost 50 ohms if i could i would have used a 1:1 balun (rf
choke)
i spent 3-4 days with different lenght of feedingline (had some shorter
parts from a fieldday) and made notes in an exelsheet
i will upload it in the filearea
happy dx?ing
dg9bfc sigi

-----Urspr?ngliche Nachricht-----
Von: SkyWires@yahoogroups.com [mailto:SkyWires@yahoogroups.com]Im Auftrag
von Jim Dunstan
Gesendet: Mittwoch, 10. September 2008 20:12
An: SkyWires@yahoogroups.com
Betreff: Re: AW: [SkyWires] Re: Hello Skywire Group

At 02:37 PM 9/10/2008 +0100, you wrote:

dear antennabuilders :-)
i feed my 168m loop with a 1:9 balun ....
the reason is:
i feed it via a quarterwave lenght of ladderline on the 2 lowest bands
on topband 38m on 80m abt. 18m ....
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ohms) and the ladderline is not transforming because it is almost a matched situation and a halfwave or fullwave lenght....
160m 80m 40m 20m 17m no tuner needed
15m 12m 10m swr is about 1:1.5 - 1:2 ... so the internal tuner will work fine
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made some test with the shorter lenght and tuner and with the longer run without tuner
10db difference !!!
maybe it is a nice idea for somebody else
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Hi,

That is an interesting ... but not a new way of ' tuning' the antenna system .... that is of adding and subtracting lengths of balanced feed line in order to match the system to the transceiver. I used a similar system years ago when end feeding a horizontal wire (Zepp). The Zepp is a half wave length at the lowest band and presents a high impedance at the starting band and its harmonics ... eg 80,40,20,10m. This high impedance is transformed to a low impedance near 50 ohms by 1/4 wavelengths of feed line. I used ladder line for the first length and then pieces of 300 ohm line for impedance transformation at the other bands.

Just as a note, I found that laying 300 ohm line straight or in loose coils caused little difference in performance.

If I was designing the system for maximum efficiency I would eliminate that RF transformer .... an obvious weak link. I would choose lengths that transform the impedance at the frequencies/bands of choice directly to 50 ohms and then connect the coax directly to the balanced feed line. All you need is an RF choke at this connection point to maintain feed line balance ... eg remove antenna current from the coax shield. Then feed the coax directly to the transceiver or to a standard unbalanced tuner (which is maximally efficient at this impedance range) in order to 'tweak' the match for best operating conditions for your radio.

Now to be fair, the comparison you made between feed systems .... which produced a 10db difference in radiation .... is really a comment on the efficiency of the particular antenna tuner you were using and the particular band/frequency of the test. I will hazard an opinion that if you use a well constructed tuner designed for balanced feed lines, feeding quality balanced feed line between the tuner and the antenna .... with no intervening RF transformers or baluns .... that comparable measurements at randomly

selected frequencies across the bands would seldom ... if ever demonstrate a full 10db difference.

To obtain a 10db difference the feed system would have to absorb almost 90% of the power .... which would make me guess you ran the test using QRP .... or your tuner would go up in smoke hi hi.

My suggestion for efficient all band operation at all frequencies would be as follows:

1. Use a well designed balanced tuner with quality components.
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3. Eliminate all RF transformers or baluns between the antenna and the tuner.
4. Modify the balanced feed line .... eg by adding/subtracting lengths of line only on those bands/frequencies that present difficulties.

Jim, VE3CI

3198. New file uploaded to SkyWires

Yahoo group: SkyWires
Date: 2008-09-11 15:03:12 UTC
From: SkyWires@yahoogroups.com
Topic: 434 Message: 3198

Hello,

This email message is a notification to let you know that
a file has been uploaded to the Files area of the SkyWires
group.

File : /loop.xls
Uploaded by : dg9bfc <siegfried.jackstien@...>
Description : notes for allbandloop as excelfile

You can access this file at the URL:
http://groups.yahoo.com/group/SkyWires/files/loop.xls

To learn more about file sharing for your group, please visit:
http://help.yahoo.com/l/us/yahoo/groups/original/members/web/index.htmlfiles

Regards,

dg9bfc <siegfried.jackstien@...>

3199. AW: AW: [SkyWires] Re: Hello Skywire Group

Yahoo group: SkyWires
Date: 2008-09-11 16:04:51 UTC
From: Siegfried Jackstien
Topic: 3191 Message: 3199

just look in filearea for loop.xls
greetz
dg9bfc
-----Urspr?ngliche Nachricht-----
Von: SkyWires@yahoogroups.com [mailto:SkyWires@yahoogroups.com]Im Auftrag von Jim Dunstan
Gesendet: Mittwoch, 10. September 2008 20:12
An: SkyWires@yahoogroups.com
Betreff: Re: AW: [SkyWires] Re: Hello Skywire Group

At 02:37 PM 9/10/2008 +0100, you wrote:

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ohms) and the ladderline is not transforming because it is almost a
matched situation and a halfwave or fullwave lenght....
160m 80m 40m 20m 17m no tuner needed
15m 12m 10m swr is about 1:1.5 - 1:2 ... so the internal tuner will work
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or you can use the pi section of your pa tu tune ...
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10db difference !!!
maybe it is a nice idea for somebody else
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Jim, VE3CI

3200. Re: AW: AW: [SkyWires] Re: Hello Skywire Group

Yahoo group: SkyWires
Date: 2008-09-11 18:36:19 UTC
From: Jim Dunstan
Topic: 3191 Message: 3200
Attachments: 2 described; binary payloads are missing from this source WARC

At 04:59 PM 9/11/2008 +0100, you wrote:

>dear jim
>you are right
>it is not the best to use a balun cause its losses BUT
>i could not find a solution better than used now
>i wanted an allband antenna with good performance
>the abt 10db losses i recognized on topband with the short feeding line
>this is caused by the tuner (differencial highpass t) and the mismatch the
>balun has to handle when not using the longer feedline on topband
>and i am sure with a high perfonance ballanced tuner the losses will be
>lower but i had to use what i have ... an unbalanced tuner with a balun
>for ladderlinefeeding

Hi,

No doubt, the tuner with balun is the culprit .... if the particular
frequency presents a high impedance to the tuner arrangement the balun will
absorb lots of power ... if you keep the power low it will work without
destroying itself hi hi.

>i recognized that the swr was low with some more or less lenght of
>feedingline and just tried what will happen when changing
>the 1:4 balun to a 1:9 balun ....i wrote before that it was SUPERB to use
>this antennasystem on many bands with
>the tuner switched OFF!!! if you don´t need the tuning parts in the tuner
>only the balun then the losses will be lower than with the tuning parts
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>(no coil=no coil losses)
>i could not find a point on my different lenght of feeding line where the
>impedance is almost 50 ohms if i could i would have used a 1:1 balun (rf choke)
>i spent 3-4 days with different lenght of feedingline (had some shorter
>parts from a fieldday) and made notes in an exelsheet
>i will upload it in the filearea
>happy dx´ing
>dg9bfc sigi
>

As they say, there are many ways to skin a cat ... and your system works
for you ... as an aside, if you can get the end of a particular piece of
feed line to measure 200 ohms then a 4:1 balun works vy well. I have used
this with resonant folded dipoles made of and fed with 300 ohm line. They
present a good load to a 4:1 balun. I have fed such antennas with up to
350 watts with AM modulation using TV twin lead .... with good
efficiency. Making do with what you got .... when you understand what you

are doing is great fun and satisfaction when your plans work hi hi

73 and gud dx

Jim, VE3CI

>
>
>-----Ursprüngliche Nachricht-----
>Von: SkyWires@yahoogroups.com [mailto:SkyWires@yahoogroups.com]Im Auftrag
>von Jim Dunstan
>Gesendet: Mittwoch, 10. September 2008 20:12
>An: SkyWires@yahoogroups.com
>Betreff: Re: AW: [SkyWires] Re: Hello Skywire Group
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>feed line balance ... eg remove antenna current from the coax
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>tuner.
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>line only on those bands/frequencies that present difficulties.
>
>Jim, VE3CI
>
>
>
>

3203. Re: increasing size of horizontal loop from 80 to 160 meters

Yahoo group: SkyWires
Date: 2008-09-18 19:33:53 UTC
From: Mark Brown
Topic: 3183 Message: 3203

Alan, I've been operating a Horizontal Loop similar to your config for some weeks now and will share my experiences. I paced off the yard and a FW loop on 160m was a tight fit. Several hams mentioned I might get away with less wire by using insulated (lower VF) so off to Home Depot for a 500' spool and some PVC elbows for 5 supports in trees.

The 500' sagged too much and since I couldn't make the trees move I took 53' out of the span to make it 447'. It's fed with 60' of ladderline about 10 feet from the SE corner for convenience. The overall shape is closest to a parallelogram.(see http://en.wikipedia.org/wiki/Parallelogram feedpoint is near "D", "E" points northeast.

It tunes all bands but there's a catch. My Heathkit SA-2040 will tune it from 80 thru 6, but the Murch tuner will tune 160 thru 10. Both are T-Match, so it's probably an issue of stray iductance/capacitance of different tuners.

Operationally, it's a nice cloud burner on 160 thru 40 with very good reception nighttime reports on 40 using 100w. On 20 & 17, this thing sings. Europe is booming in and the background noise level is way below my OCF dipole. Actually the receive noise level on all bands is lower than the OCF. No openings to speak of on 15/10 so nothing to report.

I have not done any modelling on this but the results are very encouraging. This winter when the leaves are off the trees, I'll shoot a few more lines in the higher branches to get the height AGL from 50' to 70'.

73,
Mark

--- In SkyWires@yahoogroups.com, "Alan Wilson" <ke4nu7@...> wrote:
>
> Hi all, I just finished almost doubling the wire of my 75 meter
> horizontal loop. One end has square corners while on the end one
end is
> square while the other corner extends to the property line. The
antenna
> is fed with 450 ladderline, runs to the shack wall and is connected
> inside via a 4 to 1 balun. 160 will tune fine with the internal
tuner
> as do most bands with the exception of 75 meters which can be
tuned in

> fine with an external tuner. Height varies from 60 feet on one
corner
> to about 40 on the others. I expect to have a little better dx
angle on
> 75 while 160 will be NVIS. I don't know about the other bands,
they do
> load up easily. Has anyone built or modeled this variation of the
loop
> antenna? I'd like to hear some experiences or see a model if
someone
> can do this...thanks es 73, Alan Wilson
>

3205. Re: increasing size of horizontal loop from 80 to 160 meters

Yahoo group: SkyWires
Date: 2008-09-22 13:44:34 UTC
From: Alan Wilson
Topic: 3183 Message: 3205

Mark, thanks for the info. I'm pleased so far with it. I've yet to try 160 though and of course I'd like to get it higher. I wish I could find someone to model it for me, I'd really like to look at the results...73, Alan

3210. Loop wire TOUCHING stuff - what happens?

Yahoo group: SkyWires
Date: 2008-10-02 14:34:26 UTC
From: Benson
Topic: 3210 Message: 3210

I live on a small city lot: 130 ft by 60 ft. Good sized house at the front, separate garage apartment building in the back. No trees on the corners of the lot to make a nice tidy square loop the proper way with support ropes, insulators, etc.

I was wondering if this would work: Using an SGC coupler on outside of my house, running (insulated) 14ga or 18ga antenna wire around the apartment building itself, over the roof of the house (touching the roof in places), around a tree, then back to the SGC. I would have the antenna fastened directly to the SGC and coax running from the coupler back to the radio. My power output is limited to 100W max.

The more basic question is: how well do skywires work when in contact with wood and other non-metallic material? I am hoping to have something that will tune up on 160 before the sunspots start coming back in force.

73,
Benson
K4GST

3211. Re: [SkyWires] Loop wire TOUCHING stuff - what happens?

Yahoo group: SkyWires
Date: 2008-10-02 15:52:15 UTC
From: Alan
Topic: 3210 Message: 3211

Benson, it should work ok, maybe not as good when its wet (rain). I've even put a loop in a attic and it worked good. My loop now touches tree limbs and it works great. So, give it ago...good luck, Alan

>
>
>

--
PK

3212. RE: [SkyWires] Loop wire TOUCHING stuff - what happens?

Yahoo group: SkyWires
Date: 2008-10-04 05:12:20 UTC
From: satyan
Topic: 3210 Message: 3212

Hi Benson - same here also, my loop is made of no.16 insulated household wire and it goes up from the sg230 tuner mounted on windows via tree limbs in a square shape on the flat top and comes down to the tuner earth end. So far it has performed superbly, the total length of the wire is around 130 feet and I haven't found any bad effects coz of tree limbs.

Good luck vu3mes india

-----Original Message-----
From: SkyWires@yahoogroups.com [mailto:SkyWires@yahoogroups.com] On Behalf Of Alan
Sent: 02 October 2008 21:22
To: SkyWires@yahoogroups.com
Subject: Re: [SkyWires] Loop wire TOUCHING stuff - what happens?

Benson, it should work ok, maybe not as good when its wet (rain). I've even put a loop in a attic and it worked good. My loop now touches tree limbs and it works great. So, give it ago...good luck, Alan

--
PK

3213. Re: Loop wire TOUCHING stuff - what happens?

Yahoo group: SkyWires
Date: 2008-10-04 16:03:23 UTC
From: Benson
Topic: 3210 Message: 3213

Thanks for the comments. I'm thinking of going with the new MFJ remote tuner. It got a pretty good write-up in QST recently.

3215. Re:Freebies 6th October

Yahoo group: SkyWires
Date: 2008-10-06 17:00:55 UTC
From: John Clement
Topic: 3215 Message: 3215

I, for one. fail to see how this posting has to do with loop antennas, perhaps I could be shown how to get a FREE one

3220. Leaving this group

Yahoo group: SkyWires
Date: 2008-10-09 04:10:10 UTC
From: w5hw_harry
Topic: 3220 Message: 3220

Am leaving this group because of the spam,
and have applied to join the new one. Bye.

Harry
W5HW
San Antonio, Texas

3222. Re: Leaving this group

Yahoo group: SkyWires
Date: 2008-10-09 12:57:21 UTC
From: Ken McGowan
Topic: 3220 Message: 3222

I'm jumping on the band wagon too.

KK2EN

--- In SkyWires@yahoogroups.com, "w5hw_harry" <w5hw_harry@...> wrote:
>
> Am leaving this group because of the spam,
> and have applied to join the new one. Bye.
>
> Harry
> W5HW
> San Antonio, Texas
>

3224. Re: Leaving this group

Yahoo group: SkyWires
Date: 2008-10-09 15:07:13 UTC
From: Don Keith
Topic: 3220 Message: 3224

You fellows are certainly free to do as you wish. I subscribe to
both groups but see little activity on the newer one.

By the way, there is a little button, usually near the top of your
email reader, that either says, "Delete" on it or is marked with a
big, red X. With any email that is obviously spam, all you have to
do is click that button once and it goes away forever. I've gotten
pretty good at it. It takes less than a second and only a slight
movement of my right hand on the mouse.

Just an estimate, but I bet most of you could have deleted a hundred
of those "free stuff" and "I want to meet you" postings with the same
time and effort it took to tell us you were leaving this group.

Don N4KC
www.n4kc.com
www.donkeith.com
www.n4kc.blogspot.com

--- In SkyWires@yahoogroups.com, "Ken McGowan" <mcgowan.ken@...>
wrote:
>
> I'm jumping on the band wagon too.
>
>
> KK2EN
>
>
>
> --- In SkyWires@yahoogroups.com, "w5hw_harry" <w5hw_harry@> wrote:
> >
> > Am leaving this group because of the spam,
> > and have applied to join the new one. Bye.
> >
> > Harry
> > W5HW
> > San Antonio, Texas
> >
>

3225. Re: [SkyWires] Re: Leaving this group

Yahoo group: SkyWires
Date: 2008-10-09 16:00:27 UTC
From: Ken Burchfield
Topic: 3220 Message: 3225

Thanks Don,and All
Always some Spam to mess up things, But the Delete or the Spam button will take care of it in short order.
That IS how I deal with the problem!!
Good post out ways the bad!
73 Ken

PacketRadio is Still Alive.......Mississippi.......145.010.......Simplex.......1200 Baud

----- Original Message ----
From: Don Keith <n4kc@...>
To: SkyWires@yahoogroups.com
Sent: Thursday, October 9, 2008 9:07:13 AM
Subject: [SkyWires] Re: Leaving this group

You fellows are certainly free to do as you wish. I subscribe to
both groups but see little activity on the newer one.

By the way, there is a little button, usually near the top of your
email reader, that either says, "Delete" on it or is marked with a
big, red X. With any email that is obviously spam, all you have to
do is click that button once and it goes away forever. I've gotten
pretty good at it. It takes less than a second and only a slight
movement of my right hand on the mouse.

Just an estimate, but I bet most of you could have deleted a hundred
of those "free stuff" and "I want to meet you" postings with the same
time and effort it took to tell us you were leaving this group.

Don N4KC
www.n4kc.com
www.donkeith.com
www.n4kc.blogspot.com

3226. Re: [SkyWires] Re: Leaving this group

Yahoo group: SkyWires
Date: 2008-10-09 19:23:30 UTC
From: Keith Currie
Topic: 3220 Message: 3226

Very well said Don I never could understand why all the fuss about so little.
Keith
VE5HKC.

----- Original Message -----
From: Ken Burchfield
To: SkyWires@yahoogroups.com
Sent: Thursday, October 09, 2008 10:00 AM
Subject: Re: [SkyWires] Re: Leaving this group

Thanks Don,and All
Always some Spam to mess up things, But the Delete or the Spam button will take care of it in short order.
That IS how I deal with the problem!!
Good post out ways the bad!
73 Ken

PacketRadio is Still Alive.......Mississippi.......145.010.......Simplex.......1200 Baud

----- Original Message ----
From: Don Keith <n4kc@...>
To: SkyWires@yahoogroups.com
Sent: Thursday, October 9, 2008 9:07:13 AM
Subject: [SkyWires] Re: Leaving this group

You fellows are certainly free to do as you wish. I subscribe to
both groups but see little activity on the newer one.

By the way, there is a little button, usually near the top of your
email reader, that either says, "Delete" on it or is marked with a
big, red X. With any email that is obviously spam, all you have to
do is click that button once and it goes away forever. I've gotten
pretty good at it. It takes less than a second and only a slight
movement of my right hand on the mouse.

Just an estimate, but I bet most of you could have deleted a hundred
of those "free stuff" and "I want to meet you" postings with the same
time and effort it took to tell us you were leaving this group.

Don N4KC
www.n4kc.com
www.donkeith.com

3227. My list of Yahoo Groups :)

Yahoo group: SkyWires
Date: 2008-10-10 07:41:00 UTC
From: joseph scalzo
Topic: 3227 Message: 3227

Hi everyone,

Hope this is ok to post here... You can see a list of my groups on Grouply at the link below. Maybe you'll find some you want to join.

joseph

Here's the link:
http://www.grouply.com/register.php?tmg=1016138&vt=8948798

==========
This message was posted by a fellow group member who uses Grouply instead of email to access this group. Grouply blocks additional invitations from being sent to this group by anyone for 30 days. Group owners can permanently block future invitations. For more on how Grouply maintains privacy and protects you, see http://blog.grouply.com/protect/ .

3229. RE: [SkyWires] 80 Meter Horizontal FUll Wave Loop

Yahoo group: SkyWires
Date: 2008-10-10 16:58:09 UTC
From: Scott MacKenzie
Topic: 3228 Message: 3229

I have been a fan of 80M full size loops - especially when used with a tuner on 40M...VERY effective. Very effective on 80M for relatively close (1500 miles or so) contacts. It works well on DX too - but my vertical does a bit better on really long DX (XU, JA, HL, etc. on 80M. On close contacts - out to about 1500-200 miles, the Loop beats it by a HUGE margin.

I put up an 80M full size loop for sweepstakes last year, and with only a modest effort, was able to come in first place in my section for single operator, low power (100 watts), Eastern PA section. I came in 6th overall in the Atlantic region against some really hard core contesters. I was 94th in the country. The loop was only up about 30 feet at the time. The same loop is now up at 65 feet with the peak at 75 feet. Recent comparisons have indicated several dB improvement in signal on 80M. It should be even better on 40M.

I have always used an 80M loop for FD and have been reward nicely with holding a frequency for hours at a time using only low power (100 watts).

You will enjoy it...and you can't get much simpler.

Scott, aka KB0FHP

From: SkyWires@yahoogroups.com [mailto:SkyWires@yahoogroups.com] On Behalf Of Thomas F. Giella KN4LF
Sent: Friday, October 10, 2008 11:36 AM
To: a un sky wires eGroup; a mod Sky Wires eGroup
Subject: [SkyWires] 80 Meter Horizontal FUll Wave Loop

Last week I put up an 80 meter horizontal full wave loop. It is 285 feet of #12 stranded and in a square shape. Each leg is 71.25 feet long and is fed in the middle of the leg that is broad side N-S. The four corners are orientated towards the NE, SE, SW, NW and is up at 35 feet in my oak trees. It is fed with 122 feet of 300 ohm window line to the Johnson Viking Match Box for 80-10 meter coverage

I did an A-B comparison between the loop and 80-10 meter fan doublet and the loop won every time on every band both close in and on DX and was also more quiet on receive. So I retired the doublet antenna.

I published a website about it at http://www.kn4lf.
<http://www.kn4lf.com/kn4lf92.htm> com/kn4lf92.htm

73,
Thomas F. Giella, KN4LF
Lakeland, FL, USA

kn4lf@earthlink. <mailto:kn4lf%40earthlink.net> net
With God All Things Are Possible <><

KN4LF Amateur & SWL Radio Autobiography: http://www.kn4lf.
<http://www.kn4lf.com> com

3231. Question regarding Tokyo Hi-Power HC-200AT tuner

Yahoo group: SkyWires
Date: 2008-10-14 13:28:14 UTC
From: writer1stus
Topic: 3231 Message: 3231

Hi gud people!

First a brief introduction, I guess. Though licensed since 1976, I have been mostly inactive for the last 20 or so years. I am now quasi-retired and in recent months have re-discovered my passion for ham radio. I operate primarily in the CW protion of the bands and find myself now also becoming very interested in PSK. Oh, and while I do actually own a mic, I only use it on an occasional basis.

We live in southeast Georgia in a subdivision where putting up any kind of a tower is probably out of the question so I have been using coax fed monoband dipoles for 40, 30, and 20 meters. I have never experimented with any kind of a loop antenna or balanced feedline, but want to try both now; especially after perusing the last year or so's messages here. Enough with the bio, and on to my one question, though no doubt I will have several more as I try to get up a (delta?) loop in the coming few days.

I am considering purchasing a used Tokyo Hi-Power HC-200AT tuner. Will it handle balanced transmission line or must one use a 4:1 balun and a short run of coax with this tuner?

Thanks in advance!
James
N4EKZ

3232. Re: [SkyWires] Question regarding Tokyo Hi-Power HC-200AT tuner

Yahoo group: SkyWires
Date: 2008-10-14 16:21:26 UTC
From: Jim Dunstan
Topic: 3231 Message: 3232

At 01:28 PM 10/14/2008 +0000, you wrote:

>I am considering purchasing a used Tokyo Hi-Power HC-200AT tuner.
>Will it handle balanced transmission line or must one use a 4:1 balun
>and a short run of coax with this tuner?
>
>Thanks in advance!
>James
>N4EKZ

Hi,

The Tuner you mention is an automatic tuning unit designed to feed unbalanced line (coax) or an end fed wire antenna. In order to accommodate a balanced feed line you will have to use some kind of balun arrangement. A 4:1 balun would technically give you a range of 20 to 2000 ohms as the advertised range of the Tokyo ATU is 5 to 500 ohms. I would suggest putting the balun as close as possible to the tuner. If you find frequencies you like to operate and the tuner won't match the antenna ... then try adjusting the feed line length .... add or delete to the length on an experimental basis.

Jim, VE3CI

3235. Let's Complain to Yahoo about the spam

Yahoo group: SkyWires
Date: 2008-10-22 00:15:46 UTC
From: Dr.Ace
Topic: 3235 Message: 3235

I got this response from abuse@yahoogroups.com after I complained about the Freebies spam.

Dear Dr.Ace,
Thank you for writing to Yahoo! Groups.
We appreciate your report of this incident in Yahoo! Groups. We will investigate your report and take appropriate action as per our Terms of
Service (TOS). For further details about the Yahoo! TOS, you can visit:
http://docs.yahoo.com/info/terms/
Please know that Yahoo! is unable to disclose the action taken on another user's account with a third party. We are not able to make exceptions to this rule.
Please continue to notify us of any questionable content you find in Yahoo! Groups. We are very concerned about preventing the abuse of Groups, and we will continue to evaluate any material that violates the
Yahoo! Groups Terms of Service.
Thank you again for contacting Yahoo! Groups.
Regards,
Danielle Brown
Yahoo! Customer Care
54319618
For assistance with all Yahoo! services please visit:
http://help.yahoo.com/

Original Message Follows:

>>REDFRMADV Case ID: 54299669
>>REDFRMADV Case ID: 54285947
Excessive SPAM Complaint in
http://groups.yahoo.com/group/SkyWires/
--- In SkyWires@yahoogroups.com, "stellagreenbank" <stellagreenbank@...> wrote:
Dear Members
A NEW Page of great Freebies was just added ready for Monday 20th October. Visit Now!
If you would like a veritable 'mountain' of free-stuff, take the time to visit
the website below. It is packed with great freebies that ALL members can grab!
There is even 250 Free Books you can download, straight away!
You are sure to find something of interest, and they create new pages full of freebies, every Monday & Thursday...so add and keep the link

in
your FAVORITES when you arrive at the site and visit twice a week!
www. FreebieTelegraph .com (obviously you will need to type it
into
your browser without the spaces...but its worth the work!)
Lastly, if you want to stay informed as to when the new freebie pages
are loaded (some offers are 'time' sensitive, so its the early bird
that
catches the worm!), they have an excellent Freebie VIP Group that you
can join for free (the form is on every page) and you only get 2
emails a
week informing you of the new pages.
Have a great day and enjoy the freebies!

PS: When you have collected a few freebies for yourself, be nice and
pass this email message forward to all your family and friends. Its
very
satisfying helping others and everyone loves something for nothing!
--- End forwarded message ---

--
Dr.Ace Ratliff
www.WH2T.com

3236. Re: [SkyWires] Let's Complain to Yahoo about the spam

Yahoo group: SkyWires
Date: 2008-10-22 04:47:20 UTC
From: Tom Gleeman
Topic: 3235 Message: 3236

Thank you, Dr. ACE!

Tom
KE6YNH, 73

----- Original Message -----
From: Dr.Ace
To: SkyWires@yahoogroups.com
Sent: Tuesday, October 21, 2008 5:15 PM
Subject: [SkyWires] Let's Complain to Yahoo about the spam

I got this response from abuse@yahoogroups.com after I complained
about the Freebies spam.

Dear Dr.Ace,
Thank you for writing to Yahoo! Groups.
We appreciate your report of this incident in Yahoo! Groups. We will
investigate your report and take appropriate action as per our Terms
of
Service (TOS). For further details about the Yahoo! TOS, you can
visit:
http://docs.yahoo.com/info/terms/
Please know that Yahoo! is unable to disclose the action taken on
another user's account with a third party. We are not able to make
exceptions to this rule.
Please continue to notify us of any questionable content you find in
Yahoo! Groups. We are very concerned about preventing the abuse of
Groups, and we will continue to evaluate any material that violates
the
Yahoo! Groups Terms of Service.
Thank you again for contacting Yahoo! Groups.
Regards,
Danielle Brown
Yahoo! Customer Care
54319618
For assistance with all Yahoo! services please visit:
http://help.yahoo.com/

Original Message Follows:

>>REDFRMADV Case ID: 54299669
>>REDFRMADV Case ID: 54285947
Excessive SPAM Complaint in
http://groups.yahoo.com/group/SkyWires/
--- In SkyWires@yahoogroups.com, "stellagreenbank"
<stellagreenbank@...> wrote:

Dear Members
A NEW Page of great Freebies was just added ready for Monday 20th October. Visit Now!
If you would like a veritable 'mountain' of free-stuff, take the time to visit
the website below. It is packed with great freebies that ALL members can grab!
There is even 250 Free Books you can download, straight away!
You are sure to find something of interest, and they create new pages full of freebies, every Monday & Thursday...so add and keep the link in
your FAVORITES when you arrive at the site and visit twice a week!
www. FreebieTelegraph .com (obviously you will need to type it into
your browser without the spaces...but its worth the work!)
Lastly, if you want to stay informed as to when the new freebie pages are loaded (some offers are 'time' sensitive, so its the early bird that
catches the worm!), they have an excellent Freebie VIP Group that you can join for free (the form is on every page) and you only get 2 emails a
week informing you of the new pages.
Have a great day and enjoy the freebies!

PS: When you have collected a few freebies for yourself, be nice and pass this email message forward to all your family and friends. Its very
satisfying helping others and everyone loves something for nothing!
--- End forwarded message ---

--
Dr.Ace Ratliff
www.WH2T.com

3237. Complaining to Yahoo about spam is a waste of time...

Yahoo group: SkyWires
Date: 2008-10-22 05:52:00 UTC
From: Kurt Barnhart
Topic: 3235 Message: 3237

--- In SkyWires@yahoogroups.com, "Dr.Ace" <wh2t@...> wrote:
> I got this response from abuse@yahoogroups.com after I complained
> about the Freebies spam.

I have bad news.

Once a spammer has locked onto your group address, there are few options -- they will keep spamming you again and again.

You can close the group and open a new one with a similar name (be sure to keep it UNLISTED so that the spammers don't find you). You can rename the group and most of the members will be transferred to the new group. You can also set up the group so that only members can post. Or you can make the group moderated, and set trusted individuals as "unmoderated" on a one by one basis.

When the spam arrives, then you can delete it before it posts to the group.

Don't count on Yahoo doing anything. They never did before and they especially won't now since they are laying off thousands of employees.

Good luck!

-- Kurt

3238. Re: [SkyWires] Complaining to Yahoo about spam is a waste of time... SOMETIMES

Yahoo group: SkyWires
Date: 2008-10-22 15:38:50 UTC
From: Andy
Topic: 3238 Message: 3238

> Don't count on Yahoo doing anything. They never did before and they
> especially won't now since they are laying off thousands of employees.

What Yahoo can do, and has done for me, is remove people who have actual yahoo.com email accounts and are using them to send spam.

I have had success in the past reporting some of those to Yahoo. Yahoo investigates and closes their account. Their spam actually stopped. But in the big wide world of spam, those are the small players. Most spammers these days fake their "from" address so even if it says it is "from" a yahoo.com address, it probably isn't. And then there is nothing Yahoo will do about those.

Mail that *leaves* Yahoo, from a Yahoo.com email account, is clearly covered by a TOS (terms of service) agreement.

Mail that *arrives* in a Yahoogroup, is not covered by the same TOS, and may not violate any TOS unless what they are doing is patently illegal. Advertisements in Yahoogroups aren't illegal and may not violate Yahoo's TOS, so Yahoo generally doesn't intervene when the problem is spam being received by a Yahoogroup from elsewhere. They leave that up to the Moderators of the group, to control what THEY feel is acceptable to that group. Complaining to Yahoo will not help with those.

Two of the easiest things a group Owner/Moderator can do to control spam, are:

(1) Change the settings so that membership DOES require approval.

(2) Change the settings so that messages from NEW members (and only new members) are moderated.

The Owner/Moderators of this group have chosen to do neither of these things. So it's no wonder the group gets spam, and can't do anything about it until AFTER it happens.

These two actions are easy because it requires exactly two actions per new member. Once when they sign up. A second time when they post their first message. If the first message is spam, you don't approve it, and it never reaches the group. If it isn't spam, you change their status to unmoderated. And you're done. Easy.

Until you do these things, you will forever get spam. Any Joe can sign up, post a spam message, post a hundred spams if they like, and leave, never to be seen again. Until they do it again with a totally different identity.

Even if you somehow got Yahoo on your side, they wouldn't be able to stop it until after it happens and is recognized, and by then the damage has already been done. The only way to effectively stop it, is to block it before it happens!

Andy

3240. Half wave loop question..?

Yahoo group: SkyWires
Date: 2008-10-25 08:14:39 UTC
From: clausjc2003
Topic: 3240 Message: 3240

Hello evbdi...

I live in a small city lot and my antenna is for the moment an ordinary double zepp 27,5 m long and 10 m agl. It works, but it could be better so have thougt of building a vertical 40 m loop and feed it with 20 meters of 450 ohm ladderline, making it resonant on 80m and the harmonic bands...

I wonder if anyone had tried this, and if so how does it work..? Noise..? dx...? Modelling..?

Im using a homemade z-match tuner working fb, so there will be no balun and coax stuff to mess with..:-)

Best regards de 5P1CC claus.

3241. AW: [SkyWires] Half wave loop question..?

Yahoo group: SkyWires
Date: 2008-10-25 10:33:59 UTC
From: Siegfried Jackstien
Topic: 3240 Message: 3241

a 40m loop for 80m???
i think it will work but not good ... or you will have to open the opposide end to form a (folded) dipol for 80m
but you could give it a try and see how it works
best 73?s de dg9bfc
sigi
-----Urspr?ngliche Nachricht-----
Von: SkyWires@yahoogroups.com [mailto:SkyWires@yahoogroups.com]Im Auftrag von clausjc2003
Gesendet: Samstag, 25. Oktober 2008 08:15
An: SkyWires@yahoogroups.com
Betreff: [SkyWires] Half wave loop question..?

Hello evbdi...

I live in a small city lot and my antenna is for the moment an ordinary double zepp 27,5 m long and 10 m agl. It works, but it could be better so have thougt of building a vertical 40 m loop and feed it with 20 meters of 450 ohm ladderline, making it resonant on 80m and the harmonic bands...

I wonder if anyone had tried this, and if so how does it work..?
Noise..? dx...? Modelling..?

Im using a homemade z-match tuner working fb, so there will be no balun and coax stuff to mess with..:-)

Best regards de 5P1CC claus.

3242. Re: [SkyWires] Half wave loop question..?

Yahoo group: SkyWires
Date: 2008-10-25 13:54:01 UTC
From: Jim Dunstan
Topic: 3240 Message: 3242

At 08:14 AM 10/25/2008 +0000, you wrote:

>Hello evbdi...
>
>I live in a small city lot and my antenna is for the moment an ordinary
>double zepp 27,5 m long and 10 m agl. It works, but it could be better
>so have thougt of building a vertical 40 m loop and feed it with 20
>meters of 450 ohm ladderline, making it resonant on 80m and the harmonic
>bands...
>
>I wonder if anyone had tried this, and if so how does it work..?
>Noise..? dx...? Modelling..?
>
>Im using a homemade z-match tuner working fb, so there will be no balun
>and coax stuff to mess with..:-)
>
>Best regards de 5P1CC claus.

Hi,

I have tried a vertically oriented 40m loop supported from a 15m tower in a triangular shape with the apex at the top of the tower. I fed it at one of the lower corners with 450 ohm line to a z-match tuner. It was a good antenna but not great .... perhaps I should have tried different feed points. I have since replaced it with a 1/4 wave vertical for 40m and prefer it. The loop would tune easily on 80m and was useful for local contacts. However a simple inverted V on the same tower outperformed on 80m.

I do note in an old Antenna Handbook a short discussion on the 1/2wave loop in vertical orientation. It was square and fed in the centre of one of the vertical sides .... with the loop either fully intact or open directly opposite the feed point. I recall they indicated some directional properties. I don't have the Handbook handy .... i do remember thinking I would like to try it. The loop would be 1/8 wave to a side ... and would require 2 support points.

73
Jim, VE3CI

3244. Re: [SkyWires] Digest Number 1014

Yahoo group: SkyWires
Date: 2008-10-26 15:00:29 UTC
From: claus christiansen
Topic: 3243 Message: 3244

Yes it is.. sort of that is.. Because if i feed it with 1 half wavelength 450 ohm feeder, (in my case 21 meters or so) the system will be one electrical wavelengt on 80 mtrs. The impedance on the antennapart of the system will be high at the feeding point and the loop will be voltage fed. There will be one currentnode at the opposite point of the feedingpoint making at least one halfwave of the system radiate. Of cause ther will be loss in efficiency
because the antenna will only be 1/4 of the area of a full size loop on 80 mtrs...but it will work, and it wont be a dummyload entirely...Well yes on 160 it will be lousy..:-)

73 de claus

--- Den søn 26/10/08 skrev Thomas F. Giella <kn4lf1@...>:

Fra: Thomas F. Giella <kn4lf1@...>
Emne: Re: [SkyWires] Digest Number 1014
Til: SkyWires@yahoogroups.com
Dato: søndag 26. oktober 2008 15.37

If you build a full wave loop say for 80 meters and then try to use it on 160 meters as a 1/2 wave loop you get a big dummy load in the sky as the antenna is shorted out so to speak.

73,
Thomas F. Giella, KN4LF
Lakeland, FL, USA
kn4lf1@verizon. net
With God All Things Are Possible <><

KN4LF Amateur & SWL Radio Autobiography: http://www.kn4lf. com

----- Original Message -----
From: SkyWires@yahoogroup s.com
To: SkyWires@yahoogroup s.com
Sent: Sunday, October 26, 2008 7:34 AM
Subject: [SkyWires] Digest Number 1014

SkyWire Loop Antennas

Messages In This Digest (1 Message)

1a.
Re: Half wave loop question..? From: Jim Dunstan
View All Topics | Create New Topic
Message

1a.

Re: Half wave loop question..?
Posted by: "Jim Dunstan" jimdunstan@rogers. com norlink88
Sat Oct 25, 2008 6:54 am (PDT)
At 08:14 AM 10/25/2008 +0000, you wrote:

>Hello evbdi...
>
>I live in a small city lot and my antenna is for the moment an ordinary
>double zepp 27,5 m long and 10 m agl. It works, but it could be better
>so have thougt of building a vertical 40 m loop and feed it with 20
>meters of 450 ohm ladderline, making it resonant on 80m and the harmonic
>bands...
>
>I wonder if anyone had tried this, and if so how does it work..?
>Noise..? dx...? Modelling..?
>
>Im using a homemade z-match tuner working fb, so there will be no balun
>and coax stuff to mess with..:-)
>
>Best regards de 5P1CC claus.

Hi,

I have tried a vertically oriented 40m loop supported from a 15m tower in a triangular shape with the apex at the top of the tower. I fed it at one of the lower corners with 450 ohm line to a z-match tuner. It was a good antenna but not great .... perhaps I should have tried different feed points. I have since replaced it with a 1/4 wave vertical for 40m and prefer it. The loop would tune easily on 80m and was useful for local contacts. However a simple inverted V on the same tower outperformed on 80m.

I do note in an old Antenna Handbook a short discussion on the 1/2wave loop in vertical orientation. It was square and fed in the centre of one of the vertical sides .... with the loop either fully intact or open directly opposite the feed point. I recall they indicated some directional properties. I don't have the Handbook handy ... i do remember thinking I would like to try it. The loop would be 1/8 wave to a side ... and would require 2 support points.

73
Jim, VE3CI

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Version: 8.0.175 / Virus Database: 270.8.3/1746 - Release Date: 10/25/2008 5:55 PM

Trænger du til at se det store billede? Kelkoo giver dig gode tilbud på LCD TV! Se her
http://dk.yahoo.com/r/pat/lcd

3245. Re: [SkyWires] Digest Number 1014

Yahoo group: SkyWires
Date: 2008-10-26 20:44:36 UTC
From: Jim Dunstan
Topic: 3243 Message: 3245

At 10:37 AM 10/26/2008 -0400, you wrote:
>+OK 17 32706
>+OK 32706 octets
>X-Apparently-To: jimdunstan@... via 206.190.37.209; Sun, 26 Oct
>2008 07:37:33 -0700
>X-Originating-IP: [209.131.38.216]
>Authentication-Results:
>mta103.rog.mail.re2.yahoo.com from=yahoogroups.com; domainkeys=pass (ok)
>Received: from 209.131.38.216 (HELO n33c.bullet.sp1.yahoo.com)
>(209.131.38.216)
> by mta103.rog.mail.re2.yahoo.com with SMTP; Sun, 26 Oct 2008 07:37:31 -0700
>DKIM-Signature: v=1; a=rsa-sha256; c=relaxed/relaxed; d=yahoogroups.com;
>s=lima; t=1225031850; bh=iwnKcT5OLnZA0dIaAZHFXD8NHbXnBNsSn4irqfjeW2s=;
>h=Received:Received:X-Yahoo-Newman-Id:X-Sender:X-Apparently-To:X-Received:X-Received:X-Re
ceived:X-Received:X-Received:To:Message-id:X-MIMEOLE:X-Mailer:X-Priority:X-MSMail-priority
:References:X-Originating-IP:X-eGroups-Msg-Info:From:X-Yahoo-Profile:Sender:MIME-Version:M
ailing-List:Delivered-To:List-Id:Precedence:List-Unsubscribe:Date:Subject:X-Yahoo-Newman-P
roperty:Reply-To:Content-Type;
>b=ip5FyOrbUzuwgY93CKFPCRkAiHYsO8csPAMNlaPGzdIKj4ErQH9MxLEsZ/ZVZ4QlclGuLgtm8O1XowiLsYJY4Aa
hroWVrEQT7Bli4SHsn6FRPicVhi6MbYbZxtXbiYfB
>DomainKey-Signature: a=rsa-sha1; q=dns; c=nofws; s=lima; d=yahoogroups.com;
>
>b=e2UZ2iCp6H+SBNXn64ymrQ7TVcDKU8GI5XjW43YXOEU6IwtloAV2b5cbpLDG5thQXOkYJxZVaE2o3FvrWto7oyM
EcauQc6FF39Png2tZ/Gh6TxGaRwn+72cPuTwnDOjv;
>Received: from [69.147.65.173] by n33.bullet.sp1.yahoo.com with NNFMP; 26
>Oct 2008 14:37:30 -0000
>Received: from [66.218.67.104] by t15.bullet.mail.sp1.yahoo.com with
>NNFMP; 26 Oct 2008 14:37:30 -0000
>X-Yahoo-Newman-Id: 10946119-m3243
>X-Sender: kn4lf1@...
>X-Apparently-To: SkyWires@yahoogroups.com
>X-Received: (qmail 8182 invoked from network); 26 Oct 2008 14:37:28 -0000
>X-Received: from unknown (66.218.67.97)
> by m43.grp.scd.yahoo.com with QMQP; 26 Oct 2008 14:37:28 -0000
>X-Received: from unknown (HELO vms173005pub.verizon.net) (206.46.173.5)
> by mta18.grp.scd.yahoo.com with SMTP; 26 Oct 2008 14:37:28 -0000
>X-Received: from YOUR5BFDF7BC50 ([71.101.155.149]) by vms173005.mailsrvcs.net
> (Sun Java System Messaging Server 6.2-6.01 (built Apr 3 2006))
> with ESMTPA id <0K9C006ENOMD8DW5@...> for
> SkyWires@yahoogroups.com; Sun, 26 Oct 2008 09:37:26 -0500 (CDT)
>X-Received: from 127.0.0.1 (AVG SMTP 8.0.175 [270.8.3/1746]); Sun,
> 26 Oct 2008 10:37:24 -0400
>To: <SkyWires@yahoogroups.com>
>Message-id: <857F1E29D0554E4BB2BAC15159D3C868@YOUR5BFDF7BC50>
>X-MIMEOLE: Produced By Microsoft MimeOLE V6.00.2900.5579

>X-Mailer: Microsoft Outlook Express 6.00.2900.5512
>X-Priority: 3
>X-MSMail-priority: Normal
>References: <1225020854.546.31608.m45@yahoogroups.com>
>X-Originating-IP: 206.46.173.5
>From: "Thomas F. Giella" <kn4lf1@...>
>X-Yahoo-Profile: thomasgiella
>Sender: SkyWires@yahoogroups.com
>MIME-Version: 1.0
>Mailing-List: list SkyWires@yahoogroups.com; contact
>SkyWires-owner@yahoogroups.com
>Delivered-To: mailing list SkyWires@yahoogroups.com
>List-Id: <SkyWires.yahoogroups.com>
>Precedence: bulk
>List-Unsubscribe: <mailto:SkyWires-unsubscribe@yahoogroups.com>
>Date: Sun, 26 Oct 2008 10:37:24 -0400
>Subject: Re: [SkyWires] Digest Number 1014
>Reply-To: SkyWires@yahoogroups.com
>Content-Type: multipart/mixed;
> boundary="=======AVGMAIL-490480A50000======="
>
>If you build a full wave loop say for 80 meters and then try to use it on
>160 meters as a 1/2 wave loop you get a big dummy load in the sky as the
>antenna is shorted out so to speak.
>
>73,
>Thomas F. Giella, KN4LF
>Lakeland, FL, USA
><mailto:kn4lf1@...>kn4lf1@...
>With God All Things Are Possible <>

Hi Thomas,

I wouldn't go that far hi hi After all a mobile whip antenna 8' long is only about 20% the size of a full size vertical and it works quite well. I would hardly call a 270 ft loop a black hole hi hi.

Jim, VE3CI

3248. Wire and Cable for Sale - Must Go due to sale of home

Yahoo group: SkyWires
Date: 2008-10-30 17:35:32 UTC
From: denisnh
Topic: 3248 Message: 3248

Hi All. Due to a series of personal setbacks, I am forced to sell my home. I am currently moving all my stuff out and am selling off as much as I can.

I have several rolls of new, unused wire. Some of it is industrial surplus, but it is all in new condition. I did NOT get this stuff free, so I'll sell it for the lowest prices I can. The price per foot is still much lower than anything surplus or otherwise you'll find anywhere. If you do find the following items for less money, please let me know. I have just posted this wire on Craig's List under the links below.

Right now I have two types of wire for sale:

1) 12 ga. PVC jacketed copper stranded, ideal for just about any type of wire antenna.
http://boston.craigslist.org/nwb/mat/893796223.html

2) Military spec RG-58/U, 50 ohm coaxial cable also in new condition, never used.
http://boston.craigslist.org/nwb/mat/897230310.html

Shipping is available for those who don't live in the area, or it can be picked up in Billerica, MA.

Thanks,
Denis

3249. [SkyWires] WTB - looking for some Lightning grounding wire

Yahoo group: SkyWires
Date: 2008-10-30 20:51:13 UTC
From: Walter Jinright
Topic: 3248 Message: 3249

Hi all,
I am looking for about 20 ft of either 8 gauge or larger copper grounding wire for grounding a 30 ft "tower" mast/antenna to a set of ground rods, nothing smaller than 8 gauge (however 2 x 20 ft of 10 gauge solid may work), but I prefer 3/4" x ~1/8" or 1" x ~ 1/8" copper strap (strip), solid preferred, but will settle for 1" x ~1/4" braided copper "ribbon".
I am grounding a converted TV antenna to a homebrew 6 meter beam, scantenna II, and a dual-band 2 meter/70 cm set of antennas on a ~ 30 - 35' mast that needs lightning protection (I am in FL). I already have the ground rods and polyphaser surge protectors on hardware, it is just hard to find the grounding wire / ribbon in my area.
Also, any suggestions on retailer would also be appreciated as well.

Thanks,
Walter kg4bvd

----- Original Message -----
From: denisnh
To: SkyWires@yahoogroups.com
Sent: Thursday, October 30, 2008 12:35 PM
Subject: [SkyWires] Wire and Cable for Sale - Must Go due to sale of home

Hi All. Due to a series of personal setbacks, I am forced to sell my home. I am currently moving all my stuff out and am selling off as much as I can.

I have several rolls of new, unused wire. Some of it is industrial surplus, but it is all in new condition. I did NOT get this stuff free, so I'll sell it for the lowest prices I can. The price per foot is still much lower than anything surplus or otherwise you'll find anywhere. If you do find the following items for less money, please let me know. I have just posted this wire on Craig's List under the links below.

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2) Military spec RG-58/U, 50 ohm coaxial cable also in new condition, never used.
http://boston.craigslist.org/nwb/mat/897230310.html

Shipping is available for those who don't live in the area, or it can be picked up in Billerica, MA.

Thanks,
Denis

3251. Re: [SkyWires] WTB - looking for some Lightning grounding wire

Yahoo group: SkyWires
Date: 2008-10-31 16:51:41 UTC
From: Walter Jinright
Topic: 3248 Message: 3251

Thanks Thomas,
73,
Walter

----- Original Message -----
From: Thomas F. Giella
To: a un sky wires eGroup
Sent: Friday, October 31, 2008 9:11 AM
Subject: [SkyWires] WTB - looking for some Lightning grounding wire

Walter,

Georgia Copper at http://www.gacopper.com or alternately your local Home
Depot or Lowes.

73,
Thomas F. Giella, KN4LF
Lakeland, FL, USA
kn4lf1@...
With God All Things Are Possible <><

KN4LF Amateur & SWL Radio Autobiography: http://www.kn4lf.com

---

No virus found in this outgoing message.
Checked by AVG - http://www.avg.com
Version: 8.0.175 / Virus Database: 270.8.5/1757 - Release Date: 10/30/2008 2:35 PM

3252. Re: Wire and Cable for Sale - Must Go due to sale of home

Yahoo group: SkyWires
Date: 2008-11-02 15:03:00 UTC
From: denisnh
Topic: 3248 Message: 3252

Re: Wire and Cable for Sale - Selling Home and it all must go.

The RG58 Coax is sold out. I'm going through my various storage locations in hope I have more and will update this thread if I do.

I have a huge roll of the 12ga and there is still some available.

Thanks to all who ordered or just had kind words of encouragement. The amateur radio community consists of the nicest folks on the planet and I'm proud to be a member.

Regarding the 8ga grounding wire, I had to run some of that from a pump motor to the breaker panel, getting my house ready for market, and found what I needed at Home Depot. But, WOW, it's expensive.

Someone had emailed me and asked for my take on setting up a horizontal loop. I sent a description of my version of setting up a skywire and it was very well received, so I'll post it in this group within the next few days. There is some stuff there that apparently isn't available anywhere else and you might say they are lessons "hard-learned" from experience. :)

Thanks,
Denis

--- In SkyWires@yahoogroups.com, "denisnh" <denisnh@...> wrote:
>
> Hi All. Due to a series of personal setbacks, I am forced to sell my
> home. I am currently moving all my stuff out and am selling off as
> much as I can.
>
> I have several rolls of new, unused wire. Some of it is industrial
> surplus, but it is all in new condition. I did NOT get this stuff
> free, so I'll sell it for the lowest prices I can. The price per foot
> is still much lower than anything surplus or otherwise you'll find
> anywhere. If you do find the following items for less money, please
> let me know. I have just posted this wire on Craig's List under the
> links below.
>
> Right now I have two types of wire for sale:
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> http://boston.craigslist.org/nwb/mat/893796223.html
>
> 2) Military spec RG-58/U, 50 ohm coaxial cable also in new
> condition, never used.

> http://boston.craigslist.org/nwb/mat/897230310.html
>
> Shipping is available for those who don't live in the area, or it can
> be picked up in Billerica, MA.
>
> Thanks,
> Denis
>

3260. Re: Digest Number 1014

Yahoo group: SkyWires
Date: 2008-11-19 21:45:26 UTC
From: clausjc2003
Topic: 3243 Message: 3260

--- In SkyWires@yahoogroups.com, claus christiansen <clausjc2003@...>
wrote:
>
> Yes it is.. sort of that is.. Because if i feed it with 1 half
wavelength 450 ohm feeder, (in my case 21 meters or so) the system
will be one electrical wavelengt on 80 mtrs. The impedance on the
antennapart of the system willÂ be high at the feeding point and the
loop will be voltage fed. There will be one currentnode at the
opposite point of the feedingpoint making at least one halfwave of
the system radiate. Of cause ther will be loss in efficiency
> because the antenna will only be 1/4 of the area of a full size
loop on 80 mtrs...but it will work, and it wont be a dummyload
entirely...Well yes on 160 it will be lousy..:-)
> Â
> 73 de claus
>
> --- Den sÃ¸n 26/10/08 skrev Thomas F. Giella <kn4lf1@...>:
>
> Fra: Thomas F. Giella <kn4lf1@...>
> Emne: Re: [SkyWires] Digest Number 1014
> Til: SkyWires@yahoogroups.com
> Dato: sÃ¸ndag 26. oktober 2008 15.37
>
>
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>
>
> If you build a full wave loop sayÂ for 80 meters and then try to
use it on 160 meters as a 1/2 wave loop youÂ get a big dummy load in
the sky as the antenna is shorted out so to speak.
> Â
> 73,
> Thomas F. Giella, KN4LF
> Lakeland, FL, USA
> kn4lf1@verizon. net
> With God All Things Are Possible <><
> Â
> KN4LF Amateur & SWL Radio Autobiography: http://www.kn4lf. comÂ
>
>
> ----- Original Message -----
> From: SkyWires@yahoogroup s.com
> To: SkyWires@yahoogroup s.com

> Sent: Sunday, October 26, 2008 7:34 AM
> Subject: [SkyWires] Digest Number 1014
>
>
>
> SkyWire Loop Antennas
>
> Messages In This Digest (1 Message)
>
>
> 1a.
> Re: Half wave loop question..? From: Jim Dunstan
> View All Topics | Create New Topic
> Message
>
>
> 1a.
>
> Re: Half wave loop question..?
> Posted by: "Jim Dunstan" jimdunstan@rogers. com Â norlink88
> Sat OctÂ 25,Â 2008 6:54Â am (PDT)
> At 08:14 AM 10/25/2008 +0000, you wrote:
>
> >Hello evbdi...
> >
> >I live in a small city lot and my antenna is for the moment an
ordinary
> >double zepp 27,5 m long and 10 m agl. It works, but it could be
better
> >so have thougt of building a vertical 40 m loop and feed it with 20
> >meters of 450 ohm ladderline, making it resonant on 80m and the
harmonic
> >bands...
> >
> >I wonder if anyone had tried this, and if so how does it work..?
> >Noise..? dx...? Modelling..?
> >
> >Im using a homemade z-match tuner working fb, so there will be no
balun
> >and coax stuff to mess with..:-)
> >
> >Best regards de 5P1CC claus.
>
> Hi,
>
> I have tried a vertically oriented 40m loop supported from a 15m
tower in a
> triangular shape with the apex at the top of the tower. I fed it at
one of
> the lower corners with 450 ohm line to a z-match tuner. It was a

good
> antenna but not great .... perhaps I should have tried different
feed
> points. I have since replaced it with a 1/4 wave vertical for 40m
and
> prefer it. The loop would tune easily on 80m and was useful for
local
> contacts. However a simple inverted V on the same tower
outperformed on 80m.
>
> I do note in an old Antenna Handbook a short discussion on the
1/2wave loop
> in vertical orientation. It was square and fed in the centre of one
of the
> vertical sides .... with the loop either fully intact or open
directly
> opposite the feed point. I recall they indicated some directional
> properties. I don't have the Handbook handy ... i do remember
thinking I
> would like to try it. The loop would be 1/8 wave to a side ... and
would
> require 2 support points.
>
> 73
> Jim, VE3CI
>
>
>
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>
>
> Recent Activity
>
>
> Â 4
> New MembersVisit Your Group
>
>
> Sitebuilder
> Build a web site
> quickly & easily
> with Sitebuilder.
>

Hello again... I had a brainwave...:-)

I made a model of this contraption for 145 mhz and it works.. ill try to describe how.. the loop itself is made of ordinary cu.wire 24.5 cm on each side which makes a half wavelength loop for 145 mhz.. i am

feeding it with 49 cm 450 ohm open line just like the hairpin in a j-poleantenna, making the electrical length equal to 1/1 wavelength. And in the shorted end of the hairpin i made a gammamatch, just like you could do with any other loop or dipole antenna, swr perfect 1:1 an as a bonus it also works on 70 cents as expected...

I tested it on two local repeaters against an j-pole made the same way, and they are accoding to reports and my own measurements very close to equal, but a bit to the favour of the j-pole which also was expected... both on 70 cents and 145 mhz... and with exactly the same setting of the gammacapacitor...

I also added two pieces of wire 25 cm long on each corner of the loop, to simulate an inverted v, and that also worked, maybe even a little better than with the loop alone.. This could be doubfull as the local beacon is so weak at my location that its hard to hear, (or measure) any small difference in signalstrength..

Hope this explanation is understandable, otherwise feel free to ask..:-)

73 de claus

> Everyday Wellness
> on Yahoo! Groups
> Find groups that will
> help you stay fit.
>
> Special K Group
> on Yahoo! Groups
> Learn how others
> are losing pounds.
>
>
> Need to Reply?
> Click one of the "Reply" links to respond to a specific message in the Daily Digest.
> Create New Topic | Visit Your Group on the Web
> Messages | Files | Photos | Links | Database | Polls | Members | Calendar
>
> Change settings via the Web (Yahoo! ID required)
> Change settings via email: Switch delivery to Individual | Switch format to Traditional
> Visit Your Group | Yahoo! Groups Terms of Use | Unsubscribe
>
>
>
>
> No virus found in this incoming message.
> Checked by AVG - http://www.avg. com

> Version: 8.0.175 / Virus Database: 270.8.3/1746 - Release Date:
10/25/2008 5:55 PM
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> TrÃ¦nger du til at se det store billede? Kelkoo giver dig
gode tilbud pÃ¥ LCD TV! Se her http://dk.yahoo.com/r/pat/lcd
>

3268. 160 meter loop Questions

Yahoo group: SkyWires
Date: 2008-12-09 23:38:37 UTC
From: Jim Snider
Topic: 3268 Message: 3268

Hi all, Jim, W8BS here. My rig is an Icom IC-703 Plus. I work QRP only so antenna is the only place I can make improvements to my signal. I installed a 160 meter loop this summer that is up 25 feet. I used #12 AWG THHN wire for the loop and am feeding it with RG-8/U. I used to have an 80 meter loop but I wanted to get back on 160. I use the tuner in the rig to tune 160, 80 and 40 on the loop.

Now, recently I installed a 160 meter Inverted L also. So far, I have been impressed with the contacts and performance of the L. I borrowed an MFJ analyzer from a friend and the L is resonant at 1.845. The best SWR I can measure on my loop is at 1.86 but 2.5 to 1. The tuner in the Icom matches the loop just fine to the rig but I'm wondering about performance of my station.

I've read a number of web sites where guys use 450 ohm ladder line to feed their loops. My questions are these:

1. Should I cut the loop back to 272 feet which will raise the distance to ground for the 80 meter loop? Raising the 160 up is not really an option.

2. Should I feed the current 160 meter loop with 450 ohm ladder line and get a 4:1 balun to put at the rig?

3. What about feeding an 80 meter loop with ladder line verse the coax?

Thanks in advance for any info and help.

Jim Snider

jim@...

3269. RE: [SkyWires] 160 meter loop Questions

Yahoo group: SkyWires
Date: 2008-12-09 23:51:10 UTC
From: Scott MacKenzie
Topic: 3268 Message: 3269

Regarding the 80M loop. I feed the 80M loop with a random length of 450 ohm ladder line because I use the loop on multiple bands - it works extremely well on 40M....If I was only going to use the loop on 80M, I would feed it with coax and a 75 ohm matching section.

From: SkyWires@yahoogroups.com [mailto:SkyWires@yahoogroups.com] On Behalf Of Jim Snider
Sent: Tuesday, December 09, 2008 6:39 PM
To: SkyWires@yahoogroups.com
Subject: [SkyWires] 160 meter loop Questions

Hi all, Jim, W8BS here. My rig is an Icom IC-703 Plus. I work QRP only so antenna is the only place I can make improvements to my signal. I installed a 160 meter loop this summer that is up 25 feet. I used #12 AWG THHN wire for the loop and am feeding it with RG-8/U. I used to have an 80 meter loop but I wanted to get back on 160. I use the tuner in the rig to tune 160, 80 and 40 on the loop.

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2. Should I feed the current 160 meter loop with 450 ohm ladder line and get a 4:1 balun to put at the rig?

3. What about feeding an 80 meter loop with ladder line verse the coax?

Thanks in advance for any info and help.

Jim Snider

jim@...

3270. RE: [SkyWires] 160 meter loop Questions

Yahoo group: SkyWires
Date: 2008-12-10 00:10:17 UTC
From: Jim Snider
Topic: 3268 Message: 3270

How high up is your loop?

Also, mine is in a rectangle shape but almost a square.

-----Original Message-----
From: SkyWires@yahoogroups.com [mailto:SkyWires@yahoogroups.com] On Behalf Of Scott MacKenzie
Sent: Tuesday, December 09, 2008 6:51 PM
To: SkyWires@yahoogroups.com
Subject: RE: [SkyWires] 160 meter loop Questions

Regarding the 80M loop. I feed the 80M loop with a random length of 450 ohm ladder line because I use the loop on multiple bands - it works extremely well on 40M....If I was only going to use the loop on 80M, I would feed it with coax and a 75 ohm matching section.

From: SkyWires@yahoogroups.com [mailto:SkyWires@yahoogroups.com] On Behalf Of Jim Snider
Sent: Tuesday, December 09, 2008 6:39 PM
To: SkyWires@yahoogroups.com
Subject: [SkyWires] 160 meter loop Questions

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1. Should I cut the loop back to 272 feet which will raise the distance to ground for the 80 meter loop? Raising the 160 up is not really an option.

2. Should I feed the current 160 meter loop with 450 ohm ladder line and get a 4:1 balun to put at the rig?

3. What about feeding an 80 meter loop with ladder line verse the
coax?

Thanks in advance for any info and help.

Jim Snider

jim@...

No virus found in this incoming message.
Checked by AVG - http://www.avg.com
Version: 8.0.176 / Virus Database: 270.9.15/1838 - Release Date: 12/9/2008
4:53 PM

3271. Re: [SkyWires] 160 meter loop Questions

Yahoo group: SkyWires
Date: 2008-12-10 04:25:49 UTC
From: Jim Dunstan
Topic: 3268 Message: 3271

At 06:38 PM 12/9/2008 -0500, you wrote:

>Hi all, Jim, W8BS here. My rig is an Icom IC-703 Plus. I work QRP only
>so antenna is the only place I can make improvements to my signal. I
>installed a 160 meter loop this summer that is up 25 feet. I used #12 AWG
>THHN wire for the loop and am feeding it with RG-8/U. I used to have an
>80 meter loop but I wanted to get back on 160. I use the tuner in the rig
>to tune 160, 80 and 40 on the loop.
>
>
>
>Now, recently I installed a 160 meter Inverted L also. So far, I have
>been impressed with the contacts and performance of the L. I borrowed an
>MFJ analyzer from a friend and the L is resonant at 1.845. The best SWR I
>can measure on my loop is at 1.86 but 2.5 to 1. The tuner in the Icom
>matches the loop just fine to the rig but I m wondering about performance
>of my station.
>
>
>
>I ve read a number of web sites where guys use 450 ohm ladder line to
>feed their loops. My questions are these:
>
>
>
>1. Should I cut the loop back to 272 feet which will raise the
>distance to ground for the 80 meter loop? Raising the 160 up is not
>really an option.
>
>2. Should I feed the current 160 meter loop with 450 ohm ladder line
>and get a 4:1 balun to put at the rig?
>
>3. What about feeding an 80 meter loop with ladder line verse the coax?
>
>
>
>
>
>Thanks in advance for any info and help.

Hi Jim,

This is another Jim hi .... a lot of questions ... but first .... you are running QRP and as you mentioned the antenna is important ... especially efficiency .... that is you want as much of your power up in the antenna as possible and not warming up the feed line. Start with first principles

.... If you design your loop to be resonant at a particular frequency/band and you feed the loop with coax .... then for all practical purposes that is the only band for which the system is useable! This is because the loop will present a reasonable match to the 50 ohm coax at the fundamental frequency only.

If you have a 160M (1 wavelength) loop fed with RG8 it will be a good antenna for 160M and useless on 80, 40, or other bands .... especially with QRP. You will no doubt be able to match the end of the coax (in the shack) to the rig .... but the amount of RF that actually gets into the antenna will be negligible as almost all the power will be consumed in the coax feed line. Coax feed line is notorious as an RF 'sink' when dealing with high SWR.

If you want the loop to be multi-band then you must deal with high SWR loss by using ladder line .... or use an automatic antenna coupler (like an SGC) right at the feed point of the antenna.

Jim, VE3CI

3272. Re: [SkyWires] 160 meter loop Questions

Yahoo group: SkyWires
Date: 2008-12-10 08:21:56 UTC
From: Siegfried Jackstien
Topic: 3268 Message: 3272

dear jim
see in the files section
http://f1.grp.yahoofs.com/v1/AHc_SdhhIgVggM7AbroX_bTlKX7WlN7ppR5esCmgr9NAwukShZ4TIKfAlH5T1SKWhN92bA4YDAXBOZHjob5i4YNqkZb0/loop.xls
i use a 168m loop with ladderline with superb results
fed vial 2 different lenght of ladderline and a homebrewed 1:9 balun
if you look in the excelfile you see my notes
i can feed this antenna an many bands without a tuner and on the other bands swr is quite low ... so the losses are very low in the tuner
maybe this is a little help for you
best 73´s de dg9bfc
ps any questions?? just drop me a mail
----- Original Message -----
From: Jim Snider
To: SkyWires@yahoogroups.com
Sent: Wednesday, December 10, 2008 12:38 AM
Subject: [SkyWires] 160 meter loop Questions

Hi all, Jim, W8BS here. My rig is an Icom IC-703 Plus. I work QRP only so antenna is the only place I can make improvements to my signal. I installed a 160 meter loop this summer that is up 25 feet. I used #12 AWG THHN wire for the loop and am feeding it with RG-8/U. I used to have an 80 meter loop but I wanted to get back on 160. I use the tuner in the rig to tune 160, 80 and 40 on the loop.

Now, recently I installed a 160 meter Inverted L also. So far, I have been impressed with the contacts and performance of the L. I borrowed an MFJ analyzer from a friend and the L is resonant at 1.845. The best SWR I can measure on my loop is at 1.86 but 2.5 to 1. The tuner in the Icom matches the loop just fine to the rig but I'm wondering about performance of my station.

I've read a number of web sites where guys use 450 ohm ladder line to feed their loops. My questions are these:

1. Should I cut the loop back to 272 feet which will raise the distance to ground for the 80 meter loop? Raising the 160 up is not really an option.

2. Should I feed the current 160 meter loop with 450 ohm ladder line and get a 4:1 balun to put at the rig?

3. What about feeding an 80 meter loop with ladder line verse the coax?

Thanks in advance for any info and help.

Jim Snider

jim@lexiann.com

3273. RE: [SkyWires] 160 meter loop Questions

Yahoo group: SkyWires
Date: 2008-12-11 01:15:44 UTC
From: Jim Snider
Topic: 3268 Message: 3273

OK. I think I'll get some 450 ladder line and replace my feeder. Now, for balun, will the LDG 4:1 (voltage) be a good one to use, or should I use the MFJ-911 4:1 (current)?

-----Original Message-----
From: SkyWires@yahoogroups.com [mailto:SkyWires@yahoogroups.com] On Behalf Of Scott MacKenzie
Sent: Tuesday, December 09, 2008 6:51 PM
To: SkyWires@yahoogroups.com
Subject: RE: [SkyWires] 160 meter loop Questions

Regarding the 80M loop. I feed the 80M loop with a random length of 450 ohm ladder line because I use the loop on multiple bands - it works extremely well on 40M....If I was only going to use the loop on 80M, I would feed it with coax and a 75 ohm matching section.

From: SkyWires@yahoogroups.com [mailto:SkyWires@yahoogroups.com] On Behalf Of Jim Snider
Sent: Tuesday, December 09, 2008 6:39 PM
To: SkyWires@yahoogroups.com
Subject: [SkyWires] 160 meter loop Questions

Hi all, Jim, W8BS here. My rig is an Icom IC-703 Plus. I work QRP only so antenna is the only place I can make improvements to my signal. I installed a 160 meter loop this summer that is up 25 feet. I used #12 AWG THHN wire for the loop and am feeding it with RG-8/U. I used to have an 80 meter loop but I wanted to get back on 160. I use the tuner in the rig to tune 160, 80 and 40 on the loop.

Now, recently I installed a 160 meter Inverted L also. So far, I have been impressed with the contacts and performance of the L. I borrowed an MFJ analyzer from a friend and the L is resonant at 1.845. The best SWR I can measure on my loop is at 1.86 but 2.5 to 1. The tuner in the Icom matches the loop just fine to the rig but I'm wondering about performance of my station.

I've read a number of web sites where guys use 450 ohm ladder line to feed their loops. My questions are these:

1. Should I cut the loop back to 272 feet which will raise the distance to ground for the 80 meter loop? Raising the 160 up is not really an option.

2. Should I feed the current 160 meter loop with 450 ohm ladder line and get a 4:1 balun to put at the rig?

3. What about feeding an 80 meter loop with ladder line verse the coax?

Thanks in advance for any info and help.

Jim Snider

jim@...

No virus found in this incoming message.
Checked by AVG - http://www.avg.com
Version: 8.0.176 / Virus Database: 270.9.15/1838 - Release Date: 12/9/2008 4:53 PM

3275. Re: [SkyWires] 160 meter loop Questions

Yahoo group: SkyWires
Date: 2008-12-11 08:27:09 UTC
From: Siegfried Jackstien
Topic: 3268 Message: 3275

dear jim
on my antenna i use a 1:9 balun (homemade) .... but i do use resonant lenght of feedingline
it is quarterwvae on 80 or quarterwave on 160 ....
i use it that way cause with this configuration i don´t need a tuner on most bands
just see loop.xls in the filearea ....
but if you can not use it that way a 1:4 with random lenght would work for you
surely you have to use a tuner on every band when you go that way ...
best were to use a balanced tuner with the balun on the input side
cause baluns don´t like to transform reactance very much
hope that helps a bit
most important is to change the feedingline to ladderline cause it has lower losses
the rest will be experimental
on my loop it took me 4 days with cut and try cut and try cut and try ....
that´s why i made the excelfile for my notes :-)
best 73´s de dg9bfc
sigi
----- Original Message -----
From: Jim Snider
To: SkyWires@yahoogroups.com
Sent: Thursday, December 11, 2008 2:15 AM
Subject: RE: [SkyWires] 160 meter loop Questions

OK. I think I'll get some 450 ladder line and replace my feeder. Now, for
balun, will the LDG 4:1 (voltage) be a good one to use, or should I use the
MFJ-911 4:1 (current)?

-----Original Message-----
From: SkyWires@yahoogroups.com [mailto:SkyWires@yahoogroups.com] On Behalf
Of Scott MacKenzie
Sent: Tuesday, December 09, 2008 6:51 PM
To: SkyWires@yahoogroups.com
Subject: RE: [SkyWires] 160 meter loop Questions

Regarding the 80M loop. I feed the 80M loop with a random length of 450
ohm ladder line because I use the loop on multiple bands - it works
extremely well on 40M....If I was only going to use the loop on 80M, I
would feed it with coax and a 75 ohm matching section.

From: SkyWires@yahoogroups.com [mailto:SkyWires@yahoogroups.com] On
Behalf Of Jim Snider
Sent: Tuesday, December 09, 2008 6:39 PM
To: SkyWires@yahoogroups.com
Subject: [SkyWires] 160 meter loop Questions

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Thanks in advance for any info and help.

Jim Snider

jim@...

No virus found in this incoming message.
Checked by AVG - http://www.avg.com
Version: 8.0.176 / Virus Database: 270.9.15/1838 - Release Date: 12/9/2008 4:53 PM

3277. Urgent News: John "Fred" Clement (W2FC)

Yahoo group: SkyWires
Date: 2008-12-12 01:25:44 UTC
From: geratol925
Topic: 3277 Message: 3277

This is John "Fred" Clement's (W2FC) daughter.

I need to relay some unfortunate news. You may have known that Dad was not feeling well over the past two months. It is with deep regret that on Wednesday, 12/10/08, my father passed away from lung cancer. We all feel it necessary to pass on the information since speaking with you whether it be on the internet or over the air was some of his most cherished moments.

The service information and home address is listed below for anyone who is local to the area or would like to send a quick note.

Details for John F. Clement W2FC:

Home Address: 1141 Hyman Ave. Bay Shore, NY 11706

Viewing: Friday, December 12 @ Chapey's Funeral Home in West Islip, NY from 2 - 4:30pm and 7 - 9:30pm

Funeral Services: Saturday, December 13 @ St. Patricks Cathedral in Bay Shore, NY at 10:00am.

3278. RE: [SkyWires] Urgent News: John "Fred" Clement (W2FC)

Yahoo group: SkyWires
Date: 2008-12-12 01:32:15 UTC
From: Scott MacKenzie
Topic: 3277 Message: 3278

I am sorry to hear of Fred's passing. I hope his family was around him.

You have my condolences.

Scott, KB0FHP

From: SkyWires@yahoogroups.com [mailto:SkyWires@yahoogroups.com] On Behalf Of geratol925
Sent: Thursday, December 11, 2008 8:26 PM
To: SkyWires@yahoogroups.com
Subject: [SkyWires] Urgent News: John "Fred" Clement (W2FC)

This is John "Fred" Clement's (W2FC) daughter.

I need to relay some unfortunate news. You may have known that Dad was not feeling well over the past two months. It is with deep regret that on Wednesday, 12/10/08, my father passed away from lung cancer. We all feel it necessary to pass on the information since speaking with you whether it be on the internet or over the air was some of his most cherished moments.

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Funeral Services: Saturday, December 13 @ St. Patricks Cathedral in Bay Shore, NY at 10:00am.

3280. hi

Yahoo group: SkyWires
Date: 2008-12-22 11:51:16 UTC
From: VU3MES
Topic: 3280 Message: 3280

wishing everybody a merry xmas and peaceful 2009

vu3mes
satyan

3281. HMY2K8 - A multiband HF transceiver (Homebrew) :

Yahoo group: SkyWires
Date: 2008-12-25 07:18:51 UTC
From: Satheesh Menon
Topic: 3281 Message: 3281

***** MERRY CHIRSTMAS ****

HMY2K8 - A multiband HF (Homebrew) transceiver :

for more information visit :

http://vu2sgw.blogspot.com/2008/11/hmy2k8-multiband-hf-transceiver.html

TECHNICAL SPECIFICATIONS :
Frequency coverage: Ham Bands
3.500 - 3.600 M.Hz (80 M)
7.000 - 7.100M.Hz (40 M)
14.000 – 14.350 M.Hz (20 M)
21.000 - 21.350 M.Hz (15 M)
28.000 – 28.350 M.Hz (10 M)

Frequency control :
Ver. 1: Direct Digital Synthesizer (DDS) with 1 Hz step continuously variable VFO with 20 memory channels. 2 line LCD display. Dual VFO, Split , RIT, Key pad /rotary encoder for frequency entry.

Ver. 2: 5 Band Heterodyne VFO with PIC frequency counter to reduce cost of the project.

Receiver :
Single conversion receiver with 10.000 M.Hz Cohn filter.
Low noise figure, 2.2 K.Hz SSB band width, 1.5 W audio O/P.

Transmitter :
RF O/P - SSB - 90 W (DC PWR I/P)
CW - 60 W (DC PWR I/P)
Built in CW side tone, CW delay, pwr meter, MOS FET Push Pull PA.

Dimensions :8.5 X 7 X 4.5 inches

Happy Homebrewing/ Happy HAMing

73,
VU2WSM
(Satheesh)

3282. KN4LF Daily LF/MF/HF/6M Frequency Radiowave Propagation Forecast #2008-38

Yahoo group: SkyWires
Date: 2008-12-26 14:35:24 UTC
From: kn4lf
Topic: 3282 Message: 3282

The KN4LF Daily LF/MF/HF/6M Frequency Radiowave Propagation Forecast
#2008-38 has been published on Friday 12/26/2008 at 1500 UTC, valid 0000 UTC
Saturday 12/27/2008 through 2359 UTC Friday 01/02/2009 at
http://www.kn4lf.com/kn4lf6.htm .

73 & GUD DX,
Thomas F. Giella, KN4LF
Lakeland, FL, USA
kn4lf@...

KN4LF Daily Solar Space Weather & Geomagnetic Data Archive:
http://www.kn4lf.com/kn4lf5.htm
KN4LF Daily LF/MF/HF/6M Frequency Radiowave Propagation Forecast & Archive:
http://www.kn4lf.com/kn4lf6.htm
KN4LF 160 Meter Radio Propagation Theory Notes:
http://www.kn4lf.com/kn4lf8.htm
LF/MF/HF/VHF Frequency Radiowave Propagation Email Reflector:
http://montreal.kotalampi.com/mailman/listinfo/kn4lf
Harmful Man Induced Climate Change (Global Warming) Refuted:
http://www.kn4lf.com/globalwarminglie.htm

3283. KN4LF Daily LF/MF/HF/6M Frequency Radiowave Propagation Forecast #2009-01

Yahoo group: SkyWires
Date: 2009-01-01 18:03:17 UTC
From: Thomas F. Giella KN4LF
Topic: 3283 Message: 3283

The KN4LF Daily LF/MF/HF/6M Frequency Radiowave Propagation Forecast #2009-01 has been published on Thursday 01/01/2009 at 1800 UTC, valid 0000 UTC Saturday 01/03/2009 through 2359 UTC Friday 01/09/2009 at http://www.kn4lf.com/kn4lf6.htm .

73 & GUD DX,

Thomas F. Giella, KN4LF

Lakeland, FL, USA

kn4lf@...

KN4LF Daily Solar Space Weather & Geomagnetic Data Archive:
http://www.kn4lf.com/kn4lf5.htm

KN4LF Daily LF/MF/HF/6M Frequency Radiowave Propagation Forecast & Archive:
http://www.kn4lf.com/kn4lf6.htm

KN4LF 160 Meter Radio Propagation Theory Notes:
http://www.kn4lf.com/kn4lf8.htm

LF/MF/HF/VHF Frequency Radiowave Propagation Email Reflector:
http://montreal.kotalampi.com/mailman/listinfo/kn4lf
Harmful Man Induced Climate Change (Global Warming) Refuted:
http://www.kn4lf.com/globalwarminglie.htm

3284. Fwd: Loop verses doublet Question

Yahoo group: SkyWires
Date: 2009-01-05 21:54:45 UTC
From: Jim Snider
Topic: 3284 Message: 3284

Jim Snider

Sent from my iPod

Begin forwarded message:

> From: "Jim Snider" <jim@...>
> Date: January 5, 2009 4:50:36 PM EST
> To: <w8bs@lexiann.com>
> Subject: FW: Loop verses doublet Question
>

>
>
>
>
> From: Jim Snider [mailto:jim@...]
> Sent: Monday, January 05, 2009 4:46 PM
> To: 'SkyWires@yahoogroups.com'
> Subject: Loop verses doublet Question
>
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>
> Here’s my question…
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>
> 160 meter loop fed with 450 ladder line, loop is up 25 foot, loop is
> pretty much a square
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> Verses
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>
> a 160 meter doublet, 260 foot dipole fed with 450 ladder line. Apex
> at 50 feet, ends at 15 feet.
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>
> I run 100% QRP so which would be the best performer on 160, 80 and
> 40??
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> Jim W8BS
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> Jim Snider
>
> jim@...
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3285. Re: [SkyWires] Fwd: Loop verses doublet Question

Yahoo group: SkyWires
Date: 2009-01-05 22:34:45 UTC
From: Keith Currie
Topic: 3284 Message: 3285

From my experience the loop, I had a dipole for 160 and changed to the loop and it works great on all bands with a home brew ballanced tunner. Just my opion for what its worth.
Keith
----- Original Message -----
From: Jim Snider
To: skywires@yahoogroups.com
Sent: Monday, January 05, 2009 3:54 PM
Subject: [SkyWires] Fwd: Loop verses doublet Question

Jim Snider

Sent from my iPod

Begin forwarded message:

From: "Jim Snider" <jim@...>
Date: January 5, 2009 4:50:36 PM EST
To: <w8bs@...>
Subject: FW: Loop verses doublet Question

From: Jim Snider [mailto:jim@...]
Sent: Monday, January 05, 2009 4:46 PM
To: 'SkyWires@yahoogroups.com'
Subject: Loop verses doublet Question

Here’s my question…

160 meter loop fed with 450 ladder line, loop is up 25 foot, loop is pretty much a square

Verses

a 160 meter doublet, 260 foot dipole fed with 450 ladder line. Apex at 50 feet, ends at 15 feet.

I run 100% QRP so which would be the best performer on 160, 80 and 40??

Jim W8BS

Jim Snider

jim@...

3286. Re: [SkyWires] Fwd: Loop verses doublet Question

Yahoo group: SkyWires
Date: 2009-01-05 22:54:05 UTC
From: Gordon McCleery
Topic: 3284 Message: 3286

Have to agree on the loop.

Mine is 1000', up 35' fed with open wire line and works all bands

easily with a tuner, if I run no amp, the internal tuner in my 756 PRO

III, will tune all bands, no downside, but the fantastic up-side is the

quiteness of the antenna, at times on upper bands, it would make

you think it wasn't even connected. As always,the bigger the better.

Loop, Loop, Loop.....Mac

--- On Mon, 1/5/09, Keith Currie <kecurrie@...> wrote:
From: Keith Currie <kecurrie@...>
Subject: Re: [SkyWires] Fwd: Loop verses doublet Question
To: SkyWires@yahoogroups.com
Date: Monday, January 5, 2009, 5:34 PM

□

From my experience the loop, I had a dipole for 160
and changed to the loop and it works great on all bands with a home brew
ballanced tunner. Just my opion for what its worth.

Keith

----- Original Message -----
From:
Jim Snider
To: skywires@yahoogroups.com
Sent: Monday, January 05, 2009 3:54
PM
Subject: [SkyWires] Fwd: Loop verses
doublet Question

Jim Snider

Sent from my iPod

Begin forwarded message:

From: "Jim Snider" <jim@lexiann. com>
Date:
January 5, 2009 4:50:36 PM EST
To: <w8bs@lexiann. com>
Subject:
FW: Loop verses doublet Question

From: Jim Snider [mailto:jim@lexiann. com]

Sent: Monday, January 05, 2009 4:46 PM
To: 'SkyWires@yahoogroup s.com'
Subject:
Loop verses doublet Question

Here’s my question…

160 meter loop fed with 450 ladder line, loop is up 25 foot, loop is pretty much a square

Verses

a 160 meter doublet, 260 foot dipole fed with 450 ladder line. Apex at 50 feet, ends at 15 feet.

I run 100% QRP so which would be the best performer on 160, 80 and 40??

Jim W8BS

Jim Snider
jim@lexiann. com

3287. Re: [SkyWires] Fwd: Loop verses doublet Question

Yahoo group: SkyWires
Date: 2009-01-05 22:49:21 UTC
From: Jim Snider
Topic: 3284 Message: 3287

How high is your loop? I assume your loop is 160
Meter.

Jim. W8BS

Jim Snider

Sent from my iPod

On Jan 5, 2009, at 5:34 PM, Keith Currie <kecurrie@...> wrote:

> □
>
> From my experience the loop, I had a dipole for 160 and changed to
> the loop and it works great on all bands with a home brew ballanced
> tunner. Just my opion for what its worth.
> Keith
> ----- Original Message -----
> From: Jim Snider
> To: skywires@yahoogroups.com
> Sent: Monday, January 05, 2009 3:54 PM
> Subject: [SkyWires] Fwd: Loop verses doublet Question
>
>
>
>
> Jim Snider
>
> Sent from my iPod
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> Begin forwarded message:
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>> From: "Jim Snider" <jim@...>
>> Date: January 5, 2009 4:50:36 PM EST
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>> Subject: FW: Loop verses doublet Question
>>
>
>> From: Jim Snider [mailto:jim@...]
>> Sent: Monday, January 05, 2009 4:46 PM
>> To: 'SkyWires@yahoogroups.com'
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>>
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>> Apex at 50 feet, ends at 15 feet.
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>> and 40??
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>> Jim W8BS
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>> Jim Snider
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>> jim@...
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3288. Re: [SkyWires] Fwd: Loop verses doublet Question

Yahoo group: SkyWires
Date: 2009-01-06 01:50:07 UTC
From: Keith Currie
Topic: 3284 Message: 3288

My loop is two w/l on 160 and about 45' up for the most part, it varies some higher and some lower. I feed it with 450 ohm ladder line and it is feed in the middle of one side, it is not square but when they are that big I dont think it matters much.
Keith
VE5HKC
----- Original Message -----
From: Jim Snider
To: SkyWires@yahoogroups.com
Sent: Monday, January 05, 2009 4:49 PM
Subject: Re: [SkyWires] Fwd: Loop verses doublet Question

How high is your loop? I assume your loop is 160
Meter.

Jim. W8BS

Jim Snider

Sent from my iPod

On Jan 5, 2009, at 5:34 PM, Keith Currie <kecurrie@sasktel.net> wrote:

□

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Keith
----- Original Message -----
From: Jim Snider
To: skywires@yahoogroups.com
Sent: Monday, January 05, 2009 3:54 PM
Subject: [SkyWires] Fwd: Loop verses doublet Question

Jim Snider

Sent from my iPod

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From: "Jim Snider" <jim@...>
Date: January 5, 2009 4:50:36 PM EST
To: <w8bs@...>
Subject: FW: Loop verses doublet Question

From: Jim Snider [mailto:jim@lexiann.com]
Sent: Monday, January 05, 2009 4:46 PM
To: 'SkyWires@yahoogroups.com'
Subject: Loop verses doublet Question

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Jim W8BS

Jim Snider

jim@...

3289. Re: [SkyWires] Fwd: Loop verses doublet Question

Yahoo group: SkyWires
Date: 2009-01-06 02:18:45 UTC
From: Jim Snider
Topic: 3284 Message: 3289

Oh wow!! 1100 feet of wire. Pretty good capture
Area. My 560 wire takes up the whole back
Of my property. At this point I'm leaning
Towards running the ladder line to the loop
And trying it out.

Jim W8BS

Jim Snider

Sent from my iPod

On Jan 5, 2009, at 8:50 PM, Keith Currie <kecurrie@sasktel.net> wrote:

> □
>
> My loop is two w/l on 160 and about 45' up for the most part, it
> varies some higher and some lower. I feed it with 450 ohm ladder
> line and it is feed in the middle of one side, it is not square but
> when they are that big I dont think it matters much.
> Keith
> VE5HKC
> ----- Original Message -----
> From: Jim Snider
> To: SkyWires@yahoogroups.com
> Sent: Monday, January 05, 2009 4:49 PM
> Subject: Re: [SkyWires] Fwd: Loop verses doublet Question
>
> How high is your loop? I assume your loop is 160
> Meter.
>
> Jim. W8BS
>
>
> Jim Snider
>
> Sent from my iPod
>
> On Jan 5, 2009, at 5:34 PM, Keith Currie <kecurrie@...> wrote:
>
>> □
>>
>> From my experience the loop, I had a dipole for 160 and changed to
>> the loop and it works great on all bands with a home brew ballanced
>> tunner. Just my opion for what its worth.

>> Keith
>> ----- Original Message -----
>> From: Jim Snider
>> To: skywires@yahoogroups.com
>> Sent: Monday, January 05, 2009 3:54 PM
>> Subject: [SkyWires] Fwd: Loop verses doublet Question
>>
>>
>>
>>
>> Jim Snider
>>
>> Sent from my iPod
>>
>> Begin forwarded message:
>>
>>> From: "Jim Snider" <jim@lexiann.com>
>>> Date: January 5, 2009 4:50:36 PM EST
>>> To: <w8bs@...>
>>> Subject: FW: Loop verses doublet Question
>>>
>>
>>> From: Jim Snider [mailto:jim@...]
>>> Sent: Monday, January 05, 2009 4:46 PM
>>> To: 'SkyWires@yahoogroups.com'
>>> Subject: Loop verses doublet Question
>>>
>>>
>>>
>>> Here's my question…
>>>
>>>
>>> 160 meter loop fed with 450 ladder line, loop is up 25 foot, loop
>>> is pretty much a square
>>>
>>>
>>> Verses
>>>
>>>
>>> a 160 meter doublet, 260 foot dipole fed with 450 ladder line.
>>> Apex at 50 feet, ends at 15 feet.
>>>
>>>
>>> I run 100% QRP so which would be the best performer on 160, 80 and
>>> 40??
>>>
>>>
>>>
>>> Jim W8BS

>>>
>>>
>>>
>>>
>>>
>>> Jim Snider
>>>
>>> jim@lexiann.com
>>>
>>>
>>
>
>

3290. Re Loop versus doublet Question

Yahoo group: SkyWires
Date: 2009-01-06 14:31:45 UTC
From: Thomas F. Giella KN4LF
Topic: 3290 Message: 3290

Jim,

A 2 wl horizontal loop on 160 meters is going to give you some lower TOA radiation at around 45 degrees and allow you to work some DX as well as rag chew close in. A 1/2 wave doublet on 160 meters is going to give you a TOA of 90 deg and will be good only as a rag chew antenna out to 500-600 miles. The 2 wl loop will be much more quiet on receive than a 1/2 wave doublet, a very important consideration

I ran an A/B comparison of a full wave loop for 160 meters versus a 1/2 wave doublet for about one month and the loop beat the doublet everytime on every band on 160-10 meters both rag chew and DX.

The loop is the way to go.

73 & GUD DX,
Thomas F. Giella, KN4LF
Lakeland, FL, USA
kn4lf@...

KN4LF Amateur & SWL Radio Autobiography: http://www.kn4lf.com

3291. Re: [SkyWires] Re Loop versus doublet Question

Yahoo group: SkyWires
Date: 2009-01-08 02:48:37 UTC
From: Jim Snider
Topic: 3290 Message: 3291

Just for clarification when you say a 2 wavelength antenna do you mean
2 wl for 80 meters? (560 foot).

Jim Snider

Sent from my iPod

On Jan 6, 2009, at 9:31 AM, "Thomas F. Giella KN4LF" <kn4lf@...
> wrote:

> Jim,
>
> A 2 wl horizontal loop on 160 meters is going to give you some lower
> TOA
> radiation at around 45 degrees and allow you to work some DX as well
> as rag
> chew close in. A 1/2 wave doublet on 160 meters is going to give you
> a TOA
> of 90 deg and will be good only as a rag chew antenna out to 500-600
> miles.
> The 2 wl loop will be much more quiet on receive than a 1/2 wave
> doublet, a
> very important consideration
>
> I ran an A/B comparison of a full wave loop for 160 meters versus a
> 1/2 wave
> doublet for about one month and the loop beat the doublet everytime
> on every
> band on 160-10 meters both rag chew and DX.
>
> The loop is the way to go.
>
> 73 & GUD DX,
> Thomas F. Giella, KN4LF
> Lakeland, FL, USA
> kn4lf@...
>
> KN4LF Amateur & SWL Radio Autobiography: http://www.kn4lf.com
>
>
> ------------------------------------
>
> Yahoo! Groups Links
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>
>

>

3292. Re: [SkyWires] Re Loop versus doublet Question

Yahoo group: SkyWires
Date: 2009-01-08 04:58:53 UTC
From: Keith Currie
Topic: 3290 Message: 3292

If you are refering to my post it is two wavelengths on 160.
VE5 HKC
Keith
----- Original Message -----
From: Jim Snider
To: SkyWires@yahoogroups.com
Sent: Wednesday, January 07, 2009 8:48 PM
Subject: Re: [SkyWires] Re Loop versus doublet Question

Just for clarification when you say a 2 wavelength antenna do you mean
2 wl for 80 meters? (560 foot).

Jim Snider

Sent from my iPod

On Jan 6, 2009, at 9:31 AM, "Thomas F. Giella KN4LF" <kn4lf@...
> wrote:

> Jim,
>
> A 2 wl horizontal loop on 160 meters is going to give you some lower
> TOA
> radiation at around 45 degrees and allow you to work some DX as well
> as rag
> chew close in. A 1/2 wave doublet on 160 meters is going to give you
> a TOA
> of 90 deg and will be good only as a rag chew antenna out to 500-600
> miles.
> The 2 wl loop will be much more quiet on receive than a 1/2 wave
> doublet, a
> very important consideration
>
> I ran an A/B comparison of a full wave loop for 160 meters versus a
> 1/2 wave
> doublet for about one month and the loop beat the doublet everytime
> on every
> band on 160-10 meters both rag chew and DX.
>
> The loop is the way to go.
>
> 73 & GUD DX,
> Thomas F. Giella, KN4LF
> Lakeland, FL, USA
> kn4lf@...
>

> KN4LF Amateur & SWL Radio Autobiography: http://www.kn4lf.com
>
>
> ------------------------------------
>
> Yahoo! Groups Links
>
>
>
>

3293. KN4LF Daily LF/MF/HF/6M Frequency Radiowave Propagation Forecast #2009-02

Yahoo group: SkyWires
Date: 2009-01-08 20:18:00 UTC
From: Thomas F. Giella KN4LF
Topic: 3293 Message: 3293

The KN4LF Daily LF/MF/HF/6M Frequency Radiowave Propagation Forecast #2009-02 has been published on Thursday 01/08/2009 at 2000 UTC, valid 0000 UTC Saturday 01/10/2009 through 2359 UTC Friday 01/16/2009 at http://www.kn4lf.com/kn4lf6.htm .

73 & GUD DX,

Thomas F. Giella, KN4LF

Lakeland, FL, USA

kn4lf@...

KN4LF Daily Solar Space Weather & Geomagnetic Data Archive:
http://www.kn4lf.com/kn4lf5.htm

KN4LF Daily LF/MF/HF/6M Frequency Radiowave Propagation Forecast & Archive:
http://www.kn4lf.com/kn4lf6.htm

KN4LF 160 Meter Radio Propagation Theory Notes:
http://www.kn4lf.com/kn4lf8.htm

LF/MF/HF/VHF Frequency Radiowave Propagation Email Reflector:
http://montreal.kotalampi.com/mailman/listinfo/kn4lf
Harmful Man Induced Climate Change (Global Warming) Refuted:
http://www.kn4lf.com/globalwarminglie.htm

3294. Mega-loop?? (Size suggestions...

Yahoo group: SkyWires
Date: 2009-01-10 04:03:29 UTC
From: Mike
Topic: 3284 Message: 3294

I have two one-wavelength 160 Meter antennas, both are fed with 450 Ohm window (ladder) line, and are at 35 or so feet off the ground.

Both antennas are very near trees in at least PART of the pattern of the wire's path.

In view of the fact that 450 Ohm balanced line is virtually LOSSLESS, I have had the thought that I could make up a new loop antenna, out in the clear. I have an open field where I now have two masts that are holding up the North side of my "North loop."

Using these two masts, here are some considerations:
1. I'd use the two masts that are now in place
2. These two masts are 50+ feet from a grove of trees
3. The grove of trees separates the two masts from the house
4. I would like to make a five-sided loop
5. I would like to shoot for an optimum SIZE or wire length
6. I would use balanced line to feed the antenna
7. The feed-line would be about 150 feet long

So, I have some far-away memories of a "favored length" of a mega-loop, within reason, but I cannot verify the (about 1100 feet?) length from any of my searches.

My question: What is the most IDEAL size that one could consider? My main interest is Some 160, and a good deal of 75, 20, and 17 meter activity.

My present 160 Meter loops both seem to do well on 20 and 17 Meters; With this in mind, might an even larger loop be worth the time, cost and effort?

I am looking forward to your opinions and references! (Thank you!)

-Mike-

3295. Re: Mega-loop?? (Size suggestions...

Yahoo group: SkyWires
Date: 2009-01-10 19:46:27 UTC
From: k5est
Topic: 3284 Message: 3295

Hi Mike,

Maybe I missed the details, but how far apart are
your two (2) 1WL 160 mtr loops? How are you feeding
them?

I just joined this group, but have been using large
horizontal loops for a very long time. My personal
thoughts would be to go with the 2WL horizontal loop
at around 1,100 feet. (my actual calculations are
1,093feet (984/fMHz[1.8]=) AND put a 1 WL horizontal loop
inside the big one. You will need to ground the unused
loop and use two feedlines or a relay that will ground
the unused loop. Your wire is going to stretch so getting
it cut exactly is a waste of time. Let the tuner do the
work.

73....Walter - K5EST
http://walter.k5est.googlepages.com/

3296. Ladder line

Yahoo group: SkyWires
Date: 2009-01-13 01:37:12 UTC
From: Jim Snider
Topic: 3296 Message: 3296

Got the ladder line on my 160 loop this weekend and the LDG 4:1 balun came in today. Inital tests look good so we will keep testing.

Jim W8BS

Jim Snider

Sent from my iPod

3297. Fw: [HFpack] Digest Number 3653

Yahoo group: SkyWires
Date: 2009-01-13 17:14:11 UTC
From: M. E.
Topic: 3297 Message: 3297

----- Forwarded Message ----
From: "hfpack@yahoogroups.com" <hfpack@yahoogroups.com>
To: hfpack@yahoogroups.com
Sent: Tuesday, January 13, 2009 4:41:15 AM
Subject: [HFpack] Digest Number 3653

HF PACK - HF PORTABLE GROUP - HFPACK.COM
Messages In This Digest (5 Messages)
1a.
Re: Blue Star P1 Multi-Band Portable Antenna HF VHF UHF P1 Portable, From: Tom Holden VE3MEO
1b.
Re: Blue Star P1 Multi-Band Portable Antenna HF VHF UHF P1 Portable, From: Gregory Schaller
2a.
Gaffer's Tape From: Steve
3a.
Re: Hello new guy looking for help preparing for St Maartin/ St mart From: F. Kevin Feeney
4.
Hello new guy looking for help preparing for St Maartin/ St martin t From: Wayne Estes View All Topics | Create New Topic
Messages
1a.
Re: Blue Star P1 Multi-Band Portable Antenna HF VHF UHF P1 Portable,
Posted by: "Tom Holden VE3MEO" holden_family@... yah0ldena
Mon Jan 12, 2009 8:25 pm (PST)
Dennis,

I looked at their website (<http://bluestarante nnas.com/ sales//catalog/ product_info. php?products_ id=391>) which says it measures 74" overall, longer than what you indicate, that it's made in USA (not in Asia). There seem to be positive reviews both on the company's website and 10 of 11 on eham.net give it 5/5. I wonder if the seller misrepresented what you bought.

73, Tom VE3MEO

Back to top Reply to sender | Reply to group | Reply via web post
Messages in this topic (3)
1b.
Re: Blue Star P1 Multi-Band Portable Antenna HF VHF UHF P1 Portable,
Posted by: "Gregory Schaller" sky_wave_1@... sky_wave_1
Mon Jan 12, 2009 8:53 pm (PST)
Yes, I would like further explanation of the discrepancy between all the good reviews and the recent review taking the Blue Star to task ... hard to believe everyone is talking about the same antenna ...

Greg
KE5FIL

--- On Mon, 1/12/09, Tom Holden VE3MEO <holden_family@ sympatico. ca> wrote:

From: Tom Holden VE3MEO <holden_family@ sympatico. ca>
Subject: [HFpack] Re: Blue Star P1 Multi-Band Portable Antenna HF VHF UHF P1 Portable, follow up.
To: hfpack@yahoogroups. com
Date: Monday, January 12, 2009, 8:00 PM

Dennis,

I looked at their website (<http://bluestarante nnas.com/ sales//catalog/ product_info. php?products_ id=391>) which says it measures 74" overall, longer than what you indicate, that it's made in USA (not in Asia). There seem to be positive reviews both on the company's website and 10 of 11 on eham.net give it 5/5. I wonder if the seller misrepresented what you bought.

73, Tom VE3MEO

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Messages in this topic (3)
2a.
Gaffer's Tape
Posted by: "Steve" lawresh@... lawresh
Mon Jan 12, 2009 8:26 pm (PST)
The last gaffer's tape I purchased through one of the big New York camera stores - likely B&H Photo or Adorama. The tape is labeled:
Permacel
Professional Grade Gaffer Tape
Bogen Tape Products
PP 212 B
Black
The tape is NOT duct tape. It has a higher grade adhesive that leaves little or no residue when removed. However, like duct tape has a fine cloth base. As such, it could be mistaken for duct tape -- at a distance.

Great stuff... but more expensive.
73,
Steve
aa8af

Back to top Reply to sender | Reply to group | Reply via web post
Messages in this topic (24)
3a.
Re: Hello new guy looking for help preparing for St Maartin/ St mart
Posted by: "F. Kevin Feeney" fkf1@... redhawk883
Mon Jan 12, 2009 10:38 pm (PST)

iam9z4cp wrote:
> Hi Chris,
>

> You don't need a French and Dutch callsign, but you do need a
> reciprocal license. I'm not sure of the procedure at this time, but
> you need to present your amateur radio license to the Telecomm
> authorities in St. Maarten or St Martin and you will prefix your call
> with the country code so your call will be PJ/KC0ZNT for the Dutch
> side or FS/KC0ZNT for the French side. I'll see if I can get further
> info for you.

I was down there on my friends boat 2 years ago, and IIRC, one or the other of the halves of the island recognized the CEPT reciprocal licensing. I think it may have been the French half. If so, that should simplify things as I think all you needed to do was carry the right document with you and use the proper prefix.

I researched it but didn't end up doing any operating from there so the memory is fuzzy.

Kevin, WB2EMS

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Messages in this topic (3)
4.
Hello new guy looking for help preparing for St Maartin/ St martin t
Posted by: "Wayne Estes" w9ae@... w9ae
Tue Jan 13, 2009 12:07 am (PST)
France and The Netherlands are both CEPT countries that recognize a U.S. ham license. You need 3 things to operate legally in St. Maarten or St. Martin. 1. Your U.S. ham license. 2. Your U.S. passport. 3. A printed copy of a 3-language FCC Public Notice which can be downloaded here: http://www.arrl. org/FandES/ field/regulation s/io/cept- ral.pdf

The procedure for U.S. hams to operate in CEPT countries is described in detail on the ARRL web site:
http://www.arrl. org/FandES/ field/regulation s/io/cept- info.html

The external "territories" of some countries are excluded from the CEPT agreement, but I believe that St. Maarten and St. Martin are NOT excluded.

When operating you would use the local prefix slash your callsign. For example, in St. Maarten you would probably be PJ7/KC0ZNT. In St. Martin you would be FS/KC0ZNT.

Wayne Estes W9AE
Oakland, Oregon, USA

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Messages in this topic (1)
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* 13
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on Yahoo! Groups
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--
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3298. Re: Mega-loop?? (Size suggestions...

Yahoo group: SkyWires
Date: 2009-01-14 19:19:39 UTC
From: Mike
Topic: 3284 Message: 3298

--- In SkyWires@yahoogroups.com, "k5est" <k5est@...> wrote:
>
> Hi Mike,
>
> Maybe I missed the details, but how far apart are
> your two (2) 1WL 160 mtr loops? How are you feeding
> them?

The loops are "close" only at the feed points, or corners. I am using a 56 foot mast, which is the almost-common-support for the two loops.

The NORTH loop's wires run North and South; The SW corner is within 8 feet of the 56 foot "common" mast. (The feed point is 8 feet NW of the support mast.)

The SOUTH loop's wires are at a 45 degree angle from being North and South. (It is like the South loop is rotated by 45 degrees, as compared to the NORTH loop.) The SOUTH loop's North-most point is within 15 feet of the 56 foot common support mast. (The feed point is 15 feet South of the "common" support mast.)

The NORTH loop's two supports that hold up the North-most East-to-West wire are about 175 feet apart. (These supports are both out, in the clear. No trees, etc. within 75 or so feet.)

I mention these two supports, as it is my foggy thought-process that is suggesting that these two masts could be used in a five-sided loop. These two supports would be on the "new" proposed loop's SOUTH-MOST side. (And, again, the "best" length of wire to use... Somewhere, I had seen reference to a 1500-plus foot loop length.)

-To continue the description of the loops, as you had asked: Each of the present loop antennas has it's own feedline:
The NORTH loop has about 50 feet of 450 Ohm window (ladder) line which runs to an Icom AH-4 auto-tuner in the garage.
The SOUTH loop has about 75 to 85 feet of this same type of window-line, which runs to a second AH-4 that is in my basement shop. (I have two operating positions in my home.)

> I just joined this group, but have been using large
> horizontal loops for a very long time. My personal
> thoughts would be to go with the 2WL horizontal loop
> at around 1,100 feet. (my actual calculations are
> 1,093feet (984/fMHz[1.8]=) AND put a 1 WL horizontal loop
> inside the big one.

It would be too big of a task for me to put up an antenna as you have suggested, I'm afraid. (I have no reference as to the added gain, etc. that a dual-loop would give me.)

On the matter of your suggestion of a TWO WAVELENGTH antenna: Is this considering a single band antenna? If this is the case, then your 1100 foot length makes perfect sense.

However, in my case, I actually do NOT operate 160 Meters very much; I mainly like 75, 20 and 17 Meters. -As such, I am already at the TWO WAVELENGTH setup, as my present loops are both at least 2WL on 75, and a lot more on the higher frequency bands.

Bottom line: Is there any REAL GAIN that an effort to make what would be a 2 WL or a 3 WL "160 Meter loop" might offer??

Maybe I am as well off as is LOGICAL, as the larger antennas (per the modeling software) indicate that the peaks and dips are a lot more dramatic as one goes higher in frequency.

You will need to ground the unused
> loop and use two feed-lines or a relay that will ground
> the unused loop. Your wire is going to stretch so getting
> it cut exactly is a waste of time. Let the tuner do the
> work.

Yes, I will absolutely use tuners!

On the GROUNDS applied to a loop antenna: I have knife switches in place at the present time, for both antennas; I have operated the two loops with and without the UNUSED antenna feed-lines grounded. I have noted NO difference on either antenna, with or without the grounded antenna feature. (??)

-Mike-
KØJTA

3299. Re: Mega-loop?? (Size suggestions...

Yahoo group: SkyWires
Date: 2009-01-14 23:27:20 UTC
From: k5est
Topic: 3284 Message: 3299

--- In SkyWires@yahoogroups.com, "Mike" <mike@...> wrote:
...snip...
> On the GROUNDS applied to a loop antenna: I have knife switches in
> place at the present time, for both antennas; I have operated the two
> loops with and without the UNUSED antenna feed-lines grounded. I have
> noted NO difference on either antenna, with or without the grounded
> antenna feature. (??)
> -Mike-
> KØJTA
>...snip....

Outstanding, Mike,

Great loop setup in my opinion.

The only thing I think you would gain by going to a
single large loop VS the two loops you are using now
is the bigger loop should lower your takeoff angle
for the 80 thru 10 meters and DX chasing. Well, it
would also increase your coverage with 160 meters but
if you are not working the band, there is no reason
that what you have is the best for the location.
Plus you are happy with it.....and that is most
important!

Sure appreciate your description of your loop farm.
That is real radio......to me.

73....Walter - K5EST - Missouri

3300. KN4LF Daily LF/MF/HF/6M Frequency Radiowave Propagation Forecast #2009-03

Yahoo group: SkyWires
Date: 2009-01-16 14:53:30 UTC
From: Thomas F. Giella KN4LF
Topic: 3300 Message: 3300

The KN4LF Daily LF/MF/HF/6M Frequency Radiowave Propagation Forecast #2009-03 has been published on Friday 01/16/2009 at 1500 UTC, valid 0000 UTC Saturday 01/17/2009 through 2359 UTC Friday 01/23/2009 at http://www.kn4lf.com/kn4lf6.htm .

73 & GUD DX,
Thomas F. Giella, KN4LF
Lakeland, FL, USA
kn4lf@...

KN4LF Daily Solar Space Weather & Geomagnetic Data Archive:
http://www.kn4lf.com/kn4lf5.htm

KN4LF Daily LF/MF/HF/6M Frequency Radiowave Propagation Forecast & Archive:
http://www.kn4lf.com/kn4lf6.htm

KN4LF 160 Meter Radio Propagation Theory Notes:
http://www.kn4lf.com/kn4lf8.htm

LF/MF/HF/VHF Frequency Radiowave Propagation Email Reflector:
http://montreal.kotalampi.com/mailman/listinfo/kn4lf

Harmful Man Induced Climate Change (Global Warming) Refuted:
http://www.kn4lf.com/globalwarminglie.htm

3301. Calculator for "Length of a Harmonic Wire"

Yahoo group: SkyWires
Date: 2009-01-17 18:14:30 UTC
From: aa5wg
Topic: 3301 Message: 3301

HI to all:
Does anyone know of a calculator that finds the length of a wire harmonic antenna? The formula is: Length in feet = 492 (N - 0.05) divided by Frequency in MHz. N = number of halfwavelengths at operating frequency.

Or, for 1/4 wavelength data: The formula is:
Length in feet = 246 (N - 0.025) divided by Frequency in MHz.

Do you think one could include the total length of antenna "system", i.e. end of one half of antenna and transmission line, when making these calulations?

It would be very helpfull if I could calculate the total length of antenna system, in 1/4 lengths at operating frequency, to achieve a voltage or current nodes at the link antenna coupler. Do you think I can use above formula for this goal?

Any ideas?
Thank you.
Chuck - AA5WG

3302. full wave 40 meter multi band vertical loop

Yahoo group: SkyWires
Date: 2009-01-18 06:34:51 UTC
From: Kim
Topic: 3302 Message: 3302

I recently put up a full wave vertical loop for 40 meters. It is rectangular in shape and is fed near the center of the bottom horizontal section at it's lowest point with a 10 foot section of 300 ohm twin lead followed by a 4:1 balun then a 20 foot long section of RG58 leading to a tuner near the transceiver. It is a great antenna for RX but not TX since other stations don't receive me as well. I first fed it with twin lead straight to the tuner but it works better w/ balun and coax matching section.

Any suggestions how I can improve performance on TX? There seems to be a lot of conflicting information on the web. Thanks for your input in advance.

Ken

3303. RE: [SkyWires] full wave 40 meter multi band vertical loop

Yahoo group: SkyWires
Date: 2009-01-18 07:15:44 UTC
From: Scott MacKenzie
Topic: 3302 Message: 3303

How high is the feed point and the bottom of the loop? It should work well - but you may need to get it up in the air a bit. One thing is that having a vertical loop will have a low angle of radiation. This means that local stations will not hear you very well, but DX might.

Scott aka KB0FHP

From: SkyWires@yahoogroups.com [mailto:SkyWires@yahoogroups.com] On Behalf Of Kim
Sent: Sunday, January 18, 2009 1:35 AM
To: SkyWires@yahoogroups.com
Subject: [SkyWires] full wave 40 meter multi band vertical loop

I recently put up a full wave vertical loop for 40 meters. It is rectangular in shape and is fed near the center of the bottom horizontal section at it's lowest point with a 10 foot section of 300 ohm twin lead followed by a 4:1 balun then a 20 foot long section of RG58 leading to a tuner near the transceiver. It is a great antenna for RX but not TX since other stations don't receive me as well. I first fed it with twin lead straight to the tuner but it works better w/ balun and coax matching section.

Any suggestions how I can improve performance on TX? There seems to be a lot of conflicting information on the web. Thanks for your input in advance.

Ken

3304. Re: [SkyWires] full wave 40 meter multi band vertical loop

Yahoo group: SkyWires
Date: 2009-01-18 11:47:23 UTC
From: Siegfried Jackstien
Topic: 3302 Message: 3304

if you want to have a low angle radiation it is better to feed one of the vertical sections but that is only true for 40m
how high is your feedingpoint over ground`?
my thought is if you want to use it "multiband" it would work better if you hang it horizontal
cause on the higher bands you will have a high angle of radiation
all your power is lost in space :-)
greetz
dg9bfc
sigi
----- Original Message -----
From: Kim
To: SkyWires@yahoogroups.com
Sent: Sunday, January 18, 2009 7:34 AM
Subject: [SkyWires] full wave 40 meter multi band vertical loop

I recently put up a full wave vertical loop for 40 meters. It is rectangular in shape and is fed near the center of the bottom horizontal section at it's lowest point with a 10 foot section of 300 ohm twin lead followed by a 4:1 balun then a 20 foot long section of RG58 leading to a tuner near the transceiver. It is a great antenna for RX but not TX since other stations don't receive me as well. I first fed it with twin lead straight to the tuner but it works better w/ balun and coax matching section.

Any suggestions how I can improve performance on TX? There seems to be a lot of conflicting information on the web. Thanks for your input in advance.

Ken

3305. Re: full wave 40 meter multi band vertical loop

Yahoo group: SkyWires
Date: 2009-01-18 15:50:44 UTC
From: k5est
Topic: 3302 Message: 3305

--- In SkyWires@yahoogroups.com, "Scott MacKenzie" <kb0fhp@...> wrote:
>

Scott,

Don't know about you but I have yet to see a full wave "vertical loop" perform very well as a multiband antenna. The Horizontal Loop does a very nice job of multibanding, but usually the vertical loop has been a single (monobander) band antenna. Yeah, you can use the Vertical Loop for different frequencies, but maybe you would run the installation on EZNEC and you see some very different lobes than you would normally expect to see from a multiband antenna. But on the other hand the vert. loop is a great DX antenna on the choosen band and it does not have to be up in the air very high.

73....Walter - K5EST - Missouri

3306. Re: Calculator for "Length of a Harmonic Wire"

Yahoo group: SkyWires
Date: 2009-01-18 16:27:03 UTC
From: k5est
Topic: 3301 Message: 3306

--- In SkyWires@yahoogroups.com, "aa5wg" <aa5wg@...> wrote:
>
> HI to all:
> Does anyone know of a calculator that finds the length of a wire
> harmonic antenna? The formula is: Length in feet = 492 (N - 0.05)
> divided by Frequency in MHz. N = number of halfwavelengths at
> operating frequency.
>
> Or, for 1/4 wavelength data: The formula is:
> Length in feet = 246 (N - 0.025) divided by Frequency in MHz.
>
> Do you think one could include the total length of antenna "system",
> i.e. end of one half of antenna and transmission line, when making
> these calulations?
>
> It would be very helpfull if I could calculate the total length of
> antenna system, in 1/4 lengths at operating frequency, to achieve a
> voltage or current nodes at the link antenna coupler. Do you think I
> can use above formula for this goal?
>
> Any ideas?
> Thank you.
> Chuck - AA5WG
>
.....Chuck, I am not sure what you are
wanting to do? Your link coupler should be able to
be parallel or series, because on different bands
the current / voltage nodes change locations along
the feedline/antenna.

One thing that I do know is if you include the
transmission line and the antenna as being the
1/4 WL, you are going to have your max radiation
at your feedpoint.....ie, the rig.

73....Walter - K5EST - Missour

3307. RE: [SkyWires] Re: full wave 40 meter multi band vertical loop

Yahoo group: SkyWires
Date: 2009-01-18 20:24:03 UTC
From: Scott MacKenzie
Topic: 3302 Message: 3307

Oh I agree with you - It was my impression that this was a single band antenna (hence feeding it with a balun and coax). On 40M it would be a good low angle radiator and good for DX. It would not be good for local conversations. I suspect that a vertical loop would not be a very good multi-band antenna - for the reasons cited.

From: SkyWires@yahoogroups.com [mailto:SkyWires@yahoogroups.com] On Behalf Of k5est
Sent: Sunday, January 18, 2009 10:51 AM
To: SkyWires@yahoogroups.com
Subject: [SkyWires] Re: full wave 40 meter multi band vertical loop

--- In SkyWires@yahoogroup <mailto:SkyWires%40yahoogroups.com> s.com, "Scott MacKenzie" <kb0fhp@...> wrote:
>

Scott,

Don't know about you but I have yet to see a full wave "vertical loop" perform very well as a multiband antenna. The Horizontal Loop does a very nice job of multibanding, but usually the vertical loop has been a single (monobander) band antenna. Yeah, you can use the Vertical Loop for different frequencies, but maybe you would run the installation on EZNEC and you see some very different lobes than you would normally expect to see from a multiband antenna. But on the other hand the vert. loop is a great DX antenna on the choosen band and it does not have to be up in the air very high.

73....Walter - K5EST - Missouri

3309. Re: Calculator for "Length of a Harmonic Wire"

Yahoo group: SkyWires
Date: 2009-01-19 14:31:14 UTC
From: Jochen - DG2IAQ
Topic: 3301 Message: 3309

Hi Chuck,

you don't need to look for a calculator. DL7AHW did this work and
you can find his final charts here:

http://freenet-homepage.de/dl7ahw/AntennenlaengeE.html

I think this is what you look for !?

e.g. 13,50m (the first knot) = 45ft.
is a good choice for a "universal" length, not to make the
tuner/autotuner run into extremes

vy 73,
Jochen (DG2IAQ)

--- In SkyWires@yahoogroups.com, "aa5wg" <aa5wg@...> wrote:
>
> HI to all:
> Does anyone know of a calculator that finds the length of a wire
> harmonic antenna? The formula is: Length in feet = 492 (N -
0.05)
> divided by Frequency in MHz. N = number of halfwavelengths at
> operating frequency.
>
> Or, for 1/4 wavelength data: The formula is:
> Length in feet = 246 (N - 0.025) divided by Frequency in MHz.
>
> Do you think one could include the total length of
antenna "system",
> i.e. end of one half of antenna and transmission line, when making
> these calulations?
>
> It would be very helpfull if I could calculate the total length of
> antenna system, in 1/4 lengths at operating frequency, to achieve
a
> voltage or current nodes at the link antenna coupler. Do you
think I
> can use above formula for this goal?
>
> Any ideas?
> Thank you.
> Chuck - AA5WG
>

3310. Re: [SkyWires] Re: Calculator for "Length of a Harmonic Wire"

Yahoo group: SkyWires
Date: 2009-01-19 15:18:37 UTC
From: Chuck Pool
Topic: 3301 Message: 3310

Hello Jochen, Thomas, David, K5EST, Bill V44K0 and all:
Thank you for your inputs! When I return from work late tonight I will read and study your info and respond. Thank you for your kind consideration.
73,
Chuck - AA5WG

--- On Mon, 1/19/09, Jochen - DG2IAQ <dg2iaq-mails@...> wrote:

From: Jochen - DG2IAQ <dg2iaq-mails@...>
Subject: [SkyWires] Re: Calculator for "Length of a Harmonic Wire"
To: SkyWires@yahoogroups.com
Date: Monday, January 19, 2009, 9:31 AM

Hi Chuck,

you don't need to look for a calculator. DL7AHW did this work and
you can find his final charts here:

http://freenet- homepage. de/dl7ahw/ AntennenlaengeE. html

I think this is what you look for !?

e.g. 13,50m (the first knot) = 45ft.
is a good choice for a "universal" length, not to make the
tuner/autotuner run into extremes

vy 73,
Jochen (DG2IAQ)

--- In SkyWires@yahoogroup s.com, "aa5wg" <aa5wg@...> wrote:
>
> HI to all:
> Does anyone know of a calculator that finds the length of a wire
> harmonic antenna? The formula is: Length in feet = 492 (N -
0.05)
> divided by Frequency in MHz. N = number of halfwavelengths at
> operating frequency.
>
> Or, for 1/4 wavelength data: The formula is:
> Length in feet = 246 (N - 0.025) divided by Frequency in MHz.
>
> Do you think one could include the total length of
antenna "system",
> i.e. end of one half of antenna and transmission line, when making
> these calulations?
>
> It would be very helpfull if I could calculate the total length of

> antenna system, in 1/4 lengths at operating frequency, to achieve
a
> voltage or current nodes at the link antenna coupler. Do you
think I
> can use above formula for this goal?
>
> Any ideas?
> Thank you.
> Chuck - AA5WG
>

3311. Re: Calculator for "Length of a Harmonic Wire"

Yahoo group: SkyWires
Date: 2009-01-19 21:06:49 UTC
From: k5est
Topic: 3301 Message: 3311

--- In SkyWires@yahoogroups.com, "Jochen - DG2IAQ" <dg2iaq-mails@...>
wrote:
> Hi Chuck,
> you don't need to look for a calculator. DL7AHW did this work and
> you can find his final charts here:
> http://freenet-homepage.de/dl7ahw/AntennenlaengeE.html
> I think this is what you look for !?
> e.g. 13,50m (the first knot) = 45ft.
> is a good choice for a "universal" length, not to make the
> tuner/autotuner run into extremes
> vy 73,
> Jochen (DG2IAQ)
>
.....

Jochen, thanks for the URL. That is a very handy
chart to keep.

73....Walter - K5EST - Missouri

3312. Re: [SkyWires] Re: Calculator for "Length of a Harmonic Wire"

Yahoo group: SkyWires
Date: 2009-01-19 21:56:52 UTC
From: Siegfried Jackstien
Topic: 3301 Message: 3312

dear walter
these charts are for end fed wires
so you have to make a dipole 2 times of the lenght
greetz
dg9bfc
sigi
----- Original Message -----
From: k5est
To: SkyWires@yahoogroups.com
Sent: Monday, January 19, 2009 10:06 PM
Subject: [SkyWires] Re: Calculator for "Length of a Harmonic Wire"

--- In SkyWires@yahoogroups.com, "Jochen - DG2IAQ" <dg2iaq-mails@...>
wrote:
> Hi Chuck,
> you don't need to look for a calculator. DL7AHW did this work and
> you can find his final charts here:
> http://freenet-homepage.de/dl7ahw/AntennenlaengeE.html
> I think this is what you look for !?
> e.g. 13,50m (the first knot) = 45ft.
> is a good choice for a "universal" length, not to make the
> tuner/autotuner run into extremes
> vy 73,
> Jochen (DG2IAQ)
>
.....

Jochen, thanks for the URL. That is a very handy
chart to keep.

73....Walter - K5EST - Missouri

3313. Re: [SkyWires] Re: Calculator for "Length of a Harmonic Wire"

Yahoo group: SkyWires
Date: 2009-01-20 01:21:55 UTC
From: Chuck Pool
Topic: 3301 Message: 3313

Hi Jochen:
Thank you for these charts. Are these charts for an end-fed antenna or center-fed antenna?
73,
Chuck Pool - AA5WG
Cedar, Michigan

--- On Mon, 1/19/09, Jochen - DG2IAQ <dg2iaq-mails@...> wrote:

From: Jochen - DG2IAQ <dg2iaq-mails@...>
Subject: [SkyWires] Re: Calculator for "Length of a Harmonic Wire"
To: SkyWires@yahoogroups.com
Date: Monday, January 19, 2009, 9:31 AM

Hi Chuck,

you don't need to look for a calculator. DL7AHW did this work and
you can find his final charts here:

http://freenet- homepage. de/dl7ahw/ AntennenlaengeE. html

I think this is what you look for !?

e.g. 13,50m (the first knot) = 45ft.
is a good choice for a "universal" length, not to make the
tuner/autotuner run into extremes

vy 73,
Jochen (DG2IAQ)

--- In SkyWires@yahoogroup s.com, "aa5wg" <aa5wg@...> wrote:
>
> HI to all:
> Does anyone know of a calculator that finds the length of a wire
> harmonic antenna? The formula is: Length in feet = 492 (N -
0.05)
> divided by Frequency in MHz. N = number of halfwavelengths at
> operating frequency.
>
> Or, for 1/4 wavelength data: The formula is:
> Length in feet = 246 (N - 0.025) divided by Frequency in MHz.
>
> Do you think one could include the total length of
antenna "system",
> i.e. end of one half of antenna and transmission line, when making
> these calulations?
>
> It would be very helpfull if I could calculate the total length of

> antenna system, in 1/4 lengths at operating frequency, to achieve
a
> voltage or current nodes at the link antenna coupler. Do you
think I
> can use above formula for this goal?
>
> Any ideas?
> Thank you.
> Chuck - AA5WG
>

3314. Re: [SkyWires] Re: Calculator for "Length of a Harmonic Wire

Yahoo group: SkyWires
Date: 2009-01-20 01:28:09 UTC
From: Chuck Pool
Topic: 3308 Message: 3314

Hi Thomas:
Thank you for your information.
Did you try the formula from the ARRL Antenna Book?
If you have time, please let me know what you think about this formula.
Thank you for your kind consideration.
73,
Chuck - AA5WG

--- On Mon, 1/19/09, Thomas F. Giella KN4LF <kn4lf@...> wrote:

From: Thomas F. Giella KN4LF <kn4lf@...>
Subject: [SkyWires] Re: Calculator for "Length of a Harmonic Wire
To: "a sky wires egroup un" <SkyWires@yahoogroups.com>
Date: Monday, January 19, 2009, 8:22 AM

No formula will be able to predict the electrical length of an antenna on
harmonics. An antenna self resonant on 7.000 kc will not self resonate at
21000 kc and a T or L network antenna tuner will be needed. On 14000 kc you
will need a parallel link coupled matching network.

73 & GUD DX,
Thomas F. Giella, KN4LF
Lakeland, FL, USA
kn4lf@...

KN4LF Amateur & SWL Radio Autobiography: http://www.kn4lf. com

3315. Re: [SkyWires] Re: Calculator for "Length of a Harmonic Wire"

Yahoo group: SkyWires
Date: 2009-01-20 01:44:18 UTC
From: Chuck Pool
Topic: 3301 Message: 3315

Hi Walter:
Thank you for your email. Yep, I am trying to calculate the high current points (low impedace points) for current feed for a link antenna coupler. I would like a high current point at the antenna coupler for my selected band.

This formula, I believe, was to calculate the harmonic length of the antenna element, i.e left and right side of a dipole antenna and not the transmission line.

Could I use this formula to include the length of the transmission line along with one half of the dipole element, i.e. left side of wire element of dipole plus length of transmission line.
73,
Chuck - AA5WG

--- On Sun, 1/18/09, k5est <k5est@yahoo.com> wrote:

From: k5est <k5est@...>
Subject: [SkyWires] Re: Calculator for "Length of a Harmonic Wire"
To: SkyWires@yahoogroups.com
Date: Sunday, January 18, 2009, 11:27 AM

--- In SkyWires@yahoogroup s.com, "aa5wg" <aa5wg@...> wrote:
>
> HI to all:
> Does anyone know of a calculator that finds the length of a wire
> harmonic antenna? The formula is: Length in feet = 492 (N - 0.05)
> divided by Frequency in MHz. N = number of halfwavelengths at
> operating frequency.
>
> Or, for 1/4 wavelength data: The formula is:
> Length in feet = 246 (N - 0.025) divided by Frequency in MHz.
>
> Do you think one could include the total length of antenna "system",
> i.e. end of one half of antenna and transmission line, when making
> these calulations?
>
> It would be very helpfull if I could calculate the total length of
> antenna system, in 1/4 lengths at operating frequency, to achieve a
> voltage or current nodes at the link antenna coupler. Do you think I
> can use above formula for this goal?
>
> Any ideas?
> Thank you.
> Chuck - AA5WG
>
....Chuck, I am not sure what you are

wanting to do? Your link coupler should be able to be parallel or series, because on different bands the current / voltage nodes change locations along the feedline/antenna.

One thing that I do know is if you include the transmission line and the antenna as being the 1/4 WL, you are going to have your max radiation at your feedpoint... ..ie, the rig.

73....Walter - K5EST - Missour

3316. Re: full wave 40 meter multi band vertical loop

Yahoo group: SkyWires
Date: 2009-01-20 03:28:52 UTC
From: Kim
Topic: 3302 Message: 3316

Thanks for all your responses. I took it down and rehung it as a horizontal loop - same dimensions 140 ft circumference, highest corner 30 feet, lowest point 15 feet (unavoidable), and feed point 20 feet. So far it gets out better than the vertical loop on TX but doesn't hear as well as the vertical. I've yet to test it on other bands. So far I like it better since it's weird not being able to work stations I can hear hi.

Ken

--- In SkyWires@yahoogroups.com, "Scott MacKenzie" <kb0fhp@...> wrote:
>
> Oh I agree with you - It was my impression that this was a single band
> antenna (hence feeding it with a balun and coax). On 40M it would be a good
> low angle radiator and good for DX. It would not be good for local
> conversations. I suspect that a vertical loop would not be a very good
> multi-band antenna - for the reasons cited.
>
> _____
>
> From: SkyWires@yahoogroups.com [mailto:SkyWires@yahoogroups.com] On Behalf
> Of k5est
> Sent: Sunday, January 18, 2009 10:51 AM
> To: SkyWires@yahoogroups.com
> Subject: [SkyWires] Re: full wave 40 meter multi band vertical loop
>
>
>
> --- In SkyWires@yahoogroup <mailto:SkyWires%40yahoogroups.com>
s.com, "Scott
> MacKenzie" <kb0fhp@> wrote:
> >
>
> Scott,
>
> Don't know about you but I have yet to see a full
> wave "vertical loop" perform very well as a multiband
> antenna. The Horizontal Loop does a very nice job of
> multibanding, but usually the vertical loop has been
> a single (monobander) band antenna. Yeah, you can use
> the Vertical Loop for different frequencies, but maybe
> you would run the installation on EZNEC and you see
> some very different lobes than you would normally

> expect to see from a multiband antenna. But on the
> other hand the vert. loop is a great DX antenna on
> the choosen band and it does not have to be up in the
> air very high.
>
> 73....Walter - K5EST - Missouri
>

3317. Re: full wave 40 meter multi band vertical loop

Yahoo group: SkyWires
Date: 2009-01-20 03:31:26 UTC
From: Kim
Topic: 3302 Message: 3317

I'm feeding it with straight coax - no balun and no twin lead.

--- In SkyWires@yahoogroups.com, "Kim" <kimmed51@...> wrote:
>
> Thanks for all your responses. I took it down and rehung it as a
> horizontal loop - same dimensions 140 ft circumference, highest corner
> 30 feet, lowest point 15 feet (unavoidable), and feed point 20 feet.
> So far it gets out better than the vertical loop on TX but doesn't
> hear as well as the vertical. I've yet to test it on other bands. So
> far I like it better since it's weird not being able to work stations
> I can hear hi.
>
> Ken
>
>
>
>
> --- In SkyWires@yahoogroups.com, "Scott MacKenzie" <kb0fhp@> wrote:
> >
> > Oh I agree with you - It was my impression that this was a single band
> > antenna (hence feeding it with a balun and coax). On 40M it would
> be a good
> > low angle radiator and good for DX. It would not be good for local
> > conversations. I suspect that a vertical loop would not be a very
good
> > multi-band antenna - for the reasons cited.
> >
> > _____
> >
> > From: SkyWires@yahoogroups.com [mailto:SkyWires@yahoogroups.com] On
> Behalf
> > Of k5est
> > Sent: Sunday, January 18, 2009 10:51 AM
> > To: SkyWires@yahoogroups.com
> > Subject: [SkyWires] Re: full wave 40 meter multi band vertical loop
> >
> >
> >
> > --- In SkyWires@yahoogroup <mailto:SkyWires%40yahoogroups.com>
> s.com, "Scott
> > MacKenzie" <kb0fhp@> wrote:
> > >
> >
> > Scott,
> >

> > Don't know about you but I have yet to see a full
> > wave "vertical loop" perform very well as a multiband
> > antenna. The Horizontal Loop does a very nice job of
> > multibanding, but usually the vertical loop has been
> > a single (monobander) band antenna. Yeah, you can use
> > the Vertical Loop for different frequencies, but maybe
> > you would run the installation on EZNEC and you see
> > some very different lobes than you would normally
> > expect to see from a multiband antenna. But on the
> > other hand the vert. loop is a great DX antenna on
> > the choosen band and it does not have to be up in the
> > air very high.
> >
> > 73....Walter - K5EST - Missouri
> >
>

3318. Re: Calculator for "Length of a Harmonic Wire"

Yahoo group: SkyWires
Date: 2009-01-20 04:55:19 UTC
From: k5est
Topic: 3301 Message: 3318

--- In SkyWires@yahoogroups.com, Chuck Pool <aa5wg@...> wrote:
>
> Hi Walter:
> Could I use this formula to include the length of the transmission line along with one half of the dipole element, i.e. left side of wire element of dipole plus length of transmission line.
> 73,
> Chuck - AA5WG
.....end snipped.....

Hi Chuck,

Yes, you can use the formula to include the length of the feedline. For instance, please see:
"Optimizing Line Length" at this URL
http://members4.boardhost.com/NAO911/msg/817.html

This next URL has some different ways to hook up feedlines for different antennas:
http://members.tripod.com/~KE4UYP/Feed_Line.html

Or one of my favorite schemes: W5DXP's No-Tuner All-HF-Band, Horizontal, Center-Fed Antenna
http://www.w5dxp.com/notuner.htm

Maybe one of these websites will help your decision in building your antenna system.

Best 73....Walter - K5EST

3319. Re: [SkyWires] Re: Calculator for "Length of a Harmonic Wire"

Yahoo group: SkyWires
Date: 2009-01-20 04:54:58 UTC
From: Siegfried Jackstien
Topic: 3301 Message: 3319

correct
you can use it that way
dg9bfc
----- Original Message -----
From: Chuck Pool
To: SkyWires@yahoogroups.com
Sent: Tuesday, January 20, 2009 2:44 AM
Subject: Re: [SkyWires] Re: Calculator for "Length of a Harmonic Wire"

Hi Walter:
Thank you for your email. Yep, I am trying to calculate the high current points (low impedace points) for current feed for a link antenna coupler. I would like a high current point at the antenna coupler for my selected band.

This formula, I believe, was to calculate the harmonic length of the antenna element, i.e left and right side of a dipole antenna and not the transmission line.

Could I use this formula to include the length of the transmission line along with one half of the dipole element, i.e. left side of wire element of dipole plus length of transmission line.
73,
Chuck - AA5WG

--- On Sun, 1/18/09, k5est <k5est@...> wrote:

From: k5est <k5est@...>
Subject: [SkyWires] Re: Calculator for "Length of a Harmonic Wire"
To: SkyWires@yahoogroups.com
Date: Sunday, January 18, 2009, 11:27 AM

--- In SkyWires@yahoogroup s.com, "aa5wg" <aa5wg@...> wrote:
>
> HI to all:
> Does anyone know of a calculator that finds the length of a wire
> harmonic antenna? The formula is: Length in feet = 492 (N - 0.05)
> divided by Frequency in MHz. N = number of halfwavelengths at
> operating frequency.
>
> Or, for 1/4 wavelength data: The formula is:
> Length in feet = 246 (N - 0.025) divided by Frequency in MHz.
>
> Do you think one could include the total length of antenna "system",
> i.e. end of one half of antenna and transmission line, when making
> these calulations?
>
> It would be very helpfull if I could calculate the total length of

> antenna system, in 1/4 lengths at operating frequency, to achieve a
> voltage or current nodes at the link antenna coupler. Do you think I
> can use above formula for this goal?
>
> Any ideas?
> Thank you.
> Chuck - AA5WG
>
....Chuck, I am not sure what you are
wanting to do? Your link coupler should be able to
be parallel or series, because on different bands
the current / voltage nodes change locations along
the feedline/antenna.

One thing that I do know is if you include the
transmission line and the antenna as being the
1/4 WL, you are going to have your max radiation
at your feedpoint... ..ie, the rig.

73....Walter - K5EST - Missour

3320. RE: [SkyWires] Re: Calculator for "Length of a Harmonic Wire"

Yahoo group: SkyWires
Date: 2009-01-20 09:04:45 UTC
From: satyan
Topic: 3301 Message: 3320

Hello Jochen and all friends,

Happy New Year 2009 to one and all.

I had been using this antenna, which is basically a parallel square loop one on top of another fed by a sgc sg230 antenna coupler at a common point. I don't know if this antenna has any gain or other technical parameters, the wire length is 125 feet x 2 - 250 feet in total, and performance is very good especially on 7 & 14 MHz bands. I can inform everybody from experience that with sg230 in place there is lot of scope for experimentation with wires. Also can anybody tell me if I use the bottom square as a reflector by removing the connection from the coupler please?

73s

vu3mes / satyan

9840988517

glads/chennai

satyansarath@...

-----Original Message-----
From: SkyWires@yahoogroups.com [mailto:SkyWires@yahoogroups.com] On Behalf Of Jochen - DG2IAQ
Sent: 19 January 2009 20:01
To: SkyWires@yahoogroups.com
Subject: [SkyWires] Re: Calculator for "Length of a Harmonic Wire"

Hi Chuck,

you don't need to look for a calculator. DL7AHW did this work and
you can find his final charts here:

http://freenet- <http://freenet-homepage.de/dl7ahw/AntennenlaengeE.html>
homepage.de/dl7ahw/AntennenlaengeE.html

I think this is what you look for !?

e.g. 13,50m (the first knot) = 45ft.
is a good choice for a "universal" length, not to make the
tuner/autotuner run into extremes

vy 73,
Jochen (DG2IAQ)

--- In SkyWires@yahoogroup <mailto:SkyWires%40yahoogroups.com> s.com,
"aa5wg" <aa5wg@...> wrote:

>
> HI to all:
> Does anyone know of a calculator that finds the length of a wire
> harmonic antenna? The formula is: Length in feet = 492 (N -
0.05)
> divided by Frequency in MHz. N = number of halfwavelengths at
> operating frequency.
>
> Or, for 1/4 wavelength data: The formula is:
> Length in feet = 246 (N - 0.025) divided by Frequency in MHz.
>
> Do you think one could include the total length of
antenna "system",
> i.e. end of one half of antenna and transmission line, when making
> these calulations?
>
> It would be very helpfull if I could calculate the total length of
> antenna system, in 1/4 lengths at operating frequency, to achieve
a
> voltage or current nodes at the link antenna coupler. Do you
think I
> can use above formula for this goal?
>
> Any ideas?
> Thank you.
> Chuck - AA5WG
>

No virus found in this incoming message.
Checked by AVG - http://www.avg.com
Version: 8.0.175 / Virus Database: 270.10.9/1900 - Release Date: 1/18/2009
12:11 PM

3322. Re: full wave 40 meter multi band vertical loop

Yahoo group: SkyWires
Date: 2009-01-25 22:08:03 UTC
From: Kim
Topic: 3302 Message: 3322

I've had the 40 meter horizontal loop up about a week and so far it's
been pretty disappointing. It's a fine antenna for SWL but inferior to
my dipole for transmitting. Also it requires some power - I've made
zero QRP contacts on it and need about 20 watts to get out. Definitely
not worth all it took to get it in the air.

AB7JK

--- In SkyWires@yahoogroups.com, "Kim" <kimmed51@...> wrote:
>
> I'm feeding it with straight coax - no balun and no twin lead.
>
>
> --- In SkyWires@yahoogroups.com, "Kim" <kimmed51@> wrote:
> >
> > Thanks for all your responses. I took it down and rehung it as a
> > horizontal loop - same dimensions 140 ft circumference, highest corner
> > 30 feet, lowest point 15 feet (unavoidable), and feed point 20 feet.
> > So far it gets out better than the vertical loop on TX but doesn't
> > hear as well as the vertical. I've yet to test it on other bands. So
> > far I like it better since it's weird not being able to work stations
> > I can hear hi.
> >
> > Ken
> >
> >
> >
> >
> > --- In SkyWires@yahoogroups.com, "Scott MacKenzie" <kb0fhp@> wrote:
> > >
> > > Oh I agree with you - It was my impression that this was a
single band
> > > antenna (hence feeding it with a balun and coax). On 40M it would
> > be a good
> > > low angle radiator and good for DX. It would not be good for local
> > > conversations. I suspect that a vertical loop would not be a very
> good
> > > multi-band antenna - for the reasons cited.
> > >
> > > _____
> > >
> > > From: SkyWires@yahoogroups.com [mailto:SkyWires@yahoogroups.com] On
> > Behalf
> > > Of k5est
> > > Sent: Sunday, January 18, 2009 10:51 AM

> > > To: SkyWires@yahoogroups.com
> > > Subject: [SkyWires] Re: full wave 40 meter multi band vertical loop
> > >
> > >
> > >
> > > --- In SkyWires@yahoogroup <mailto:SkyWires%40yahoogroups.com>
> > s.com, "Scott
> > > MacKenzie" <kb0fhp@> wrote:
> > > >
> > >
> > > Scott,
> > >
> > > Don't know about you but I have yet to see a full
> > > wave "vertical loop" perform very well as a multiband
> > > antenna. The Horizontal Loop does a very nice job of
> > > multibanding, but usually the vertical loop has been
> > > a single (monobander) band antenna. Yeah, you can use
> > > the Vertical Loop for different frequencies, but maybe
> > > you would run the installation on EZNEC and you see
> > > some very different lobes than you would normally
> > > expect to see from a multiband antenna. But on the
> > > other hand the vert. loop is a great DX antenna on
> > > the choosen band and it does not have to be up in the
> > > air very high.
> > >
> > > 73....Walter - K5EST - Missouri
> > >
> >
>

3323. Re: [SkyWires] Re: full wave 40 meter multi band vertical loop

Yahoo group: SkyWires
Date: 2009-01-26 00:48:03 UTC
From: Jim Dunstan
Topic: 3302 Message: 3323

At 10:08 PM 1/25/2009 +0000, you wrote:

>I've had the 40 meter horizontal loop up about a week and so far it's
>been pretty disappointing. It's a fine antenna for SWL but inferior to
>my dipole for transmitting. Also it requires some power - I've made
>zero QRP contacts on it and need about 20 watts to get out. Definitely
>not worth all it took to get it in the air.
>
>AB7JK

Hi,

Interesting, How high is your loop, how high is the dipole. How are they fed? I am planning on putting up the best 40m antenna I can come spring and need all the info I can get hi hi.... winter is definitely too cold ... -30c hi hi

Jim, VE3CI

3324. Re: full wave 40 meter multi band vertical loop

Yahoo group: SkyWires
Date: 2009-01-26 01:43:05 UTC
From: Kim
Topic: 3302 Message: 3324

--- In SkyWires@yahoogroups.com, Jim Dunstan <jimdunstan@...> wrote:
>
> At 10:08 PM 1/25/2009 +0000, you wrote

Hi Jim,

The loop is 140 feet circumference lowest point 15 feet, highest about 30 feet. Works better on 40 than 20 the with 20 meter dipole being better. Both fed with coax. I haven't tried it on the higher frequency bands yet. Good Luck,

Kim
AB7JK

>
> >I've had the 40 meter horizontal loop up about a week and so far it's
> >been pretty disappointing. It's a fine antenna for SWL but inferior to
> >my dipole for transmitting. Also it requires some power - I've made
> >zero QRP contacts on it and need about 20 watts to get out. Definitely
> >not worth all it took to get it in the air.
> >
> >AB7JK
>
>
> Hi,
>
> Interesting, How high is your loop, how high is the dipole. How are
they
> fed? I am planning on putting up the best 40m antenna I can come
spring
> and need all the info I can get hi hi.... winter is definitely too
cold ...
> -30c hi hi
>
> Jim, VE3CI
>

3325. RE: [SkyWires] Re: full wave 40 meter multi band vertical loop

Yahoo group: SkyWires
Date: 2009-01-26 02:17:57 UTC
From: Scott MacKenzie
Topic: 3302 Message: 3325

A good part of the issue is height. You really need to get it up in the air much higher. On 40M, the signal will be going straight up - it will be a cloud burner. That is fine for local (1000 mile contacts), but for it to play well, you really need it to be up higher in the air. The same will be true for the other bands.

Feeding with coax is fine for single band operation - but for other bands the losses will be high and most of the TX and RX signal will be lost in the coax.

I have an 80M loop, up about 50-70 feed in a lazy trapezoid. It works extremely well for 80M and 40M I use it as my low band US contest antenna. It still has a decent DX component (low angle of radiation) too. For 20M, it doesn't do as well because I am competing with people that have beams. I don't break pileups - but I can work just about anybody I can hear.

Recommendations:

First, see if you can get the loop higher in the air - the higher the better;
Second, think about feeding it with ladder line. The losses will be greatly reduced, and it will be easier to tune.

Hope that helps

Scott, aka KB0FHP

From: SkyWires@yahoogroups.com [mailto:SkyWires@yahoogroups.com] On Behalf Of Kim
Sent: Sunday, January 25, 2009 8:43 PM
To: SkyWires@yahoogroups.com
Subject: [SkyWires] Re: full wave 40 meter multi band vertical loop

--- In SkyWires@yahoogroup <mailto:SkyWires%40yahoogroups.com> s.com, Jim Dunstan <jimdunstan@...> wrote:
>
> At 10:08 PM 1/25/2009 +0000, you wrote

Hi Jim,

The loop is 140 feet circumference lowest point 15 feet, highest about 30 feet. Works better on 40 than 20 the with 20 meter dipole being better. Both fed with coax. I haven't tried it on the higher frequency bands yet. Good Luck,

Kim
AB7JK

>
> >I've had the 40 meter horizontal loop up about a week and so far it's
> >been pretty disappointing. It's a fine antenna for SWL but inferior to
> >my dipole for transmitting. Also it requires some power - I've made
> >zero QRP contacts on it and need about 20 watts to get out. Definitely
> >not worth all it took to get it in the air.
> >
> >AB7JK
>
>
> Hi,
>
> Interesting, How high is your loop, how high is the dipole. How are
they
> fed? I am planning on putting up the best 40m antenna I can come
spring
> and need all the info I can get hi hi.... winter is definitely too
cold ...
> -30c hi hi
>
> Jim, VE3CI
>

3326. Re: [SkyWires] Re: full wave 40 meter multi band vertical loop

Yahoo group: SkyWires
Date: 2009-01-26 04:22:19 UTC
From: KD5aq
Topic: 3302 Message: 3326

Kim
some of the answers are right but I have tried a number of loops on
both hor and vertical. My loop now is centered on 7200 and fed with
coax.I sloop my loop from 35 feet to 8 feet.and feed with a 1/4 wave of
75 ohm coax (I am using rg6 u and then with rg8x to the rig.) . I
pruned it with only 8x then put the 1/4 wave 75 in. Without the q
section it was 1:1 on 7200 . I work all bands 40-10 except 30 and 17. My
internal tuner will tune 30 but not 17 . I can tune 17 with my SA2040.
All bands are close enough to use the amp without the tuner (under 3:1)
except the 30 and 17.
Ron KD5AQ
Kim wrote:
>
> I've had the 40 meter horizontal loop up about a week and so far it's
> been pretty disappointing. It's a fine antenna for SWL but inferior to
> my dipole for transmitting. Also it requires some power - I've made
> zero QRP contacts on it and need about 20 watts to get out. Definitely
> not worth all it took to get it in the air.
>
> AB7JK
>
> --- In SkyWires@yahoogroups.com <mailto:SkyWires%40yahoogroups.com>,
> "Kim" <kimmed51@...> wrote:
> >
> > I'm feeding it with straight coax - no balun and no twin lead.
> >
> >
> > --- In SkyWires@yahoogroups.com <mailto:SkyWires%40yahoogroups.com>,
> "Kim" <kimmed51@> wrote:
> > >
> > > Thanks for all your responses. I took it down and rehung it as a
> > > horizontal loop - same dimensions 140 ft circumference, highest corner
> > > 30 feet, lowest point 15 feet (unavoidable), and feed point 20 feet.
> > > So far it gets out better than the vertical loop on TX but doesn't
> > > hear as well as the vertical. I've yet to test it on other bands. So
> > > far I like it better since it's weird not being able to work stations
> > > I can hear hi.
> > >
> > > Ken
> > >
> > >
> > >
> > >
> > > --- In SkyWires@yahoogroups.com
> <mailto:SkyWires%40yahoogroups.com>, "Scott MacKenzie" <kb0fhp@> wrote:

> > > >
> > > > Oh I agree with you - It was my impression that this was a
> single band
> > > > antenna (hence feeding it with a balun and coax). On 40M it would
> > > be a good
> > > > low angle radiator and good for DX. It would not be good for local
> > > > conversations. I suspect that a vertical loop would not be a very
> > good
> > > > multi-band antenna - for the reasons cited.
> > > >
> > > > _____
> > > >
> > > > From: SkyWires@yahoogroups.com
> <mailto:SkyWires%40yahoogroups.com> [mailto:SkyWires@yahoogroups.com
> <mailto:SkyWires%40yahoogroups.com>] On
> > > Behalf
> > > > Of k5est
> > > > Sent: Sunday, January 18, 2009 10:51 AM
> > > > To: SkyWires@yahoogroups.com <mailto:SkyWires%40yahoogroups.com>
> > > > Subject: [SkyWires] Re: full wave 40 meter multi band vertical loop
> > > >
> > > >
> > > >
> > > > --- In SkyWires@yahoogroup <mailto:SkyWires%40yahoogroups.com>
> > > s.com, "Scott
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> > > > Scott,
> > > >
> > > > Don't know about you but I have yet to see a full
> > > > wave "vertical loop" perform very well as a multiband
> > > > antenna. The Horizontal Loop does a very nice job of
> > > > multibanding, but usually the vertical loop has been
> > > > a single (monobander) band antenna. Yeah, you can use
> > > > the Vertical Loop for different frequencies, but maybe
> > > > you would run the installation on EZNEC and you see
> > > > some very different lobes than you would normally
> > > > expect to see from a multiband antenna. But on the
> > > > other hand the vert. loop is a great DX antenna on
> > > > the choosen band and it does not have to be up in the
> > > > air very high.
> > > >
> > > > 73....Walter - K5EST - Missouri
> > > >
> > > >
> > >
>
>

3327. Re: full wave 40 meter multi band vertical loop

Yahoo group: SkyWires
Date: 2009-01-26 07:52:49 UTC
From: Kim
Topic: 3302 Message: 3327

Ron,

You didn't mention how well your current loop works but I imagine
pretty well since you describe it. Yours has it's lowest point at only
eight feet so height must not be so important. I guess all we can do
is experiment. The W0HMS article says no matching networks - just use
straight coax. I don't know how he came up with that since you can't
feed a multiband dipole using coax (I'd like to hear his explanation
for that). I think what works is hit or miss for any given situation.

AB7JK

--- In SkyWires@yahoogroups.com, KD5aq <fbaker@...> wrote:
>
> Kim
> some of the answers are right but I have tried a number of loops on
> both hor and vertical. My loop now is centered on 7200 and fed with
> coax.I sloop my loop from 35 feet to 8 feet.and feed with a 1/4 wave of
> 75 ohm coax (I am using rg6 u and then with rg8x to the rig.) . I
> pruned it with only 8x then put the 1/4 wave 75 in. Without the q
> section it was 1:1 on 7200 . I work all bands 40-10 except 30 and
17. My
> internal tuner will tune 30 but not 17 . I can tune 17 with my SA2040.
> All bands are close enough to use the amp without the tuner (under 3:1)
> except the 30 and 17.
> Ron KD5AQ
> Kim wrote:
> >
> > I've had the 40 meter horizontal loop up about a week and so far it's
> > been pretty disappointing. It's a fine antenna for SWL but inferior to
> > my dipole for transmitting. Also it requires some power - I've made
> > zero QRP contacts on it and need about 20 watts to get out. Definitely
> > not worth all it took to get it in the air.
> >
> > AB7JK
> >
> > --- In SkyWires@yahoogroups.com <mailto:SkyWires%40yahoogroups.com>,
> > "Kim" <kimmed51@> wrote:
> > >
> > > I'm feeding it with straight coax - no balun and no twin lead.
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> > > --- In SkyWires@yahoogroups.com
<mailto:SkyWires%40yahoogroups.com>,
> > "Kim" <kimmed51@> wrote:
> > > >

> > > > Thanks for all your responses. I took it down and rehung it as a
> > > > horizontal loop - same dimensions 140 ft circumference,
highest corner
> > > > 30 feet, lowest point 15 feet (unavoidable), and feed point 20
feet.
> > > > So far it gets out better than the vertical loop on TX but doesn't
> > > > hear as well as the vertical. I've yet to test it on other
bands. So
> > > > far I like it better since it's weird not being able to work
stations
> > > > I can hear hi.
> > > > >
> > > > > Ken
> > > > >
> > > > >
> > > > >
> > > > >
> > > > > --- In SkyWires@yahoogroups.com
> > <mailto:SkyWires%40yahoogroups.com>, "Scott MacKenzie" <kb0fhp@>
wrote:
> > > > > >
> > > > > > Oh I agree with you - It was my impression that this was a
> > single band
> > > > > > antenna (hence feeding it with a balun and coax). On 40M it
would
> > > > > be a good
> > > > > > low angle radiator and good for DX. It would not be good for
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> > > > > > conversations. I suspect that a vertical loop would not be a
very
> > > good
> > > > > > multi-band antenna - for the reasons cited.
> > > > > >
> > > > > > _____
> > > > > >
> > > > > > From: SkyWires@yahoogroups.com
> > <mailto:SkyWires%40yahoogroups.com> [mailto:SkyWires@yahoogroups.com
> > <mailto:SkyWires%40yahoogroups.com>] On
> > > > > Behalf
> > > > > > Of k5est
> > > > > > Sent: Sunday, January 18, 2009 10:51 AM
> > > > > > To: SkyWires@yahoogroups.com <mailto:SkyWires%40yahoogroups.com>
> > > > > > Subject: [SkyWires] Re: full wave 40 meter multi band
vertical loop
> > > > > >
> > > > > >
> > > > > >
> > > > > > --- In SkyWires@yahoogroup <mailto:SkyWires%40yahoogroups.com>
> > > > s.com, "Scott
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> > > > > Scott,
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> > > > > Don't know about you but I have yet to see a full
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> > > > > other hand the vert. loop is a great DX antenna on
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> > > > > air very high.
> > > > >
> > > > > 73....Walter - K5EST - Missouri
> > > > >
> > > >
> > >
> >
> >
>

3328. Re: [SkyWires] Re: full wave 40 meter multi band vertical loop

Yahoo group: SkyWires
Date: 2009-01-26 13:58:43 UTC
From: Siegfried Jackstien
Topic: 3302 Message: 3328

dear jim
you wanna build the best you can ... so what about a 4-square for 40??
should be easy to errect 4 pushup-poles....
or do you want a skywaveantenna for local contacts??
last year i was able to get zl and vk from germany in ssb with only 100w and some wire
it was a very big loop so i don´t know if you have the space for bit
dg9bfc
----- Original Message -----
From: Jim Dunstan
To: SkyWires@yahoogroups.com
Sent: Monday, January 26, 2009 1:48 AM
Subject: Re: [SkyWires] Re: full wave 40 meter multi band vertical loop

At 10:08 PM 1/25/2009 +0000, you wrote:

>I've had the 40 meter horizontal loop up about a week and so far it's
>been pretty disappointing. It's a fine antenna for SWL but inferior to
>my dipole for transmitting. Also it requires some power - I've made
>zero QRP contacts on it and need about 20 watts to get out. Definitely
>not worth all it took to get it in the air.
>
>AB7JK

Hi,

Interesting, How high is your loop, how high is the dipole. How are they
fed? I am planning on putting up the best 40m antenna I can come spring
and need all the info I can get hi hi.... winter is definitely too cold ...
-30c hi hi

Jim, VE3CI

3329. Re: [SkyWires] Re: full wave 40 meter multi band vertical loop

Yahoo group: SkyWires
Date: 2009-01-26 16:11:35 UTC
From: Jim Dunstan
Topic: 3302 Message: 3329

At 01:43 AM 1/26/2009 +0000, you wrote:

>--- In <mailto:SkyWires%40yahoogroups.com>SkyWires@yahoogroups.com, Jim
>Dunstan <jimdunstan@...> wrote:
> >
> > At 10:08 PM 1/25/2009 +0000, you wrote
>
>Hi Jim,
>
>The loop is 140 feet circumference lowest point 15 feet, highest about
>30 feet. Works better on 40 than 20 the with 20 meter dipole being
>better. Both fed with coax. I haven't tried it on the higher frequency
>bands yet. Good Luck,
>
>Kim
>AB7JK

Thanks Kim

Jim, ve3ci

3330. Re: full wave 40 meter multi band vertical loop

Yahoo group: SkyWires
Date: 2009-01-26 17:06:23 UTC
From: k5est
Topic: 3302 Message: 3330

> >The loop is 140 feet circumference lowest point 15 feet, highest about
> >30 feet. Works better on 40 than 20 the with 20 meter dipole being
> >better. Both fed with coax. I haven't tried it on the higher frequency
> >bands yet. Good Luck,
> >
> >Kim
> >AB7JK
......

Sorry you are having a negative experience with the horizontal loop, however, there is a lot of misunderstood very simple things that should be used when putting up a horizontal loop. IMHO:

..forget coax feeders unless it is a monobander.

..unless you have NVIS as your prime goal, then the next band lower should be your target loop size. ie, if you want to operate 40 thru 10, then make the loop for 80 meters. This lowers the take off angle and provides way better coverage.

..if you just have to use coax for a partial feeder, ie inside the shack or entry/exit from the house/shack then please use the coax until outside, then install a 1:1 or 4:1 balun (whatever your tuner requires for the best operation) then go to ladderline, open wire feeders, or TV twinlead.

..the feed point impedances are a WIDE swing from band to band just like a dipole/inverted vee will be when used as a multi-band antenna. That is why using the ladderline or twinlead is best for less losses. If you are running QRP (like I do) then think ahead and avoid anything that creates losses in the antenna system.

..a horizontal loop is real estate intensive but you normally can put a loop up, even if it is around the perimeter of your QTH.

..I have been using horizontal loops since 1976 and the only time I have been disappointed in the Horiz. Loop is when trying to press one into service BELOW the design frequency. IE, using a 40 meter loop on 60 or 80 meters, etc. You must break the wire loop 180 degrees from the feedpoint to use the loop effectively on the

below design frequency. Then you have a bent dipole!

..horizontal loops are very good radiators even at low heights. Higher up is best, but most of my loops are no higher than 30 feet. Actually I have a GML (Ground Mounted Loop) that lays right on the ground and it works better than a Grasswire Antenna.

..wire size is no big deal, but the bigger the loop then you either need stronger wire or a lot more supports. Most of the time #14AWG will work fine until you get to over 500 feet. You have less loss but more weight when going over to #12AWG but that is what seems to work best when going over 500 feet in the loop length.

..feed point, don't feed a multi-band at the corner unless you don't mind a rhombic antenna effect on the upper bands. Most of the time feeding at the middle of one side is just not convenient but you can feed it maybe 10 feet from a corner to avoid the rhombic effect.

..always look for a better way to enjoy a Horizontal Loop. The collective effort of all of us has yielded some fine mods and fixes. The more you use and experiment with Horiz. Loops, then the more you will giggle at some of the articles in magazines and online.

That's my story.....and maybe I'm sticking to it....Grin!

73....Walter - K5EST

3331. Re: full wave 40 meter multi band vertical loop

Yahoo group: SkyWires
Date: 2009-01-26 17:36:12 UTC
From: Don Keith
Topic: 3302 Message: 3331

I don't have Walter's experience with the horizontal loop, but I totally agree with K5EST's points. Since I now primarily use mine on 160, and since it is a bit short for a full wavelength on that band, I'm thinking about breaking it about halfway around and seeing what it looks like as a "bent dipole."

Mine is 15 feet above ground in some places, 35 feet up in others. This weekend on the 160-meter CW contest, I worked every station I called on the first or second call but one (never did get him...he was in Arizona and deep in the QRM), and they were from Manitoba, Canada, to California to Prince Edward Island. I was running 100 watts.

I've also worked Europe and Chile on 160. But the truth is, I don't even hear a lot of the DX that guys with verticals, inverted Ls and high dipoles are working. I just don't have the height.

Hope you figure out what is ailing yours. The loop is no miracle antenna, but it is a very good one. It allowed me to get on 160 without a 270-foot-long dipole, which I could never have fit on my lot...without bending it!

73,

Don N4KC
www.n4kc.com (article on my loop there)
www.donkeith.com
www.n4kc.blogspot.com
(A blog about rapid technological change and its
effect on society, media and amateur radio)

--- In SkyWires@yahoogroups.com, "k5est" <k5est@...> wrote:
>
> > >The loop is 140 feet circumference lowest point 15 feet, highest
about
> > >30 feet. Works better on 40 than 20 the with 20 meter dipole
being
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> > >Kim
> > >AB7JK
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> Sorry you are having a negative experience with the

> horizontal loop, however, there is a lot of
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>
> ..forget coax feeders unless it is a monobander.
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> ..unless you have NVIS as your prime goal, then the
> next band lower should be your target loop size. ie,
> if you want to operate 40 thru 10, then make the loop
> for 80 meters. This lowers the take off angle and
> provides way better coverage.
>
> ..if you just have to use coax for a partial feeder, ie
> inside the shack or entry/exit from the house/shack
> then please use the coax until outside, then install
> a 1:1 or 4:1 balun (whatever your tuner requires for
> the best operation) then go to ladderline, open wire
> feeders, or TV twinlead.
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> ..the feed point impedances are a WIDE swing from band
> to band just like a dipole/inverted vee will be when
> used as a multi-band antenna. That is why using the
> ladderline or twinlead is best for less losses. If
> you are running QRP (like I do) then think ahead and
> avoid anything that creates losses in the antenna
> system.
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> ..a horizontal loop is real estate intensive but you
> normally can put a loop up, even if it is around the
> perimeter of your QTH.
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> ..I have been using horizontal loops since 1976 and the
> only time I have been disappointed in the Horiz. Loop
> is when trying to press one into service BELOW the
> design frequency. IE, using a 40 meter loop on 60 or
> 80 meters, etc. You must break the wire loop 180 degrees
> from the feedpoint to use the loop effectively on the
> below design frequency. Then you have a bent dipole!
>
> ..horizontal loops are very good radiators even at low
> heights. Higher up is best, but most of my loops are
> no higher than 30 feet. Actually I have a GML (Ground
> Mounted Loop) that lays right on the ground and it
> works better than a Grasswire Antenna.
>
> ..wire size is no big deal, but the bigger the loop then
> you either need stronger wire or a lot more supports.
> Most of the time #14AWG will work fine until you get
> to over 500 feet. You have less loss but more weight
> when going over to #12AWG but that is what seems to

> work best when going over 500 feet in the loop length.
>
> ..feed point, don't feed a multi-band at the corner
> unless you don't mind a rhombic antenna effect on
> the upper bands. Most of the time feeding at the
> middle of one side is just not convenient but you
> can feed it maybe 10 feet from a corner to avoid the
> rhombic effect.
>
> ..always look for a better way to enjoy a Horizontal
> Loop. The collective effort of all of us has
> yielded some fine mods and fixes. The more you use
> and experiment with Horiz. Loops, then the more you
> will giggle at some of the articles in magazines and
> online.
>
> That's my story.....and maybe I'm sticking to it....Grin!
>
> 73....Walter - K5EST
>

3332. Re: full wave 40 meter multi band vertical loop

Yahoo group: SkyWires
Date: 2009-01-26 19:00:34 UTC
From: k5est
Topic: 3302 Message: 3332

--- In SkyWires@yahoogroups.com, "Don Keith" <n4kc@...> wrote:
>
> I don't have Walter's experience with the horizontal loop, but I
> totally agree with K5EST's points. Since I now primarily use mine on
> 160, and since it is a bit short for a full wavelength on that band,
> I'm thinking about breaking it about halfway around and seeing what
> it looks like as a "bent dipole."
>
.....snip.........

Hi Don,

Thanks for the nice comments. If I could mention,
please separate the halfway around break in the
wires about 2 ft (24 inches) minimum. Some guys
have had good results with just using a couple of
egg insulators in-line as the gap, but lately I
have been using a piece of PVC pipe of 3/4 inch
size that is 2 feet long with holes drilled in the
ends for the wire tie holes. It could just be my
homebrew tuner that doesn't like the high voltage
points so close together, so I went for more
separation of the ends.

Sure would appreciate your thoughts and experiences
on this detail.

Happy Horizontal Loops to you!

73....Walter - K5EST

3333. Re: [SkyWires] Re: full wave 40 meter multi band vertical loop

Yahoo group: SkyWires
Date: 2009-01-26 19:45:19 UTC
From: Jim Dunstan
Topic: 3302 Message: 3333

At 05:06 PM 1/26/2009 +0000, you wrote:

Hi Walter,

I really enjoyed reading ur post. I am presently planning some antenna work for the spring and some of my ideas overlap with some of the things you said. Here is my situation. At the moment I have a single band, 20m rotatable dipole element made of aluminium tubing mounted on the top of my 55' tower fed with RG-232 coax cable. It is very efficient and effective ... even at QRP levels (lots of DX). The problem it is mono band.

I want to operate 40m as well as 30m and 15m. and it would be very nice if I could do it all with one antenna .... although I will probably continue to spend most of my time on 20m ... my favourite band (probably because it is the only band i can operate hi hi).

Back in the old days .... (late 50's) I used a vertically oriented loop for 20/15 (actually 2 loop elements in a quad arrangement) mounted vertically with the centre at 30'. It was very effective .... I really like the loop ... as it was really nice and quiet as well on receive. In my present situation I have a really nice tilt over tower in my front yard a few feet away from the front of the house. It tilts over and comes down into the side drive. A big box antenna like a quad won't fit .... whereas the dipole comes down almost to the ground making working on the antenna a snap.

In all of the alternative arrangements I have been thinking of I would feed the new antenna with 450 ohm ladder line and bring right into the shack ... where I have an excellent balanced antenna tuner. I want the antenna to be useable 40-10M

Plan #1
However if I were to construct a 20m loop (single element) the dimensions would make it approximately 17.5 ft square. If I mounted it vertically and rotated it so it was parallel to the side of the house I could bring it down to the side drive and the mast would be about 8-9 ft from the ground. I could easily work on the antenna with a small step ladder.

Plan #2
I could mount the same loop in the horizontal position and physically I would be in the same position in terms of access when I bring it down into the driveway and have access to all parts of the antenna from a small step ladder.

>Question 1
> From a performance point of view which orientation would you suggest be
> superior (on 20-15m with the loop 1 wavelength on 20m)... the horizontal
> where the whole loop plane is at 55 ft or the vertical orientation where

> the centre is a 55 ft and the top above and the bottom below by 8' ??
>
>Question 2
>Concerns operation on 40m and 30m . Which orientation of the 70' loop
>would provide the best performance ??
>
>Plan #3
>This plan is simply to extend the present dipole from the present 32' to
>40 to 44 ft in length (also fed with ladder line).

Any opinions on the best plan?

Jim, VE3CI

3334. Re: [SkyWires] Re: full wave 40 meter multi band vertical loop

Yahoo group: SkyWires
Date: 2009-01-26 19:59:31 UTC
From: Jim Dunstan
Topic: 3302 Message: 3334

At 05:36 PM 1/26/2009 +0000, you wrote:

>I don't have Walter's experience with the horizontal loop, but I
>totally agree with K5EST's points. Since I now primarily use mine on
>160, and since it is a bit short for a full wavelength on that band,
>I'm thinking about breaking it about halfway around and seeing what
>it looks like as a "bent dipole."

Hi,

For what its worth, I read an entry in an old ARRL antenna hand book concerning the performance of a 1/2 wavelength loop. First it is self resonant with a different current distribution than a full wavelength loop. One side of the loop is high current and the opposite side is low current. They made the point that this current distribution remains the same and thus performance whether it remains unbroken except for the feed point or open at both the feed point and directly across from the feed point. In the first instance (unbroken) the feed point impedance is high ... eg up to 2000 ohms, while the impedance drops to the 60 to 100 ohm range if the loop is broken across from the feed point. The important point is performance remains the same ... just the feed point impedance changes and the slight directional characteristic reverses.

The second interesting point they made was that the radiation pattern will demonstrate a small directional pattern since there is uneven current distribution. The directional pattern reverses when the loop is broken across from the feed point.

Later issues of the handbook seem to have dropped the discussion of the 1/2 wave loop.

Jim, VE3CI

3335. Re: full wave 40 meter multi band vertical loop

Yahoo group: SkyWires
Date: 2009-01-26 20:11:10 UTC
From: k5est
Topic: 3302 Message: 3335

--- In SkyWires@yahoogroups.com, Jim Dunstan <jimdunstan@...> wrote:
....snip....
> Later issues of the handbook seem to have dropped the discussion of
the 1/2
> wave loop.
>
> Jim, VE3CI
....end snip....

Hi Jim,
Boy, I have no idea why the handbook does not include
the 1/2WL loop, but there have been a lot of guys that
are trying to make it a multi-band antenna and to me
there are way better antennas to put into the air.
73....Walter - K5EST

3336. Re: full wave 40 meter multi band vertical loop

Yahoo group: SkyWires
Date: 2009-01-26 20:24:22 UTC
From: k5est
Topic: 3302 Message: 3336

..
.....top reply.....
..

Hi Jim,

Glad you have the tilt-over for a mast. With your house
being that close and still wanting to be able to service
your antenna (you are a wise man), then my first thought
would be "Go with LB (W4RNL-now SK)" and use a 44 foot
metal dipole fed with 450 ohm ladderline. The 44 ft dipole
will allow you to rotate and gain some escape of QRM
plus a little directivity. The advantage of the 44 footer
is that you still have radiation broadside to the antenna
from 40 thru 10 meters. Yeah, it is a bit of a compromise
antenna on 40 meters but with your height for the antenna
then you may not notice adverse problems. And best of all
you still retain your 20 meter hangout.

Maybe you have another area in the yard for a horizontal
loop.......even around the house eves. That would give
you 2 antennas to A-B switch for the best performance.

73....Walter - K5EST

--- In SkyWires@yahoogroups.com, Jim Dunstan <jimdunstan@...> wrote:
>
> At 05:06 PM 1/26/2009 +0000, you wrote:
>
>
> Hi Walter,
>
> I really enjoyed reading ur post. I am presently planning some antenna
> work for the spring and some of my ideas overlap with some of the
things
> you said. Here is my situation. At the moment I have a single
band, 20m
> rotatable dipole element made of aluminium tubing mounted on the top
of my
> 55' tower fed with RG-232 coax cable. It is very efficient and
effective
> ... even at QRP levels (lots of DX). The problem it is mono band.
>
> I want to operate 40m as well as 30m and 15m. and it would be very
nice if
> I could do it all with one antenna .... although I will probably

continue
> to spend most of my time on 20m ... my favourite band (probably
because it
> is the only band i can operate hi hi).
>
> Back in the old days .... (late 50's) I used a vertically oriented
loop for
> 20/15 (actually 2 loop elements in a quad arrangement) mounted
vertically
> with the centre at 30'. It was very effective .... I really like
the loop
> ... as it was really nice and quiet as well on receive. In my present
> situation I have a really nice tilt over tower in my front yard a
few feet
> away from the front of the house. It tilts over and comes down into
the
> side drive. A big box antenna like a quad won't fit .... whereas the
> dipole comes down almost to the ground making working on the antenna
a snap.
>
> In all of the alternative arrangements I have been thinking of I
would feed
> the new antenna with 450 ohm ladder line and bring right into the
shack ...
> where I have an excellent balanced antenna tuner. I want the
antenna to be
> useable 40-10M
>
> Plan #1
> However if I were to construct a 20m loop (single element) the
dimensions
> would make it approximately 17.5 ft square. If I mounted it
vertically and
> rotated it so it was parallel to the side of the house I could bring it
> down to the side drive and the mast would be about 8-9 ft from the
> ground. I could easily work on the antenna with a small step ladder.
>
> Plan #2
> I could mount the same loop in the horizontal position and physically I
> would be in the same position in terms of access when I bring it
down into
> the driveway and have access to all parts of the antenna from a
small step
> ladder.
>
> >Question 1
> > From a performance point of view which orientation would you
suggest be
> > superior (on 20-15m with the loop 1 wavelength on 20m)... the
horizontal

> > where the whole loop plane is at 55 ft or the vertical orientation
where
> > the centre is a 55 ft and the top above and the bottom below by 8' ??
> >
> >Question 2
> >Concerns operation on 40m and 30m . Which orientation of the 70' loop
> >would provide the best performance ??
> >
> >Plan #3
> >This plan is simply to extend the present dipole from the present
32' to
> >40 to 44 ft in length (also fed with ladder line).
>
> Any opinions on the best plan?
>
> Jim, VE3CI
>

3337. Re: full wave 40 meter multi band vertical loop

Yahoo group: SkyWires
Date: 2009-01-26 20:30:29 UTC
From: Don Keith
Topic: 3302 Message: 3337

You know, if someone had the software and the time and the interest (I only have the interest!), it might be a good exercise to model a 470-foot loop, one that is roughly rectangular in shape, fed in the middle of a relatively straight stretch with 450-ohm window line. Then break it along the leg opposite the feedpoint by varying amounts of distance. Maybe varied from an inch or so up to ten or twelve feet. I mention 470 feet only because that is what mine is!

We love our loops, but there might be advantages to opening up the other end a bit. Would it behave more like a dipole? That is, would it present high reactance on even harmonics? Or would it keep the better aspects of the loop? I also wonder about the pattern, especially on higher multiples of the fundamental frequency.

Would I be better just walking off 135 feet in each direction from the feedpoint and cutting the loop there, tying off the ends, and making myself a true bent dipole? It would be 100 feet less wire in the air, but that is the stretch of the loop back there that is the highest above worm-infested dirt.

Don N4KC

--- In SkyWires@yahoogroups.com, "k5est" <k5est@...> wrote:
>
> --- In SkyWires@yahoogroups.com, "Don Keith" <n4kc@> wrote:
> >
> > I don't have Walter's experience with the horizontal loop, but I
> > totally agree with K5EST's points. Since I now primarily use
mine on
> > 160, and since it is a bit short for a full wavelength on that
band,
> > I'm thinking about breaking it about halfway around and seeing
what
> > it looks like as a "bent dipole."
> >
> .....snip.........
>
> Hi Don,
>
> Thanks for the nice comments. If I could mention,
> please separate the halfway around break in the
> wires about 2 ft (24 inches) minimum. Some guys
> have had good results with just using a couple of
> egg insulators in-line as the gap, but lately I
> have been using a piece of PVC pipe of 3/4 inch
> size that is 2 feet long with holes drilled in the

> ends for the wire tie holes. It could just be my
> homebrew tuner that doesn't like the high voltage
> points so close together, so I went for more
> separation of the ends.
>
> Sure would appreciate your thoughts and experiences
> on this detail.
>
> Happy Horizontal Loops to you!
>
> 73....Walter - K5EST
>

3338. Re: [SkyWires] Re: full wave 40 meter multi band vertical loop

Yahoo group: SkyWires
Date: 2009-01-26 21:53:49 UTC
From: Jim Dunstan
Topic: 3302 Message: 3338

At 08:24 PM 1/26/2009 +0000, you wrote:

>..
>.....top reply.....
>..
>
>Hi Jim,
>
>Glad you have the tilt-over for a mast. With your house
>being that close and still wanting to be able to service
>your antenna (you are a wise man), then my first thought
>would be "Go with LB (W4RNL-now SK)" and use a 44 foot
>metal dipole fed with 450 ohm ladderline. The 44 ft dipole
>will allow you to rotate and gain some escape of QRM
>plus a little directivity. The advantage of the 44 footer
>is that you still have radiation broadside to the antenna
>from 40 thru 10 meters. Yeah, it is a bit of a compromise
>antenna on 40 meters but with your height for the antenna
>then you may not notice adverse problems. And best of all
>you still retain your 20 meter hangout.
>
>Maybe you have another area in the yard for a horizontal
>loop.......even around the house eves. That would give
>you 2 antennas to A-B switch for the best performance.
>
>73....Walter - K5EST

Good advice Walter. I already have the necessary aluminium tubing to extend the dipole. Your right, the 44 ft dipole length does provide a consistent radiation pattern on all bands 40-10m. The ladder line feed will then easily accommodate all band operation with good efficiency. If I do try the loop it will not be at the expense of the dipole ... I can simply put the dipole on the roof of the carport ... ready for re-installation if needed hi. I have enough aluminum to make a frame for the loop. Since my tower comes down into the drive changing from the loop to the dipole would be a week-end project hi

Jim, VE3CI

3339. Re: full wave 40 meter multi band vertical loop

Yahoo group: SkyWires
Date: 2009-01-26 22:23:54 UTC
From: k5est
Topic: 3302 Message: 3339

--- In SkyWires@yahoogroups.com, "Don Keith" <n4kc@...> wrote:
>
> You know, if someone had the software and the time and the interest
> (I only have the interest!), it might be a good exercise to model a
> 470-foot loop, one that is roughly rectangular in shape, fed in the
> middle of a relatively straight stretch with 450-ohm window line.
> Then break it along the leg opposite the feedpoint by varying amounts
> of distance. Maybe varied from an inch or so up to ten or twelve
> feet. I mention 470 feet only because that is what mine is!
>
....snip.....

Hi Don,

Hee hee....great question. I don't have the software,
and being on dialup, I am not likely to download the
full EZNEC program.

All I can say is from some experience with opening up
the loop for Below the design frequency ops. I tried
the open loop "bent dipole" on some other bands and
immediately had the same high noise on receive that
my NVIS dipoles were experiencing so the loop was
re-attached.

Along with your "opened loop" modeling, it would also
be nice if some kind soul would model the feedpoint
impedances when the feedpoint was moved from say the
corner of a loop to various locations along the one
side to about midway of the side. If you are familiar
with the clothesline antenna, there are many changes
in impedances along the sliding feedpoint.

73....Walter - K5EST

3340. Re: [SkyWires] Re: full wave 40 meter multi band vertical loop

Yahoo group: SkyWires
Date: 2009-01-26 22:25:54 UTC
From: Siegfried Jackstien
Topic: 3302 Message: 3340

try out mmana ... it is a modelling soft that is easy to use (and freeware)... you will find that the loop is better as the bent dipole ...
dg9bfc
sigi

----- Original Message -----
From: Don Keith
To: SkyWires@yahoogroups.com
Sent: Monday, January 26, 2009 9:30 PM
Subject: [SkyWires] Re: full wave 40 meter multi band vertical loop

You know, if someone had the software and the time and the interest (I only have the interest!), it might be a good exercise to model a 470-foot loop, one that is roughly rectangular in shape, fed in the middle of a relatively straight stretch with 450-ohm window line. Then break it along the leg opposite the feedpoint by varying amounts of distance. Maybe varied from an inch or so up to ten or twelve feet. I mention 470 feet only because that is what mine is!

We love our loops, but there might be advantages to opening up the other end a bit. Would it behave more like a dipole? That is, would it present high reactance on even harmonics? Or would it keep the better aspects of the loop? I also wonder about the pattern, especially on higher multiples of the fundamental frequency.

Would I be better just walking off 135 feet in each direction from the feedpoint and cutting the loop there, tying off the ends, and making myself a true bent dipole? It would be 100 feet less wire in the air, but that is the stretch of the loop back there that is the highest above worm-infested dirt.

Don N4KC

--- In SkyWires@yahoogroups.com, "k5est" <k5est@...> wrote:
>
> --- In SkyWires@yahoogroups.com, "Don Keith" <n4kc@> wrote:
> >
> > I don't have Walter's experience with the horizontal loop, but I
> > totally agree with K5EST's points. Since I now primarily use mine on
> > 160, and since it is a bit short for a full wavelength on that band,
> > I'm thinking about breaking it about halfway around and seeing what
> > it looks like as a "bent dipole."
> >

> .....snip.........
>
> Hi Don,
>
> Thanks for the nice comments. If I could mention,
> please separate the halfway around break in the
> wires about 2 ft (24 inches) minimum. Some guys
> have had good results with just using a couple of
> egg insulators in-line as the gap, but lately I
> have been using a piece of PVC pipe of 3/4 inch
> size that is 2 feet long with holes drilled in the
> ends for the wire tie holes. It could just be my
> homebrew tuner that doesn't like the high voltage
> points so close together, so I went for more
> separation of the ends.
>
> Sure would appreciate your thoughts and experiences
> on this detail.
>
> Happy Horizontal Loops to you!
>
> 73....Walter - K5EST
>

3341. RE: [SkyWires] Re: full wave 40 meter multi band vertical loop

Yahoo group: SkyWires
Date: 2009-01-26 22:54:57 UTC
From: Scott MacKenzie
Topic: 3302 Message: 3341

With a loop fed at the top of the 55 foot tower, and spread out in a delta fashion with the ends about 15/20 feet in the air - it will be a very effective antenna. I am using one now (80M loop) and am using it from 160-6M. Not as good as a beam, but it works well. It should be MUCH better than the dipole. Feed it with ladder line and you will do much better.

Scott

From: SkyWires@yahoogroups.com [mailto:SkyWires@yahoogroups.com] On Behalf Of Jim Dunstan
Sent: Monday, January 26, 2009 4:54 PM
To: SkyWires@yahoogroups.com
Subject: Re: [SkyWires] Re: full wave 40 meter multi band vertical loop

At 08:24 PM 1/26/2009 +0000, you wrote:

>..
>.....top reply.....
>..
>
>Hi Jim,
>
>Glad you have the tilt-over for a mast. With your house
>being that close and still wanting to be able to service
>your antenna (you are a wise man), then my first thought
>would be "Go with LB (W4RNL-now SK)" and use a 44 foot
>metal dipole fed with 450 ohm ladderline. The 44 ft dipole
>will allow you to rotate and gain some escape of QRM
>plus a little directivity. The advantage of the 44 footer
>is that you still have radiation broadside to the antenna
>from 40 thru 10 meters. Yeah, it is a bit of a compromise
>antenna on 40 meters but with your height for the antenna
>then you may not notice adverse problems. And best of all
>you still retain your 20 meter hangout.
>
>Maybe you have another area in the yard for a horizontal
>loop.......even around the house eves. That would give
>you 2 antennas to A-B switch for the best performance.
>
>73....Walter - K5EST

Good advice Walter. I already have the necessary aluminium tubing to extend the dipole. Your right, the 44 ft dipole length does provide a consistent radiation pattern on all bands 40-10m. The ladder line feed

will then easily accommodate all band operation with good efficiency. If I do try the loop it will not be at the expense of the dipole ... I can simply put the dipole on the roof of the carport ... ready for re-installation if needed hi. I have enough aluminum to make a frame for the loop. Since my tower comes down into the drive changing from the loop to the dipole would be a week-end project hi

Jim, VE3CI

3342. RE: [SkyWires] Re: full wave 40 meter multi band vertical loop

Yahoo group: SkyWires
Date: 2009-01-26 23:49:59 UTC
From: Jim Dunstan
Topic: 3302 Message: 3342

At 05:54 PM 1/26/2009 -0500, you wrote:

>With a loop fed at the top of the 55 foot tower, and spread out in a delta
>fashion with the ends about 15/20 feet in the air - it will be a very
>effective antenna. I am using one now (80M loop) and am using it from
>160-6M. Not as good as a beam, but it works well. It should be MUCH
>better than the dipole. Feed it with ladder line and you will do much better.
>
>Scott

Hi Scott,

The aluminium material I have on hand will allow me to construct a frame that will support 70 ft of wire (full wave at 20M) in a square shape. The square is about 18 ft on a side. It would be supported with the center 55 ft above ground. The top of the square would be about 8 ft higher and the lower part would be 8 ft lower. I would feed the antenna with open wire line use it multi-band from 40m to 10m.

I know it should be as good as or better than a 20m dipole at the same height ... but I have no idea what it will do on 40 m where it is a half wave loop or on 30m where it is in between hi. It will load alright on all bands.

I could also design the frame to hold the same loop in a horizontal position at 55 ft. I have heard much comment on how effective a horizontal loop is ... but all of the examples have been in the 160-80 mtr full wave size and thus close to the ground relatively speaking. I don't know what the prediction for radiation pattern would be if the 1 wavelength loop was held at a 3/4 wavelength height above ground ... I suspect that at that height the vertical orientation might be more effective.

I should become acquainted with antenna modeling software to see if it can give any indication of how they would compare ... winter lasts pretty long here which should give me lots of time to work on the ideas hi hi

Jim, VE3CI

3343. Re: [SkyWires] Re: full wave 40 meter multi band vertical loop

Yahoo group: SkyWires
Date: 2009-01-27 00:01:34 UTC
From: Siegfried Jackstien
Topic: 3302 Message: 3343

why not put an elevation rotor in your construction??
you can turn from vertikal to horizontal (and all in between) in a few seconds while receiving the other station .... when conditions change (or the range to the other station is different from the station worked before) you turn your antenna ..... local and dx in one antenna tuneable to almost any band
i think that could be very fine
if turned to vertical feed it in one of the vertikal corners NOT on the lower or upper corner
maybe i have the time to make a modell in mmana
dg9bfc

----- Original Message -----
From: Jim Dunstan
To: SkyWires@yahoogroups.com
Sent: Tuesday, January 27, 2009 12:49 AM
Subject: RE: [SkyWires] Re: full wave 40 meter multi band vertical loop

At 05:54 PM 1/26/2009 -0500, you wrote:

With a loop fed at the top of the 55 foot tower, and spread out in a delta fashion with the ends about 15/20 feet in the air - it will be a very effective antenna. I am using one now (80M loop) and am using it from 160-6M. Not as good as a beam, but it works well. It should be MUCH better than the dipole. Feed it with ladder line and you will do much better.

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I should become acquainted with antenna modeling software to see if it can give any indication of how they would compare ... winter lasts pretty long here which should give me

lots of time to work on the ideas hi hi

Jim, VE3CI

3344. Re: [SkyWires] Re: full wave 40 meter multi band vertical loop

Yahoo group: SkyWires
Date: 2009-01-27 00:22:44 UTC
From: KD5aq
Topic: 3302 Message: 3344

For what it is worth you will find that information at http://www.cebik.com
It will take some looking on the site but he even has it modeled for you.
Ron KD5AQ
k5est wrote:
>
> --- In SkyWires@yahoogroups.com <mailto:SkyWires%40yahoogroups.com>,
> "Don Keith" <n4kc@...> wrote:
> >
> > You know, if someone had the software and the time and the interest
> > (I only have the interest!), it might be a good exercise to model a
> > 470-foot loop, one that is roughly rectangular in shape, fed in the
> > middle of a relatively straight stretch with 450-ohm window line.
> > Then break it along the leg opposite the feedpoint by varying amounts
> > of distance. Maybe varied from an inch or so up to ten or twelve
> > feet. I mention 470 feet only because that is what mine is!
> >
> ....snip.....
>
> Hi Don,
>
> Hee hee....great question. I don't have the software,
> and being on dialup, I am not likely to download the
> full EZNEC program.
>
> All I can say is from some experience with opening up
> the loop for Below the design frequency ops. I tried
> the open loop "bent dipole" on some other bands and
> immediately had the same high noise on receive that
> my NVIS dipoles were experiencing so the loop was
> re-attached.
>
> Along with your "opened loop" modeling, it would also
> be nice if some kind soul would model the feedpoint
> impedances when the feedpoint was moved from say the
> corner of a loop to various locations along the one
> side to about midway of the side. If you are familiar
> with the clothesline antenna, there are many changes
> in impedances along the sliding feedpoint.
>
> 73....Walter - K5EST
>
>

3345. RE: [SkyWires] Re: full wave 40 meter multi band vertical loop

Yahoo group: SkyWires
Date: 2009-01-27 00:24:02 UTC
From: Scott MacKenzie
Topic: 3302 Message: 3345

I use MMANA - I would be happy to model a 20M loop in the horizontal and vertical planes for you. Shouldn't take me more than a couple of minutes to do. Give me your email address and I can send it to you off-line.

But if you are going to the trouble of making a 20M horizontal loop - you might want to consider a Moxon - nice gain and F/B.

Scott

From: SkyWires@yahoogroups.com [mailto:SkyWires@yahoogroups.com] On Behalf Of Jim Dunstan
Sent: Monday, January 26, 2009 6:50 PM
To: SkyWires@yahoogroups.com
Subject: RE: [SkyWires] Re: full wave 40 meter multi band vertical loop

At 05:54 PM 1/26/2009 -0500, you wrote:

With a loop fed at the top of the 55 foot tower, and spread out in a delta fashion with the ends about 15/20 feet in the air - it will be a very effective antenna. I am using one now (80M loop) and am using it from 160-6M. Not as good as a beam, but it works well. It should be MUCH better than the dipole. Feed it with ladder line and you will do much better.

Scott

Hi Scott,

The aluminium material I have on hand will allow me to construct a frame that will support 70 ft of wire (full wave at 20M) in a square shape. The square is about 18 ft on a side. It would be supported with the center 55 ft above ground. The top of the square would be about 8 ft higher and the lower part would be 8 ft lower. I would feed the antenna with open wire line use it multi-band from 40m to 10m.

I know it should be as good as or better than a 20m dipole at the same height ... but I have no idea what it will do on 40 m where it is a half wave loop or on 30m where it is in between hi. It will load alright on all bands.

I could also design the frame to hold the same loop in a horizontal position at 55 ft. I have heard much comment on how effective a horizontal loop is ... but all of the examples have been in the 160-80 mtr full wave size and thus close to the ground relatively speaking. I don't know what the prediction for radiation pattern would be if the 1 wavelength loop was held at a 3/4 wavelength height above ground ... I suspect that at that height the vertical orientation might be more effective.

I should become acquainted with antenna modeling software to see if it can give any indication of how they would compare ... winter lasts pretty long here which should give me lots of time to work on the ideas hi hi

Jim, VE3CI

3346. Re: [SkyWires] Re: full wave 40 meter multi band vertical loop

Yahoo group: SkyWires
Date: 2009-01-27 00:31:16 UTC
From: Jim Dunstan
Topic: 3302 Message: 3346

At 01:01 AM 1/27/2009 +0100, you wrote:

>why not put an elevation rotor in your construction??
>you can turn from vertikal to horizontal (and all in between) in a few
>seconds while receiving the other station .... when conditions change (or
>the range to the other station is different from the station worked
>before) you turn your antenna ..... local and dx in one antenna tuneable
>to almost any band
>i think that could be very fine
>if turned to vertical feed it in one of the vertikal corners NOT on the
>lower or upper corner
>maybe i have the time to make a modell in mmana
>dg9bfc

What an interesting idea. I am always coming to my local black smith with new fabrication ideas. If not a rotor .... some kind of manual hinge that can be shifted 90 deg.

My tower is hinged at the 18 ft level and is an easy one person operation to bring down into the side drive (using a bloc and tackle). I will be feeding the loop giving it horizontal polarization.... when in the vertical position ... It would be a simple operation to feed the square from the side to produce vertical polarization. I have no idea what the polarization is if the loop is in the horizontal configuration.

Jim, VE3CI

3347. Re: [SkyWires] Re: full wave 40 meter multi band vertical loop

Yahoo group: SkyWires
Date: 2009-01-27 00:39:10 UTC
From: Siegfried Jackstien
Topic: 3302 Message: 3347

if it is horizontal the radiation wil be horizontal but turned 90 in orientation
say vertical in in east west direction mounted it shoots to north south like a dipole would do
actually you have 2 close spaced verticals fed in phase
now you turn it to horizontal it shoots now east west in horizontal polarization
dg9bfc
sigi
----- Original Message -----
From: Jim Dunstan
To: SkyWires@yahoogroups.com
Sent: Tuesday, January 27, 2009 1:31 AM
Subject: Re: [SkyWires] Re: full wave 40 meter multi band vertical loop

At 01:01 AM 1/27/2009 +0100, you wrote:

why not put an elevation rotor in your construction??
you can turn from vertikal to horizontal (and all in between) in a few seconds while receiving the other station .... when conditions change (or the range to the other station is different from the station worked before) you turn your antenna ..... local and dx in one antenna tuneable to almost any band
i think that could be very fine
if turned to vertical feed it in one of the vertikal corners NOT on the lower or upper corner
maybe i have the time to make a modell in mmana
dg9bfc

What an interesting idea. I am always coming to my local black smith with new fabrication ideas. If not a rotor .... some kind of manual hinge that can be shifted 90 deg.

My tower is hinged at the 18 ft level and is an easy one person operation to bring down into the side drive (using a bloc and tackle). I will be feeding the loop giving it horizontal polarization.... when in the vertical position ... It would be a simple operation to feed the square from the side to produce vertical polarization. I have no idea what the polarization is if the loop is in the horizontal configuration.

Jim, VE3CI

3348. RE: [SkyWires] Re: full wave 40 meter multi band vertical loop

Yahoo group: SkyWires
Date: 2009-01-27 01:10:30 UTC
From: Scott MacKenzie
Topic: 3302 Message: 3348

Looking at the models just completed - a 20M vertical loop, fed at the bottom is not bad at all. I like it better than a horizontal one .... much more low angle and very little high angle.

From: SkyWires@yahoogroups.com [mailto:SkyWires@yahoogroups.com] On Behalf Of Siegfried Jackstien
Sent: Monday, January 26, 2009 7:39 PM
To: SkyWires@yahoogroups.com
Subject: Re: [SkyWires] Re: full wave 40 meter multi band vertical loop

if it is horizontal the radiation wil be horizontal but turned 90 in orientation
say vertical in in east west direction mounted it shoots to north south like a dipole would do
actually you have 2 close spaced verticals fed in phase
now you turn it to horizontal it shoots now east west in horizontal polarization
dg9bfc
sigi

----- Original Message -----
From: Jim <mailto:jimdunstan@...> Dunstan
To: SkyWires@yahoogroup <mailto:SkyWires@yahoogroups.com> s.com
Sent: Tuesday, January 27, 2009 1:31 AM
Subject: Re: [SkyWires] Re: full wave 40 meter multi band vertical loop

At 01:01 AM 1/27/2009 +0100, you wrote:

why not put an elevation rotor in your construction??
you can turn from vertikal to horizontal (and all in between) in a few seconds while receiving the other station .... when conditions change (or the range to the other station is different from the station worked before) you turn your antenna ..... local and dx in one antenna tuneable to almost any band
i think that could be very fine
if turned to vertical feed it in one of the vertikal corners NOT on the lower or upper corner
maybe i have the time to make a modell in mmana
dg9bfc

What an interesting idea. I am always coming to my local black smith with new fabrication ideas. If not a rotor .... some kind of manual hinge that can be shifted 90 deg.

My tower is hinged at the 18 ft level and is an easy one person operation to bring down into the side drive (using a bloc and tackle). I will be feeding the loop giving it horizontal polarization.... when in the vertical position ... It would be a simple operation to feed the square from the side to produce vertical polarization. I have no idea what the polarization is if the loop is in the horizontal configuration.

Jim, VE3CI

3349. Re: [SkyWires] Re: full wave 40 meter multi band vertical loop

Yahoo group: SkyWires
Date: 2009-01-27 10:44:54 UTC
From: Siegfried Jackstien
Topic: 3302 Message: 3349

did you also make a model vertical oriented and fed in left or right corner?
dg9bfc
----- Original Message -----
From: Scott MacKenzie
To: SkyWires@yahoogroups.com
Sent: Tuesday, January 27, 2009 2:10 AM
Subject: RE: [SkyWires] Re: full wave 40 meter multi band vertical loop

Looking at the models just completed - a 20M vertical loop, fed at the bottom is not bad at all. I like it better than a horizontal one .... much more low angle and very little high angle.

From: SkyWires@yahoogroups.com [mailto:SkyWires@yahoogroups.com] On Behalf Of Siegfried Jackstien
Sent: Monday, January 26, 2009 7:39 PM
To: SkyWires@yahoogroups.com
Subject: Re: [SkyWires] Re: full wave 40 meter multi band vertical loop

if it is horizontal the radiation wil be horizontal but turned 90 in orientation
say vertical in in east west direction mounted it shoots to north south like a dipole would do
actually you have 2 close spaced verticals fed in phase
now you turn it to horizontal it shoots now east west in horizontal polarization
dg9bfc
sigi
----- Original Message -----
From: Jim Dunstan
To: SkyWires@yahoogroups.com
Sent: Tuesday, January 27, 2009 1:31 AM
Subject: Re: [SkyWires] Re: full wave 40 meter multi band vertical loop

At 01:01 AM 1/27/2009 +0100, you wrote:

why not put an elevation rotor in your construction??
you can turn from vertikal to horizontal (and all in between) in a few seconds while receiving the other station .... when conditions change (or the range to the other station is different from the station worked before) you turn your antenna ..... local and dx in one antenna tuneable to almost any band
i think that could be very fine
if turned to vertical feed it in one of the vertikal corners NOT on the lower or upper corner
maybe i have the time to make a modell in mmana
dg9bfc

What an interesting idea. I am always coming to my local black smith with new fabrication ideas. If not a rotor .... some kind of manual hinge that can be shifted 90 deg.

My tower is hinged at the 18 ft level and is an easy one person operation to bring down into the side drive (using a bloc and tackle). I will be feeding the loop giving it horizontal polarization.... when in the vertical position ... It would be a simple operation to feed the square from the side to produce vertical polarization. I have no idea what the polarization is if the loop is in the horizontal configuration.

Jim, VE3CI

3350. Advice for a 2mhz loop ?

Yahoo group: SkyWires
Date: 2009-01-27 20:53:33 UTC
From: chas
Topic: 3350 Message: 3350

I have a building out back, 24x30' and I am thinking about attaching a 3 or 4' piece of 1" ID PVC vertically on each corner and wrapping the 108 linear feet with some 22 or 24ga wire... spaced about a foot apart. that would give me about 400' of wire going into some 450ohm ladderline, thence to a balun to drop it to 50ohms and then into the Dentron tuner. this is obviously going to be a cloud burner unless I can get it up into the air and away from the ground. but heck, unless I can stand it on a side AND up off the ground, it is going to be highly NVIS anyway.

I am really looking for a quiet, 2mhz antenna for 500W or so MARS work at night when the critical freq drops into the mid or low 2's.

suggestions??

chas, k5dam
AAR6TU

3351. RE: [SkyWires] Re: full wave 40 meter multi band vertical loop

Yahoo group: SkyWires
Date: 2009-01-27 22:40:32 UTC
From: Scott MacKenzie
Topic: 3302 Message: 3351

Not yet - but that would take me no more than a couple of seconds....

BTW, I put the stuff together - how is the best way for people to see it?

Scott

From: SkyWires@yahoogroups.com [mailto:SkyWires@yahoogroups.com] On Behalf Of Siegfried Jackstien
Sent: Tuesday, January 27, 2009 5:45 AM
To: SkyWires@yahoogroups.com
Subject: Re: [SkyWires] Re: full wave 40 meter multi band vertical loop

did you also make a model vertical oriented and fed in left or right corner?
dg9bfc

----- Original Message -----
From: Scott MacKenzie <mailto:kb0fhp@...>
To: SkyWires@yahoogroup <mailto:SkyWires@yahoogroups.com> s.com
Sent: Tuesday, January 27, 2009 2:10 AM
Subject: RE: [SkyWires] Re: full wave 40 meter multi band vertical loop

Looking at the models just completed - a 20M vertical loop, fed at the bottom is not bad at all. I like it better than a horizontal one .... much more low angle and very little high angle.

From: SkyWires@yahoogroup <mailto:SkyWires@yahoogroups.com> s.com [mailto:SkyWires@yahoogroups.com] On Behalf Of Siegfried Jackstien
Sent: Monday, January 26, 2009 7:39 PM
To: SkyWires@yahoogroups.com
Subject: Re: [SkyWires] Re: full wave 40 meter multi band vertical loop

if it is horizontal the radiation wil be horizontal but turned 90 in orientation
say vertical in in east west direction mounted it shoots to north south like a dipole would do
actually you have 2 close spaced verticals fed in phase
now you turn it to horizontal it shoots now east west in horizontal polarization
dg9bfc
sigi

----- Original Message -----
From: Jim <mailto:jimdunstan@...> Dunstan
To: SkyWires@yahoogroup <mailto:SkyWires@yahoogroups.com> s.com

Sent: Tuesday, January 27, 2009 1:31 AM
Subject: Re: [SkyWires] Re: full wave 40 meter multi band vertical loop

At 01:01 AM 1/27/2009 +0100, you wrote:

why not put an elevation rotor in your construction??
you can turn from vertikal to horizontal (and all in between) in a few seconds while receiving the other station .... when conditions change (or the range to the other station is different from the station worked before) you turn your antenna ..... local and dx in one antenna tuneable to almost any band
i think that could be very fine
if turned to vertical feed it in one of the vertikal corners NOT on the lower or upper corner
maybe i have the time to make a modell in mmana
dg9bfc

What an interesting idea. I am always coming to my local black smith with new fabrication ideas. If not a rotor .... some kind of manual hinge that can be shifted 90 deg.

My tower is hinged at the 18 ft level and is an easy one person operation to bring down into the side drive (using a bloc and tackle). I will be feeding the loop giving it horizontal polarization.... when in the vertical position ... It would be a simple operation to feed the square from the side to produce vertical polarization. I have no idea what the polarization is if the loop is in the horizontal configuration.

Jim, VE3CI

3352. RE: [SkyWires] Re: full wave 40 meter multi band vertical loop

Yahoo group: SkyWires
Date: 2009-01-27 23:35:42 UTC
From: Jim Dunstan
Topic: 3302 Message: 3352

At 05:40 PM 1/27/2009 -0500, you wrote:

>>----- Original Message -----
>>From: <mailto:kb0fhp@...>Scott MacKenzie
>>To: <mailto:SkyWires@yahoogroups.com>SkyWires@yahoogroups.com
>>Sent: Tuesday, January 27, 2009 2:10 AM
>>Subject: RE: [SkyWires] Re: full wave 40 meter multi band vertical loop
>>
>>Looking at the models just completed - a 20M vertical loop, fed at the
>>bottom is not bad at all. I like it better than a horizontal one
>>.... much more low angle and very little high angle.

Hi Scott,

Interesting observation. Your modelling software seems to be very useful. I assume the statement basically demonstrates that a 20m vertical loop, fed at the bottom and at a reasonable height of 45 ft at the center, performs better (e.g. low angle radiation) than if it was oriented horizontally at the same height.

How does it perform compared to a dipole at the same height? Years ago I used a cubical quad on 20m mounted on a 30ft TV mast. It was a great DX antenna. I am sure the second element (reflector) must have lowered the radiation pattern. I don't have the space for a quad ... but a single element might be possible. I wonder if improvement would be sufficient to justify replacing a straight dipole element.

I wouldn't mind looking at antenna modeling software myself ... any suggestions on how to get started ?

Jim, VE3CI

3353. RE: [SkyWires] Re: full wave 40 meter multi band vertical loop

Yahoo group: SkyWires
Date: 2009-01-27 23:47:33 UTC
From: Scott MacKenzie
Topic: 3302 Message: 3353

The Vertical loop performs better than a dipole at the same height. I guess I need to put a quick and dirty presentation together and post on the files section.

Regarding modeling software, I would strongly recommend MMANA because it is free and does a pretty good job. I have found it to be reasonably accurate. It can also take advantage of the NEC 3 engine. If you want the ultimate, use NEC 4 - but be prepared to pay the big bucks. NEC 4 does a better job of handing verticals and ground interactions.

http://mmhamsoft.amateur-radio.ca/mmana/

I personally like it - and it is relatively easy to use.

Scott, aka KB0FHP

From: SkyWires@yahoogroups.com [mailto:SkyWires@yahoogroups.com] On Behalf Of Jim Dunstan
Sent: Tuesday, January 27, 2009 6:36 PM
To: SkyWires@yahoogroups.com
Subject: RE: [SkyWires] Re: full wave 40 meter multi band vertical loop

At 05:40 PM 1/27/2009 -0500, you wrote:

----- Original Message -----
From: Scott MacKenzie <mailto:kb0fhp@...>
To: SkyWires@yahoogroup <mailto:SkyWires@yahoogroups.com> s.com
Sent: Tuesday, January 27, 2009 2:10 AM
Subject: RE: [SkyWires] Re: full wave 40 meter multi band vertical loop

Looking at the models just completed - a 20M vertical loop, fed at the bottom is not bad at all. I like it better than a horizontal one .... much more low angle and very little high angle.

Hi Scott,

Interesting observation. Your modelling software seems to be very useful. I assume the statement basically demonstrates that a 20m vertical loop, fed at the bottom and at a reasonable height of 45 ft at the center, performs better (e.g. low angle radiation) than if it was oriented horizontally at the same height.

How does it perform compared to a dipole at the same height? Years ago I used a cubical quad on 20m mounted on a 30ft TV mast. It was a great DX antenna. I am sure the second element (reflector) must have lowered the radiation pattern. I don't have the space for a quad ... but a single

element might be possible. I wonder if improvement would be sufficient to justify replacing a straight dipole element.

I wouldn't mind looking at antenna modeling software myself ... any suggestions on how to get started ?

Jim, VE3CI

3354. RE: [SkyWires] Re: full wave 40 meter multi band vertical loop

Yahoo group: SkyWires
Date: 2009-01-28 02:33:21 UTC
From: Jim Dunstan
Topic: 3302 Message: 3354

At 06:47 PM 1/27/2009 -0500, you wrote:

>The Vertical loop performs better than a dipole at the same height. I
>guess I need to put a quick and dirty presentation together and post on
>the files section.
>
>Regarding modeling software, I would strongly recommend MMANA because it
>is free and does a pretty good job. I have found it to be reasonably
>accurate. It can also take advantage of the NEC 3 engine. If you want
>the ultimate, use NEC 4 - but be prepared to pay the big bucks. NEC 4
>does a better job of handing verticals and ground interactions.
>
><http://mmhamsoft.amateur-radio.ca/mmana/>http://mmhamsoft.amateur-radio.ca/mmana/
>
>I personally like it - and it is relatively easy to use.
>
>Scott, aka KB0FHP

Thanks Scott,

Good info ... I will check out MMANA for a starter.

In the mean time I found an interesting on-line 'height vs elevation'
calculator for dipoles, horiz. and vert. loops, and inverted Vees. I took
the height of 50 ft (what I have to work with) which is close to 1 WL at
15m, .7 WL at 20m, .5 WL at 30m and .35 WL at 40m. and compared the
elevation angle of radiation of the dipole vs a vertical loop.

I found the results very surprising. The higher the antennas in term of WL
the less the difference. e.g. at 1 WL the vert loop has a lower elevation
by only 1 deg. At .7 WL the difference is 4 deg. At .5 WL the difference
increases to 7 deg, and at .35 WL the difference is a whopping 16 deg !

However the horizontal loop does not show this trend. No wonder the
vertical loop is so popular on 40m for DX given the dramatic improvement in
elevation angle over a dipole at the same height. However I understand the
popularity of the horizontal loop for 160m and 80m since it is very
difficult to construct a vertical loop at these frequencies.

Jim, VE3CI

3355. New Freebies 28th January (good mix!)

Yahoo group: SkyWires
Date: 2009-01-28 04:16:07 UTC
From: harworthharriet
Topic: 3355 Message: 3355

Dear Members,

New Freebie Selection: Wednesday 28th January!. This FRESH page is packed with Great Freebies and is ready for you to view, TODAY!

Type the following website directly into your browser and grab some great freestuff TODAY!: FreebieTelegraph (dot com)

When you arrive at the website, simply click on the picture of the LADY WITH THE GIFT BAGS and you will find the LATEST freebie page!

Lastly, if you want to stay informed as to when the new freebie pages are loaded (some offers are 'time' sensitive, so its the early bird that catches the worm!), they have an excellent Freebie VIP Group that you can join for FREE (the form is at the top of their page).

Have a great day and enjoy the freebies!

3356. Re: Advice for a 2mhz loop ?

Yahoo group: SkyWires
Date: 2009-01-28 05:14:18 UTC
From: k5est
Topic: 3350 Message: 3356

--- In SkyWires@yahoogroups.com, chas <chasm@...> wrote:
>
> I have a building out back, 24x30' and I am thinking about attaching a
> 3 or 4' piece of 1" ID PVC vertically on each corner and wrapping the
> 108 linear feet with some 22 or 24ga wire... spaced about a foot
> apart. that would give me about 400' of wire going into some 450ohm
> ladderline, thence to a balun to drop it to 50ohms and then into the
> Dentron tuner. this is obviously going to be a cloud burner unless I
> can get it up into the air and away from the ground. but heck, unless
> I can stand it on a side AND up off the ground, it is going to be
> highly NVIS anyway.
>
> I am really looking for a quiet, 2mhz antenna for 500W or so MARS work
> at night when the critical freq drops into the mid or low 2's.
>
> suggestions??
>
> chas, k5dam
> AAR6TU
>
.....
Hi Chas,

Not sure your 4 turn loop is going to do the job for
the intended use. My guess is that a single turn
horizontal loop 4 sided would do a better job.
Probably will not need the amp at 2 MHz, but who knows!

At your low elevation, I doubt that modeling the antenna
is going to be reliable, at least EZNEC can't do it
but maybe the other program can do the reliable calculations.

I am all for experimenting, please let us know how / what
you come up with for the 2 MHz loop.

73....Walter - K5EST

3357. Re: [SkyWires] Re: full wave 40 meter multi band vertical loop

Yahoo group: SkyWires
Date: 2009-01-28 11:58:13 UTC
From: Siegfried Jackstien
Topic: 3302 Message: 3357

dear jim
look out for mmana ..... it is freeware and can be found here:
http://mmhamsoft.amateur-radio.ca/mmana/index.htm
there are lots of antennas in the "anf" folder
the soft is easy to use
and if you have the same soft as i (and scott) have .... it is easy to exchange modelfiles
if you have questions how to use it feel free to ask
and you should join the yahoogroup "mm-hamsoft" .... there you will find others that are using
the soft.....
you should also try out the other soft from macoto mori .... mmsstv mmtty and the dspfilter
the dsp filter is very good :-)
i have allways connected my trx to my soundcard for the digital modes .... if you have a qso
nearly in the noise the dsp-filter is started with a mouseclick .... you can programm userfilters as well
greetz
dg9bfc
sigi

----- Original Message -----
From: Jim Dunstan
To: SkyWires@yahoogroups.com
Sent: Wednesday, January 28, 2009 12:35 AM
Subject: RE: [SkyWires] Re: full wave 40 meter multi band vertical loop

At 05:40 PM 1/27/2009 -0500, you wrote:

----- Original Message -----
From: Scott MacKenzie
To: SkyWires@yahoogroups.com
Sent: Tuesday, January 27, 2009 2:10 AM
Subject: RE: [SkyWires] Re: full wave 40 meter multi band vertical loop

Looking at the models just completed - a 20M vertical loop, fed at the bottom is not bad at all. I like it better than a horizontal one .... much more low angle and very little high angle.

Hi Scott,

Interesting observation. Your modelling software seems to be very useful. I assume the statement basically demonstrates that a 20m vertical loop, fed at the bottom and at a reasonable height of 45 ft at the center, performs better (e.g. low angle radiation) than if it was oriented horizontally at the same height.

How does it perform compared to a dipole at the same height? Years ago I used a cubical quad on 20m mounted on a 30ft TV mast. It was a great DX antenna. I am sure the second

element (reflector) must have lowered the radiation pattern. I don't have the space for a quad ... but a single element might be possible. I wonder if improvement would be sufficient to justify replacing a straight dipole element.

I wouldn't mind looking at antenna modeling software myself ... any suggestions on how to get started ?

Jim, VE3CI

3358. Re: [SkyWires] Re: full wave 40 meter multi band vertical loop

Yahoo group: SkyWires
Date: 2009-01-28 12:01:02 UTC
From: Siegfried Jackstien
Topic: 3302 Message: 3358

dear scott
if i want to show people the soft i make a screenshot with the programm "hardcopy" and store it as a jpg-file .... or the others have to install mmana and you send the ....maa-file to them
greetz
dg9bfc
sigi
----- Original Message -----
From: Scott MacKenzie
To: SkyWires@yahoogroups.com
Sent: Tuesday, January 27, 2009 11:40 PM
Subject: RE: [SkyWires] Re: full wave 40 meter multi band vertical loop

Not yet - but that would take me no more than a couple of seconds....

BTW, I put the stuff together - how is the best way for people to see it?

Scott

From: SkyWires@yahoogroups.com [mailto:SkyWires@yahoogroups.com] On Behalf Of Siegfried Jackstien
Sent: Tuesday, January 27, 2009 5:45 AM
To: SkyWires@yahoogroups.com
Subject: Re: [SkyWires] Re: full wave 40 meter multi band vertical loop

did you also make a model vertical oriented and fed in left or right corner?
dg9bfc
----- Original Message -----
From: Scott MacKenzie
To: SkyWires@yahoogroups.com
Sent: Tuesday, January 27, 2009 2:10 AM
Subject: RE: [SkyWires] Re: full wave 40 meter multi band vertical loop

Looking at the models just completed - a 20M vertical loop, fed at the bottom is not bad at all. I like it better than a horizontal one .... much more low angle and very little high angle.

From: SkyWires@yahoogroups.com [mailto:SkyWires@yahoogroups.com] On Behalf Of Siegfried Jackstien
Sent: Monday, January 26, 2009 7:39 PM
To: SkyWires@yahoogroups.com
Subject: Re: [SkyWires] Re: full wave 40 meter multi band vertical loop

if it is horizontal the radiation wil be horizontal but turned 90 in orientation
say vertical in in east west direction mounted it shoots to north south like a dipole would

do
actually you have 2 close spaced verticals fed in phase
now you turn it to horizontal it shoots now east west in horizontal polarization
dg9bfc
sigi
----- Original Message -----
From: Jim Dunstan
To: SkyWires@yahoogroups.com
Sent: Tuesday, January 27, 2009 1:31 AM
Subject: Re: [SkyWires] Re: full wave 40 meter multi band vertical loop

At 01:01 AM 1/27/2009 +0100, you wrote:

why not put an elevation rotor in your construction??
you can turn from vertikal to horizontal (and all in between) in a few seconds while receiving the other station .... when conditions change (or the range to the other station is different from the station worked before) you turn your antenna ..... local and dx in one antenna tuneable to almost any band
i think that could be very fine
if turned to vertical feed it in one of the vertikal corners NOT on the lower or upper corner
maybe i have the time to make a modell in mmana
dg9bfc

What an interesting idea. I am always coming to my local black smith with new fabrication ideas. If not a rotor .... some kind of manual hinge that can be shifted 90 deg.

My tower is hinged at the 18 ft level and is an easy one person operation to bring down into the side drive (using a bloc and tackle). I will be feeding the loop giving it horizontal polarization.... when in the vertical position ... It would be a simple operation to feed the square from the side to produce vertical polarization. I have no idea what the polarization is if the loop is in the horizontal configuration.

Jim, VE3CI

3359. Re: [SkyWires] Re: Advice for a 2mhz loop ?

Yahoo group: SkyWires
Date: 2009-01-28 13:13:27 UTC
From: chas
Topic: 3350 Message: 3359

k5est wrote:
> ....
> Hi Chas,
>
> Not sure your 4 turn loop is going to do the job for
> the intended use. My guess is that a single turn
> horizontal loop 4 sided would do a better job.
> Probably will not need the amp at 2 MHz, but who knows!
>
> At your low elevation, I doubt that modeling the antenna
> is going to be reliable, at least EZNEC can't do it
> but maybe the other program can do the reliable calculations.
>
> I am all for experimenting, please let us know how / what
> you come up with for the 2 MHz loop.
>
> 73....Walter - K5EST

thanks for the reply Walter

of course, this loop would be attached to the roof fascia boards and extend above the hip roof's edge. but again, this is just too close to the ground. better would be some bamboo poles radiating from a center axis attached to a 20' mast above a 50' tower... rotatable even <G>. I guess I better be happy with my 140' Cobra at about 45'... this IS for MARS use across the state of Texas. That is 420' of wire but not a spread out loop. maybe I need to study the trees around the property some more <G>
73 de chas/k5dam

3360. Re: Advice for a 2mhz loop ?

Yahoo group: SkyWires
Date: 2009-01-28 13:44:59 UTC
From: k5est
Topic: 3350 Message: 3360

--- In SkyWires@yahoogroups.com, chas <chasm@...> wrote:
> thanks for the reply Walter
>
> of course, this loop would be attached to the roof fascia boards and
> extend above the hip roof's edge. but again, this is just too close
> to the ground. better would be some bamboo poles radiating from a
> center axis attached to a 20' mast above a 50' tower... rotatable
> even <G>. I guess I better be happy with my 140' Cobra at about
> 45'... this IS for MARS use across the state of Texas. That is 420'
> of wire but not a spread out loop. maybe I need to study the trees
> around the property some more <G>
> 73 de chas/k5dam
>
....
Hi Chas,

I was not concerned about the height of your antenna
as far as radiation, my concern is the 4 turn loop.
Some of those 'big coils' have not worked for me in the
past. You ought to be able to blow the speakers off of the
shelf at AAA6TX's QTH with a 4 sided full wave length
horizontal loop fed with ladderline (since you are using
an amp).

ZUI
http://www.wd8das.net/160loadedvee.jpg
Bet you could do some good with this antenna but it is
not as good as the full wave horizontal loop.

73....Walter - K5EST - Missouri

3361. Re: [SkyWires] Re: Advice for a 2mhz loop ? #3

Yahoo group: SkyWires
Date: 2009-01-28 15:02:46 UTC
From: chas
Topic: 3350 Message: 3361

k5est wrote:
> --- In SkyWires@yahoogroups.com, chas <chasm@...> wrote:
>> thanks for the reply Walter
>>
>> of course, this loop would be attached to the roof fascia boards and
>> extend above the hip roof's edge. but again, this is just too close
>> to the ground. better would be some bamboo poles radiating from a
>> center axis attached to a 20' mast above a 50' tower... rotatable
>> even <G>. I guess I better be happy with my 140' Cobra at about
>> 45'... this IS for MARS use across the state of Texas. That is 420'
>> of wire but not a spread out loop. maybe I need to study the trees
>> around the property some more <G>
>> 73 de chas/k5dam
>>
> ....
> Hi Chas,
>
> I was not concerned about the height of your antenna
> as far as radiation, my concern is the 4 turn loop.
> Some of those 'big coils' have not worked for me in the
> past. You ought to be able to blow the speakers off of the
> shelf at AAA6TX's QTH with a 4 sided full wave length
> horizontal loop fed with ladderline (since you are using
> an amp).
>
> ZUI
> http://www.wd8das.net/160loadedvee.jpg
> Bet you could do some good with this antenna but it is
> not as good as the full wave horizontal loop.
>
> 73....Walter - K5EST - Missouri

Walter
I understand the multiloop... the 50' coil might be an idea for a single loop around the roof, shortening the straight line, increasing the coil. I am trying to guestimate a tuned dipole length for a mid 2mhz and I think we are talking about just under 400' - to round it off. I assume that the coils are simply a way to shorten for lot constraints, the length of the illustrated dipole. iow, straight line vs coil are 1:1. so, I could probably use multiple coils? to achieve 400' single lap around the roof...?

73 de chas/k5dam - Houston

3362. RE: [SkyWires] Re: full wave 40 meter multi band vertical loop

Yahoo group: SkyWires
Date: 2009-01-28 20:08:23 UTC
From: Scott MacKenzie
Topic: 3302 Message: 3362

I can do that... I will put together a pdf file with the various different file configurations.

From: SkyWires@yahoogroups.com [mailto:SkyWires@yahoogroups.com] On Behalf Of Siegfried Jackstien
Sent: Wednesday, January 28, 2009 7:01 AM
To: SkyWires@yahoogroups.com
Subject: Re: [SkyWires] Re: full wave 40 meter multi band vertical loop

dear scott
if i want to show people the soft i make a screenshot with the programm "hardcopy" and store it as a jpg-file .... or the others have to install mmana and you send the ....maa-file to them
greetz
dg9bfc
sigi

----- Original Message -----
From: Scott MacKenzie <mailto:kb0fhp@...>
To: SkyWires@yahoogroup <mailto:SkyWires@yahoogroups.com> s.com
Sent: Tuesday, January 27, 2009 11:40 PM
Subject: RE: [SkyWires] Re: full wave 40 meter multi band vertical loop

Not yet - but that would take me no more than a couple of seconds....

BTW, I put the stuff together - how is the best way for people to see it?

Scott

From: SkyWires@yahoogroup <mailto:SkyWires@yahoogroups.com> s.com [mailto:SkyWires@yahoogroups.com] On Behalf Of Siegfried Jackstien
Sent: Tuesday, January 27, 2009 5:45 AM
To: SkyWires@yahoogroup <mailto:SkyWires@yahoogroups.com> s.com
Subject: Re: [SkyWires] Re: full wave 40 meter multi band vertical loop

did you also make a model vertical oriented and fed in left or right corner?
dg9bfc

----- Original Message -----
From: Scott <mailto:kb0fhp@...> MacKenzie
To: SkyWires@yahoogroup <mailto:SkyWires@yahoogroups.com> s.com
Sent: Tuesday, January 27, 2009 2:10 AM
Subject: RE: [SkyWires] Re: full wave 40 meter multi band vertical loop

Looking at the models just completed - a 20M vertical loop, fed at the bottom is not bad at all. I like it better than a horizontal one .... much more low angle and very little high angle.

From: SkyWires@yahoogroup <mailto:SkyWires@yahoogroups.com> s.com [mailto:SkyWires@yahoogroups.com] On Behalf Of Siegfried Jackstien
Sent: Monday, January 26, 2009 7:39 PM
To: SkyWires@yahoogroups.com
Subject: Re: [SkyWires] Re: full wave 40 meter multi band vertical loop

if it is horizontal the radiation wil be horizontal but turned 90 in orientation
say vertical in in east west direction mounted it shoots to north south like a dipole would do
actually you have 2 close spaced verticals fed in phase
now you turn it to horizontal it shoots now east west in horizontal polarization
dg9bfc
sigi

----- Original Message -----
From: Jim <mailto:jimdunstan@...> Dunstan
To: SkyWires@yahoogroup <mailto:SkyWires@yahoogroups.com> s.com
Sent: Tuesday, January 27, 2009 1:31 AM
Subject: Re: [SkyWires] Re: full wave 40 meter multi band vertical loop

At 01:01 AM 1/27/2009 +0100, you wrote:

why not put an elevation rotor in your construction??
you can turn from vertikal to horizontal (and all in between) in a few seconds while receiving the other station .... when conditions change (or the range to the other station is different from the station worked before) you turn your antenna ..... local and dx in one antenna tuneable to almost any band
i think that could be very fine
if turned to vertical feed it in one of the vertikal corners NOT on the lower or upper corner
maybe i have the time to make a modell in mmana
dg9bfc

What an interesting idea. I am always coming to my local black smith with new fabrication ideas. If not a rotor .... some kind of manual hinge that can be shifted 90 deg.

My tower is hinged at the 18 ft level and is an easy one person operation to bring down into the side drive (using a bloc and tackle). I will be feeding the loop giving it horizontal polarization.... when in the vertical position ... It would be a simple operation to feed the square from the side to produce vertical polarization. I have no idea what the polarization is if the loop is in the horizontal configuration.

Jim, VE3CI

3363. Re: Advice for a 2mhz loop ? #3

Yahoo group: SkyWires
Date: 2009-01-28 23:27:11 UTC
From: k5est
Topic: 3350 Message: 3363

--- In SkyWires@yahoogroups.com, chas <chasm@...> wrote:
.....snip.....
> Walter
> I understand the multiloop... the 50' coil might be an idea for a
> single loop around the roof, shortening the straight line, increasing
> the coil. I am trying to guestimate a tuned dipole length for a mid
> 2mhz and I think we are talking about just under 400' - to round it
> off. I assume that the coils are simply a way to shorten for lot
> constraints, the length of the illustrated dipole. iow, straight line
> vs coil are 1:1. so, I could probably use multiple coils? to achieve
> 400' single lap around the roof...?
>
> 73 de chas/k5dam - Houston
>.....end snipped.....

I don't know about the loaded horizontal loops as being
good performers, Chas. My luck has been unfavorable but
there is always a chance the loaded loop would work
satisfactorily for you. Since you are using it mainly
for the 2 meg freq then maybe it would be possible to
keep the loading coils not at the high current areas.
This is not my cup of tea.....Grin

My notes on several multi-turn loops are showing that
the best that I could get to work (without computer
modeling) was a 3 turn loop, vertical mounted, and
with a L-match at the feedpoint which was at the
bottom of the loop (closest to ground). This was one
of the few times I slipped up and actually used coax
for something!

You might be interested in drooling over W6OBB's loop
farm which includes a 2 turn horizontal loop. I can
guarantee you his loops work flawlessly.
http://www.smeter.net/w6obb/antenna-farm.php
and
http://www.candlewater.com/3830/artsloop2/

Oh yeah, before I forget, I sent you the loaded
dipole URL so you might consider that antenna if
you cannot get the room for a 2 turn horiz loop
or better yet.....in tune with this reflector
a full wave horiz. loop.

Thanks for bringing this thread, maybe someone
else can chime in and help us with some experience.

73....Walter - K5EST - Missouri

3364. New file uploaded to SkyWires

Yahoo group: SkyWires
Date: 2009-01-29 00:27:26 UTC
From: SkyWires@yahoogroups.com
Topic: 434 Message: 3364

Hello,

This email message is a notification to let you know that
a file has been uploaded to the Files area of the SkyWires
group.

File : /20M Loop Configuration.pdf
Uploaded by : kb0fhp <kb0fhp@...>
Description : 20M Horizontal and Vertical Loop Comparison

You can access this file at the URL:
http://groups.yahoo.com/group/SkyWires/files/20M%20Loop%20Configuration.pdf

To learn more about file sharing for your group, please visit:
http://help.yahoo.com/l/us/yahoo/groups/original/members/web/index.htmlfiles

Regards,

kb0fhp <kb0fhp@...>

3365. RE: [SkyWires] Re: full wave 40 meter multi band vertical loop

Yahoo group: SkyWires
Date: 2009-01-29 00:28:55 UTC
From: Scott MacKenzie
Topic: 3302 Message: 3365

I have uploaded a pdf file of a reference dipole; 20M horizontal loop and a 20M vertical loop, fed with 50 ohm coax, and fed in different positions. All are modeled at 10M high, with the center of the antenna being up 10M. Let me know what you think. The file is a bit big at 4.8 Mb, but I think you will find the information useful.

Scott

From: SkyWires@yahoogroups.com [mailto:SkyWires@yahoogroups.com] On Behalf Of Scott MacKenzie
Sent: Wednesday, January 28, 2009 3:08 PM
To: SkyWires@yahoogroups.com
Subject: RE: [SkyWires] Re: full wave 40 meter multi band vertical loop

I can do that... I will put together a pdf file with the various different file configurations.

From: SkyWires@yahoogroups.com [mailto:SkyWires@yahoogroups.com] On Behalf Of Siegfried Jackstien
Sent: Wednesday, January 28, 2009 7:01 AM
To: SkyWires@yahoogroups.com
Subject: Re: [SkyWires] Re: full wave 40 meter multi band vertical loop

dear scott
if i want to show people the soft i make a screenshot with the programm "hardcopy" and store it as a jpg-file .... or the others have to install mmana and you send the ....maa-file to them
greetz
dg9bfc
sigi

----- Original Message -----
From: Scott MacKenzie <mailto:kb0fhp@...>
To: SkyWires@yahoogroup <mailto:SkyWires@yahoogroups.com> s.com
Sent: Tuesday, January 27, 2009 11:40 PM
Subject: RE: [SkyWires] Re: full wave 40 meter multi band vertical loop

Not yet - but that would take me no more than a couple of seconds....

BTW, I put the stuff together - how is the best way for people to see it?

Scott

From: SkyWires@yahoogroup <mailto:SkyWires@yahoogroups.com> s.com
[mailto:SkyWires@yahoogroups.com] On Behalf Of Siegfried Jackstien
Sent: Tuesday, January 27, 2009 5:45 AM
To: SkyWires@yahoogroup <mailto:SkyWires@yahoogroups.com> s.com
Subject: Re: [SkyWires] Re: full wave 40 meter multi band vertical loop

did you also make a model vertical oriented and fed in left or right corner?
dg9bfc

----- Original Message -----
From: Scott <mailto:kb0fhp@...> MacKenzie
To: SkyWires@yahoogroup <mailto:SkyWires@yahoogroups.com> s.com
Sent: Tuesday, January 27, 2009 2:10 AM
Subject: RE: [SkyWires] Re: full wave 40 meter multi band vertical loop

Looking at the models just completed - a 20M vertical loop, fed at the
bottom is not bad at all. I like it better than a horizontal one .... much
more low angle and very little high angle.

From: SkyWires@yahoogroup <mailto:SkyWires@yahoogroups.com> s.com
[mailto:SkyWires@yahoogroups.com] On Behalf Of Siegfried Jackstien
Sent: Monday, January 26, 2009 7:39 PM
To: SkyWires@yahoogroups.com
Subject: Re: [SkyWires] Re: full wave 40 meter multi band vertical loop

if it is horizontal the radiation wil be horizontal but turned 90 in
orientation
say vertical in in east west direction mounted it shoots to north south like
a dipole would do
actually you have 2 close spaced verticals fed in phase
now you turn it to horizontal it shoots now east west in horizontal
polarization
dg9bfc
sigi

----- Original Message -----
From: Jim <mailto:jimdunstan@...> Dunstan
To: SkyWires@yahoogroup <mailto:SkyWires@yahoogroups.com> s.com
Sent: Tuesday, January 27, 2009 1:31 AM
Subject: Re: [SkyWires] Re: full wave 40 meter multi band vertical loop

At 01:01 AM 1/27/2009 +0100, you wrote:

why not put an elevation rotor in your construction??
you can turn from vertikal to horizontal (and all in between) in a few
seconds while receiving the other station .... when conditions change (or
the range to the other station is different from the station worked before)
you turn your antenna ..... local and dx in one antenna tuneable to almost
any band
i think that could be very fine
if turned to vertical feed it in one of the vertikal corners NOT on the

lower or upper corner
maybe i have the time to make a modell in mmana
dg9bfc

What an interesting idea. I am always coming to my local black smith with new fabrication ideas. If not a rotor .... some kind of manual hinge that can be shifted 90 deg.

My tower is hinged at the 18 ft level and is an easy one person operation to bring down into the side drive (using a bloc and tackle). I will be feeding the loop giving it horizontal polarization.... when in the vertical position ... It would be a simple operation to feed the square from the side to produce vertical polarization. I have no idea what the polarization is if the loop is in the horizontal configuration.

Jim, VE3CI

3366. RE: [SkyWires] Re: full wave 40 meter multi band vertical loop

Yahoo group: SkyWires
Date: 2009-01-29 08:08:17 UTC
From: Jim Dunstan
Topic: 3302 Message: 3366

At 07:28 PM 1/28/2009 -0500, you wrote:

>I have uploaded a pdf file of a reference dipole; 20M horizontal loop and
>a 20M vertical loop, fed with 50 ohm coax, and fed in different
>positions. All are modeled at 10M high, with the center of the antenna
>being up 10M. Let me know what you think. The file is a bit big at 4.8
>Mb, but I think you will find the information useful.
>
>Scott

Hi Scott

That is really enlightening information. I will have to investigate that software and learn how to use it. I would like to know how the same vertical loop (20m) performs at 15m height on 20m, 15m, as well as 30m. The charts you developed demonstrate an appreciable difference in DX performance (elevation angel) between the vertical loop and the dipole. I suspect the difference would be less with the antennas at the 15m height.

Jim, VE3CI

3367. Re: [SkyWires] Re: full wave 40 meter multi band vertical loop

Yahoo group: SkyWires
Date: 2009-01-29 14:17:20 UTC
From: Siegfried Jackstien
Topic: 3302 Message: 3367

really nice that pdf file ... you are right it is a bit big but ... nice pictures
the summary of all that stuff is .... a vertical loop is the best dx antenna for multiband, isn´t it?
greetz
dg9bfc
sigi
----- Original Message -----
From: Scott MacKenzie
To: SkyWires@yahoogroups.com
Sent: Thursday, January 29, 2009 1:28 AM
Subject: RE: [SkyWires] Re: full wave 40 meter multi band vertical loop

I have uploaded a pdf file of a reference dipole; 20M horizontal loop and a 20M vertical loop, fed with 50 ohm coax, and fed in different positions. All are modeled at 10M high, with the center of the antenna being up 10M. Let me know what you think. The file is a bit big at 4.8 Mb, but I think you will find the information useful.

Scott

From: SkyWires@yahoogroups.com [mailto:SkyWires@yahoogroups.com] On Behalf Of Scott MacKenzie
Sent: Wednesday, January 28, 2009 3:08 PM
To: SkyWires@yahoogroups.com
Subject: RE: [SkyWires] Re: full wave 40 meter multi band vertical loop

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Sent: Wednesday, January 28, 2009 7:01 AM
To: SkyWires@yahoogroups.com
Subject: Re: [SkyWires] Re: full wave 40 meter multi band vertical loop

dear scott
if i want to show people the soft i make a screenshot with the programm "hardcopy" and store it as a jpg-file .... or the others have to install mmana and you send the ....maa-file to them
greetz
dg9bfc
sigi
----- Original Message -----
From: Scott MacKenzie
To: SkyWires@yahoogroups.com

Sent: Tuesday, January 27, 2009 11:40 PM
Subject: RE: [SkyWires] Re: full wave 40 meter multi band vertical loop

Not yet - but that would take me no more than a couple of seconds....

BTW, I put the stuff together - how is the best way for people to see it?

Scott

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Sent: Tuesday, January 27, 2009 5:45 AM
To: SkyWires@yahoogroups.com
Subject: Re: [SkyWires] Re: full wave 40 meter multi band vertical loop

did you also make a model vertical oriented and fed in left or right corner?
dg9bfc
----- Original Message -----
From: Scott MacKenzie
To: SkyWires@yahoogroups.com
Sent: Tuesday, January 27, 2009 2:10 AM
Subject: RE: [SkyWires] Re: full wave 40 meter multi band vertical loop

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From: SkyWires@yahoogroups.com [mailto:SkyWires@yahoogroups.com] On Behalf Of Siegfried Jackstien
Sent: Monday, January 26, 2009 7:39 PM
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Jim, VE3CI

3368. Re: [SkyWires] Re: full wave 40 meter multi band vertical loop

Yahoo group: SkyWires
Date: 2009-01-29 14:56:20 UTC
From: kb0fhp@comcast.net
Topic: 3302 Message: 3368

I dont know - I can take a look....at least do a couple simple tests...which configuration are you interested in?
----- Original Message -----
From: "Jim Dunstan" <jimdunstan@...>
To: SkyWires@yahoogroups.com
Sent: Thursday, January 29, 2009 3:08:17 AM GMT -05:00 US/Canada Eastern
Subject: RE: [SkyWires] Re: full wave 40 meter multi band vertical loop

At 07:28 PM 1/28/2009 -0500, you wrote:

I have uploaded a pdf file of a reference dipole; 20M horizontal loop and a 20M vertical loop, fed with 50 ohm coax, and fed in different positions. All are modeled at 10M high, with the center of the antenna being up 10M. Let me know what you think. The file is a bit big at 4.8 Mb, but I think you will find the information useful.

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Jim, VE3CI

3369. Re: [SkyWires] Re: full wave 40 meter multi band vertical loop

Yahoo group: SkyWires
Date: 2009-01-29 14:57:35 UTC
From: kb0fhp@comcast.net
Topic: 3302 Message: 3369

It does very well - I certainly like it on 40M.....if I can find a simple way to rotate it.....(from the shack)....
----- Original Message -----
From: "Siegfried Jackstien" <siegfried.jackstien@...>
To: SkyWires@yahoogroups.com
Sent: Thursday, January 29, 2009 9:17:20 AM GMT -05:00 US/Canada Eastern
Subject: Re: [SkyWires] Re: full wave 40 meter multi band vertical loop

really nice that pdf file ... you are right it is a bit big but ... nice pictures
the summary of all that stuff is .... a vertical loop is the best dx antenna for multiband, isn´t it?
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Subject: RE: [SkyWires] Re: full wave 40 meter multi band vertical loop

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Subject: Re: [SkyWires] Re: full wave 40 meter multi band vertical loop

if it is horizontal the radiation wil be horizontal but turned 90 in orientation
say vertical in in east west direction mounted it shoots to north south like a dipole would do
actually you have 2 close spaced verticals fed in phase
now you turn it to horizontal it shoots now east west in horizontal polarization
dg9bfc
sigi

----- Original Message -----
From: Jim Dunstan
To: SkyWires@yahoogroups.com
Sent: Tuesday, January 27, 2009 1:31 AM

Subject: Re: [SkyWires] Re: full wave 40 meter multi band vertical loop

At 01:01 AM 1/27/2009 +0100, you wrote:

why not put an elevation rotor in your construction??
you can turn from vertikal to horizontal (and all in between) in a few seconds while receiving the other station .... when conditions change (or the range to the other station is different from the station worked before) you turn your antenna ..... local and dx in one antenna tuneable to almost any band
i think that could be very fine
if turned to vertical feed it in one of the vertikal corners NOT on the lower or upper corner
maybe i have the time to make a modell in mmana
dg9bfc
What an interesting idea. I am always coming to my local black smith with new fabrication ideas. If not a rotor .... some kind of manual hinge that can be shifted 90 deg.

My tower is hinged at the 18 ft level and is an easy one person operation to bring down into the side drive (using a bloc and tackle). I will be feeding the loop giving it horizontal polarization.... when in the vertical position ... It would be a simple operation to feed the square from the side to produce vertical polarization. I have no idea what the polarization is if the loop is in the horizontal configuration.

Jim, VE3CI

3371. Re: [SkyWires] Re: full wave 40 meter multi band vertical loop

Yahoo group: SkyWires
Date: 2009-01-29 16:55:40 UTC
From: Jim Dunstan
Topic: 3302 Message: 3371

At 02:56 PM 1/29/2009 +0000, you wrote:

My physical arrangements would favour a square loop (20m) fed in the middle
at the bottom. My tower tilts down and the square arrangements brings the
center down closer to the ground than if I installed it in a diamond shape
... same loop just rotate 45 deg hi. The other interesting thing is that
the 20m loop is also resonant at 40m. I wonder if the software can deal
with 1/2 wave loop performance. Not a very popular antenna configuration.

Jim, VE3CI

>I dont know - I can take a look....at least do a couple simple
>tests...which configuration are you interested in?
>----- Original Message -----
>From: "Jim Dunstan" <jimdunstan@...>
>To: SkyWires@yahoogroups.com
>Sent: Thursday, January 29, 2009 3:08:17 AM GMT -05:00 US/Canada Eastern
>Subject: RE: [SkyWires] Re: full wave 40 meter multi band vertical loop
>
>At 07:28 PM 1/28/2009 -0500, you wrote:
>I have uploaded a pdf file of a reference dipole; 20M horizontal loop and
>a 20M vertical loop, fed with 50 ohm coax, and fed in different
>positions. All are modeled at 10M high, with the center of the antenna
>being up 10M. Let me know what you think. The file is a bit big at 4.8
>Mb, but I think you will find the information useful.
>
>Scott
>
>
>Hi Scott
>
>That is really enlightening information. I will have to investigate that
>software and learn how to use it. I would like to know how the same
>vertical loop (20m) performs at 15m height on 20m, 15m, as well as
>30m. The charts you developed demonstrate an appreciable difference in DX
>performance (elevation angel) between the vertical loop and the dipole. I
>suspect the difference would be less with the antennas at the 15m height.
>
>Jim, VE3CI

3373. New file uploaded to SkyWires

Yahoo group: SkyWires
Date: 2009-01-30 00:48:30 UTC
From: SkyWires@yahoogroups.com
Topic: 434 Message: 3373

Hello,

This email message is a notification to let you know that
a file has been uploaded to the Files area of the SkyWires
group.

File : /20M Vertical and Horizontal Height Comparisons.pdf
Uploaded by : kb0fhp <kb0fhp@...>
Description : Height Comparisons - 20M vertical and Horizontal Loops

You can access this file at the URL:
http://groups.yahoo.com/group/SkyWires/files/20M%20Vertical%20and%20Horizontal%20Height%20Comparisons.pdf

To learn more about file sharing for your group, please visit:
http://help.yahoo.com/l/us/yahoo/groups/original/members/web/index.htmlfiles

Regards,

kb0fhp <kb0fhp@...>

3374. Files

Yahoo group: SkyWires
Date: 2009-01-30 00:51:26 UTC
From: Scott MacKenzie
Topic: 3374 Message: 3374

I uploaded two files:

Height comparisons of 20M vertical and Horizontal Loops and Pattern
Comparisons of 20M Vertical Loop fed at different points

Let me know what you think.....

Scott - aka KB0FHP

3375. Re: [SkyWires] Files

Yahoo group: SkyWires
Date: 2009-01-30 11:40:54 UTC
From: Siegfried Jackstien
Topic: 3374 Message: 3375

did you make the test with the vertica loop with feeding vertikal or horizontal
i think you wrote bottom fed ... so fed as horizontal ... right?
dg9bfc
sigi
----- Original Message -----
From: Scott MacKenzie
To: SkyWires@yahoogroups.com
Sent: Friday, January 30, 2009 1:51 AM
Subject: [SkyWires] Files

I uploaded two files:

Height comparisons of 20M vertical and Horizontal Loops and Pattern Comparisons of 20M Vertical Loop fed at different points

Let me know what you think.....

Scott - aka KB0FHP

3376. Re: [SkyWires] Files

Yahoo group: SkyWires
Date: 2009-01-30 14:21:11 UTC
From: kb0fhp@comcast.net
Topic: 3374 Message: 3376

I believe that is correct
----- Original Message -----
From: "Siegfried Jackstien" <siegfried.jackstien@...>
To: SkyWires@yahoogroups.com
Sent: Friday, January 30, 2009 6:40:54 AM GMT -05:00 US/Canada Eastern
Subject: Re: [SkyWires] Files

did you make the test with the vertica loop with feeding vertikal or horizontal
i think you wrote bottom fed ... so fed as horizontal ... right?
dg9bfc
sigi

----- Original Message -----
From: Scott MacKenzie
To: SkyWires@yahoogroups.com
Sent: Friday, January 30, 2009 1:51 AM
Subject: [SkyWires] Files

I uploaded two files:

Height comparisons of 20M vertical and Horizontal Loops and Pattern Comparisons of 20M Vertical Loop fed at different points

Let me know what you think.....

Scott - aka KB0FHP

3377. Re: [SkyWires] Files

Yahoo group: SkyWires
Date: 2009-01-30 15:14:48 UTC
From: Siegfried Jackstien
Topic: 3374 Message: 3377

so make another one with vertical loop side fed (as vertical)
dg9bfc
sigi
----- Original Message -----
From: kb0fhp@...
To: SkyWires@yahoogroups.com
Sent: Friday, January 30, 2009 3:21 PM
Subject: Re: [SkyWires] Files

I believe that is correct
----- Original Message -----
From: "Siegfried Jackstien" <siegfried.jackstien@...>
To: SkyWires@yahoogroups.com
Sent: Friday, January 30, 2009 6:40:54 AM GMT -05:00 US/Canada Eastern
Subject: Re: [SkyWires] Files

did you make the test with the vertica loop with feeding vertikal or horizontal
i think you wrote bottom fed ... so fed as horizontal ... right?
dg9bfc
sigi
----- Original Message -----
From: Scott MacKenzie
To: SkyWires@yahoogroups.com
Sent: Friday, January 30, 2009 1:51 AM
Subject: [SkyWires] Files

I uploaded two files:

Height comparisons of 20M vertical and Horizontal Loops and Pattern Comparisons of 20M Vertical Loop fed at different points

Let me know what you think.....

Scott - aka KB0FHP

3379. RE: [SkyWires] Files

Yahoo group: SkyWires
Date: 2009-01-30 23:09:13 UTC
From: Scott MacKenzie
Topic: 3374 Message: 3379

That is part of the original - I loaded the loop on the side and the bottom... that is part of the feed and the second file....

_____

From: SkyWires@yahoogroups.com [mailto:SkyWires@yahoogroups.com] On Behalf Of Siegfried Jackstien
Sent: Friday, January 30, 2009 10:15 AM
To: SkyWires@yahoogroups.com
Subject: Re: [SkyWires] Files

□

so make another one with vertical loop side fed (as vertical)
dg9bfc
sigi

----- Original Message -----
From: kb0fhp@comcast. <mailto:kb0fhp@...> net
To: SkyWires@yahoogroup <mailto:SkyWires@yahoogroups.com> s.com
Sent: Friday, January 30, 2009 3:21 PM
Subject: Re: [SkyWires] Files

I believe that is correct
----- Original Message -----
From: "Siegfried Jackstien" <siegfried.jackstien <mailto:siegfried.jackstien@...> @...>
To: SkyWires@yahoogroup <mailto:SkyWires@yahoogroups.com> s.com
Sent: Friday, January 30, 2009 6:40:54 AM GMT -05:00 US/Canada Eastern
Subject: Re: [SkyWires] Files

did you make the test with the vertica loop with feeding vertikal or horizontal
i think you wrote bottom fed ... so fed as horizontal ... right?
dg9bfc
sigi

----- Original Message -----
From: Scott MacKenzie <mailto:kb0fhp@...>
To: SkyWires@yahoogroup <mailto:SkyWires@yahoogroups.com> s.com
Sent: Friday, January 30, 2009 1:51 AM
Subject: [SkyWires] Files

I uploaded two files:

Height comparisons of 20M vertical and Horizontal Loops and Pattern Comparisons of 20M Vertical Loop fed at different points

Let me know what you think.....

Scott - aka KB0FHP

3380. RE: [SkyWires] Files

Yahoo group: SkyWires
Date: 2009-01-30 23:11:59 UTC
From: Scott MacKenzie
Topic: 3374 Message: 3380

Thank you Jim:

Actually what slows me down is getting the images into Photoshop (to make the images and crop out extraneous data) and then to put it into Powerpoint. Then double checking to make sure I got the right file with the right height, direction or feed-type....

_____

From: SkyWires@yahoogroups.com [mailto:SkyWires@yahoogroups.com] On Behalf Of Jim Dunstan
Sent: Friday, January 30, 2009 2:38 PM
To: SkyWires@yahoogroups.com
Subject: Re: [SkyWires] Files

At 07:51 PM 1/29/2009 -0500, you wrote:

I uploaded two files:

Height comparisons of 20M vertical and Horizontal Loops and Pattern Comparisons of 20M Vertical Loop fed at different points

Let me know what you think.....

Scott - aka KB0FHPt

Hi Scott,

I am impressed with how fast you can turn out the data. I have downloaded all your files and I am using them to help make up my antenna plans for the spring season.
The diamond shape has a number of advantages. As I mentioned there is a problem bring larger structures down so they fit the structures on the ground (unlike the 5 acre antenna farm hi hi). Planning is a lot of fun .... one physical solution is to make one of the 'wings' of the diamond 'foldable' when lowering to the ground.

Jim, VE3CI

3382. bare wire vs insulated wire in trees for supports.

Yahoo group: SkyWires
Date: 2009-02-02 11:41:30 UTC
From: chas
Topic: 3370 Message: 3382

Thomas F. Giella KN4LF wrote:
> *I'm using a 432 foot horizontal loop for 160 meters as it's all I can
> squeeze into my land. It's up at 35 feet and is fed with 122 feet of 300
> ohm window line.*
> **

and that is really all that I want to be able to do.
a couple of questions Thomas,
== is your loop oak tree supported? that and pecans and other is all
I have to support a loop (horizontally) around the perimeter.
== is your loop wire insulated ? same above to cut down on leaf, etc
grounding.

Art Bell is able to put up hellacious high support poles because he
has several acres of bare desert land. However, a lot of us might
think that he lives in hell and we much prefer our trees surrounding
our little oasis of light ... a glade in the forest containing our ham
shack aka home. hi!

I know of a lot of hams who live in piney woods running non-loops
which zig zag from tree to tree and who put out very fine signals,
barefoot. I really believe in lots of wire, as high as you can get
it.<G> But I do not run bare wire. I run insulated products like my
140' Cobra or my DX-CC in the belief that the insulation reduces
grounding. aar, I have one of the strongest stations in Texas MARS
with my HK SB-220 amp and my 50' high dipoles down here on the coast.

thanks
73 de chas - k5dam

3385. Re: bare wire vs insulated wire in trees for supports.

Yahoo group: SkyWires
Date: 2009-02-06 01:24:00 UTC
From: coachstevesmith
Topic: 3370 Message: 3385

I have a 500 foot loop running thru the trees at 20' to 8' above ground... it's made of #14 insulated wire... the kind you get in spools at Lowes. It works fine. I live in a deep valley and a cloudburner is the ONLY way I'm getting a signal out of here (NE Tennessee.) I've talked to Oregon on 80, California on 40, Nova Scotia and Canada on 40 and 20... not so much on 10. The take off angle lowers each band you move up from the resonate freq. with a horizontal loop, so the mountains at blocking me.

Use insulated wire if you're running it across limbs, (non-metalic) shingles, etc...

Use un-insulated if you are in the clear. At least this is what I've been told in the past by my Elmers.

Take care,

Steve, W4HKL

--- In SkyWires@yahoogroups.com, chas <chasm@...> wrote:
>
> Thomas F. Giella KN4LF wrote:
> > *I'm using a 432 foot horizontal loop for 160 meters as it's all I can
> > squeeze into my land. It's up at 35 feet and is fed with 122 feet of 300
> > ohm window line.*
> > **
>
> and that is really all that I want to be able to do.
> a couple of questions Thomas,
> == is your loop oak tree supported? that and pecans and other is all
> I have to support a loop (horizontally) around the perimeter.
> == is your loop wire insulated ? same above to cut down on leaf, etc
> grounding.
>
> Art Bell is able to put up hellacious high support poles because he
> has several acres of bare desert land. However, a lot of us might
> think that he lives in hell and we much prefer our trees surrounding
> our little oasis of light ... a glade in the forest containing our ham
> shack aka home. hi!
>

> I know of a lot of hams who live in piney woods running non-loops
> which zig zag from tree to tree and who put out very fine signals,
> barefoot. I really believe in lots of wire, as high as you can get
> it.<G> But I do not run bare wire. I run insulated products like
my
> 140' Cobra or my DX-CC in the belief that the insulation reduces
> grounding. aar, I have one of the strongest stations in Texas MARS
> with my HK SB-220 amp and my 50' high dipoles down here on the
coast.
>
> thanks
> 73 de chas - k5dam
>

3386. Re: [SkyWires] Re: bare wire vs insulated wire in trees for supports.

Yahoo group: SkyWires
Date: 2009-02-06 03:15:05 UTC
From: Dr.Ace Ratliff
Topic: 3370 Message: 3386

Hi Guys,
I'm using a 290' bare copper wire Horizontal Delta loop that contacts several trees, with no problem at all. I use legal limit power when I feel like it and haven't started a fire yet !
I will concede that rain and/or snow noise will probably be better with insulated wire. Come spring I hope to do some multi-band loop testing, it's been cold and lots of snow here in Indiana. I have some very good ideas I want to test. Will keep the group posted.
73 all, Ace

--
Dr.Ace Ratliff
www.WH2T.com <http://www.wh2t.com/>

On Thu, Feb 5, 2009 at 8:24 PM, coachstevesmith <w4hkl@...> wrote:

> I have a 500 foot loop running thru the trees at 20' to 8' above
> ground... it's made of #14 insulated wire... the kind you get in
> spools at Lowes. It works fine. I live in a deep valley and a
> cloudburner is the ONLY way I'm getting a signal out of here (NE
> Tennessee.) I've talked to Oregon on 80, California on 40, Nova
> Scotia and Canada on 40 and 20... not so much on 10. The take off
> angle lowers each band you move up from the resonate freq. with a
> horizontal loop, so the mountains at blocking me.
>
> Use insulated wire if you're running it across limbs, (non-metalic)
> shingles, etc...
>
> Use un-insulated if you are in the clear. At least this is what I've
> been told in the past by my Elmers.
>
> Take care,
>
> Steve, W4HKL
>
> --- In SkyWires@yahoogroups.com <SkyWires%40yahoogroups.com>, chas <chasm@...>
> wrote:
> >
> > Thomas F. Giella KN4LF wrote:
> > > *I'm using a 432 foot horizontal loop for 160 meters as it's all
> I can
> > > squeeze into my land. It's up at 35 feet and is fed with 122 feet
> of 300
> > > ohm window line.*
> > > **
> >

> > and that is really all that I want to be able to do.
> > a couple of questions Thomas,
> > == is your loop oak tree supported? that and pecans and other is
> all
> > I have to support a loop (horizontally) around the perimeter.
> > == is your loop wire insulated ? same above to cut down on leaf,
> etc
> > grounding.
> >
> > Art Bell is able to put up hellacious high support poles because he
> > has several acres of bare desert land. However, a lot of us might
> > think that he lives in hell and we much prefer our trees
> surrounding
> > our little oasis of light ... a glade in the forest containing our
> ham
> > shack aka home. hi!
> >
> > I know of a lot of hams who live in piney woods running non-loops
> > which zig zag from tree to tree and who put out very fine signals,
> > barefoot. I really believe in lots of wire, as high as you can get
> > it.<G> But I do not run bare wire. I run insulated products like
> my
> > 140' Cobra or my DX-CC in the belief that the insulation reduces
> > grounding. aar, I have one of the strongest stations in Texas MARS
> > with my HK SB-220 amp and my 50' high dipoles down here on the
> coast.
> >
> > thanks
> > 73 de chas - k5dam
> >
>
>
>

3387. NEW TO GROUP.

Yahoo group: SkyWires
Date: 2009-02-10 15:22:39 UTC
From: John Berry.
Topic: 3387 Message: 3387

Hi All,just found and joined the Group.I have a fairly long garden,about 60ft,and a fairly high House about 50ft.Masterplan was to run a wire from the Shack,middle floor,about 25ft from ground,up 15ft,down garden,60ft,down pole 40ft,back down garden,60ft about 6ft off ground,then back up to shack 25ft.The Loop would be Vertical,estimate about 200ft of wire.Read for Top Bamnd 160mtrs the need to keep the current of Ant' out in the clear ??.Main interest are 160/80/40mtrs.Both ends of loop would go sraight into ATU in shack,no feeders involved ??.Any comments/suggestions welcomed.John G1WOS.Bristol UK.

3389. 80M FW height vs Performance

Yahoo group: SkyWires
Date: 2009-03-19 00:47:23 UTC
From: captcurt2000
Topic: 3389 Message: 3389

Good Evening All:

I'm getting ready to put up a FW loop for 80M. I plan to use 450 Ohm Ladder Line all the way to the balanced tuner.

Problem is I cant get it very high. perhaps 20' at two of the 4 corners and 12-15 at the other side.

How much should I expect the performance to be degraded by this low height? I have heard mixed reports about these things working really well as low as 10' gutter height on a ranch style house.

Thanks

Curt
KU8L

3390. RE: [SkyWires] 80M FW height vs Performance

Yahoo group: SkyWires
Date: 2009-03-19 00:57:54 UTC
From: Scott MacKenzie
Topic: 3389 Message: 3390

It will work well on 80M as a NVIS antenna and good/excellent for short hop out to about 1000 miles or so. 40M it will be much better and much lower angle of radiation.

I use one hanging in the trees up 70' at one end and 50' at the other in a rough trapazoid. It works very well. Similar observations except more low angle on 80M and much lower on 40M. The antenna was put up as a sweepstakes antenna just for working the US - and it does very well at that. It also works well for DX on 40M and I have worked some good stuff on 80M. It also works well on 20M.

Scott

From: SkyWires@yahoogroups.com [mailto:SkyWires@yahoogroups.com] On Behalf Of captcurt2000
Sent: Wednesday, March 18, 2009 8:47 PM
To: SkyWires@yahoogroups.com
Subject: [SkyWires] 80M FW height vs Performance

Good Evening All:

I'm getting ready to put up a FW loop for 80M. I plan to use 450 Ohm Ladder Line all the way to the balanced tuner.

Problem is I cant get it very high. perhaps 20' at two of the 4 corners and 12-15 at the other side.

How much should I expect the performance to be degraded by this low height? I have heard mixed reports about these things working really well as low as 10' gutter height on a ranch style house.

Thanks

Curt
KU8L

3391. 160M Loop going up this weekend

Yahoo group: SkyWires
Date: 2009-03-20 04:13:25 UTC
From: Aaron
Topic: 3391 Message: 3391

I have no idea how well this will work but since I have the wire and the space I am going for it. The height from the ground will be any where from 40' to 60', it will be level just have a steep grade from one end of the yard to the other.

The configuration is like a D shaped trapezoid with the longest side being about 230-240' long. Antenna will be constructed with 14G insulated stranded and feeding it with 9913 for the moment. I would love to use ladder line but it is just not doable at my QTH. I am still not sure exactly what the other options are for feeding it but I guess I will find out soon enough. Might even consider a remote tuner if it works as well as everyone says they do.

If anyone has any suggestions or comments before I put this up, I would love to hear them.

Aaron
KD4GSL

3392. Re: [SkyWires] 160M Loop going up this weekend

Yahoo group: SkyWires
Date: 2009-03-20 05:32:16 UTC
From: Dr.Ace Ratliff
Topic: 3391 Message: 3392

Aaron,
Do it, you will be glad you did.
Ace
--
Dr.Ace Ratliff
www.WH2T.com <http://www.wh2t.com/>

On Fri, Mar 20, 2009 at 12:13 AM, Aaron <wm.aaron.lamb@...> wrote:

> I have no idea how well this will work but since I have the wire and the
> space I am going for it. The height from the ground will be any where from
> 40' to 60', it will be level just have a steep grade from one end of the
> yard to the other.
>
> The configuration is like a D shaped trapezoid with the longest side being
> about 230-240' long. Antenna will be constructed with 14G insulated stranded
> and feeding it with 9913 for the moment. I would love to use ladder line but
> it is just not doable at my QTH. I am still not sure exactly what the other
> options are for feeding it but I guess I will find out soon enough. Might
> even consider a remote tuner if it works as well as everyone says they do.
>
> If anyone has any suggestions or comments before I put this up, I would
> love to hear them.
>
> Aaron
> KD4GSL
>
>
>

3393. 160M Loop going up this weekend

Yahoo group: SkyWires
Date: 2009-03-20 04:22:21 UTC
From: Aaron
Topic: 3391 Message: 3393

I have no idea how well this will work but since I have the wire and the space I am going for it. The height from the ground will be any where from 40' to 60', it will be level just have a steep grade from one end of the yard to the other.

The configuration is like a D shaped trapezoid with the longest side being about 230-240' long. Antenna will be constructed with 14G insulated stranded and feeding it with 9913 for the moment. I would love to use ladder line but it is just not doable at my QTH. I am still not sure exactly what the other options are for feeding it but I guess I will find out soon enough. Might even consider a remote tuner if it works as well as everyone says they do.

If anyone has any suggestions or comments before I put this up, I would love to hear them.

Aaron
KD4GSL

3395. Re: [SkyWires] 160M Loop going up this weekend

Yahoo group: SkyWires
Date: 2009-03-20 13:42:28 UTC
From: Siegfried Jackstien
Topic: 3391 Message: 3395

dear aaron
why are you not able to use ladderline???
i feed my 168m loop with windowline and it works very good on ALL bands
73´s de dg9bfc
sigi
----- Original Message -----
From: Aaron
To: SkyWires@yahoogroups.com
Sent: Friday, March 20, 2009 5:13 AM
Subject: [SkyWires] 160M Loop going up this weekend

I have no idea how well this will work but since I have the wire and the space I am going for it. The height from the ground will be any where from 40' to 60', it will be level just have a steep grade from one end of the yard to the other.

The configuration is like a D shaped trapezoid with the longest side being about 230-240' long. Antenna will be constructed with 14G insulated stranded and feeding it with 9913 for the moment. I would love to use ladder line but it is just not doable at my QTH. I am still not sure exactly what the other options are for feeding it but I guess I will find out soon enough. Might even consider a remote tuner if it works as well as everyone says they do.

If anyone has any suggestions or comments before I put this up, I would love to hear them.

Aaron
KD4GSL

3397. Re: 160M Loop going up this weekend

Yahoo group: SkyWires
Date: 2009-03-20 14:22:00 UTC
From: Aaron
Topic: 3391 Message: 3397

Well considering my feed line goes into the wall and comes out in the crawl space then pops though the side of the house. After that it would have to go underground about 50' and pop out next to a 18'X32' metal pole barn.

I could get a little creative but that will require a 4:1 balun or a remote tuner. I am thinking that the remote tuner is what I want at the end of the day but I am still waiting for my money tree to bloom.
So for now I will just deal with the loss in the coax until I can feed it more efficiently.

The 2 biggest resources I found on this just replied back... Thank you Tom and Dr Ace for your wonderful publications on the internet. Some of the best antenna stuff I have read yet.

One of these days Dr Ace I may just have to meet you, I live up in Monrovia so we are basically neighbors as ham radio goes.

Regards,
Aaron
KD4GSL

--- In SkyWires@yahoogroups.com, "Siegfried Jackstien" <siegfried.jackstien@...> wrote:
>
> dear aaron
> why are you not able to use ladderline???
> i feed my 168m loop with windowline and it works very good on ALL bands
> 73´s de dg9bfc
> sigi
> ----- Original Message -----
> From: Aaron
> To: SkyWires@yahoogroups.com
> Sent: Friday, March 20, 2009 5:13 AM
> Subject: [SkyWires] 160M Loop going up this weekend
>
>
> I have no idea how well this will work but since I have the wire and the space I am going for it. The height from the ground will be any where from 40' to 60', it will be level just have a steep grade from one end of the yard to the other.
>
> The configuration is like a D shaped trapezoid with the longest side being about 230-240' long. Antenna will be constructed with 14G insulated stranded and feeding it with 9913 for the moment. I would love to use ladder line but it is just not doable at my QTH. I am still not sure exactly what the other options are for feeding it but I guess I will find out soon enough. Might even consider a remote tuner if it works as well as everyone says they do.
>
> If anyone has any suggestions or comments before I put this up, I would love to hear them.

>
> Aaron
> KD4GSL
>

3398. Re: [SkyWires] Re: 160M Loop going up this weekend

Yahoo group: SkyWires
Date: 2009-03-20 15:36:33 UTC
From: Dr.Ace Ratliff
Topic: 3391 Message: 3398

Hello Aaron,
Yes we are neighbors. We should get on 75 mtrs some evening, and everyone in the group is invited to join the QSO. We could have a discussion about loop antennas.
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As a foot note I will mention: Many small cable TV companies are a good source for FREE or very cheap hard line coaxial cable, It will usually be 75 ohm coax. This is NOT as bad as many amateurs might believe. Especially if there is a long run of feedline involved from the station to the antenna.
Very 73, Ace
--
Dr.Ace Ratliff
www.WH2T.com <http://www.wh2t.com/>

On Fri, Mar 20, 2009 at 10:22 AM, Aaron <wm.aaron.lamb@gmail.com> wrote:

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> Regards,
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> KD4GSL
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> --- In SkyWires@yahoogroups.com <SkyWires%40yahoogroups.com>, "Siegfried
> Jackstien" <siegfried.jackstien@...> wrote:
> >

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> > ----- Original Message -----
> > From: Aaron
> > To: SkyWires@yahoogroups.com <SkyWires%40yahoogroups.com>
> > Sent: Friday, March 20, 2009 5:13 AM
> > Subject: [SkyWires] 160M Loop going up this weekend
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> > Aaron
> > KD4GSL
> >
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3399. Re: 160M Loop going up this weekend

Yahoo group: SkyWires
Date: 2009-03-20 21:09:36 UTC
From: Aaron
Topic: 3391 Message: 3399

Well, I got the 80M Dipole moved across the yard which will be the feed point for the loop. Also got all the fishing string shot up in the trees so tomorrow all I have to do is pull wire around the perimeter then hook the ropes to the fishing string and pull it up. I had to scrap the 9913 and run regular RG8. Seems to be an issue with it somewhere as it is showing 60 ohms with a load on it and the MFJ said 10DB loss at 3.5 Mhz. Something is not right with is and I don't have access to a TDR to find the bad spot.

Moving along I am excited now and look forward to getting this beast up on start working some DX. Will have some pics soon.

Dr. Ace, not sure where you hang out on 80 but I usually catch up with the Roundtable Group which can be found some where between 3803 and 3806. Rest of the time I on 3580 doing PSK.

Aaron
KD4GSL

--- In SkyWires@yahoogroups.com, "Dr.Ace Ratliff" <Ace@...> wrote:
>
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3400. Re: 160M Loop going up this weekend

Yahoo group: SkyWires
Date: 2009-03-20 21:58:59 UTC
From: Aaron
Topic: 3391 Message: 3400

Added loop layout in my yard.

http://f1.grp.yahoofs.com/v1/0APESRNDPKlSTUsDQJ2kSVvBl2EljZ0jt8lrHBTbp2ZRjykNQa5UOaKB4vG-YbJqgFUgXyVlKwGDtb4uGlC7cvwldMCXUAtfYw/KD4GSL%20/160_loop_layout.jpg

KD4GSL
Aaron

--- In SkyWires@yahoogroups.com, "Aaron" <wm.aaron.lamb@...> wrote:
>
> Well, I got the 80M Dipole moved across the yard which will be the feed point for the loop. Also got all the fishing string shot up in the trees so tomorrow all I have to do is pull wire around the perimeter then hook the ropes to the fishing string and pull it up. I had to scrap the 9913 and run regular RG8. Seems to be an issue with it somewhere as it is showing 60 ohms with a load on it and the MFJ said 10DB loss at 3.5 Mhz. Something is not right with is and I don't have access to a TDR to find the bad spot.
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> --- In SkyWires@yahoogroups.com, "Dr.Ace Ratliff" <Ace@> wrote:
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3401. Re: [SkyWires] Re: 160M Loop going up this weekend

Yahoo group: SkyWires
Date: 2009-03-20 22:45:15 UTC
From: Siegfried Jackstien
Topic: 3391 Message: 3401

why do you have to go underground with your feedline???
should be possible to hang your windowline at a height of 2-3m in the air (not cutting somebodys head *g*) ..... if you could hang your feedline in the air instead of laying underground you could use ladderline and so you have a multiband antenna with almost no losses .... would be better for allband ...
see the file "loop.xls" in the filearea
this is an excelsheet what i made for the swr of my loop ....
it is a fullwave for topband
i feed it over a homebrewed balun 1:9 and 2 different lenght of ladderline ....
1st run is abt 18m from the feedingpoint to the shack ...
another 20m is added just with 2 bananaplugs ...
on most bands the swr is so low that i need NO tuner at all
on the rest of the bands the swr is lower than 1:3 so the internal tuner of the rig does the job
or when feeding with pa ... the pi-section of the pa will tune the antenna easy ..
think about a better way for your feedingline :-)
dg9bfc
sigi

----- Original Message -----
From: Aaron
To: SkyWires@yahoogroups.com
Sent: Friday, March 20, 2009 3:22 PM
Subject: [SkyWires] Re: 160M Loop going up this weekend

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KD4GSL

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> If anyone has any suggestions or comments before I put this up, I would love to hear them.
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> Aaron
> KD4GSL
>

3402. Re: [SkyWires] Re: 160M Loop going up this weekend

Yahoo group: SkyWires
Date: 2009-03-20 23:15:20 UTC
From: Siegfried Jackstien
Topic: 3391 Message: 3402

nice picture of your layout :-)
----- Original Message -----
From: Aaron
To: SkyWires@yahoogroups.com
Sent: Friday, March 20, 2009 10:58 PM
Subject: [SkyWires] Re: 160M Loop going up this weekend

Added loop layout in my yard.

http://f1.grp.yahoofs.com/v1/0APESRNDPKlSTUsDQJ2kSVvBl2EljZ0jt8lrHBTbp2ZRjykNQa5UOaKB4vG-YbJqgFUgXyVlKwGDtb4uGlC7cvwldMCXUAtfYw/KD4GSL%20/160_loop_layout.jpg

KD4GSL
Aaron

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3403. Re: [SkyWires] Re: 160M Loop going up this weekend

Yahoo group: SkyWires
Date: 2009-03-21 01:59:08 UTC
From: Dr.Ace Ratliff
Topic: 3391 Message: 3403

Aaron,
I usually hang out around 3.658 + or - 10 Khz. But I can easily move up the band let me know if you get the loop up this weekend.
Very 73, Ace
--
Dr.Ace Ratliff
www.WH2T.com <http://www.wh2t.com/>

On Fri, Mar 20, 2009 at 5:09 PM, Aaron <wm.aaron.lamb@...> wrote:

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> > > > i feed my 168m loop with windowline and it works very good on ALL
> bands
> > > > 73Â´s de dg9bfc

> > > > sigi
> > > > ----- Original Message -----
> > > > From: Aaron
> > > > To: SkyWires@yahoogroups.com <SkyWires%40yahoogroups.com> <SkyWires%
> 40yahoogroups.com>
> > > > Sent: Friday, March 20, 2009 5:13 AM
> > > > Subject: [SkyWires] 160M Loop going up this weekend
> > > > >
> > > > >
> > > > > I have no idea how well this will work but since I have the wire and
> the
> > > > space I am going for it. The height from the ground will be any where
> from
> > > > 40' to 60', it will be level just have a steep grade from one end of
> the
> > > > yard to the other.
> > > > >
> > > > > The configuration is like a D shaped trapezoid with the longest side
> > > > being about 230-240' long. Antenna will be constructed with 14G
> insulated
> > > > stranded and feeding it with 9913 for the moment. I would love to use
> ladder
> > > > line but it is just not doable at my QTH. I am still not sure exactly
> what
> > > > the other options are for feeding it but I guess I will find out soon
> > > > enough. Might even consider a remote tuner if it works as well as
> everyone
> > > > says they do.
> > > > >
> > > > > If anyone has any suggestions or comments before I put this up, I
> would
> > > > love to hear them.
> > > > >
> > > > > Aaron
> > > > > KD4GSL
> > > > >
> > > >
> > > >
> > > >
> > >
>
>
>

3404. Re: 160M Loop going up this weekend

Yahoo group: SkyWires
Date: 2009-03-23 20:39:59 UTC
From: Aaron
Topic: 3391 Message: 3404

Ok, loop is up and works I guess. Seems to be resonant around 2mhz with about 70 ohms impudence from what the MFJ is saying. I checked the resistance ant the conector here in the shack and its about 1.5 ohms across the center to the shield.

That being said it tunes 160 - 6 meters on my little Dentron Jr. Monitor with the exception of 17 meters. I can get 17 to load but I have to bridge from ground to one of the balun post. Still have a bunch of QRN from a couple of things in the house and power lines.

All in all it works great but I guess I have some room for improvement with the feeding. Not too sure if getting 160 down below 2:1.

Also will note that on 40 I am getting RF back in the shack so I may have to get put a choke out there in between the house and the feed point. I am looking for a SGC remote tune so maybe that might solve some of the issues.

Aaron
KD4GSL

3405. Re: 160M Loop going up this weekend

Yahoo group: SkyWires
Date: 2009-03-23 23:22:30 UTC
From: Aaron
Topic: 3391 Message: 3405

Ok, I just found out how to run balanced line. Had a good QSO on 17 discussing the matter. Learned something new today.... I guess I can use 2 runs on the same type of coax and just use the center conductors from what I was told.

Now I know that will not be efficient as true twin lead but this will resolve the routing issue. Any thoughts on what the best way to match this is if I go that route? Or using the remote tuner still maybe a better way to go... I don't have any issues manually tuning an antenna unlike some of the newer hams I keep bumping into.

My current tuner usually tunes about anything I through at it but I think at the end of the day I will want a dedicated tuner for the antenna... so the L vs the T or remote??

Aaron
KD4GSL

--- In SkyWires@yahoogroups.com, "Aaron" <wm.aaron.lamb@...> wrote:
>
> Ok, loop is up and works I guess. Seems to be resonant around 2mhz with about 70 ohms impudence from what the MFJ is saying. I checked the resistance ant the conector here in the shack and its about 1.5 ohms across the center to the shield.
>
> That being said it tunes 160 - 6 meters on my little Dentron Jr. Monitor with the exception of 17 meters. I can get 17 to load but I have to bridge from ground to one of the balun post. Still have a bunch of QRN from a couple of things in the house and power lines.
>
> All in all it works great but I guess I have some room for improvement with the feeding. Not too sure if getting 160 down below 2:1.
>
> Also will note that on 40 I am getting RF back in the shack so I may have to get put a choke out there in between the house and the feed point. I am looking for a SGC remote tune so maybe that might solve some of the issues.
>
> Aaron
> KD4GSL
>

3406. Re: [SkyWires] Re: 160M Loop going up this weekend

Yahoo group: SkyWires
Date: 2009-03-23 22:47:54 UTC
From: Dr.Ace Ratliff
Topic: 3391 Message: 3406

Aaron,
How many feet of wire is the loop ?
Also I added a file to the picture section of
http://groups.yahoo.com/group/SkyWires/photos/album in Dr.Ace's
Stuff<http://groups.yahoo.com/group/SkyWires/photos/album/267129049/pic/list?mode=tn&order
=ordinal&start=1&&dir=asc>
It shows how to make a simple choke balun.
If you want to test that antenna on 75 mtrs , I can get on the air anytime
before 8 PM CST or after 10 PM CST "Local Time" tonight.

Very 73,
Ace
--
Dr.Ace Ratliff
www.WH2T.com <http://www.wh2t.com/>

On Mon, Mar 23, 2009 at 4:39 PM, Aaron <wm.aaron.lamb@...> wrote:

> Ok, loop is up and works I guess. Seems to be resonant around 2mhz with
> about 70 ohms impudence from what the MFJ is saying. I checked the
> resistance ant the conector here in the shack and its about 1.5 ohms across
> the center to the shield.
>
> That being said it tunes 160 - 6 meters on my little Dentron Jr. Monitor
> with the exception of 17 meters. I can get 17 to load but I have to bridge
> from ground to one of the balun post. Still have a bunch of QRN from a
> couple of things in the house and power lines.
>
> All in all it works great but I guess I have some room for improvement with
> the feeding. Not too sure if getting 160 down below 2:1.
>
> Also will note that on 40 I am getting RF back in the shack so I may have
> to get put a choke out there in between the house and the feed point. I am
> looking for a SGC remote tune so maybe that might solve some of the issues.
>
> Aaron
> KD4GSL
>
>
>

--
Dr.Ace Ratliff
www.WH2T.com

3407. Re: [SkyWires] Re: 160M Loop going up this weekend

Yahoo group: SkyWires
Date: 2009-03-24 01:44:11 UTC
From: Dr.Ace Ratliff
Topic: 3391 Message: 3407

Hi All,
If you take two identical pieces of equal lengths of coax, lay them side by side and solder the shields together at both ends. Then use the two center conductors as though they were twin lead or ladder line. This raises the impedance value of the line to exactly double its original value. If you use two pieces of 50 ohm coax then you have a near perfect match to a full wave loop antenna at the fundamental frequency! And, your coax is impervious to nearby metal objects such as gutters, aluminum siding etc.

If you move up to harmonic frequencies, then this no longer applies since the 100 – 104 ohms of the coax is only good for the design (lowest useable) frequency.

You still need a tuner between your 50 Ohm transmitter and your "shielded twin lead" feed line for multi-band operation.

Aaron, I think a remote tuner at the antenna feedpoint is a better option for what you want to do.

73, Ace

--
Dr.Ace Ratliff
www.WH2T.com <http://www.wh2t.com/>

On Mon, Mar 23, 2009 at 7:22 PM, Aaron <wm.aaron.lamb@...> wrote:

> Ok, I just found out how to run balanced line. Had a good QSO on 17
> discussing the matter. Learned something new today.... I guess I can use 2
> runs on the same type of coax and just use the center conductors from what I
> was told.
>
> Now I know that will not be efficient as true twin lead but this will
> resolve the routing issue. Any thoughts on what the best way to match this
> is if I go that route? Or using the remote tuner still maybe a better way to
> go... I don't have any issues manually tuning an antenna unlike some of the
> newer hams I keep bumping into.
>
> My current tuner usually tunes about anything I through at it but I think
> at the end of the day I will want a dedicated tuner for the antenna... so
> the L vs the T or remote??
>
> Aaron
> KD4GSL
>
> --- In SkyWires@yahoogroups.com <SkyWires%40yahoogroups.com>, "Aaron"
> <wm.aaron.lamb@...> wrote:

> >
> > Ok, loop is up and works I guess. Seems to be resonant around 2mhz with
> about 70 ohms impudence from what the MFJ is saying. I checked the
> resistance ant the conector here in the shack and its about 1.5 ohms across
> the center to the shield.
> >
> > That being said it tunes 160 - 6 meters on my little Dentron Jr. Monitor
> with the exception of 17 meters. I can get 17 to load but I have to bridge
> from ground to one of the balun post. Still have a bunch of QRN from a
> couple of things in the house and power lines.
> >
> > All in all it works great but I guess I have some room for improvement
> with the feeding. Not too sure if getting 160 down below 2:1.
> >
> > Also will note that on 40 I am getting RF back in the shack so I may have
> to get put a choke out there in between the house and the feed point. I am
> looking for a SGC remote tune so maybe that might solve some of the issues.
> >
> > Aaron
> > KD4GSL
> >
>
>
>

3408. Re: [SkyWires] Re: 160M Loop going up this weekend

Yahoo group: SkyWires
Date: 2009-03-24 02:01:54 UTC
From: Dr.Ace Ratliff
Topic: 3391 Message: 3408

Aaron,
Not knowing the length of antenna wire you are using I can only come close in my calculations. But I think the antenna would tune better if you could possibly add about another 43 feet of wire to it. Maybe you could pull the center of the longest side back to or into the tree line ???
Just my 2 cents.
73 again, Ace
--
Dr.Ace Ratliff
www.WH2T.com <http://www.wh2t.com/>

On Mon, Mar 23, 2009 at 4:39 PM, Aaron <wm.aaron.lamb@...> wrote:

> Ok, loop is up and works I guess. Seems to be resonant around 2mhz with
> about 70 ohms impudence from what the MFJ is saying. I checked the
> resistance ant the conector here in the shack and its about 1.5 ohms across
> the center to the shield.
>
> That being said it tunes 160 - 6 meters on my little Dentron Jr. Monitor
> with the exception of 17 meters. I can get 17 to load but I have to bridge
> from ground to one of the balun post. Still have a bunch of QRN from a
> couple of things in the house and power lines.
>
> All in all it works great but I guess I have some room for improvement with
> the feeding. Not too sure if getting 160 down below 2:1.
>
> Also will note that on 40 I am getting RF back in the shack so I may have
> to get put a choke out there in between the house and the feed point. I am
> looking for a SGC remote tune so maybe that might solve some of the issues.
>
> Aaron
> KD4GSL
>
>
>

3409. RE: [SkyWires] Re: 160M Loop going up this weekend

Yahoo group: SkyWires
Date: 2009-03-24 03:56:27 UTC
From: Aaron Lamb
Topic: 3391 Message: 3409

Ace, the antenna works fine. I have worked a bunch of states and quite a few counties on it so far. Seems to do really good. In fact I was on 17 earlier today and forgot to turn the RF power up after tuning up so I was about ¼ way through the QSO when I noticed I was only doing about 3 watts and the guy in Oregon had a solid S8 copy on me.

The best guess I can come up with on the length is just a little over 500' as a real close estimate which would fall just right in line with what the Analyzer says being resonant at 2 mhz. I was mistaken in my previous post, reads 2.3:1 at 1.990 mhz @ 30 ohms (that's what seems resonant). I can add more wire and left some insulators up there in various parts of the antenna. I actually used them for tag lines so I could pull the antenna out and over from the limbs. But I see what you are talking about if I get it tuned to 1.8 the harmonics will start falling into place thus making it easier to tune. Its close, but needs some tweaking me thinks.

Anyways I'll keep my eyes peeled for a SGC at Columbus this weekend, if not I'll build one with stepper motors. Looks like I will be in Loop optimization mode for some time now. Guess this week I'll try to add some wire somehow and the 1:1 choke then note the changes.

Aaron

From: SkyWires@yahoogroups.com [mailto:SkyWires@yahoogroups.com] On Behalf Of Dr.Ace Ratliff
Sent: Monday, March 23, 2009 10:02 PM
To: SkyWires@yahoogroups.com
Subject: Re: [SkyWires] Re: 160M Loop going up this weekend

Aaron,

Not knowing the length of antenna wire you are using I can only come close in my calculations. But I think the antenna would tune better if you could possibly add about another 43 feet of wire to it. Maybe you could pull the center of the longest side back to or into the tree line ???

Just my 2 cents.

73 again, Ace
--
Dr.Ace Ratliff
www.WH2T.com <http://www.wh2t.com/>

On Mon, Mar 23, 2009 at 4:39 PM, Aaron <wm.aaron.lamb@...> wrote:

Ok, loop is up and works I guess. Seems to be resonant around 2mhz with about 70 ohms impudence from what the MFJ is saying. I checked the resistance ant the conector here in the shack and its about 1.5 ohms across the center to the shield.

That being said it tunes 160 - 6 meters on my little Dentron Jr. Monitor with the exception of 17 meters. I can get 17 to load but I have to bridge from ground to one of the balun

post. Still have a bunch of QRN from a couple of things in the house and power lines.

All in all it works great but I guess I have some room for improvement with the feeding. Not too sure if getting 160 down below 2:1.

Also will note that on 40 I am getting RF back in the shack so I may have to get put a choke out there in between the house and the feed point. I am looking for a SGC remote tune so maybe that might solve some of the issues.

Aaron
KD4GSL

3410. Re: [SkyWires] Re: 160M Loop going up this weekend

Yahoo group: SkyWires
Date: 2009-03-24 04:42:31 UTC
From: Dr.Ace Ratliff
Topic: 3391 Message: 3410

Hi All,
For the record, my rough calculations indicate that adding 43 feet of wire
should drop the resonant freq to a little below 1.843 Mhz.
Ace

--
Dr.Ace Ratliff
www.WH2T.com

On Mon, Mar 23, 2009 at 11:56 PM, Aaron Lamb <wm.aaron.lamb@...>wrote:

> Ace, the antenna works fine. I have worked a bunch of states and quite
> a few counties on it so far. Seems to do really good. In fact I was on 17
> earlier today and forgot to turn the RF power up after tuning up so I was
> about ¼ way through the QSO when I noticed I was only doing about 3 watts
> and the guy in Oregon had a solid S8 copy on me.
>
>
>
> The best guess I can come up with on the length is just a little over 500'
> as a real close estimate which would fall just right in line with what the
> Analyzer says being resonant at 2 mhz. I was mistaken in my previous post,
> reads 2.3:1 at 1.990 mhz @ 30 ohms (that's what seems resonant). I can add
> more wire and left some insulators up there in various parts of the
> antenna. I actually used them for tag lines so I could pull the antenna out
> and over from the limbs. But I see what you are talking about if I get it
> tuned to 1.8 the harmonics will start falling into place thus making it
> easier to tune. Its close, but needs some tweaking me thinks.
>
>
>
> Anyways I'll keep my eyes peeled for a SGC at Columbus this weekend, if not
> I'll build one with stepper motors. Looks like I will be in Loop
> optimization mode for some time now. Guess this week I'll try to add some
> wire somehow and the 1:1 choke then note the changes.
>
>
>
> Aaron
>
>
>
> *From:* SkyWires@yahoogroups.com [mailto:SkyWires@yahoogroups.com] *On
> Behalf Of *Dr.Ace Ratliff
> *Sent:* Monday, March 23, 2009 10:02 PM
> *To:* SkyWires@yahoogroups.com

> *Subject:* Re: [SkyWires] Re: 160M Loop going up this weekend
>
>
>
> Aaron,
>
> Not knowing the length of antenna wire you are using I can only come close
> in my calculations. But I think the antenna would tune better if you could
> possibly add about another 43 feet of wire to it. Maybe you could pull the
> center of the longest side back to or into the tree line ???
>
> Just my 2 cents.
>
> 73 again, Ace
> --
> Dr.Ace Ratliff
> www.WH2T.com <http://www.wh2t.com/>
>
> On Mon, Mar 23, 2009 at 4:39 PM, Aaron <wm.aaron.lamb@...> wrote:
>
> Ok, loop is up and works I guess. Seems to be resonant around 2mhz with
> about 70 ohms impudence from what the MFJ is saying. I checked the
> resistance ant the conector here in the shack and its about 1.5 ohms across
> the center to the shield.
>
> That being said it tunes 160 - 6 meters on my little Dentron Jr. Monitor
> with the exception of 17 meters. I can get 17 to load but I have to bridge
> from ground to one of the balun post. Still have a bunch of QRN from a
> couple of things in the house and power lines.
>
> All in all it works great but I guess I have some room for improvement with
> the feeding. Not too sure if getting 160 down below 2:1.
>
> Also will note that on 40 I am getting RF back in the shack so I may have
> to get put a choke out there in between the house and the feed point. I am
> looking for a SGC remote tune so maybe that might solve some of the issues.
>
> Aaron
> KD4GSL
>
>
>
>
>

3411. Re: [SkyWires] Re: 160M Loop going up this weekend

Yahoo group: SkyWires
Date: 2009-03-24 22:35:31 UTC
From: Andy
Topic: 3391 Message: 3411

Dr. Ace's note about side-by-side coax runs to mimic a balanced line is quite correct. Except where he says:

> If you move up to harmonic frequencies, then this no longer applies since
> the 100 - 104 ohms of the coax is only good for the design (lowest
> useable) frequency.

Unless I misunderstood what he's saying ... the dual coax still works correctly and still looks like ~100 ohms differential, it's just that the antenna might or might not present such a nice impedance on its harmonics.

Not sure why you get SWR=2.3:1 at resonance with 30 ohms. Seems to me it ought to be 50/30 = 1.7:1 if it really is at resonance. Then again, some say the MFJ shows higher SWR numbers than it should. But that would be a bad miscalculation.

I'm guessing the low impedance is because the loop is horizontal and close to ground.

Andy

3412. Re: [SkyWires] Re: 160M Loop going up this weekend

Yahoo group: SkyWires
Date: 2009-03-25 02:21:57 UTC
From: Dr.Ace Ratliff
Topic: 3391 Message: 3412

Hi Andy,
Yes I knew after I posted that I should have been more specific. But I was tired and thought oh well.
The dual coax will work correctly and still look like ~100 ohms differential at any freq, it's just that the antenna might or might not present an awkward impedance to the feedline on its harmonics.
73, Ace
--
Dr.Ace Ratliff
www.WH2T.com

On Tue, Mar 24, 2009 at 6:35 PM, Andy <ai.egrps@...> wrote:

> Dr. Ace's note about side-by-side coax runs to mimic a balanced line is
> quite correct. Except where he says:
>
> > If you move up to harmonic frequencies, then this no longer applies since
> > the 100 - 104 ohms of the coax is only good for the design (lowest
> > useable) frequency.
>
> Unless I misunderstood what he's saying ... the dual coax still works
> correctly and still looks like ~100 ohms differential, it's just that the
> antenna might or might not present such a nice impedance on its harmonics.
>
> Not sure why you get SWR=2.3:1 at resonance with 30 ohms. Seems to me it
> ought to be 50/30 = 1.7:1 if it really is at resonance. Then again, some
> say the MFJ shows higher SWR numbers than it should. But that would be a
> bad miscalculation.
>
> I'm guessing the low impedance is because the loop is horizontal and close
> to ground.
>
> Andy
>
>
>

3414. Resonant vs Non-Resonant Loops

Yahoo group: SkyWires
Date: 2009-03-27 14:26:31 UTC
From: Mark Brown
Topic: 3414 Message: 3414

I've been using a loop for several months now with better than expected results; but wonder if things could be even better. Is there a fundamental advantage to using a loop that's resonant versus non-resonant?

Following the adage of using the biggest loop that will fit as high as possible, here are the general details. Length = 467' mostly square but tilted toward a parallelogram such that feedpoint is near SW corner with the opposite corner pointed NE. The open-wire feedpoint is about 13% away from the corner to give a closer run to the shack. Corner heights follow existing trees from 70', 55', 40', and 35' over sloping ground.

EZNEC modeling shows lots of variation in lobes, nulls, and gains at different elevations - as expected from the different heights above ground; and wildly varying impedance values across the different bands. There's an in-ground pool with lots of cement in the middle and have no idea how to inject that into the model.

Being non-resonant, the shack T-network tuner gets a good match on all bands through 45' of feedline. Subjectively, this antenna outperforms an 88' doublet oriented NS at 70' on almost every signal heard & worked. There's a big lobe on 40m that covers the Madiera Islands over to Ukraine on 40m.

Lengthening the loop for resonance on 160 is out of the question because there isn't any more room; but I could shorten it to full wave on 80m. My gut tells me to leave it alone. Looking for comments / opinions.

Lastly, I want to thank KB0FHP & WH2T for their excellent articles in the Files section of this Group.

73,
Mark

3415. Re: Resonant vs Non-Resonant Loops

Yahoo group: SkyWires
Date: 2009-03-27 19:33:04 UTC
From: k5est
Topic: 3414 Message: 3415

--- In SkyWires@yahoogroups.com, "Mark Brown" <mark.n4bcd@...> wrote:
>snip....
> Lengthening the loop for resonance on 160 is out of the question because there isn't any more room; but I could shorten it to full wave on 80m. My gut tells me to leave it alone. Looking for comments / opinions.
>
> Lastly, I want to thank KB0FHP & WH2T for their excellent articles in the Files section of this Group.
>
> 73,
> Mark
>

Sounds like a fine horiz. loop to me. If it is loading and working.....my thoughts say, leave things as is! Gosh, a resonate antenna around my antenna farm has been absent for many years. And another thing to consider, you may, by shortening your loop get into a length that is going to be hard to tune and on the upper bands you could sacrifice some of the large lobes you now have.

The thing to experiment is the feedpoint. By moving the feedpoint your lobes will change on different bands.

Just my thoughts!

73....Walter - K5EST

3416. Re: [SkyWires] Resonant vs Non-Resonant Loops

Yahoo group: SkyWires
Date: 2009-03-27 20:02:57 UTC
From: Jim Dunstan
Topic: 3414 Message: 3416

At 02:26 PM 3/27/2009 +0000, you wrote:

>I've been using a loop for several months now with better than expected
>results; but wonder if things could be even better. Is there a fundamental
>advantage to using a loop that's resonant versus non-resonant?
>
>Following the adage of using the biggest loop that will fit as high as
>possible, here are the general details. Length = 467' mostly square but
>tilted toward a parallelogram such that feedpoint is near SW corner with
>the opposite corner pointed NE. The open-wire feedpoint is about 13% away
>from the corner to give a closer run to the shack. Corner heights follow
>existing trees from 70', 55', 40', and 35' over sloping ground.
>
>EZNEC modeling shows lots of variation in lobes, nulls, and gains at
>different elevations - as expected from the different heights above
>ground; and wildly varying impedance values across the different bands.
>There's an in-ground pool with lots of cement in the middle and have no
>idea how to inject that into the model.
>
>Being non-resonant, the shack T-network tuner gets a good match on all
>bands through 45' of feedline. Subjectively, this antenna outperforms an
>88' doublet oriented NS at 70' on almost every signal heard & worked.
>There's a big lobe on 40m that covers the Madiera Islands over to Ukraine
>on 40m.
>
>Lengthening the loop for resonance on 160 is out of the question because
>there isn't any more room; but I could shorten it to full wave on 80m. My
>gut tells me to leave it alone. Looking for comments / opinions.
>
>Lastly, I want to thank KB0FHP & WH2T for their excellent articles in the
>Files section of this Group.
>
>73,
>Mark

Hi Mark'

Resonance does not make a loop radiate any better than one that is
non-resonant. The statement refers to large loops (wires as well)... eg at
least a 1/2 wavelength or larger. Resonance by definition simply occurs
when the inductive and capacitive reactance cancel leaving a simple feed
point resistance. In the case of the loop that resistance in the vicinity
of 100 ohms. It will vary to a degree depending on the loop's relationship
to ground. Since most people operate many frequencies and bands their
antenna operates off resonance more often than not. All that means is the
feed point impedance will become more complex including inductive or

capacitive reactance. It also means a large swing in SWR. If you use a low loss feed line with an effective coupler at the rig the system will remain efficient.

The size and height of the loop of course makes a difference.

Jim, VE3CI

3417. Re: [SkyWires] Resonant vs Non-Resonant Loops

Yahoo group: SkyWires
Date: 2009-03-27 20:21:54 UTC
From: Siegfried Jackstien
Topic: 3414 Message: 3417

could you make one or two sides as "zig-zag"
maybe a way to have more wire in the air
but if it works for you it´s okay
have fun with your loop
dg9bfc

3418. Re: 160M Loop going up this weekend

Yahoo group: SkyWires
Date: 2009-03-29 18:00:39 UTC
From: Aaron
Topic: 3391 Message: 3418

Ok, I updated the layout...

http://groups.yahoo.com/group/SkyWires/photos/album/836998787/pic/257966228/view?picmode=&mode=tn&order=ordinal&start=1&count=20&dir=asc

...nothing a little work with Google Earth and Visio couldn't draft up. The dimensions are farily close but I know its not exact, the blue lines indicate the 80M dipole that became the feed point for the loop.

Now back to adding wire subject, I think I am stuck with what I have because if you look the drawing... I can't pull more out more NW because it would be in the neighbors property. Plus there more trees now, the image from Google Earth is probably 4+ years old and things have grown up around here, plus the barn is there now.

If I tried to pull more out from the splice point over the house I think I will be getting too close to the transformer and there is that tree between the barn and house.

The SW part has too much foliage in the way, means I would have to wrap around about a 100+ year old maple tree.

Now, if I was going with a long wire I could go back about another 200' west but its pretty thick back there for putting up a loop.

Ordering a SGC 239 tomorrow and will mounting it at the barn. So if I put the tuner out there below the feed point. What would be the best way to feed it from the tuner?? More coax to a 1:1 or just run 450 ladder? Excited now since I will have more feeding options now knowing the SGC will do it :) :)

After I get this all dialed in I am toying around with the idea of making a feed point switch and add 2 additional feed points to the loop at the splices. Sounds like a fun loop project to make the loop have 3 remotely switched feed ponts.

Aaron
KD4GSL

3419. Re: [SkyWires] Re: 160M Loop going up this weekend

Yahoo group: SkyWires
Date: 2009-03-29 18:32:34 UTC
From: Jim Dunstan
Topic: 3391 Message: 3419

At 06:00 PM 3/29/2009 +0000, you wrote:

>Ordering a SGC 239 tomorrow and will mounting it at the barn. So if I put
>the tuner out there below the feed point. What would be the best way to
>feed it from the tuner?? More coax to a 1:1 or just run 450 ladder?
>Excited now since I will have more feeding options now knowing the SGC
>will do it :) :)
>
>After I get this all dialed in I am toying around with the idea of making
>a feed point switch and add 2 additional feed points to the loop at the
>splices. Sounds like a fun loop project to make the loop have 3 remotely
>switched feed ponts.
>
>Aaron
>KD4GSL

Hi Aaron,

Use 450 ohm line between the loop feed point and the SGC coupler. Role about 20 ft of the coax and 20 ft of the DC supply line into a tight coil close to the tuner. The coils will work as RF chokes preventing RF on the coax feed line and dc power line between the coupler and the radio. You can hold the coils together neatly with some electrical tie wraps. I use this system with a SGC 239 mounted just inside the basement window. I have 55' of 450 ohm line coming down from my rotatable dipole. The antenna tunes like a charm with the SGC 239 .... the coax routes across the basement to the other side of the house and the radio shack. The dipole is 40' long and loads nicely on 40-10m with the ATU. Ideally the coupler should be outside up at the feed point ... but the SGC 239 is not weather proof and it is so much more convenient to have it just inside and out of the weather.

Jim, VE3CI

3420. Re: 160M Loop going up this weekend

Yahoo group: SkyWires
Date: 2009-03-29 18:57:32 UTC
From: Aaron
Topic: 3391 Message: 3420

Jim,
I will be mounting the 239 in a WX proof box out at the corner of the barn. I have and extra Dish standoff mount that will be mounted at the eve of the barn roof. So I am only looking at maybe 25 - 30' run of feedline from the tuner to the feed point. Pretty much will be a straight shot up to the antenna. So I wasn't sure what the gain of such a short run of 450 would be plus it not being at least 1/4 wavelength at the fundamental would cause possible problems?

Aaron
--- In SkyWires@yahoogroups.com, Jim Dunstan <jdunstan@...> wrote:
>
> At 06:00 PM 3/29/2009 +0000, you wrote:
>
>
> >Ordering a SGC 239 tomorrow and will mounting it at the barn. So if I put
> >the tuner out there below the feed point. What would be the best way to
> >feed it from the tuner?? More coax to a 1:1 or just run 450 ladder?
> >Excited now since I will have more feeding options now knowing the SGC
> >will do it :) :)
> >
> >After I get this all dialed in I am toying around with the idea of making
> >a feed point switch and add 2 additional feed points to the loop at the
> >splices. Sounds like a fun loop project to make the loop have 3 remotely
> >switched feed ponts.
> >
> >Aaron
> >KD4GSL
>
> Hi Aaron,
>
> Use 450 ohm line between the loop feed point and the SGC coupler. Role
> about 20 ft of the coax and 20 ft of the DC supply line into a tight coil
> close to the tuner. The coils will work as RF chokes preventing RF on the
> coax feed line and dc power line between the coupler and the radio. You
> can hold the coils together neatly with some electrical tie wraps. I use
> this system with a SGC 239 mounted just inside the basement window. I have
> 55' of 450 ohm line coming down from my rotatable dipole. The antenna
> tunes like a charm with the SGC 239 .... the coax routes across the
> basement to the other side of the house and the radio shack. The dipole is
> 40' long and loads nicely on 40-10m with the ATU. Ideally the coupler
> should be outside up at the feed point ... but the SGC 239 is not weather
> proof and it is so much more convenient to have it just inside and out of
> the weather.
>
> Jim, VE3CI

>

3421. Re: [SkyWires] Re: 160M Loop going up this weekend

Yahoo group: SkyWires
Date: 2009-03-29 20:34:02 UTC
From: Jim Dunstan
Topic: 3391 Message: 3421

At 06:57 PM 3/29/2009 +0000, you wrote:

>Jim,
>I will be mounting the 239 in a WX proof box out at the corner of the
>barn. I have and extra Dish standoff mount that will be mounted at the eve
>of the barn roof. So I am only looking at maybe 25 - 30' run of feedline
>from the tuner to the feed point. Pretty much will be a straight shot up
>to the antenna. So I wasn't sure what the gain of such a short run of 450
>would be plus it not being at least 1/4 wavelength at the fundamental
>would cause possible problems?

I don't think you will have any problems. I am sure the 239 will be able
to cope with whatever impedance it sees. If, on some particular frequency
it seems to be having trouble ... and that frequency is important to you
.... you can always add some extra 450 ohm line to make the 239 more
comfortable. The feed line losses with that length of line will be negligible.

Jim, VE3CI
_

3422. coax twin lead

Yahoo group: SkyWires
Date: 2009-04-01 03:13:36 UTC
From: teb602003
Topic: 3422 Message: 3422

Dr.Ace
As a novice I'm intriqued by your comments re using a pair of matched coax lines in place of twin lead to the tuner.
You have made it clear that this option will work well at the fundamental frequency, but what happens when twin coax feedlines are used with an auto tuner on other frequencies?
Should it be expected to act like regular old balanced line on other bands as well?
thanks Terry

3423. Re: [SkyWires] coax twin lead

Yahoo group: SkyWires
Date: 2009-04-01 04:04:55 UTC
From: Dr.Ace Ratliff
Topic: 3422 Message: 3423

Hello Terry,
I know I wasn't very clear. And being tired I might have mis-spoke.
If you use two pieces of 50 ohm coax then you have a near perfect match to a full wave loop antenna at the fundamental frequency.

But, As with most balanced feedlines even if there is a high VSWR on the feedline the losses will still be much lower than if you were using a single coax feedline.
The short answer is it should be expected to act like regular old balanced line on other bands as well.
73, Ace
P.S. Anyone is welcome to add their 2 cents.
--
Dr.Ace Ratliff
www.WH2T.com

On Tue, Mar 31, 2009 at 11:13 PM, teb602003 <cbaugh@...> wrote:

> Dr.Ace
> As a novice I'm intriqued by your comments re using a pair of matched coax
> lines in place of twin lead to the tuner.
> You have made it clear that this option will work well at the fundamental
> frequency, but what happens when twin coax feedlines are used with an auto
> tuner on other frequencies? Should it be expected to act like regular old
> balanced line on other bands as well?
> thanks Terry
>
>
>

3424. Re: [SkyWires] coax twin lead

Yahoo group: SkyWires
Date: 2009-04-01 04:40:57 UTC
From: Dr.Ace Ratliff
Topic: 3422 Message: 3424

I want to clarify my previous posting(s).

If you take two identical pieces of equal lengths of coax, lay them side by side and solder the shields together at both ends. Then use the two center conductors as though they were twin lead or ladder line. This raises the impedance value of the line to exactly double its original value.

If you use two pieces of 50 ohm coax then you have a near perfect match to a full wave loop antenna at the fundamental frequency! If you move up to harmonic frequencies, then this near perfect match no longer applies. Since the 100 – 104 ohms of the coax is only a near perfect match to a full wave loop antenna at the design (lowest usable) frequency.

But, As with most balanced feed lines even if there is a high VSWR on the feed line the losses will still be much lower than if you were using a single coax feed line.

And, unlike ladder line your shielded coax is impervious to nearby metal objects such as gutters, aluminum siding etc.

You still need a tuner between your 50 Ohm transmitter and your "dual coax shielded twin lead" feed line for multi-band operation.

Ace
--
Dr.Ace Ratliff
www.WH2T.com <http://www.wh2t.com/>

On Tue, Mar 31, 2009 at 11:13 PM, teb602003 <cbaugh@...> wrote:

> Dr.Ace
> As a novice I'm intriqued by your comments re using a pair of matched coax
> lines in place of twin lead to the tuner.
> You have made it clear that this option will work well at the fundamental
> frequency, but what happens when twin coax feedlines are used with an auto
> tuner on other frequencies? Should it be expected to act like regular old
> balanced line on other bands as well?
> thanks Terry
>
>
>

3425. coax twin lead

Yahoo group: SkyWires
Date: 2009-04-01 13:29:02 UTC
From: teb602003
Topic: 3425 Message: 3425

Dr.Ace
Thank you Sir ,for your prompt response.

And it provides an excellent solution to regular twin lead's only major weakness;influence from nearby metal objects.

I have the wire for a 160M full wave loop waiting for the snow to melt so I can put it up & will now be using twin coax as the feed line to my indoor auto tuner.

3426. Re: [SkyWires] coax twin lead

Yahoo group: SkyWires
Date: 2009-04-01 15:59:41 UTC
From: Andy
Topic: 3422 Message: 3426

> As a novice I'm intriqued by your comments re using a pair of matched coax
> lines in place of twin lead to the tuner.
> You have made it clear that this option will work well at the fundamental
> frequency, but what happens when twin coax feedlines are used with an auto
> tuner on other frequencies? Should it be expected to act like regular old
> balanced line on other bands as well?

My comments follow.

First, it won't behave exactly "like regular old balanced line" on ANY band, even the fundamental, because "regular old balanced line" is usually 300, 450, or 600 ohms characteristic impedance, and this combination is only 100 ohms (if you use pairs of 50 ohm coax). That can be an advantage to you or a disadvantage, depending on what's on the other end.

Second, it indeed really works like a balanced line, because it IS a balanced line. Even better: it is a shielded balanced line.

Third, there are minor differences between this balanced line and a ladderline suspended in space, which may or may not affect you.

One is that its common-mode characteristic impedance is much lower than that of ladderline, in case that matters. (It might not. If you have a well balanced system, this won't make a bit of difference.)

Another is that it is subject to the typical losses of coax as opposed to ladderline.

There is no fundamental reason why coax would be more lossy than ladderline, but it often is, because ladderline uses mainly air as dielectric whereas coax typically uses a plastic or foam or polymer material. So in dry weather, ladderline's losses may be smaller. But loss depends on the VSWR actually on the line; i.e., how well the characteristic impedance of the line matches the feedpoint impedance of the antenna. (Your auto tuner doesn't help this, unless you mount it remotely at the far end of the feedline.)

Compared to a single coax, the dual-coax approach would have a little better (lower) loss IF the antenna's feedpoint impedance goes high, because the amount of impedance mismatch would be less. Other than that, the dual-coax approach has exactly the same loss as a single coax.

The coax pair is a good way to bring balanced feedline through a wall into your house without unbalancing the line. If the length of the coax pair is short compared to a wavelength, the mismatch between it (100 ohms) and your open feedline (300-600 ohms) shouldn't matter, and the losses shouldn't matter either.

Andy

3427. Re: [SkyWires] coax twin lead

Yahoo group: SkyWires
Date: 2009-04-01 16:47:19 UTC
From: Dr.Ace Ratliff
Topic: 3422 Message: 3427

Andy,
Thank you for your input.
You say
"First, it won't behave exactly "like regular old balanced line" on ANY
band, even the fundamental, because "regular old balanced line" is usually
300, 450, or 600 ohms characteristic impedance, and this combination is only
100 ohms (if you use pairs of 50 ohm coax)."

The KEY word is usually.....

BTW - I have seen 75 ohm balanced line.

Also for newcomers......The higher the feed lines characteristic impedance
is USUALLY the better.

Very 73, Ace

P.S.
Any constructive input is good input and always welcome.
--
Dr.Ace Ratliff
www.WH2T.com <http://www.wh2t.com/>

On Wed, Apr 1, 2009 at 11:59 AM, Andy <ai.egrps@...> wrote:

> > As a novice I'm intriqued by your comments re using a pair of matched
> coax
> > lines in place of twin lead to the tuner.
> > You have made it clear that this option will work well at the fundamental
> > frequency, but what happens when twin coax feedlines are used with an
> auto
> > tuner on other frequencies? Should it be expected to act like regular old
> > balanced line on other bands as well?
>
> My comments follow.
>
> First, it won't behave exactly "like regular old balanced line" on ANY
> band, even the fundamental, because "regular old balanced line" is usually
> 300, 450, or 600 ohms characteristic impedance, and this combination is
> only
> 100 ohms (if you use pairs of 50 ohm coax). That can be an advantage to you
> or a disadvantage, depending on what's on the other end.
>
> Second, it indeed really works like a balanced line, because it IS a
> balanced line. Even better: it is a shielded balanced line.
>
> Third, there are minor differences between this balanced line and a

> ladderline suspended in space, which may or may not affect you.
>
> One is that its common-mode characteristic impedance is much lower than
> that
> of ladderline, in case that matters. (It might not. If you have a well
> balanced system, this won't make a bit of difference.)
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> Another is that it is subject to the typical losses of coax as opposed to
> ladderline.
>
> There is no fundamental reason why coax would be more lossy than
> ladderline,
> but it often is, because ladderline uses mainly air as dielectric whereas
> coax typically uses a plastic or foam or polymer material. So in dry
> weather, ladderline's losses may be smaller. But loss depends on the VSWR
> actually on the line; i.e., how well the characteristic impedance of the
> line matches the feedpoint impedance of the antenna. (Your auto tuner
> doesn't help this, unless you mount it remotely at the far end of the
> feedline.)
>
> Compared to a single coax, the dual-coax approach would have a little
> better
> (lower) loss IF the antenna's feedpoint impedance goes high, because the
> amount of impedance mismatch would be less. Other than that, the dual-coax
> approach has exactly the same loss as a single coax.
>
> The coax pair is a good way to bring balanced feedline through a wall into
> your house without unbalancing the line. If the length of the coax pair is
> short compared to a wavelength, the mismatch between it (100 ohms) and
> your open feedline (300-600 ohms) shouldn't matter, and the losses
> shouldn't
> matter either.
>
> Andy
>
>
>

3428. Re: [SkyWires] coax twin lead

Yahoo group: SkyWires
Date: 2009-04-01 17:20:45 UTC
From: Dean L.
Topic: 3422 Message: 3428

The old Telephone Drop Wire the kind that ran from the pole to your
house was a bout a 75 ohm twin lead.

73 ☐ Dean W5GXL ☐

W5GXL@...

On Apr 1, 2009, at 11:47 AM, Dr.Ace Ratliff wrote:

>
> Andy,
> Thank you for your input.
> You say
> "First, it won't behave exactly "like regular old balanced line" on
> ANY
> band, even the fundamental, because "regular old balanced line" is
> usually
> 300, 450, or 600 ohms characteristic impedance, and this combination
> is only
> 100 ohms (if you use pairs of 50 ohm coax)."
>
> The KEY word is usually.........
>
> BTW - I have seen 75 ohm balanced line.
>
> Also for newcomers......The higher the feed lines characteristic
> impedance is USUALLY the better.
>
> Very 73, Ace
>
> P.S.
> Any constructive input is good input and always welcome.
> --
> Dr.Ace Ratliff
> www.WH2T.com
>
>
> On Wed, Apr 1, 2009 at 11:59 AM, Andy <ai.egrps@...> wrote:
>
> > As a novice I'm intriqued by your comments re using a pair of
> matched coax
> > lines in place of twin lead to the tuner.
> > You have made it clear that this option will work well at the
> fundamental
> > frequency, but what happens when twin coax feedlines are used with
> an auto

> > tuner on other frequencies? Should it be expected to act like
> regular old
> > balanced line on other bands as well?
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> First, it won't behave exactly "like regular old balanced line" on ANY
> band, even the fundamental, because "regular old balanced line" is
> usually
> 300, 450, or 600 ohms characteristic impedance, and this combination
> is only
> 100 ohms (if you use pairs of 50 ohm coax). That can be an advantage
> to you
> or a disadvantage, depending on what's on the other end.
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> balanced line. Even better: it is a shielded balanced line.
>
> Third, there are minor differences between this balanced line and a
> ladderline suspended in space, which may or may not affect you.
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> One is that its common-mode characteristic impedance is much lower
> than that
> of ladderline, in case that matters. (It might not. If you have a well
> balanced system, this won't make a bit of difference.)
>
> Another is that it is subject to the typical losses of coax as
> opposed to
> ladderline.
>
> There is no fundamental reason why coax would be more lossy than
> ladderline,
> but it often is, because ladderline uses mainly air as dielectric
> whereas
> coax typically uses a plastic or foam or polymer material. So in dry
> weather, ladderline's losses may be smaller. But loss depends on the
> VSWR
> actually on the line; i.e., how well the characteristic impedance of
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> line matches the feedpoint impedance of the antenna. (Your auto tuner
> doesn't help this, unless you mount it remotely at the far end of the
> feedline.)
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> Compared to a single coax, the dual-coax approach would have a
> little better
> (lower) loss IF the antenna's feedpoint impedance goes high, because
> the
> amount of impedance mismatch would be less. Other than that, the
> dual-coax
> approach has exactly the same loss as a single coax.

>
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> wall into
> your house without unbalancing the line. If the length of the coax
> pair is
> short compared to a wavelength, the mismatch between it (100 ohms) and
> your open feedline (300-600 ohms) shouldn't matter, and the losses
> shouldn't
> matter either.
>
> Andy
>
>
>
>
>
>
>
>

3429. Re: [SkyWires] coax twin lead

Yahoo group: SkyWires
Date: 2009-04-01 22:06:13 UTC
From: Siegfried Jackstien
Topic: 3425 Message: 3429

i am sure you will have higher losses as on an open feeder .... i would only take 2 short runs of the coax to get from the inside to the outside ... and after that an open ladderline
just my 2 cents
dg9bfc
sigi
----- Original Message -----
From: teb602003
To: SkyWires@yahoogroups.com
Sent: Wednesday, April 01, 2009 4:29 PM
Subject: [SkyWires] coax twin lead

Dr.Ace
Thank you Sir ,for your prompt response.

And it provides an excellent solution to regular twin lead's only major weakness;influence from nearby metal objects.

I have the wire for a 160M full wave loop waiting for the snow to melt so I can put it up & will now be using twin coax as the feed line to my indoor auto tuner.

3430. Re: [SkyWires] coax twin lead

Yahoo group: SkyWires
Date: 2009-04-02 19:02:49 UTC
From: Andy
Topic: 3422 Message: 3430

> The KEY word is usually.........
>
> BTW - I have seen 75 ohm balanced line.

Quite true!

Designers can make feedlines have lower impedances, by substituting a solid dielectric material for the air (or using material with a yet higher dielectric constant), or by moving the wires closer together. The lower impedances, also often used for things like computer network busses, are done this way.

> Also for newcomers......The higher the feed lines characteristic impedance is USUALLY the better.

That's true, because the higher characteristic impedance requires using mostly air between the wires, and air has superior electrical characteristics, especially lower loss. The downside is it takes up a bit more space, and you need to be careful what gets close to it. You could also get those higher impedances by using very skinny wires, but then they have more resistance (more loss), and would be more likely to break.

Andy

3431. Re: [SkyWires] coax twin lead

Yahoo group: SkyWires
Date: 2009-04-03 00:44:07 UTC
From: Jim Dunstan
Topic: 3422 Message: 3431

At 03:02 PM 4/2/2009 -0400, you wrote:

> > The KEY word is usually.....
> >
> > BTW - I have seen 75 ohm balanced line.
>
>Quite true!
>
>Designers can make feedlines have lower impedances, by substituting a solid
>dielectric material for the air (or using material with a yet higher
>dielectric constant), or by moving the wires closer together. The lower
>impedances, also often used for things like computer network busses, are
>done this way.
>
> > Also for newcomers......The higher the feed lines characteristic impedance
>is USUALLY the better.
>
>That's true, because the higher characteristic impedance requires using
>mostly air between the wires, and air has superior electrical
>characteristics, especially lower loss. The downside is it takes up a bit
>more space, and you need to be careful what gets close to it. You could
>also get those higher impedances by using very skinny wires, but then they
>have more resistance (more loss), and would be more likely to break.
>
>Andy

Hi,

Back in the 60's .... and maybe later .... most of the cable companies carried 75 ohm balanced cable. Amateur suppliers advertised and carried the product as they now do with 450 ohm line, coax, etc.... It came in 2 forms ... the low power and high power (called killowatt version) designed to specifically carry HF RF. It was used basically the same way you use coax. .... that is for feeding resonant dipoles and loops .... and not for multi-band high SWR situations. As far as I can determine it has been dropped for the radio market ... there may well be 75 ohm balanced line made for and marketed in other services with specifications designed for those services.

Jim, VE3CI

3432. Re: [SkyWires] coax twin lead

Yahoo group: SkyWires
Date: 2009-04-03 01:01:11 UTC
From: Dr.Ace Ratliff
Topic: 3422 Message: 3432

>
> Hi,
>
> Back in the 60's .... and maybe later .... most of the cable companies
> carried 75 ohm balanced cable. Amateur suppliers advertised and carried
> the product as they now do with 450 ohm line, coax, etc.... It came in 2
> forms ... the low power and high power (called killowatt version) designed
> to specifically carry HF RF. It was used basically the same way you use
> coax. .... that is for feeding resonant dipoles and loops .... and not for
> multi-band high SWR situations. As far as I can determine it has been
> dropped for the radio market ... there may well be 75 ohm balanced line
> made for and marketed in other services with specifications designed for
> those services.
>
> Jim, VE3CI
>
>
>

Hi All,
A few years ago, maybe 10 or less. Van Gordon Engineering offered 100 Ohm balanced transmission line thru HRO and other retail outlets. Or I think you could also order it direct from Van Gordon Engineering. I called them at the time and was told it was not for QRO hign power operations. I just looked at HRO online and didn't see it listed. 73, Ace

--
Dr.Ace Ratliff
www.WH2T.com

3433. Re: [SkyWires] coax twin lead

Yahoo group: SkyWires
Date: 2009-04-03 01:29:59 UTC
From: Andy
Topic: 3422 Message: 3433

> Back in the 60's .... and maybe later .... most of the cable companies
> carried 75 ohm balanced cable. ...

If my recollection is right, 93 ohm twinax (shielded pair) was a somewhat popular cable type, going way back. I think its use originalted with instrumentation and "video", according to what I read. It is possible that this configuration has survived longer than the 75 ohm variety. But my guess is that it might not have come in the high power variety, since neither instrumentation nor video signals are particularly high power.

Andy

3434. Re: [SkyWires] coax twin lead

Yahoo group: SkyWires
Date: 2009-04-03 02:11:08 UTC
From: Jim Dunstan
Topic: 3422 Message: 3434

At 09:01 PM 4/2/2009 -0400, you wrote:

>Hi All,
>Â A few years ago, maybe 10 or less. Van Gordon Engineering offered 100
>Ohm balanced transmission line thru HRO and other retail outlets. Or I
>think you could alsoÂ order it direct from Van Gordon Engineering. I
>called them at the time and was told it was not for QRO hign power
>operations. I just looked at HRO online and didn't see it listed. 73, Ace
>
>--
>Dr.Ace Ratliff

Hi,

The 'killowatt' version of 75 ohm balanced line was almost as wide as standard TV twinlead, twice a thick, and flat. the colour was brown and not quite as flexible as standard TV twinlead. The lower power version was almost round and quite small in diameter and flexible. It could be wound easily and ideal for portable operation. I have never used it. I have used the killowatt variety ..... feeding a 20m quad. antenna. A few years ago I did an extensive search for it without any luck.

Jim, VE3CI

3435. Feedpoint switch

Yahoo group: SkyWires
Date: 2009-04-03 21:43:37 UTC
From: Aaron
Topic: 3435 Message: 3435

Ok, I am still goofing around with the idea of making a remote feed point switch for my loop to feed it in 3 different places. SO I have drafted up a crude schematic/diagram of a what i am trying to get out of my head right now.

I want to be able to use the 450 to either feed RF or DC to the relay out at the splice points on the loop. That would in theory either open it up as a feed point or close the connection when DC is applied to the far point relay.

This one is for the default feed point which should work as a feed point with no DC applied to relay circuit, this would be opposite to the remaining feed points not yet illustrated.

Now... in this illustration, I think I am going to run into a issue with the opening and closing of the loop circuit. I am not sure if I feed past the short what is going to happen... might have to put another relay into this mess to do what i want.

Anyways throwing it out there to brainstorm on.

Aaron

http://groups.yahoo.com/group/SkyWires/photos/album/836998787/pic/81662693/view?picmode=&mode=tn&order=ordinal&start=1&count=20&dir=asc

3436. Re: Feedpoint switch

Yahoo group: SkyWires
Date: 2009-04-03 22:37:16 UTC
From: Aaron
Topic: 3435 Message: 3436

Ok, I got it figured out now at the antenna side. This should work with no DC applied as the default feed point. When DC is applied through the twin lead it will close the loop circuit and allow me to feed another point on the loop.

Anyone got any ideas on what relays might work best for this idea? They need to be small and handle about 200W PEP I guess since this portion will be hanging way up in the air. Might have to find some lighter weight tubing other than pvc too.

Aaron

http://groups.yahoo.com/group/SkyWires/photos/album/836998787/pic/1778810671/view?picmode=&mode=tn&order=ordinal&start=1&count=20&dir=asc

3437. Re: [SkyWires] Feedpoint switch

Yahoo group: SkyWires
Date: 2009-04-03 21:51:01 UTC
From: Siegfried Jackstien
Topic: 3435 Message: 3437

you will need capacitors inthe feedingline
or you will short circuit your relais-voltage in your tuner or trx
and after the relais not to short circuit the relais voltage with your loop antenna
just my 2 cents
----- Original Message -----
From: Aaron
To: SkyWires@yahoogroups.com
Sent: Saturday, April 04, 2009 12:43 AM
Subject: [SkyWires] Feedpoint switch

Ok, I am still goofing around with the idea of making a remote feed point switch for my loop to feed it in 3 different places. SO I have drafted up a crude schematic/diagram of a what i am trying to get out of my head right now.

I want to be able to use the 450 to either feed RF or DC to the relay out at the splice points on the loop. That would in theory either open it up as a feed point or close the connection when DC is applied to the far point relay.

This one is for the default feed point which should work as a feed point with no DC applied to relay circuit, this would be opposite to the remaining feed points not yet illustrated.

Now... in this illustration, I think I am going to run into a issue with the opening and closing of the loop circuit. I am not sure if I feed past the short what is going to happen... might have to put another relay into this mess to do what i want.

Anyways throwing it out there to brainstorm on.

Aaron

http://groups.yahoo.com/group/SkyWires/photos/album/836998787/pic/81662693/view?picmode=&mode=tn&order=ordinal&start=1&count=20&dir=asc

3438. Re: Feedpoint switch

Yahoo group: SkyWires
Date: 2009-04-03 23:16:46 UTC
From: Aaron
Topic: 3435 Message: 3438

There won't be any DC in the circuit, the feed line will either act as transmission line or DC supply and switched accordingly at the remote switch. The remote switch... I am still drafting that up as I was trying to figure it all out on 1 sheet, the first diagram posted isn't going to be right. Now I am segmenting it all out so I don't get myself corn-fused.

Once I get the remote switch logic figured out the only things will be figuring out the appropriate relays and then to figure out how to decouple or choke the RF from going into relay coils at the loop switch.

I think this may work... not sure how much of a difference the radiation patterns will change but sounds like a fun project to experiment with.

Aaron

--- In SkyWires@yahoogroups.com, "Siegfried Jackstien" <siegfried.jackstien@...> wrote:
>
> you will need capacitors inthe feedingline
> or you will short circuit your relais-voltage in your tuner or trx
> and after the relais not to short circuit the relais voltage with your loop antenna
> just my 2 cents
> ----- Original Message -----
> From: Aaron
> To: SkyWires@yahoogroups.com
> Sent: Saturday, April 04, 2009 12:43 AM
> Subject: [SkyWires] Feedpoint switch
>
>
> Ok, I am still goofing around with the idea of making a remote feed point switch for my loop to feed it in 3 different places. SO I have drafted up a crude schematic/diagram of a what i am trying to get out of my head right now.
>
> I want to be able to use the 450 to either feed RF or DC to the relay out at the splice points on the loop. That would in theory either open it up as a feed point or close the connection when DC is applied to the far point relay.
>
> This one is for the default feed point which should work as a feed point with no DC applied to relay circuit, this would be opposite to the remaining feed points not yet illustrated.
>
> Now... in this illustration, I think I am going to run into a issue with the opening and closing of the loop circuit. I am not sure if I feed past the short what is going to happen... might have to put another relay into this mess to do what i want.
>
> Anyways throwing it out there to brainstorm on.
>
> Aaron

>
> http://groups.yahoo.com/group/SkyWires/photos/album/836998787/pic/81662693/view?picmode=&mode=tn&order=ordinal&start=1&count=20&dir=asc
>

3439. Re: [SkyWires] Feedpoint switch

Yahoo group: SkyWires
Date: 2009-04-04 01:36:35 UTC
From: Jim Dunstan
Topic: 3435 Message: 3439

At 09:43 PM 4/3/2009 +0000, you wrote:

>Ok, I am still goofing around with the idea of making a remote feed point
>switch for my loop to feed it in 3 different places. SO I have drafted up
>a crude schematic/diagram of a what i am trying to get out of my head
>right now.
>
>I want to be able to use the 450 to either feed RF or DC to the relay out
>at the splice points on the loop. That would in theory either open it up
>as a feed point or close the connection when DC is applied to the far
>point relay.
>
>This one is for the default feed point which should work as a feed point
>with no DC applied to relay circuit, this would be opposite to the
>remaining feed points not yet illustrated.
>
>Now... in this illustration, I think I am going to run into a issue with
>the opening and closing of the loop circuit. I am not sure if I feed past
>the short what is going to happen... might have to put another relay into
>this mess to do what i want.
>
>Anyways throwing it out there to brainstorm on.
>
>Aarone

Hi Aaron,

Lets hold the concept to a single feed point and describe what is going to happen. If you can get one feed point to work you can add additional circuits at other feed points.

1. You want to have a relay at the feed point that will short the feed point when the relay is NOT energized. When you energize the relay it will open and remove the short and attach the feed line to the feed point. You will need a 2 pole 2 position relay to accomplish this task. You would make a number of these at different points in the loop to test their effectiveness.

2. You want the feed line to carry the DC for switching the relay and to carry the RF when the feed point is open and connected.

First, it is not unusual to accomplish the second point ... that is carry RF and Dc on the same cable. The method used is to use isolation chokes and capacitors to separate RF from DC circuits and vice versa . This is best done when the feed line is low impedance .... eg with coax cable. You mention 450 ohm line ... which will present various complex impedances ....

which make designing an effective RF/DC isolation system difficult. The system could be designed if careful attention is paid to system resonance. All band operation would be out of the question.

If the loop is to tested this way on one band then you might consider using stub feeders at the various feed points of interest. The relay switching could be done at the ends of the stubs ... closer to the ground where you could easily run separate DC lines to the relays and avoid using a single line for RF and DC. However, whether you use 450 ohm line or coax ... you would be limited to one resonant frequency as you would have to cut the stubs to this frequency.

Jim, VE3CI

3440. Re: [SkyWires] Re: Feedpoint switch

Yahoo group: SkyWires
Date: 2009-04-04 02:03:22 UTC
From: Jim Dunstan
Topic: 3435 Message: 3440

At 10:37 PM 4/3/2009 +0000, you wrote:

>Ok, I got it figured out now at the antenna side. This should work with no
>DC applied as the default feed point. When DC is applied through the twin
>lead it will close the loop circuit and allow me to feed another point on
>the loop.

Good point. The cable does not have to carry DC and RF at the same time. However this raises 2 additional problems. The feed point is normally open and the relay coil is connected across it, a problem when feeding RF. Second, you cant feed DC on the feed line as the feed point is a DC short (wire loop). So, either way ..... normally open feed point .... or normally closed feed point .... you are going to need both capacitors and inductors to allow one cable to feed DC or RF whether they are on at the same time or not.

This then leads to the points I made on my previous post ... you need to keep the point of RF and DC separation at a low impedance.

Jim, VE3CI

3441. Re: [SkyWires] Feedpoint switch

Yahoo group: SkyWires
Date: 2009-04-04 06:29:35 UTC
From: Siegfried Jackstien
Topic: 3435 Message: 3441

i think the best way is to make a dc cable and a ladderline to each feedingpoint
if he uses the loop only for the fundamental frequency switching feedingpoint will gain nothing
changing the feedingpoints will give different patterns only on the higher bands where the loop is NOT a cloudburner
----- Original Message -----
From: Jim Dunstan
To: SkyWires@yahoogroups.com
Sent: Saturday, April 04, 2009 4:36 AM
Subject: Re: [SkyWires] Feedpoint switch

At 09:43 PM 4/3/2009 +0000, you wrote:

>Ok, I am still goofing around with the idea of making a remote feed point
>switch for my loop to feed it in 3 different places. SO I have drafted up
>a crude schematic/diagram of a what i am trying to get out of my head
>right now.
>
>I want to be able to use the 450 to either feed RF or DC to the relay out
>at the splice points on the loop. That would in theory either open it up
>as a feed point or close the connection when DC is applied to the far
>point relay.
>
>This one is for the default feed point which should work as a feed point
>with no DC applied to relay circuit, this would be opposite to the
>remaining feed points not yet illustrated.
>
>Now... in this illustration, I think I am going to run into a issue with
>the opening and closing of the loop circuit. I am not sure if I feed past
>the short what is going to happen... might have to put another relay into
>this mess to do what i want.
>
>Anyways throwing it out there to brainstorm on.
>
>Aarone

Hi Aaron,

Lets hold the concept to a single feed point and describe what is going to happen. If you can get one feed point to work you can add additional circuits at other feed points.

1. You want to have a relay at the feed point that will short the feed point when the relay is NOT energized. When you energize the relay it will open and remove the short and attach the feed line to the feed point. You will need a 2 pole 2 position relay to accomplish this task. You would

make a number of these at different points in the loop to test their effectiveness.

2. You want the feed line to carry the DC for switching the relay and to carry the RF when the feed point is open and connected.

First, it is not unusual to accomplish the second point ... that is carry RF and Dc on the same cable. The method used is to use isolation chokes and capacitors to separate RF from DC circuits and vice versa . This is best done when the feed line is low impedance .... eg with coax cable. You mention 450 ohm line ... which will present various complex impedances .... which make designing an effective RF/DC isolation system difficult. The system could be designed if careful attention is paid to system resonance. All band operation would be out of the question.

If the loop is to tested this way on one band then you might consider using stub feeders at the various feed points of interest. The relay switching could be done at the ends of the stubs ... closer to the ground where you could easily run separate DC lines to the relays and avoid using a single line for RF and DC. However, whether you use 450 ohm line or coax ... you would be limited to one resonant frequency as you would have to cut the stubs to this frequency.

Jim, VE3CI

3442. Re: Feedpoint switch

Yahoo group: SkyWires
Date: 2009-04-05 16:01:20 UTC
From: Aaron
Topic: 3435 Message: 3442

Here is the latest diagram, switching logic is now figured out:
http://groups.yahoo.com/group/SkyWires/photos/album/836998787/pic/1990466535/view?picmode=original&mode=tn&order=ordinal&start=1&dir=asc

If you scroll down to the bottom of the diagram you can follow it up the circuit. RL1 & RL2 are the first tier of switches and solely route RF to the next tier.
The second tier (RLA, RLB, & RLC) determine the function of what will be sent to the loop switch located at the wire. Off is RF and ON is DC feeding up to the wire which will keep the loop circuit closed at that point.

Now the only thing left is the RF chokes that need to go between Pins 1&3 and 6&8 on RL*1 at the loop switch to prevent RF current going into the relay coils when that switch is acting as the feed point.

I think this will work now, lots of relays but I don't see any way around it. ...and yes this concept is to make the patterns change at higher frequencies. Since the antenna seems to out perform any other antenna I have ever put up 80 - 10 I can't see the reason why not to do this and make the antenna just a little more dynamic.

I would and try to model this but I can't find any modeling program that will work correctly with Vista 64 and I have been too busy to set up a VM just to do antenna modeling.

Aaron

3443. Re: [SkyWires] Re: Feedpoint switch

Yahoo group: SkyWires
Date: 2009-04-05 17:14:23 UTC
From: Siegfried Jackstien
Topic: 3435 Message: 3443

doesn´t mmana work under vista???

3447. Beginner with many questions :o)

Yahoo group: SkyWires
Date: 2009-05-03 13:51:37 UTC
From: Alexandre Souza
Topic: 3447 Message: 3447

Hi you all, greetings from sunny Brazil, here is PU1BZZ Alexandre :o)

I've heard about this incredible skywire antenna and I'm willing to make one here next weekend, using ladderline to feed it. So I'm here for some advice.

My terrain is a 12 x 33 rectangular-shaped with a house in the middle, so I can feed the antenna in the middle of one of the biggest sides of the rectangle. But I know no one who has made an antenna like this. So, here are a buttload of questions:

- Can I make it rectangular, so it can be used on 80mtrs?
- The highest I think I can put it is some 6mtrs (about 20 feet). Is it too low?
- I'm planning to use #14 wire to make a ladder line. What is the best distance between wires to keep it at a reasonable impedance (300 ohms? 450 ohms? 600 ohms?)? Or is better to feed it with RG213 coax?
- Can I use the same #14 wire for the antenna?
- Does it matter the place I feed it? I can build a relay system to change the feedpoint, but is it worth it?
- Does it matter the polarity of the feeding if I use coaxial? Is it worth to put a latching relay to change the polarity of the feed?
- As a newbie, any tip I should have? :o)

Thanks you all!
Alexandre, PU1BZZ

3448. RE: [SkyWires] Beginner with many questions :o)

Yahoo group: SkyWires
Date: 2009-05-03 15:33:42 UTC
From: Aaron Lamb
Topic: 3447 Message: 3448

Well since I have been experimenting some I'll relay some of my findings. I have not really noticed a difference since I switched from direct feed with coax to 450 ladder line for the exception it looks to be a little longer now on 160. Think the ladder line shifted my resonant freq down some.

I have since moved my tuner (SGC-239) from the shack out near the loop. It is about 30 feet below the feed point and mounted on a dish mount on the side of the barn. Running RG8 from the shack to the tuner and 450 from the tuner to the loop. I may actually mount the tuner in the tree later this year and feed the loop directly into the tuner just to see what happens.

As for your lot size looks like it's about 294 feet which puts you about 3.4 mhz.. looks close enough if you're running a tuner and you plan on using on other bands other than 80.

The feed point switch idea I came up with may or may not be worth it. I have yet to try and build it yet but in theory it should alter lobes patterns on higher bands. My antenna is working so good the way it is I am not sure it's worth the effort other than to experiment and satisfy my own curiosity. Considering your loop would be square I am not sure that switching the polarity of the feed would show any difference. You may see something by doing that if you feed it off center but you would have to model it to see.

About the best tip I can give you is the SGC-239 tuner + as much wire as you can get up = one fun antenna. I have burnt myself out on antenna theory & design and was surprised the above formula has been the best multi band wire antenna I have used to date. I think most will concur, just put up the loop the best you can and be very surprised. Get it up and tinker later.

Aaron

KD4GSL

From: SkyWires@yahoogroups.com [mailto:SkyWires@yahoogroups.com] On Behalf Of Alexandre Souza
Sent: Sunday, May 03, 2009 9:52 AM
To: SkyWires@yahoogroups.com
Subject: [SkyWires] Beginner with many questions :o)

Hi you all, greetings from sunny Brazil, here is PU1BZZ Alexandre :o)

I've heard about this incredible skywire antenna and I'm willing to make one here next weekend, using ladderline to feed it. So I'm here for some advice.

My terrain is a 12 x 33 rectangular-shaped with a house in the middle, so I can feed the antenna in the middle of one of the biggest sides of the rectangle. But I know no one who has made an antenna like this. So, here are

a buttload of questions:

- Can I make it rectangular, so it can be used on 80mtrs?
- The highest I think I can put it is some 6mtrs (about 20 feet). Is it too low?
- I'm planning to use #14 wire to make a ladder line. What is the best distance between wires to keep it at a reasonable impedance (300 ohms? 450 ohms? 600 ohms?)? Or is better to feed it with RG213 coax?
- Can I use the same #14 wire for the antenna?
- Does it matter the place I feed it? I can build a relay system to change the feedpoint, but is it worth it?
- Does it matter the polarity of the feeding if I use coaxial? Is it worth to put a latching relay to change the polarity of the feed?
- As a newbie, any tip I should have? :o)

Thanks you all!
Alexandre, PU1BZZ

3449. Re: Beginner with many questions :o)

Yahoo group: SkyWires
Date: 2009-05-03 15:59:42 UTC
From: Alan Wilson
Topic: 3447 Message: 3449

--- In SkyWires@yahoogroups.com, "Alexandre Souza" <alexandre-
In my setup,I use about 400 ft of 14 ga wire. It is somewhat a rectangle. I feed it in the closest corner near the shack with 450 ohm ladderline. The height varies from 55 ft to about 30 ft. I bring the ladder line to the wall outside of the shack where it connects to a 4 to 1 balun then about 12 ft of rg8x to the tuner. It work on all band 160 thru 6 meters. 160 is mostly local stuff but the rest of the bands I've work dx on. So, put up as much wire as possible and get it high as possible and you'll be pleased with its performance. For a article on construction of one goto:http://www.n4kc.com/ Don does and great job on his construction article..73, Alan
ps: his and my antenna are very similar

3452. Just joined group

Yahoo group: SkyWires
Date: 2009-05-13 18:32:07 UTC
From: Bill
Topic: 3452 Message: 3452

Hi all. Name here is Bill. I've been a ham since Feb last year. I might be moving this summer to a new location that has room for some different options. I'm hoping to put up a 160m loop if there's room, or an 80m if not. I'll probably be digging in the archives for a while. I've probably read about all I can find online. I'll feed it with 450 ohm window line back to the shack and have a 4:1 balun just outside with a short coax into the house to the tuner. Anyone have a setup like that and would you care to share your experience with it?

Thanks!

Bill KC2SUO

3453. Re: Just joined group

Yahoo group: SkyWires
Date: 2009-05-13 21:57:47 UTC
From: Alan Wilson
Topic: 3452 Message: 3453

Bill, I use almost the same setup as your considering. Its not quite large enough to be resonant on 160 but the autotuner in the rig brings it right in. Its tied off at 4 different trees so its not a square and has one long leg. It is fed at the sw corner nearest the shack. I run maybe 50 ft of ladderline to a 4 to 1 balun and there into the shack where it goes into a manual tuner for when i use the amp or direct to the rig where the autotuner takes care of most freqs. It works from 160-6 meters. 160 is mostly close in stuff maybe out to 400 miles. On the other bands I have worked and do work dx. Sometimes the signal is as loud as my hexbeam and other times not. The height of the loop also varies in height from 30 to 55 ft. good luck, you love it...73, Alan

3454. Re: [SkyWires] Just joined group

Yahoo group: SkyWires
Date: 2009-05-14 06:40:45 UTC
From: Siegfried Jackstien
Topic: 3452 Message: 3454

if you have the room for a fullsized loop for topband ... go for it ... i have a setup like you .. a loop for topband fed via ladderline with a balun and a tuner ....
i have 2 different lenght of feedind line
about 18m from loop to shack and another run of about 20m that i switch in for some bands
the reason is with this setup i can switch my tuner OFF .... so no tuner losses :-)
and on the bands where the swr is not 1:1 it is so low (>3) that i can use the tuner in the rig or the pi section of the pa .... so you need no tuner most of the time
look for (loop.xls) in the filearea of this group
it is an excelsheet what i made for my notes of resonance points and swr
if you wanna try out this setup write to me offline to callsign (at) freenet (dot) de
dg9bfc
sigi
----- Original Message -----
From: Bill
To: SkyWires@yahoogroups.com
Sent: Wednesday, May 13, 2009 8:32 PM
Subject: [SkyWires] Just joined group

Hi all. Name here is Bill. I've been a ham since Feb last year. I might be moving this summer to a new location that has room for some different options. I'm hoping to put up a 160m loop if there's room, or an 80m if not. I'll probably be digging in the archives for a while. I've probably read about all I can find online. I'll feed it with 450 ohm window line back to the shack and have a 4:1 balun just outside with a short coax into the house to the tuner. Anyone have a setup like that and would you care to share your experience with it?

Thanks!

Bill KC2SUO

3455. Re: Just joined group

Yahoo group: SkyWires
Date: 2009-05-14 18:57:13 UTC
From: Bill
Topic: 3452 Message: 3455

Thanks Sigi, and also to Alan. I hope it won't be too long before we take possession. One thing I'm wondering about, modifying a tuner so that the balun is on the rig side, and that being a 1:1. Bringing the balanced line right in to the tuner. To minimize loss in the balun by having only converting 50ohm balanced to 50ohm unbalanced. Have you, or anyone else tried that? And did it make enough of a difference to notice? If it's only a marginal improvement, I might not bother with it.

Thanks again!
Bill KC2SUO

--- In SkyWires@yahoogroups.com, "Siegfried Jackstien" <siegfried.jackstien@...> wrote:
>
> if you have the room for a fullsized loop for topband ... go for it ...
> dg9bfc
> sigi

3456. RF getting into speakers

Yahoo group: SkyWires
Date: 2009-05-15 15:26:25 UTC
From: Mike
Topic: 3456 Message: 3456

I normally use either of two IC-756 Pro-II radios at two locations in my home. Both use the Icom AH-4 auto-antenna tuner. Both feed similar 160 Meter loop antennas, fed with 450 Ohm window (ladder) line. (No balun is used; I simply attach the twin-lead feedline to the HOT and GROUND sides.)

I have a new unit, a Flex-3000 radio. The built-in ATU (auto antenna tuner) is very limited, so I must use an external ATU (tuner) to achieve a match.

I have two two external tuners to try:
A. MFJ-993 ATU, which has both COAX and a BALANCED output as choices.
B. LDG AT-100Pro, which has COAX outputs. (No balun built in)

My Flex-Radio appears to have a good enough transmitted signal, per the reports I get, compared to the (to me, GOLDEN) reports that I get if I use the Icom radio on this same antenna. (The other Icom setup is upstairs; It has a similar signal, when comparing.)

My point is that the Flex is doing well, as far as receive and transmit signals.

BUT: I have varying degrees of RF getting into whatever speaker that I use. The degree differs from band to band. (20 Meters causes the greatest amount of "muffled sounds" as I transmit in SSB mode.)

I have tried a ground at the Flex-Radio, and at the tuner.

I have NOT lifted the ground at the radio, as a trial!

I have moved the tuner from on top of the Flex-Radio to a point that is ten or twelve feet removed from the Flex-Radio, so that it is at the same point or area as the 450 Ohm feed-line actually ENDS. (This is achieved by cobbling together three pieces of RG-58 coax, with UHF barrels to join the too-short coax length's PL-259 connectors.)

I have tried both a 4:1 and a 1:1 current balun; The 1:1 is noticeably EASIER FOR THE ATU TO TUNE, but no great difference is seen between the two as far as the RF-in-the-speakers problem.

I do have a home-made "RF choke" that I built some time back; It is about 10 to 15 turns of RG-213 coax wound on a 5 inch PVC tube. It is fed with an SO-239, and was preciously attached to a 450 Ohm twin-lead fed antenna. I HAVE NOT TRIED this choke,

yet

My ground system is far from OK or correct: The radio is on a bench at an inner wall of my basement. The ground wire has to be routed UP, then OVER (to the LEFT) to the outer wall of the basement shop, then to the ground.

The ground situation appears to be able to "control" the degree of my speaker-barking the most. (All is OK and clean, if I use a dummy load, of course.)

So far, the MFJ-993, employing the unit's built-in Balun, is the cleanest, by a noticeable amount!

I have not tapped into the house-wiring's ground; This was suggested bu one fellow. (This would mean about a 15 foot run of wire to the breaker-box area bu going UP, then to the RIGHT-FORWARD to reach the power panels.)

I am looking for some hints or ideas, please.

Thank you!!! -Mike- KOJTA

3457. Re: [SkyWires] RF getting into speakers

Yahoo group: SkyWires
Date: 2009-05-15 16:04:32 UTC
From: Siegfried Jackstien
Topic: 3456 Message: 3457

try the mfj and put your chokebalun between the tuner and the rig
do not ground tuner but ground the rig .... that is what i would try first ....
surely you made a choke for the atu power lines didn´t you ?
put chokes over EVERY cable that goes in or out of the flexnet
if you are using amplified speakers try a different set (some are better not getting rf in)
also try a headphone instead the amplified speakers
put chokes over the power cord of the speakers
use a different power outlet for the speakers / the radio / both
etc
etc
etc
just my 2 cents
dg9bfc
sigi

3458. Re: RF getting into speakers

Yahoo group: SkyWires
Date: 2009-05-15 16:30:10 UTC
From: Mike
Topic: 3456 Message: 3458

--- In SkyWires@yahoogroups.com, "Siegfried Jackstien" <siegfried.jackstien@...> wrote:
>
> try the mfj and put your chokebalun between the tuner and the rig
> do not ground tuner but ground the rig .... that is what i would try first ....
> surely you made a choke for the atu power lines didn´t you ?
> put chokes over EVERY cable that goes in or out of the flexnet
> if you are using amplified speakers try a different set (some are better not getting rf in)
> also try a headphone instead the amplified speakers
> put chokes over the power cord of the speakers
> use a different power outlet for the speakers / the radio / both
> etc
> etc
> etc
> just my 2 cents
> dg9bfc
> sigi
>
Hello!! Great ideas!!! (Thank you!)

The home-made coax-on-a-PVC-tube has coax input only (This is the SO-239 I had mentioned.) It has no OUTPUT to a coax. I had used this to feed the twin-lead (450 Ohm window/ladder line), you see.

I have noted that the three different line-in speakers that I have ARE very different as to RF suseptability. (-If this is a correct term.)

I had tried to run the system with a ground on the radio ONLY, but this was no better. (I cannot even recall if it was BETTER or WORSE...)

I have NOT tried to run the system with a ground at the TUNER only; I will try this next.

I have one of them powered by a 12-volt power brick, and one is powered bu a USB connection. (The Altec-Lansing one is the BEST, and is AC-powered; The power supply is built into the bass-woofer speaker box.)

I had not tried the ferrite cores (chokes) on the leads, but I will!

I could also see if I can just run the speaker with a battery.

I had not tried using the radio with a headset. (Brilliant idea!)
Thank you for this one; I should have thought of this, but was

too focused on the speaker applications.

Thank you!!!

-Mike- KOJTA

3459. Re: RF getting into speakers

Yahoo group: SkyWires
Date: 2009-05-15 17:51:14 UTC
From: Mike
Topic: 3456 Message: 3459

--- In SkyWires@yahoogroups.com, "Siegfried Jackstien" <siegfried.jackstien@...> wrote:
>
> try the mfj and put your chokebalun between the tuner and the rig
> do not ground tuner but ground the rig .... that is what i would try first ....
> surely you made a choke for the atu power lines didn´t you ?
> put chokes over EVERY cable that goes in or out of the flexnet
> if you are using amplified speakers try a different set (some are better not getting rf in)
> also try a headphone instead the amplified speakers
> put chokes over the power cord of the speakers
> use a different power outlet for the speakers / the radio / both

UPDATE:
I have tried a LOT more setups, re-arranging the grounds, adding,
deleting, etc.
I have worked toward MINIMIZING the offending noise in the speakers
if I am on SSB or on CW.

I have reached an almost acceptable point...

- I have the LDG AT-100Pro ATU on top of the Flex-3000 radio.
- Adding the ground at the ATU makes no noticable difference.
- The radio IS grounded at this point.
- If I ground one side of the twin-lead that feeds the loop, I
can make a further reduction of the noise.

The Altec-Lansing sub-woofer speaker is the best, so far, but
it still has noise when I transmit.

If I disconnect the external speaker system, I have no noise.
(If I use the HEADSET, I have no noise, as I recall.)

I have added several ferrite chokes on various points; NO HELP.

I have not tried to simply re-arrange the sub-woofer speaker system.
I have not tried to add a ferrite choke on the AC power lead to the
Altec-Lansing speaker system.

I think I will open the speaker system up, and add RF bypassing to
as many points as I can see that would be logical. (At this point,
I am assigning the troubles to my high SWR causing some small bit
of RF to be in the vicinity of the radio, which the speakers that
I have been using, are all sensitive to.

Thanks for the input, so far!!

-Mike- KOJTA

3460. Re: [SkyWires] RF getting into speakers

Yahoo group: SkyWires
Date: 2009-05-15 20:47:36 UTC
From: Andy
Topic: 3456 Message: 3460

A few thoughts. Take these with a grain of salt as my practical experience is somewhat limited; a lot of this is more theory than practice.

Does the amp need to be turned on, and does it depend on the volume setting? This could tell you if the RF is getting into the amp itself, the inputs to the amp, the speakers, or the speaker cables. Often RF appears on the speaker wires acting as receiving antennas, then gets rectified by the amp and turned into sound. This type of RFI may be heard even with the amp turned off.

If they are computer speakers, almost all of them are known for being susceptible to RFI, because they are cheap and poorly designed.

In other words, there might be nothing wrong with your ham setup, but the speaker is at fault, and you can't do anything to the rig or antenna to make it better, short of shutting it off or going QRP. In that case, focus on adding toroids, chokes, capacitors, etc. to the speakers/amp.

> My ground system is far from OK or correct:

I wouldn't worry too much about your ground system, and would NOT suggest trying ways to augment it in an attempt to fix your RFI. With your antenna you don't actually need any ground (except for safety!). A loop antenna is self contained and needs no ground. As long as you feed it properly, there should never be any RF current from your rig into ground. (Now if you were feeding a tower, that would be a different story.)

The feed to the loop should be balanced. When you feed it unbalanced (one side grounded), you are forcing an unbalanced signal onto your ladderline, which makes it an antenna too, and that's not good. Then the return current IS through ground, and that's not what you want. Feed it either from a balun, or a balanced tuner.

Putting the balun between the rig and tuner might be OK as long as you realize this makes the tuner "hot" so you need to isolate it from everything else. Not necessarily hot enough to bite you (though it might), but you want to make sure it can't touch anything else and has minimum coupling to it. You will detune it by touching it. And powering an isolated auto-tuner becomes a problem.

Your station grounds might matter if there is RF current going through them. And ideally there shouldn't be any. As long as there is RF current, you cannot eliminate its effects, you can only reduce them, and 'diminishing returns' quickly comes into play. A ground wire of any length is no longer ground. So focus on eliminating RF ground currents rather than beefing up your grounds in an attempt to reduce their effects.

> I have not tapped into the house-wiring's ground;

Good. Don't. (Except for the usual 3rd pin safety ground.)

> This was
> suggested bu one fellow. (This would mean about a 15 foot
> run of wire to the breaker-box area bu going UP, then to the
> RIGHT-FORWARD to reach the power panels.)

The problem is, if there is an electrical fault, bad things can happen. After your house burns down, your insurance company might deny payment claiming it was your fault.

If you get your RF cleaned up by feeding your balanced antenna with a balanced feed, you may find that you still get RFI. Then you can focus on adding remedies to the affected components. The best place to start, is with any "antenna" that goes into the audio system.

If all else fails, you may even need to think about moving the loop antenna. By definition you are creating a strong RF field, and if your speakers are susceptible to it, your only choice might be to make that RF field not as strong where the speakers are. But if you've got RF ground currents, some of your RF field isn't coming from the antenna, it's coming from your ground wires.

Regards,
Andy

3461. Re: [SkyWires] Re: Just joined group

Yahoo group: SkyWires
Date: 2009-05-16 02:37:50 UTC
From: Jim Dunstan
Topic: 3452 Message: 3461

At 06:57 PM 5/14/2009 +0000, you wrote:

>Thanks Sigi, and also to Alan. I hope it won't be too long before we take
>possession. One thing I'm wondering about, modifying a tuner so that the
>balun is on the rig side, and that being a 1:1. Bringing the balanced line
>right in to the tuner. To minimize loss in the balun by having only
>converting 50ohm balanced to 50ohm unbalanced. Have you, or anyone else
>tried that? And did it make enough of a difference to notice? If it's only
>a marginal improvement, I might not bother with it.
>
>Thanks again!
>Bill KC2SUO

Hi Bill,

I assume you mean connecting the balanced feed line directly to an unbalanced tuner and placing the 1:1 balun on the input side.

Yes, it is certainly possible to do. Yes, I have done it. Yes, it makes a difference. It is not all that difficult to do. It can be accomplished with no actual modification to the tuner other than to take steps to isolate the frame, including the coax input from ground.

One side of the balanced feed line connects to the output of the tuner and the other side of the balanced feed line connects to (ground), the tuner frame. The coax from the radio connects to the input of a 1:1 balun .... one side of the output of the balun connects to the center connector of the coax input of the tuner and the other side of the balun output connects to the tuner ground (frame).

Critics say this arrangement is not a "true" balanced antenna tuner .... whatever that means .... as long as antenna currents are in balance I am satisfied ... and this arrangement will achieve that end. The only problem is that the typical unbalanced antenna tuner may not have sufficient tuning range. this can be accommodated by inserting and removing (as the case may be) lengths of feed line to make up for any shortcoming in this regard.

I presently use this system with an SGC automatic antenna tuner SGC-239 located at the base of the tower ... (inside the basement window). I feed the tuner with coax via a 1:1 balun the output connects to 450 ohm line as outlined above. You need to take care to keep the tuner frame isolated from common ground. The antenna at the top of the tower is a loaded dipole arrangement that covers 40-10m very nicely.

Jim, VE3CI

3462. Re: Just joined group

Yahoo group: SkyWires
Date: 2009-05-16 02:54:43 UTC
From: Alan Wilson
Topic: 3452 Message: 3462

Bill, I tried using direct feed to a Johnson Matchbox then to the rig vs the current setup. I could not tell any difference on transmit signal or receive signal. There might have been some difference but I could not tell it.So, I went with 4 to 1 balun because it was a lot easier to get through the wall to the shack. 73, Alan

3463. Re: [SkyWires] RF getting into speakers

Yahoo group: SkyWires
Date: 2009-05-16 02:56:23 UTC
From: Jim Dunstan
Topic: 3456 Message: 3463

At 03:26 PM 5/15/2009 +0000, you wrote:

>I normally use either of two IC-756 Pro-II radios at two
>locations in my home. Both use the Icom AH-4 auto-antenna
>tuner. Both feed similar 160 Meter loop antennas, fed with
>450 Ohm window (ladder) line. (No balun is used; I simply
>attach the twin-lead feedline to the HOT and GROUND sides.)
>
>I have a new unit, a Flex-3000 radio. The built-in ATU
>(auto antenna tuner) is very limited, so I must use an external
>ATU (tuner) to achieve a match.
>
>I have two two external tuners to try:
>A. MFJ-993 ATU, which has both COAX and a BALANCED output as choices.
>B. LDG AT-100Pro, which has COAX outputs. (No balun built in)
>
>My Flex-Radio appears to have a good enough transmitted signal,
>per the reports I get, compared to the (to me, GOLDEN) reports
>that I get if I use the Icom radio on this same antenna. (The
>other Icom setup is upstairs; It has a similar signal,
>when comparing.)
>
>My point is that the Flex is doing well, as far as receive
>and transmit signals.
>
>BUT: I have varying degrees of RF getting into whatever speaker
>that I use. The degree differs from band to band. (20 Meters
>causes the greatest amount of "muffled sounds" as I transmit in
>SSB mode.)
>
>I have tried a ground at the Flex-Radio, and at the tuner.
>
>I have NOT lifted the ground at the radio, as a trial!
>
>I have moved the tuner from on top of the Flex-Radio to a point
>that is ten or twelve feet removed from the Flex-Radio, so that
>it is at the same point or area as the 450 Ohm feed-line
>actually ENDS. (This is achieved by cobbling together three
>pieces of RG-58 coax, with UHF barrels to join the too-short
>coax length's PL-259 connectors.)
>
>I have tried both a 4:1 and a 1:1 current balun; The 1:1
>is noticeably EASIER FOR THE ATU TO TUNE, but no great difference
>is seen between the two as far as the RF-in-the-speakers problem.
>

>I do have a home-made "RF choke" that I built some time back; It
>is about 10 to 15 turns of RG-213 coax wound on a 5 inch PVC
>tube. It is fed with an SO-239, and was preciously attached
>to a 450 Ohm twin-lead fed antenna. I HAVE NOT TRIED this choke,
>yet
>
>My ground system is far from OK or correct: The radio is on a
>bench at an inner wall of my basement. The ground wire has to
>be routed UP, then OVER (to the LEFT) to the outer wall of
>the basement shop, then to the ground.
>
>The ground situation appears to be able to "control" the degree
>of my speaker-barking the most. (All is OK and clean, if I use
>a dummy load, of course.)
>
>So far, the MFJ-993, employing the unit's built-in Balun, is the
>cleanest, by a noticeable amount!
>
>I have not tapped into the house-wiring's ground; This was
>suggested bu one fellow. (This would mean about a 15 foot
>run of wire to the breaker-box area bu going UP, then to the
>RIGHT-FORWARD to reach the power panels.)
>
>I am looking for some hints or ideas, please.
>
>Thank you!!! -Mike- KOJTA

Hi Mike,

See my previous post. I have a similar antenna arrangement in that I have an ATU that normally connects to an unbalanced output. I also connect 450 ohm line in the same manner you have outlined ... e.g. one side to the hot connector and the other side to the tuner frame (ground). The difference is I isolate the tuner from RF ground at the input connector by using a 1:1 balun.

The balanced line comes in at the basement window and connects to the tuner at that point .... the operating position is at the other end of the basement (about 35 ft.) coax joins the radio to the tuner. The arrangement maintains RF balance on the 450 ohm line and removes RF from the outside of the coax feed line. I use a SGC-239 tuner ... similar type to your AH-4. I also tried the other arrangement ... as you mentioned ... e.g. putting the balun between the 450 ohm line and the tuner ... with much less success. The only care is to be sure the tuner frame stays isolated from any common ground.

I am sure if you used this system you would avoid your rf problem.

PS I also used a Flexradio SDR-1000 with this arrangement with no RF problems.

Jim, VE3CI

3464. Re: [SkyWires] Re: RF getting into speakers

Yahoo group: SkyWires
Date: 2009-05-15 22:35:52 UTC
From: Siegfried Jackstien
Topic: 3456 Message: 3464

glad if i could help
----- Original Message -----
From: Mike
To: SkyWires@yahoogroups.com
Sent: Friday, May 15, 2009 7:51 PM
Subject: [SkyWires] Re: RF getting into speakers

--- In SkyWires@yahoogroups.com, "Siegfried Jackstien" <siegfried.jackstien@...> wrote:
>
> try the mfj and put your chokebalun between the tuner and the rig
> do not ground tuner but ground the rig .... that is what i would try first ....
> surely you made a choke for the atu power lines didn´t you ?
> put chokes over EVERY cable that goes in or out of the flexnet
> if you are using amplified speakers try a different set (some are better not getting rf in)
> also try a headphone instead the amplified speakers
> put chokes over the power cord of the speakers
> use a different power outlet for the speakers / the radio / both

UPDATE:
I have tried a LOT more setups, re-arranging the grounds, adding,
deleting, etc.
I have worked toward MINIMIZING the offending noise in the speakers
if I am on SSB or on CW.

I have reached an almost acceptable point...

- I have the LDG AT-100Pro ATU on top of the Flex-3000 radio.
- Adding the ground at the ATU makes no noticable difference.
- The radio IS grounded at this point.
- If I ground one side of the twin-lead that feeds the loop, I
can make a further reduction of the noise.

The Altec-Lansing sub-woofer speaker is the best, so far, but
it still has noise when I transmit.

If I disconnect the external speaker system, I have no noise.
(If I use the HEADSET, I have no noise, as I recall.)

I have added several ferrite chokes on various points; NO HELP.

I have not tried to simply re-arrange the sub-woofer speaker system.
I have not tried to add a ferrite choke on the AC power lead to the
Altec-Lansing speaker system.

I think I will open the speaker system up, and add RF bypassing to
as many points as I can see that would be logical. (At this point,

I am assigning the troubles to my high SWR causing some small bit of RF to be in the vicinity of the radio, which the speakers that I have been using, are all sensitive to.

Thanks for the input, so far!!

-Mike- KOJTA

3465. Re: [SkyWires] Re: Just joined group

Yahoo group: SkyWires
Date: 2009-05-16 11:28:29 UTC
From: Siegfried Jackstien
Topic: 3452 Message: 3465

i used a 1:4 on the output side of a fc1000 yaesu atu .... works almost anywhere with almost any lenght of wire
dg9bfc
sigi

----- Original Message -----
From: Jim Dunstan
To: SkyWires@yahoogroups.com
Sent: Saturday, May 16, 2009 4:37 AM
Subject: Re: [SkyWires] Re: Just joined group

At 06:57 PM 5/14/2009 +0000, you wrote:

>Thanks Sigi, and also to Alan. I hope it won't be too long before we take
>possession. One thing I'm wondering about, modifying a tuner so that the
>balun is on the rig side, and that being a 1:1. Bringing the balanced line
>right in to the tuner. To minimize loss in the balun by having only
>converting 50ohm balanced to 50ohm unbalanced. Have you, or anyone else
>tried that? And did it make enough of a difference to notice? If it's only
>a marginal improvement, I might not bother with it.
>
>Thanks again!
>Bill KC2SUO

Hi Bill,

I assume you mean connecting the balanced feed line directly to an unbalanced tuner and placing the 1:1 balun on the input side.

Yes, it is certainly possible to do. Yes, I have done it. Yes, it makes a difference. It is not all that difficult to do. It can be accomplished with no actual modification to the tuner other than to take steps to isolate the frame, including the coax input from ground.

One side of the balanced feed line connects to the output of the tuner and the other side of the balanced feed line connects to (ground), the tuner frame. The coax from the radio connects to the input of a 1:1 balun .... one side of the output of the balun connects to the center connector of the coax input of the tuner and the other side of the balun output connects to the tuner ground (frame).

Critics say this arrangement is not a "true" balanced antenna tuner .... whatever that means .... as long as antenna currents are in balance I am satisfied ... and this arrangement will achieve that end. The only problem is that the typical unbalanced antenna tuner may not have sufficient tuning range. this can be accommodated by inserting and removing (as the case may be) lengths of feed line to make up for any shortcoming in this regard.

I presently use this system with an SGC automatic antenna tuner SGC-239 located at the base of the tower ... (inside the basement window). I feed the tuner with coax via a 1:1 balun the output connects to 450 ohm line as outlined above. You need to take care to keep the tuner frame isolated from common ground. The antenna at the top of the tower is a loaded dipole arrangement that covers 40-10m very nicely.

Jim, VE3CI

3466. Re: RF getting into speakers

Yahoo group: SkyWires
Date: 2009-05-16 14:49:46 UTC
From: Mike
Topic: 3456 Message: 3466

--- In SkyWires@yahoogroups.com, Andy <ai.egrps@...> wrote:
>
> A few thoughts. Take these with a grain of salt as my practical experience
> is somewhat limited; a lot of this is more theory than practice.
>
> Does the amp need to be turned on, and does it depend on the volume setting?
> This could tell you if the RF is getting into the amp itself, the inputs to
> the amp, the speakers, or the speaker cables. Often RF appears on the
> speaker wires acting as receiving antennas, then gets rectified by the amp
> and turned into sound. This type of RFI may be heard even with the amp
> turned off.

Good day, and THANK YOU for your comment. Your first point brings up a new point of attack, maybe:

In my case, I get the almost static-line (HEAVY static sounds) on some bands if I have the powered speakers turned ON, but only allow the SHIELD of the input stereo plug to contact a ground on the Flex-Radio, and then transmit in SSB.

I mention this, as it is different from your fist paragraph's points/queries.

Yes, the speaker must be turned ON, I BELIEVE. (Almost sure.)

I DO NOT think the powered speaker's VOLUME CONTROL has an effect.

I have opened up the speaker system's base unit, preparing to add some bypass caps, so it is not functional at the moment. -So, I cannot tell you with absolute certainty.

>
> If they are computer speakers, almost all of them are known for being
> susceptible to RFI, because they are cheap and poorly designed.

Yes, these are speakers that are intended to be fed by a computer. The base unit is heavy at 6 to 7 pounds, and is a unit that houses the 110 VAC power supply as well as the amplifier and the large bass speaker.

>
> In other words, there might be nothing wrong with your ham setup, but the
> speaker is at fault, and you can't do anything to the rig or antenna to make
> it better, short of shutting it off or going QRP. In that case, focus on
> adding toroids, chokes, capacitors, etc. to the speakers/amp.

I'd tend to agree, but I have an IC-756 Pro-II at the same location in my basement shop. It feeds the same antenna, via an AH-4 auto-antenna tuner. No troubles.

>
> > My ground system is far from OK or correct:
>

> I wouldn't worry too much about your ground system, and would NOT suggest
> trying ways to augment it in an attempt to fix your RFI. With your antenna
> you don't actually need any ground (except for safety!). A loop antenna is
> self contained and needs no ground. As long as you feed it properly, there
> should never be any RF current from your rig into ground. (Now if you were
> feeding a tower, that would be a different story.)

You are highly correct on the loop NOT having a need for a ground. However, in my case, I am "providing" a ground, as the ATU is being fed by a coax cable from the Icom radio; The ATU is -intended- to be feeding a long-wire antenna. But in my case (and I have done this with several installations; This is one of three that I NOW HAVE IN SERVICE, and all have the twin-lead (window-line) wires attached to the HOT side of the AH-4 ATU, and the GROUND POST of the ATU.

This does not make it right; It is just the way I am doing it. I have seen and read of many others with the same configuration, so it is almost an acceptable method.

Again, if I use the Icom radio and AH-4 ATU, I have no to EXTREMELY LITTLE RF getting into the powered speakers...

So here, the ground is my FRIEND!!

I had also found that if I try to duplicate this grounded side "design" that I now use with the AH-4 ATU units, I get a significant decrease in the RFI to the speakers. My transmitted signal does not suffer, so I feel no allegiance to adhering to my NOT grounding a leg of the twin-lead antenna feed line.

>
> The feed to the loop should be balanced. When you feed it unbalanced (one
> side grounded), you are forcing an unbalanced signal onto your ladder-line,
> which makes it an antenna too, and that's not good. Then the return current
> IS through ground, and that's not what you want. Feed it either from a
> balun, or a balanced tuner.

VERY interesting point!!!!!!!!!

I say this, as I had attached the MFJ-993 ATU to the loop's feed-line; I felt that the RF that was floating about was reduced, but this was too far back to recall exactly. But, you make a good point!!!

>
> Putting the balun between the rig and tuner might be OK as long as you
> realize this makes the tuner "hot" so you need to isolate it from everything
> else. Not necessarily hot enough to bite you (though it might), but you
> want to make sure it can't touch anything else and has minimum coupling to
> it. You will detune it by touching it. And powering an isolated auto-tuner

My baluns are both set up with an SO-239 input and have wires as the outputs. They are both intended to feed a dipole, etc, and act as the center insulator.

So, I cannot put it in series, locating it between the radio and the ATU, I am afraid.

> becomes a problem.
>
> Your station grounds might matter if there is RF current going through them.
> And ideally there shouldn't be any. As long as there is RF current, you
> cannot eliminate its effects, you can only reduce them, and 'diminishing
> returns' quickly comes into play. A ground wire of any length is no longer
> ground. So focus on eliminating RF ground currents rather than beefing up
> your grounds in an attempt to reduce their effects.
>

Yes, I agree...

If I add or remove a ground, the "pattern" or degree of RF into the speaker system shows a change.

> > I have not tapped into the house-wiring's ground;
>
> Good. Don't. (Except for the usual 3rd pin safety ground.)
>
> > This was
> > suggested bu one fellow. (This would mean about a 15 foot
> > run of wire to the breaker-box area bu going UP, then to the
> > RIGHT-FORWARD to reach the power panels.)
>
> The problem is, if there is an electrical fault, bad things can happen.
> After your house burns down, your insurance company might deny payment
> claiming it was your fault.

EXTREMELY good point!!!!!

>
> If you get your RF cleaned up by feeding your balanced antenna with a
> balanced feed, you may find that you still get RFI. Then you can focus on
> adding remedies to the affected components. The best place to start, is
> with any "antenna" that goes into the audio system.

I think I have the RFI with any/all of my tuners.

This is why I am considering attacking the design of the speaker.

I am thinking of the possibility of adding an isolation RESISTOR in the shield, or ground return of the input to the powered speaker.

I mention this, as the dramatic HEAVT crackle that I hear if I have only the shield or ground of the input lead of the powered speakers touching a ground on the tuner or the radio!!

>
> If all else fails, you may even need to think about moving the loop antenna.
> By definition you are creating a strong RF field, and if your speakers are
> susceptible to it, your only choice might be to make that RF field not as
> strong where the speakers are. But if you've got RF ground currents, some
> of your RF field isn't coming from the antenna, it's coming from your ground
> wires.

>
> Regards,
> Andy
>

Yep; I agree, Andy. I have a strong field. The shield-to-grounding crackle is the interesting point... This CRACKLE is so very loud and very dramatic ON SOME BANDS, such as on 17 Meters, in my case..! Other bands, it is OK to non-existent.

Thank you VERY MUCH; You have given me a LOT to try. I hope that I have answered your points. More importantly, I hope that my earliest statements on the shield-to-ground as the only need to produce the RFI will give you the AHAA! factor.
-Mike- KOJTA

3467. Re: RF getting into speakers

Yahoo group: SkyWires
Date: 2009-05-16 15:01:16 UTC
From: Mike
Topic: 3456 Message: 3467

>
> Hi Mike,
>
> See my previous post. I have a similar antenna arrangement in that I have
> an ATU that normally connects to an unbalanced output. I also connect 450
> ohm line in the same manner you have outlined ... e.g. one side to the hot
> connector and the other side to the tuner frame (ground). The difference
> is I isolate the tuner from RF ground at the input connector by using a 1:1
> balun.

OK; I do NOT have one of these units.
My two baluns (a 1:1 and a 4:1) both have an SO-239 as the input; The outputs are simply wires, intended to attach to a dipole, etc.

Now, I do have this home-made "RF Choke" doo-dad that I had made up some time back; It has an SO-239 at the input, and the RG-8 coax was set up with the shield and the center as the two connections that would feed the twin-lead of the loop antenna. maybe I could cobble a second SO-239 there, and see if this would offer an IMPROVEMENT!!!

>
> The balanced line comes in at the basement window and connects to the tuner
> at that point .... the operating position is at the other end of the
> basement (about 35 ft.) coax joins the radio to the tuner. The arrangement
> maintains RF balance on the 450 ohm line and removes RF from the outside of
> the coax feed line. I use a SGC-239 tuner ... similar type to your
> AH-4. I also tried the other arrangement ... as you mentioned ... e.g.
> putting the balun between the 450 ohm line and the tuner ... with much less
> success. The only care is to be sure the tuner frame stays isolated from
> any common ground.

OK, except for the fact that (in my case) I was unable to add either of my baluns to the "input" of the tuner. I added the baluns at the output of my LDG AT-100Pro ATU. The LDG tuners have SO-239 connectors as the input and output.

But, yes: in the case where you were duplicating my AH-4 ATU-to-Icom setup: This is the same. But... In this case, I have no to very little RFI!!!

I only have the RFI issue when I run the Flex-3000, feeding an LDG AT-100Pro tuner, with the SO-239 output, Here, I felt the need to add the 1:1 balun.

>
> I am sure if you used this system you would avoid your rf problem.
>
> PS I also used a Flexradio SDR-1000 with this arrangement with no RF problems.
>

U used to have an SDR-1000, also; In this case, I used the SDR-1000's built in ATU. I could feed it through a balun or I could simply attach the window-line to the BNC connector at the RF output port of the '1000. It ran fine. I had no RFI. (Go figger...)

73!!! -Mike- KOJTA

3468. Re: [SkyWires] Re: RF getting into speakers

Yahoo group: SkyWires
Date: 2009-05-16 15:53:20 UTC
From: Siegfried Jackstien
Topic: 3456 Message: 3468

dear mike
what about af-transformers between your rig setup and your amplified speakers ....
what helps from getting no ground loops on transmitting and receiving via a souncard could probably help with your rfi problem ....
speakers and trx setup/pc are now isolated with different grounds and/or floating ground ....
that is on the speaker side .....
putting your 1:4 on the OUPUT side of your tuner is the other thing to try ....
output can be atached to ladderline so that is no problem .... for the input i would take a short lenght of coax wit one plug and would put the plug to the balun input
now strip off a lenght of the isolation to connect this to your atu.... if this works okay you can build a homebrewed 1:4 and put it there
let the other balun there
or put a homebrewed balun IN the atu with a jumper wire outside if there is room in your atu
good luck
dg9bfc
sigi
----- Original Message -----
From: Mike
To: SkyWires@yahoogroups.com
Sent: Saturday, May 16, 2009 5:01 PM
Subject: [SkyWires] Re: RF getting into speakers

>
> Hi Mike,
>
> See my previous post. I have a similar antenna arrangement in that I have
> an ATU that normally connects to an unbalanced output. I also connect 450
> ohm line in the same manner you have outlined ... e.g. one side to the hot
> connector and the other side to the tuner frame (ground). The difference
> is I isolate the tuner from RF ground at the input connector by using a 1:1
> balun.

OK; I do NOT have one of these units.
My two baluns (a 1:1 and a 4:1) both have an SO-239 as the input; The outputs are simply wires, intended to attach to a dipole, etc.

Now, I do have this home-made "RF Choke" doo-dad that I had made up some time back; It has an SO-239 at the input, and the RG-8 coax was set up with the shield and the center as the two connections that would feed the twin-lead of the loop antenna. maybe I could cobble a second SO-239 there, and see if this would offer an IMPROVEMENT!!!

>
> The balanced line comes in at the basement window and connects to the tuner
> at that point .... the operating position is at the other end of the

> basement (about 35 ft.) coax joins the radio to the tuner. The arrangement
> maintains RF balance on the 450 ohm line and removes RF from the outside of
> the coax feed line. I use a SGC-239 tuner ... similar type to your
> AH-4. I also tried the other arrangement ... as you mentioned ... e.g.
> putting the balun between the 450 ohm line and the tuner ... with much less
> success. The only care is to be sure the tuner frame stays isolated from
> any common ground.

OK, except for the fact that (in my case) I was unable to add either of my baluns to the "input" of the tuner. I added the baluns at the output of my LDG AT-100Pro ATU. The LDG tuners have SO-239 connectors as the input and output.

But, yes: in the case where you were duplicating my AH-4 ATU-to-Icom setup: This is the same. But... In this case, I have no to very little RFI!!!

I only have the RFI issue when I run the Flex-3000, feeding an LDG AT-100Pro tuner, with the SO-239 output, Here, I felt the need to add the 1:1 balun.

>
> I am sure if you used this system you would avoid your rf problem.
>
> PS I also used a Flexradio SDR-1000 with this arrangement with no RF problems.
>

U used to have an SDR-1000, also; In this case, I used the SDR-1000's built in ATU. I could feed it through a balun or I could simply attach the window-line to the BNC connector at the RF output port of the '1000. It ran fine. I had no RFI. (Go figger...)

73!!! -Mike- KOJTA

3469. Re: [SkyWires] Re: RF getting into speakers

Yahoo group: SkyWires
Date: 2009-05-16 19:22:56 UTC
From: Jim Dunstan
Topic: 3456 Message: 3469

At 03:01 PM 5/16/2009 +0000, you wrote:

> >
> > Hi Mike,
> >
> > See my previous post. I have a similar antenna arrangement in that I have
> > an ATU that normally connects to an unbalanced output. I also connect 450
> > ohm line in the same manner you have outlined ... e.g. one side to the hot
> > connector and the other side to the tuner frame (ground). The difference
> > is I isolate the tuner from RF ground at the input connector by using a
> 1:1
> > balun.
>
>OK; I do NOT have one of these units.
>My two baluns (a 1:1 and a 4:1) both have an SO-239 as the input; The
>outputs are simply wires, intended to attach to a dipole, etc.
>
>Now, I do have this home-made "RF Choke" doo-dad that I had made up some
>time back; It has an SO-239 at the input, and the RG-8 coax was set up
>with the shield and the center as the two connections that would feed the
>twin-lead of the loop antenna. maybe I could cobble a second SO-239 there,
>and see if this would offer an IMPROVEMENT!!!

That is exactly my situation .... my 1:1 balun has a coax input and 2 terminals (wires) at the output. One balun output wire goes to tuner ground and the other goes to the center pin on the coax input !!!! simple .... the distance between the 1:1 balun and the tuner is about 3 inches.

In the case of the SGC tuner there is no coax input connector .... just direct connections to the circuit board. I have used the system with both types of tuners ... those with a coax input connector and those without.

Putting the balun between the tuner and the radio (next to the tuner) is easily accomplished regardless of the kind of connectors on the tuner. After all, a coax connector is a 2 point connector (ground frame and center pin to the unbalanced tuner circuit). the only amputation necessary is if the tuner input uses a feed thru coax. Most of the SGC auto tuners come with a length of coax at the input. If you have an actual coax connector at the input and output of the tuner the problem is easily solved with 2 short (few inches) lengths of coax with a male connector on one end and shield and center conductor exposed at the other. Then you don't have to do perform any mod to the tuner. The shield and center conductor simply connect to the balun output. At the other side of the tuner the shield and center conductor would connect to the parallel feed line. Be sure to keep the frame of the tuner above ground .... and voila

you have a reasonable facsimile of a balanced antenna tuner .... and no RF on the coax to the radio.

I have tried several types of 1:1 baluns: 1- simple coax wound in a coil (moderately effective and bulky) 2. parallel wires wound on a ferrite core (much more effective and less bulky 3. a pair of air wound bifiler coils hooked up as a 1:1 transmission line transformer (also bulky ... but the best performance). This arrangement (balun on the radio side of the tuner is far superior to the opposite arrangement. Stable, predictable, and NO RF coming into the shack.

Jim, VE3CI

3470. Re: RF getting into speakers

Yahoo group: SkyWires
Date: 2009-05-16 21:21:13 UTC
From: Mike
Topic: 3456 Message: 3470

--- In SkyWires@yahoogroups.com, Jim Dunstan <jdunstan@...> wrote:
>
> At 03:01 PM 5/16/2009 +0000, you wrote:
>

> >Now, I do have this home-made "RF Choke" doo-dad that I had made up some
> >time back; It has an SO-239 at the input, and the RG-8 coax was set up
> >with the shield and the center as the two connections that would feed the
> >twin-lead of the loop antenna. maybe I could cobble a second SO-239 there,
> >and see if this would offer an IMPROVEMENT!!!
>
> That is exactly my situation .... my 1:1 balun has a coax input and 2
> terminals (wires) at the output. One balun output wire goes to tuner
> ground and the other goes to the center pin on the coax input !!!!
> simple .... the distance between the 1:1 balun and the tuner is about 3
> inches.
>
....

> Putting the balun between the tuner and the radio (next to the tuner) is
> easily accomplished regardless of the kind of connectors on the
> tuner. After all, a coax connector is a 2 point connector (ground frame
> and center pin to the unbalanced tuner circuit). the only amputation
> necessary is if the tuner input uses a feed thru coax. Most of the SGC
> auto tuners come with a length of coax at the input. If you have an actual
> coax connector at the input and output of the tuner the problem is easily
> solved with 2 short (few inches) lengths of coax with a male connector on
> one end and shield and center conductor exposed at the other. Then you

OK!!! This sounds the most promising!!! Thank you VERY much for the detailed explanation. In my case, the LDG tuner has SO-239 connectors at the input as well as the output, so I am going to duplicate your efforts. It seems that I'll be able to do this with ease.

> don't have to do perform any mod to the tuner. The shield and center
> conductor simply connect to the balun output. At the other side of the
> tuner the shield and center conductor would connect to the parallel feed
> line. Be sure to keep the frame of the tuner above ground .... and voila
> you have a reasonable facsimile of a balanced antenna tuner .... and no RF
> on the coax to the radio.

Oooops... This might be a "gotcha, as my ATU units (Auto-antenna tuners) are in need of DC power. So, I'll not be able to do as you had said, "Be sure to keep the frame of the tuner above ground" I'm afraid. (The power-brick is sort of tied back to the AC mains...) If this is a factor, I will see if I can TUNE, then disconnect the ATU... As an experiment, if nothing else. If I do need to drop the power brick, maybe I can do a battery-operated setup.

>
> I have tried several types of 1:1 baluns: 1- simple coax wound in a coil
> (moderately effective and bulky) 2. parallel wires wound on a ferrite core
> (much more effective and less bulky 3. a pair of air wound bifiler coils
> hooked up as a 1:1 transmission line transformer (also bulky ... but the
> best performance). This arrangement (balun on the radio side of the tuner
> is far superior to the opposite arrangement. Stable, predictable, and NO
> RF coming into the shack.
>
> Jim, VE3CI
>

Excellent info, Jim!! (Thank you, AGAIN!) I will try the home-made single winding choke that I made up from a length of RG-8 coax. If this does indeed give me a good result, I will have to see if I can duplicate the "better" designs that you have mentioned.

Yes, in my case, I had the Balun on the "wrong side" of the tuner! (Very interesting!!!)

Your mention of "parallel wires wound on a ferrite core" is puzzling: Is the "parallel wires" to be two runs of RG-8 coax? -Or a run of (what length) 450 Ohm twin-lead..?

The same goes for your description of "a pair of air wound bifiler coils" applies. (Very interesting, but still a puzzle. Is this stuff going to be found in my ARRL handbook? -Or in my wire-type-antenna book by ARRL?)

I just got home from helping a friend erect two towers, so I am BEAT. But I will try to get at this as soon as I can.

73!!! -Mike- KOJTA

3471. Re: RF getting into speakers

Yahoo group: SkyWires
Date: 2009-05-16 21:32:58 UTC
From: Mike
Topic: 3456 Message: 3471

--- In SkyWires@yahoogroups.com, "Siegfried Jackstien" <siegfried.jackstien@...> wrote:
>
> dear mike
> what about af-transformers between your rig setup and your amplified speakers ....
> what helps from getting no ground loops on transmitting and receiving via a souncard could
> probably help with your rfi problem ....
> speakers and trx setup/pc are now isolated with different grounds and/or floating ground ....
> that is on the speaker side .....

YES!! I had considered this at first, but I have no isolation transformers available at this time.

Yours is an excellent idea!!!

I had also considered a "rubber" connection to the return or ground side of the stereo input connector-cable: In this, I was thinking of adding CARBON RESISTORS in the connections, thinking that this might drop the effect that I now see, if I simply touch the shield of the plug)from the speaker) to any frame-ground on the radio or on the LDG tuner. (As it now is, I get a very DRAMATIC noise (crackle, etc.) if I transmit on SSB on 17 Meters, if just the shield or common connector is touching ground on the radio.)

In the case of my adding return-resistors, I was hoping that the heavy SOUNDING signal would be largely absorbed by the resistor, yet, I'd have enough of the desired audio to work for me.

> putting your 1:4 on the OUPUT side of your tuner is the other thing to try ....
> output can be atached to ladderline so that is no problem .... for the input i would take a short lenght of coax wit one plug and would put the plug to the balun input
> now strip off a lenght of the isolation to connect this to your atu.... if this works okay
> you can build a homebrewed 1:4 and put it there
> let the other balun there
> or put a homebrewed balun IN the atu with a jumper wire outside if there is room in your atu

As for placing the Baluns on the OUTPUT SIDE OF THE TUNER, this is what I had been doing. This was not doing the trick for me. This was also "voted down" by another fellow (Jim) whose comments I just answered. So... I have done this, and I must say that it most likely did some good, but it did not resolve the issue. (I tried both a 1:1 and a 4:1 Balun; The 1:1 seems to be the best.)

Thank you VERY MUCH for your helpful comments!!!!

73! -Mike- KOJTA

3472. Re: [SkyWires] Re: RF getting into speakers

Yahoo group: SkyWires
Date: 2009-05-17 02:39:47 UTC
From: Jim Dunstan
Topic: 3456 Message: 3472

At 09:21 PM 5/16/2009 +0000, you wrote:

>OK!!! This sounds the most promising!!! Thank you VERY much for the
>detailed explanation. In my case, the LDG tuner has SO-239 connectors at
>the input as well as the output, so I am going to duplicate your efforts.
>It seems that I'll be able to do this with ease.
>
> > don't have to do perform any mod to the tuner. The shield and center
> > conductor simply connect to the balun output. At the other side of the
> > tuner the shield and center conductor would connect to the parallel feed
> > line. Be sure to keep the frame of the tuner above ground .... and voila
> > you have a reasonable facsimile of a balanced antenna tuner .... and no RF
> > on the coax to the radio.
>
>Oooops... This might be a "gotcha, as my ATU units (Auto-antenna tuners)
>are in need of DC power. So, I'll not be able to do as you had said, "Be
>sure to keep the frame of the tuner above ground" I'm afraid. (The
>power-brick is sort of tied back to the AC mains...) If this is a factor,
>I will see if I can TUNE, then disconnect the ATU... As an experiment, if
>nothing else. If I do need to drop the power brick, maybe I can do a
>battery-operated setup.

I forgot to mention .... with my SGC 239 auto tuner I also use a bifiler wound RF choke for the power line. At the moment I use a ferrite doughnut (about 2" in diameter) .... comes from an old TV set. I wound a pair of insulated wires (approx 16 guage) - and + 12 vdc. about 12 turns to form an RF choke. It can also be wound on a ferrite rod to form a choke.

Jim, VE3CI

3473. Re: RF getting into speakers

Yahoo group: SkyWires
Date: 2009-05-17 03:29:12 UTC
From: Mike
Topic: 3456 Message: 3473

--- In SkyWires@yahoogroups.com, Andy <ai.egrps@...> wrote:
>
> A few thoughts. Take these with a grain of salt as my practical experience
> is somewhat limited; a lot of this is more theory than practice.
>
> Does the amp need to be turned on, and does it depend on the volume setting?
> This could tell you if the RF is getting into the amp itself, the inputs to
> the amp, the speakers, or the speaker cables. Often RF appears on the
> speaker wires acting as receiving antennas, then gets rectified by the amp
> and turned into sound. This type of RFI may be heard even with the amp
> turned off.
>

Andy;

A short re-cap for you, with some more observations and answers to your queries:

The amp DOES NEED TO BE TURNED ON for me to hear the RFI.

If the amp is not turned on (By unplugging the 115 VAC, as there is no power switch), I do not hear any noise at all. (No receiver, no CRACKLE if the BCI, etc.)

The RFI (HEAVY crackle) that I hear is independent on the volume setting of the Altec-Lansing powered subwoofer-speakers.

I hear the RFI if the speakers are attached to the Flex-3000 radio, in the normal audio-out to the speaker situation.

I hear the heavy CRACKLE if I disconnect the plug that is normally plugged into the radio's LINE OUT port, and simply TOUCH THE BARREL or the GROUND/SHIELD to a common ground point, or screw on the radio.

If I unplug the input cable from the radio, I have no RFI. (The cable is still attached to the input port of the speaker unit.)

I have added .01 uFd capacitors to bypass the 115 VAC as well as both sides of the stereo inputs on the powered speaker. This was no help at all.

If I operate the radio into an MFJ dummy load, I have no RFI

When I attach the antenna, I have varying degrees of RFI; It is worst on 20 Meters. It is present to a small degree on 75 Meters. It is OK to non-existent on all other bands.

What is all of this telling you?

Thank you!!! -Mike- KOJTA

3474. Re: [SkyWires] Re: RF getting into speakers

Yahoo group: SkyWires
Date: 2009-05-17 10:53:10 UTC
From: Siegfried Jackstien
Topic: 3456 Message: 3474

dear mike
i think that resistor would not help
ground loop problems can NOT be solved with resistors
resistors are the reason for potetial differences
potetial differences are the reason for hum noise etc....
so audio transformers surely would help ..... look in your junk box ... or in your old computer "waiste" :-)
got an old modemcard ... telephone modem ... telephone answering machine????
there you can find transformers ....
if you have the problems only on 1 or 2 bands try a different lenght of ladder line
maybe with your setup you have on 17 a high voltage point on your lower side of the ladder line
try to lenghten or shorten it a bit ... now you are on a current point and your balun would work better
maybe THAT solves your problem
dg9bfc
sigi
----- Original Message -----
From: Mike
To: SkyWires@yahoogroups.com
Sent: Saturday, May 16, 2009 11:32 PM
Subject: [SkyWires] Re: RF getting into speakers

--- In SkyWires@yahoogroups.com, "Siegfried Jackstien" <siegfried.jackstien@...> wrote:
>
> dear mike
> what about af-transformers between your rig setup and your amplified speakers ....
> what helps from getting no ground loops on transmitting and receiving via a souncard could
> probably help with your rfi problem ....
> speakers and trx setup/pc are now isolated with different grounds and/or floating ground ....
> that is on the speaker side .....

YES!! I had considered this at first, but I have no isolation transformers available at this time.

Yours is an excellent idea!!!

I had also considered a "rubber" connection to the return or ground side of the stereo input connector-cable: In this, I was thinking of adding CARBON RESISTORS in the connections, thinking that this might drop the effect that I now see, if I simply touch the shield of the plug)from the speaker) to any frame-ground on the radio or on the LDG tuner. (As it now is, I get a very DRAMATIC noise (crackle, etc.) if I transmit on SSB on 17 Meters, if just the shield or common connector is touching ground on the radio.)

In the case of my adding return-resistors, I was hoping that the heavy SOUNDING signal would be largely absorbed by the resistor, yet, I'd have enough of the desired audio to work for me.

> putting your 1:4 on the OUPUT side of your tuner is the other thing to try ....
> output can be atached to ladderline so that is no problem .... for the input i would take a short lenght of coax wit one plug and would put the plug to the balun input
> now strip off a lenght of the isolation to connect this to your atu.... if this works okay
> you can build a homebrewed 1:4 and put it there
> let the other balun there
> or put a homebrewed balun IN the atu with a jumper wire outside if there is room in your atu

As for placing the Baluns on the OUTPUT SIDE OF THE TUNER, this is what I had been doing. This was not doing the trick for me. This was also "voted down" by another fellow (Jim) whose comments I just answered. So... I have done this, and I must say that it most likely did some good, but it did not resolve the issue. (I tried both a 1:1 and a 4:1 Balun; The 1:1 seems to be the best.)

Thank you VERY MUCH for your helpful comments!!!!

73! -Mike- KOJTA

3475. Re: [SkyWires] Re: RF getting into speakers

Yahoo group: SkyWires
Date: 2009-05-17 11:18:12 UTC
From: Siegfried Jackstien
Topic: 3456 Message: 3475

snip
When I attach the antenna, I have varying degrees of RFI; It is worst on 20 Meters. It is present to a small degree on 75 Meters. It is OK to non-existent on all other bands.
snip

dipole 40m plus feedingline of 20m or 60m ..... high impedance on 75m (and on 20m)
different lenght could help

dg9bfc
sigi

3476. Re: RF getting into speakers

Yahoo group: SkyWires
Date: 2009-05-18 17:36:29 UTC
From: Mike
Topic: 3456 Message: 3476

--- In SkyWires@yahoogroups.com, "Siegfried Jackstien" <siegfried.jackstien@...> wrote:
>
> dear mike
> i think that resistor would not help
> ground loop problems can NOT be solved with resistors
> resistors are the reason for potetial differences
> potetial differences are the reason for hum noise etc....

Your logic is CORRECT.

I chose to try resistors, as I would have the severe CRACKLE in the Altec-Lansing powered speakers if I had the SHIELD touching a ground-point on the Flex-3000 radio.

I have two cables that I use with a SOFTROCK (RXTXv6.3) radio; These cables have mini-stereo plugs on one end, and a female header-connector on the other end(s).

I first added 2.7 K resistors to the ground, then to all three leads. (I had the resistors plugged into each of the felaye connectors, which effectively duplicated the cable that was now in use to couple the Flex radio to the powered speakers.) The RFI has decreased a lot.

I went to 10K Ohm resistors as an experiment; The RFI noise dropped a LOT more.

But, as one would expect, the receiver's audio dropped more.

All in all, I have dropped the offending hash (the crackle-pop I hear if I transmit) my 95 percent. The audio level is Ok, as I still have more than enough.

BUT: I am simply MASKING the problem! It is not a cure!

> so audio transformers surely would help ..... look in your junk box ... or in your old computer "waiste" :-)
> got an old modemcard ... telephone modem ... telephone answering machine????
> there you can find transformers ....

I will look for audio transformers!!! I had this same idea, but I was considering getting a couple of audio transformers from Radio-Shack. -I had not considered looking for an old piece of equipment that would allow me to achieve the task. (Great idea!!!)

> if you have the problems only on 1 or 2 bands try a different lenght of ladder line
> maybe with your setup you have on 17 a high voltage point on your lower side of the ladder line
> try to lenghten or shorten it a bit ... now you are on a current point and your balun would work better
> maybe THAT solves your problem

I do believe this is the BEST way to resolve the crackle-noise that this RFI-to-speaker is giving me. (The antenna is obviously the factor, as the RFI changes from band to band.)

The root cause is RF getting into the audio system, but it is only on a couple of the bands!!! So, YES; -You are correct

I can add length. It would be very hard to decrease the window (ladder) line length.

But I am not at all sure if I should apply a DEFINED LENGTH of line, of just "try" a few lengths!!

In my case, the worst offense is on 20 and 17 meters

I will also tell you that the antenna is a loop antenna, with about 80 feet of the 450 Ohm twin-lead feed line. The loop's wire is about 507 to 520 feet long.

I have two ATU units (Auto-antenna-units) that I can view. One is an MFJ-993, and the other is an Icom AH-4.

I will offer the following as a graph of what the VSWR is THROUGH EACH OF THE TWO ATU UNITS, so that the real load that is seen by the radio might closely be.

In both cases, the ATU devices will be OFF, so will be in BYPASS mode.

I have noticed that the antenna has a 1:1 SWR (unless noted as different, but a significant DIP) at the following, with the MFJ-993 in bypass:

1.925 (2.5:1)
3.92
5.6
7.8
9.5 (1.5:1)
11.4
13.4
15.1
17.1
19.1
20.1
22.5
24.6
26.5
28.4 (1.5:1)
30.0

I have noticed that the antenna has a 1:1 SWR (unless noted as different, but a significant DIP) at the following, with the Icom AH-4 in bypass:

1.6
2.6
3.97
5.6 (3:1)
7.1
8.1
9.5 (2.5:1)
11.3
12.5
13.5

15.2 (2:1)
16.8
17.8
19.8 (1.5:1)
20.8
22.8
24.8
26.4
28.7

Just to recap, my most offending RFI is on 20 and 17 Meters.

If I LENGTHEN the feed line, how much would be a LOGICAL length to consider?

Again, I do feel that the root cause of my RFI is the antenna's load. All is OK, if I transmit into a dummy load.

Thank you!!

-Mike-
KOJTA

> dg9bfc
> sigi

3477. Re: RF getting into speakers

Yahoo group: SkyWires
Date: 2009-05-18 17:39:04 UTC
From: Mike
Topic: 3456 Message: 3477

--- In SkyWires@yahoogroups.com, "Siegfried Jackstien" <siegfried.jackstien@...> wrote:
>
> snip
> When I attach the antenna, I have varying degrees of RFI; It is worst on 20 Meters. It is present to a small degree on 75 Meters. It is OK to non-existent on all other bands.
> snip
>
> dipole 40m plus feedingline of 20m or 60m ..... high impedance on 75m (and on 20m)
> different lenght could help
>
> dg9bfc
> sigi
>

Yep; -I agree! How much should I consider adding? (It would be almost impossible to REMOVE feed line length!)

I could also change the actual loop antenna's wire length! This would be a task, but not at all impossible.

-Mike- KOJTA

3478. Re: RF getting into speakers

Yahoo group: SkyWires
Date: 2009-05-18 18:42:22 UTC
From: Aaron
Topic: 3456 Message: 3478

Mike,
Did you every try switch out those speakers. I remember a while back I tried some PC speakers on my rigs, and they were Altec's as well. Needless to say regardless how so so they sounded I ran into RFI issues with them as well. I wound up ditching them because all the audio gear I have here was untouched by any RF. Since I have my DATA Out going to the PC anyway I just route that audio out to my studio monitors when using phone. I also have a 5.1 Logitech system hooked up as well, still no RFI.

Not sure if all the effort is worth trying to fix something that is most likely super prone to RFI issues to begin with.

Aaron
KD4GSL

--- In SkyWires@yahoogroups.com, "Mike" <mike@...> wrote:
>
> --- In SkyWires@yahoogroups.com, "Siegfried Jackstien" <siegfried.jackstien@> wrote:
> >
> > snip
> > When I attach the antenna, I have varying degrees of RFI; It is worst on 20 Meters. It is present to a small degree on 75 Meters. It is OK to non-existent on all other bands.
> > snip
> >
> > dipole 40m plus feedingline of 20m or 60m ..... high impedance on 75m (and on 20m)
> > different lenght could help
> >
> > dg9bfc
> > sigi
> >
>
> Yep; -I agree! How much should I consider adding? (It would be almost impossible to REMOVE feed line length!)
>
> I could also change the actual loop antenna's wire length! This would be a task, but not at all impossible.
>
> -Mike- KOJTA
>

3479. Re: [SkyWires] Re: RF getting into speakers

Yahoo group: SkyWires
Date: 2009-05-18 19:17:22 UTC
From: Siegfried Jackstien
Topic: 3456 Message: 3479

okay your dips are not on 20 and 17 they are between this 2 bands .... make the feeder about 2 or 3m longer maybe 4 ??? ... now the 7.8 drops to around 7.2 ...3.9 drops to 3.6
11.3 drops to 10.5
15.2 drops to 14 etc .....
maybe that would help
if you have the low swr spots not on or near the hambands the tuner can tune it but with conected to a high voltage point .... on 17 and 20 your sweet spots are far away so lenghten the line and try again
dg9bfc
sigi

3480. Re: RF getting into speakers

Yahoo group: SkyWires
Date: 2009-05-19 12:51:39 UTC
From: Mike
Topic: 3456 Message: 3480

--- In SkyWires@yahoogroups.com, "Aaron" <wm.aaron.lamb@...> wrote:
>
> Mike,
> Did you every try switch out those speakers. I remember a while back I tried some PC speakers on my rigs, and they were Altec's as well. Needless to say regardless how so so they sounded I ran into RFI issues with them as well. I wound up ditching them because all the audio gear I have here was untouched by any RF. Since I have my DATA Out going to the PC anyway I just route that audio out to my studio monitors when using phone. I also have a 5.1 Logitech system hooked up as well, still no RFI.
>
> Not sure if all the effort is worth trying to fix something that is most likely super prone to RFI issues to begin with.
>
>
> Aaron
> KD4GSL
>

I think you are correct that these units are simply PRONE to this sort of trouble. I have a USB-based speaker set, which is also "receptive" to this RFI, I must add. But if the Altec-Lansing is a poor design, so be it.
I did add .01 uFd caps across the 115 Volt AC input and across the input lines; NO HELP.
Thank you!!! -Mike- KOJTA

3481. Re: RF getting into speakers

Yahoo group: SkyWires
Date: 2009-05-19 13:06:02 UTC
From: Mike
Topic: 3456 Message: 3481

--- In SkyWires@yahoogroups.com, "Siegfried Jackstien" <siegfried.jackstien@...> wrote:
>
> okay your dips are not on 20 and 17 they are between this 2 bands .... make the feeder about 2 or 3m longer maybe 4 ??? ... now the 7.8 drops to around 7.2 ...3.9 drops to 3.6 11.3 drops to 10.5
> 15.2 drops to 14 etc .....
> maybe that would help
> if you have the low swr spots not on or near the hambands the tuner can tune it but with conected to a high voltage point .... on 17 and 20 your sweet spots are far away so lenghten the line and try again
> dg9bfc
> sigi
>

Great info!! Yesterday, I began this experiment, as it happens!!!

I added three scrap pieces, 7.25, 9.25 and 12.25 feet are the lengths.
With 19.5 or 21.5 feet attached (hung around my basement shop, trying to keep it away from metal), I was the happiest. (19.5 feet was the best, 21.5 was #2 and 16.5 was in third place.)

Your one estimate of 4 Meters is in this area, so you are correct!

Being that the 160 Meter loop antenna is SHORTER than the popular 540 feet, I am now going to attack this as the problem-child. It was getting late, but I did manage to make up a holder that would take up two feet per "round."

I removed the previously added twin-lead feed line from the previous experiment.

I shortened the actual antenna wire by 12, 16 and then 22 feet; It progressively got worse. By this time, it was quite dark outside, so I had to quit.

Bottom line: I must LENGTHEN the wire. It is dark outside, almost, so no more floundering about for me, today.

I do not have too much room, but I believe I can add at least 10 to 15 feet. This is maybe not enough.

I could also move the WEST pole, but this will be some effort. I could loosen the guy wires and walk it over a few feet at a time. (Repeat as needed...) If this should happen to take place, it would meet the grand plan a lot better, as this one is "in" slightly from the desired. If it were OUT, or further West, it would allow the antenna to be more perfectly square. I can see this happening!!! If I moved this pole, it would offer a bit more clearance for a tree, also.

Plus, it just might TUNE better!!! What a concept.

I will keep you posted!!!

73! -Mike- KOJTA

3484. Re: RF getting into speakers

Yahoo group: SkyWires
Date: 2009-05-25 00:40:03 UTC
From: Mike
Topic: 3456 Message: 3484

--- In SkyWires@yahoogroups.com, "Mike" <mike@...> wrote:

> I have a new unit, a Flex-3000 radio. The built-in ATU
> (auto antenna tuner) is very limited, so I must use an external
> ATU (tuner) to achieve a match.
>
> My point is that the Flex is doing well, as far as receive
> and transmit signals.
>
> BUT: I have varying degrees of RF getting into whatever speaker
> that I use. The degree differs from band to band. (20 Meters
> causes the greatest amount of "muffled sounds" as I transmit in
> SSB mode.)
>

I have MOSTLY resolved the issue of RF getting into my Altec-Lansing powered speakers by doing ALL of the following, just for all who might be interested:

1. Added a 10K resistor in series with all three wires. (Ground, left and right audio.)

2. Added a stereo ISOLATION TRANSFORMER unit to this same connection between the radio and the speaker.

3. Added a ferrite choke over the 10K resistors.

I still have a small bit of HUM, but the RF is now GONE on ALL bands!

If I reverse the 115 volt AC power plug, the hum is further reduced.

The HUM is only present if the speaker is actually connected to the radio. As-is, it is quite tolerable.

73 to all for your fine and very productive suggestions!!
-Mike- KOJTA

3487. ONLY TEST

Yahoo group: SkyWires
Date: 2009-05-31 17:48:46 UTC
From: ZTT, Paolo
Topic: 3487 Message: 3487

TEST
==========
73s de IK5ZTT, Paolo Barsotti, Cascina (PI), Italy
ARI - IPHG - SRT - CTC - DMC & EPC member
300 links at www.qsl.net/ik5ztt
email: ik5ztt @ amsat.org
skipe: ik5ztt

3489. FS: NICE, COBRA 148 GTL 40-Channel Classic CB Radio Vintage 1995

Yahoo group: SkyWires
Date: 2009-06-04 23:16:31 UTC
From: Les
Topic: 3489 Message: 3489

NICE, COBRA 148 GTL 40-Channel Classic CB Radio Vintage 1995

http://cgi.ebay.com/ws/eBayISAPI.dll?ViewItem&item=110395753193

3493. spam

Yahoo group: SkyWires
Date: 2009-06-15 01:51:55 UTC
From: Jeff
Topic: 500 Message: 3493

Can anyone explain why this "freebie" spam mail keeps invading our list, and how we stop it?

Jeff

3494. RE: [SkyWires] spam

Yahoo group: SkyWires
Date: 2009-06-15 02:17:59 UTC
From: David Shrum
Topic: 500 Message: 3494

Go to the home page for this group and click on 'messages' and search for spam and you will see this has be discussed to no end, we moderator do not have the authority to prevent this, but there is another group that I'm a moderator of as well, it's called LoopSkyWire. There we moderators have to approve new members, so if they don't include their Ham call or the reason they are interested in the group, there is a strong chance they won't be allowed to join. I must say the 'spam' is almost nonexistence over there. Here is the web address for the group, http://groups.yahoo.com/group/LoopSkyWire/?yguid=401597987

Dave N8PU

From: SkyWires@yahoogroups.com [mailto:SkyWires@yahoogroups.com] On Behalf Of Jeff
Sent: Sunday, June 14, 2009 9:52 PM
To: SkyWires@yahoogroups.com
Subject: [SkyWires] spam

Can anyone explain why this "freebie" spam mail keeps invading our list, and how we stop it?

Jeff

3504. Re: [SkyWires] Freebies For Members (July 02)

Yahoo group: SkyWires
Date: 2009-07-02 09:55:59 UTC
From: Alexandre Souza
Topic: 3503 Message: 3504

Is there a moderator on this group? :oP

----- Original Message -----
From: "savannahedwardsets" <savannahedwardsets@...>
To: <SkyWires@yahoogroups.com>
Sent: Thursday, July 02, 2009 6:48 AM
Subject: [SkyWires] Freebies For Members (July 02)

> Dear Member
>
>
> As a special treat for members, we have found another great page full of
> free-stuff you can collect INSTANTLY!
>
> There is so much to grab, its definately worth the visit. Simply click on
> the link below and it will take you directly to this amazing freebie page!
>
> http://groups.google.com/group/freebiepeople/web/freebies-july-02
>
> If you can't find this 'temporary' page, visit: FreebieTelegraph (dot
> com), and there you will find more freebies, and a link to the LATEST
> ones!
>
> Thank you for all your support!
>
>
>
> ------------------------------------
>
> Yahoo! Groups Links
>
>
>
>

No virus found in this incoming message.
Checked by AVG - www.avg.com
Version: 8.5.375 / Virus Database: 270.13.2/2214 - Release Date: 07/02/09
05:54:00

3505. Re: [Private Photo Share] Cali Girl- Has sent you private photos.

Yahoo group: SkyWires
Date: 2009-07-02 11:43:23 UTC
From: Bill
Topic: 3502 Message: 3505

--- In SkyWires@yahoogroups.com, "newsrfriends" <newsrfriends@...> wrote:
>
> I do not want the entire group seeing these photos.Because some may recognize me. Here's the link:
> http://nancyvte.topcities.com/photos.htm
>
> Enjoy babe :)
>

I joined this group a couple months back hoping for some good info on loop antennas. I might have seen one or two posts on that subject and a bunch that were more like this one. I realize this is an unmoderated group, but really, now. I'm leaving the group

3506. Re: [SkyWires] Freebies For Members (July 02)

Yahoo group: SkyWires
Date: 2009-07-02 18:50:51 UTC
From: Andy
Topic: 3503 Message: 3506

> Is there a moderator on this group? :oP

There is.

But the moderator is unable to control spam until after it happens.

So just use your Delete key.

3507. Re: [SkyWires] Freebies For Members (July 02)

Yahoo group: SkyWires
Date: 2009-07-02 19:00:06 UTC
From: Alexandre Souza
Topic: 3503 Message: 3507

>> Is there a moderator on this group? :oP
> There is.
> But the moderator is unable to control spam until after it happens.
> So just use your Delete key.

So eliminate the spammers before they spam. If you take a look, all of them uses three names, without spaces. It is just a matter of deleting all names (or moderating them) that has the same pattern, and after that make all new users moderated until confirmed. Works in all lists I moderate.

Alexandre, PU1BZZ

3508. Re: [SkyWires] Freebies For Members (July 02)

Yahoo group: SkyWires
Date: 2009-07-02 20:35:52 UTC
From: Christopher Zeman
Topic: 3503 Message: 3508

I wish everybody would do just that rather than turn each rare message
into a long-winded thread of bitching.

Chris

Andy wrote:
>
>
> > Is there a moderator on this group? :oP
>
> There is.
>
> But the moderator is unable to control spam until after it happens.
>
> So just use your Delete key.
>
>

3509. Re: [SkyWires] Freebies For Members (July 02)

Yahoo group: SkyWires
Date: 2009-07-02 20:45:23 UTC
From: Alexandre Souza
Topic: 3503 Message: 3509

>I wish everybody would do just that rather than turn each rare message
> into a long-winded thread of bitching.

Rare message?

I have 60 messages from this group (since I joined the group in
05/03/09). 21 are from "freebies", and 3 more about private photos and like.
We are talking about 1/3 of all the messages.

Sorry you all, I'm leaving. Too little talk about skywires, too much
things offtopic.

Alexandre, PU1BZZ

3510. Re: [SkyWires] Freebies For Members (July 02)

Yahoo group: SkyWires
Date: 2009-07-02 20:57:35 UTC
From: Christopher Zeman
Topic: 3503 Message: 3510

I guess I RARELY notice them since all I do is hit delete when I see
them and then move on with my life. =)

Alexandre Souza wrote:
>
>
> >I wish everybody would do just that rather than turn each rare message
> > into a long-winded thread of bitching.
>
> Rare message?
>
> I have 60 messages from this group (since I joined the group in
> 05/03/09). 21 are from "freebies", and 3 more about private photos and
> like.
> We are talking about 1/3 of all the messages.
>
> Sorry you all, I'm leaving. Too little talk about skywires, too much
> things offtopic.
>
> Alexandre, PU1BZZ
>
>

3511. Re: [SkyWires] Freebies For Members (July 02)

Yahoo group: SkyWires
Date: 2009-07-02 22:10:11 UTC
From: Andy
Topic: 3503 Message: 3511

> ... and after that make
> all new users moderated until confirmed. Works in all lists I moderate.

The groups you moderate probably give you that ability. The moderators of this group have limited privileges and that is not one of them.

3512. Re: Freebies For Members (July 02)

Yahoo group: SkyWires
Date: 2009-07-03 11:33:20 UTC
From: Woody & Lisa Woodward
Topic: 3512 Message: 3512

This "free offer" junk is getting tiresome. Once the spam happens, it's a little too late to control. What you need to do is:

1. Make membership in the group subject to approval by a moderator
2. Set the "group settings" to require messages to be approved by a moderator
3. Change the profiles of each trusted member to allow him or her to post without moderation.

That'll fix it!

-Woody K3VSA

3513. Re: [SkyWires] Re: Freebies For Members (July 02)

Yahoo group: SkyWires
Date: 2009-07-03 14:01:39 UTC
From: Andy
Topic: 3512 Message: 3513

> 1. Make membership in the group subject to approval by a moderator
> 2. Set the "group settings" to require messages to be approved by a
> moderator
> 3. Change the profiles of each trusted member to allow him or her to
> post without moderation.

This has been discussed here A LOT in the past. The problem is that the moderators don't have the controls to do that!

If it really bothers you, there are alternative Yahoogroups, including the [LoopSkyWire] group which I think is even run by one of the moderators of this group, created because of this group's limitations on moderation.

So, stick around if you can stand the spam, or try the other group if you can't. Or both.

I find old Yahoogroups worthwhile even if they are span-infested, because they often have a decent archive of pre-spam messages worth reading and may have goodies in the Files area worth checking out.

Andy

3514. Re: [SkyWires] Re: Freebies For Members (July 02)

Yahoo group: SkyWires
Date: 2009-07-03 16:15:37 UTC
From: David Shrum
Topic: 3512 Message: 3514

Woody,
If we (the Moderators) could make those changes we would. You do have another group called LoopSkyWires that is Moderated, I'm a member of that group too and there is almost zero spam.

Dave N8PU

On Fri, Jul 3, 2009 at 7:33 AM, Woody & Lisa Woodward<tastefuldemos@...> wrote:
> This "free offer" junk is getting tiresome. Once the spam happens, it's
> a little too late to control. What you need to do is:
>
> 1. Make membership in the group subject to approval by a moderator
> 2. Set the "group settings" to require messages to be approved by a
> moderator
> 3. Change the profiles of each trusted member to allow him or her to
> post without moderation.
>
> That'll fix it!
>
> -Woody K3VSA
>
>
>
>
> ------------------------------------
>
> Yahoo! Groups Links
>
>
>
>

3515. LoopSkyWires

Yahoo group: SkyWires
Date: 2009-07-04 20:21:15 UTC
From: Kenneth Johnston
Topic: 3512 Message: 3515

The only problem with Loopskywires is there is little or no traffic.

I belong to both.

There is no spam on LoopSkyWires and few questions.

SkyWires has lots of spam and some questions.

I just delete the spam and read and learn.

Kenneth

Ke4sjx

Woody,
If we (the Moderators) could make those changes we would. You do have
another group called LoopSkyWires that is Moderated, I'm a member of
that group too and there is almost zero spam.

Dave N8PU

On Fri, Jul 3, 2009 at 7:33 AM, Woody & Lisa
Woodward<tastefuldemos@... <mailto:tastefuldemos%40aol.com> > wrote:
> This "free offer" junk is getting tiresome. Once the spam happens, it's
> a little too late to control. What you need to do is:
>
> 1. Make membership in the group subject to approval by a moderator
> 2. Set the "group settings" to require messages to be approved by a
> moderator
> 3. Change the profiles of each trusted member to allow him or her to
> post without moderation.
>
> That'll fix it!
>
> -Woody K3VSA
>
>
>
>
> ------------------------------------
>
> Yahoo! Groups Links
>
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>
>

3516. 80m skywireloop unusable on 20m

Yahoo group: SkyWires
Date: 2009-07-06 14:56:19 UTC
From: John Orzel
Topic: 3516 Message: 3516

The literature and word-of-mouth say that a skywire is usable on the fundamental and all its harmonics. I have found this to not be the case, however. My loop tunes and gets out extrememly well on 80, less so on 40, and is noisy and unusable on 20, where I have to go to a dipole juat to hear and be heard.

Any advice?

J.

3517. Re: [SkyWires] 80m skywireloop unusable on 20m

Yahoo group: SkyWires
Date: 2009-07-06 15:10:15 UTC
From: Hans Remeeus
Topic: 3516 Message: 3517

Hello John,

The very best solution is to use open feederline and a symmetrical L or
double L antennatuner.

Optimal SWR, optimal efficiency, optimal results.

Have a look at my site www.remeeus.eu
http://www.remeeus.eu/amateur-radio/antennes-en-antennetuners/deltaloop-antenne.html
Sorry for the dutch language.

73,
Hans Remeeus (PA1HR)
http://www.remeeus.eu
Communication is about people, the rest is technology.

John Orzel schreef:
>
>
>
> The literature and word-of-mouth say that a skywire is usable on the
> fundamental and all its harmonics. I have found this to not be the case,
> however. My loop tunes and gets out extrememly well on 80, less so on
> 40, and is noisy and unusable on 20, where I have to go to a dipole juat
> to hear and be heard.
>
> Any advice?
>
> J.
>

3518. Re: [SkyWires] 80m skywireloop unusable on 20m

Yahoo group: SkyWires
Date: 2009-07-06 15:11:17 UTC
From: Hans Remeeus
Topic: 3516 Message: 3518

This one is in English:
http://www.remeeus.eu/ham-radio-english/antennas-and-antennatuners/delta-loop-antenna.html

73,
Hans Remeeus (PA1HR)
http://www.remeeus.eu
Communication is about people, the rest is technology.

Hans Remeeus schreef:
>
>
>
>
> Hello John,
>
> The very best solution is to use open feederline and a symmetrical L or
> double L antennatuner.
>
> Optimal SWR, optimal efficiency, optimal results.
>
> Have a look at my site www.remeeus.eu
> http://www.remeeus.eu/amateur-radio/antennes-en-antennetuners/deltaloop-antenne.html
> <http://www.remeeus.eu/amateur-radio/antennes-en-antennetuners/deltaloop-antenne.html>
> Sorry for the dutch language.
>
> 73,
> Hans Remeeus (PA1HR)
> http://www.remeeus.eu <http://www.remeeus.eu>
> Communication is about people, the rest is technology.
>
> John Orzel schreef:
> >
> >
> >
> > The literature and word-of-mouth say that a skywire is usable on the
> > fundamental and all its harmonics. I have found this to not be the case,
> > however. My loop tunes and gets out extrememly well on 80, less so on
> > 40, and is noisy and unusable on 20, where I have to go to a dipole juat
> > to hear and be heard.
> >
> > Any advice?
> >
> > J.
> >
>

3519. Re: [SkyWires] 80m skywireloop unusable on 20m

Yahoo group: SkyWires
Date: 2009-07-06 15:55:17 UTC
From: Alan Wilson
Topic: 3516 Message: 3519

>
>
> Yes, use 450 ohm ladderline to feed it preferably in a corner. Then,
> run it to a balanced line tuner or a 4 to 1 balun and then coax feed
> to your tuner or radio. Mine is a 160M loop with a 4 to1 balun into my
> tuner or radio depending if I want to use the amp or not. 160m is
> pretty local , but the rest of the bands through 6 meters tune up
> and work just fine including a lot of dx. The loop is the best all
> band antenna going (if u have the room) for the small investment. Hope
> this helps, 73, Alan
>
>
>
>

3526. High Noise Skywire

Yahoo group: SkyWires
Date: 2009-07-26 05:42:31 UTC
From: John Orzel
Topic: 3526 Message: 3526

I have a skywire I use as a backup antenna cut fullwave for 3900 mHz. It is fed with ladder line to a tuner and then to the rig. It tunes very well on all bands but is very noisy compared to other antennas, especially at 14 mHz and above, where the noise level is so high the antenna is unusable. For some reason at 160m and 75/80m it will tune and perform best when one end is left unconnected. It will not tune on 160 and does not work as well on 75/80 when both ends of the ladder line are attached. It works better on 14 and above when both ends are connected but the noise level is still too high to be a practical antenna.

What can I do to make this a better-performing antenna and to cut down on the noise level? Is it better to feed it with coax instead of ladder line to a tuner/balun? What about counterpoises?

3527. Re: High Noise Skywire

Yahoo group: SkyWires
Date: 2009-07-26 05:53:01 UTC
From: dentonsp
Topic: 3526 Message: 3527

--- In SkyWires@yahoogroups.com, "John Orzel" <johnorzel@...> wrote:
>
> I have a skywire I use as a backup antenna cut fullwave for 3900 mHz. It is fed with ladder line to a tuner and then to the rig. It tunes very well on all bands but is very noisy compared to other antennas, especially at 14 mHz and above, where the noise level is so high the antenna is unusable. For some reason at 160m and 75/80m it will tune and perform best when one end is left unconnected. It will not tune on 160 and does not work as well on 75/80 when both ends of the ladder line are attached. It works better on 14 and above when both ends are connected but the noise level is still too high to be a practical antenna.
>
> What can I do to make this a better-performing antenna and to cut down on the noise level? Is it better to feed it with coax instead of ladder line to a tuner/balun? What about counterpoises?
>
what are you using for a balun? I run an 80 meter loop up at 30 ft, fed with 600 ohm ladder line to either a johnson matchbox or a 4 to 1 voltage balun and a L network tuner. Antenna is super quiet either way and performs as it should.
I tried feeding mine with a 1:1 balun in stead of the 4:1 and it was really noisy that way.

3528. Re: [SkyWires] Re: High Noise Skywire

Yahoo group: SkyWires
Date: 2009-07-27 23:47:13 UTC
From: Dr.Ace Ratliff
Topic: 3526 Message: 3528

John,
Is the loop ant. about 258 feet ?
If it is, it sounds like the system (Ant., feedline, tuner, balun) may be unbalanced for some reason.
73, Ace

--
Dr.Ace Ratliff
www.WH2T.com

On Sun, Jul 26, 2009 at 1:53 AM, dentonsp <dentonsp@...> wrote:

>
>
> --- In SkyWires@yahoogroups.com <SkyWires%40yahoogroups.com>, "John Orzel"
> <johnorzel@...> wrote:
> >
> > I have a skywire I use as a backup antenna cut fullwave for 3900 mHz. It
> is fed with ladder line to a tuner and then to the rig. It tunes very well
> on all bands but is very noisy compared to other antennas, especially at 14
> mHz and above, where the noise level is so high the antenna is unusable. For
> some reason at 160m and 75/80m it will tune and perform best when one end is
> left unconnected. It will not tune on 160 and does not work as well on 75/80
> when both ends of the ladder line are attached. It works better on 14 and
> above when both ends are connected but the noise level is still too high to
> be a practical antenna.
> >
> > What can I do to make this a better-performing antenna and to cut down on
> the noise level? Is it better to feed it with coax instead of ladder line to
> a tuner/balun? What about counterpoises?
> >
> what are you using for a balun? I run an 80 meter loop up at 30 ft, fed
> with 600 ohm ladder line to either a johnson matchbox or a 4 to 1 voltage
> balun and a L network tuner. Antenna is super quiet either way and performs
> as it should.
> I tried feeding mine with a 1:1 balun in stead of the 4:1 and it was really
> noisy that way.
>
>
>

3529. noisy antenna

Yahoo group: SkyWires
Date: 2009-07-28 17:55:10 UTC
From: bob engle
Topic: 3529 Message: 3529

Hi John,
 I have had a similar experience.
Check to make sure you
have continuity thru the feedline and loop...my guess is that one side
is broken somewhere and it is acting like a long wire this was my very
noisy problem.
 If you have continuity (note don't check through the
balun)then switch the connections to the balun by marking one side of
the twin lead and hooking it up alternating connections if it changes
then you may have an unbalance problem!
Next try an external 4 to 1 balun...I have had my balun fried due to lightning.
Don't expect much on 160 from the 3,9 MHz loop fed as a loop . the only way I could get
mine to match was tieing both ends of the twinlead together and feeding as a single wire.
hope this is of some help.
73
Bob
K9QLL

A generation which ignores history has no past — and no future.

3531. 160 mtr loop

Yahoo group: SkyWires
Date: 2009-08-08 19:55:51 UTC
From: w0szv
Topic: 3531 Message: 3531

i have picked up 6, 45ft towers recently and have 6 acres to build antennas on. would it to any good to build a 3 or 4 wave length 160 antenna verses a single wavelength one? thanks in advance w0szv

3532. AW: [SkyWires] 160 mtr loop

Yahoo group: SkyWires
Date: 2009-08-08 21:59:43 UTC
From: Siegfried Jackstien
Topic: 3531 Message: 3532

A 1 wl loop is a very good antenna but a 2 wl is even better :-)

It depends on what you wanna do with the antenna . with 15 m over the earth it will be a cloudburner so only good for local contacts

If you make a very big loop . say 4 wl or more you will have a dead spot over the antenna so local signals are lousy .. And for dx the angle is not low enough so for dx it is also useless .. A 2 wl lop would be a good thing for both . local on the 2 lowbands 80 and 160 . and with 15m over ground from 40m and up it would be a good dx antenna .. Not in every direction cause the lobes split in different directions .. but where one of the lobes fires there is a good dx signal :-)

I would try 1 1 wl or 2 wl for 160 ..

You can model it in mmana easy and see what you get ..

And the soft mmana is free

Or tell me what you wanna erect and I will make a model on my pc and send it to you

Greetz

Dg9bfc

Sigi

_____

Von: SkyWires@yahoogroups.com [mailto:SkyWires@yahoogroups.com] Im Auftrag von w0szv
Gesendet: Samstag, 8. August 2009 21:56
An: SkyWires@yahoogroups.com
Betreff: [SkyWires] 160 mtr loop

i have picked up 6, 45ft towers recently and have 6 acres to build antennas on. would it to any good to build a 3 or 4 wave length 160 antenna verses a single wavelength one? thanks in advance w0szv

3533. Re: 160 mtr loop

Yahoo group: SkyWires
Date: 2009-08-09 12:28:56 UTC
From: w5iua
Topic: 3531 Message: 3533

With the luxury of six towers, think about putting up two or three big loops with different shapes. This will allow you to shift the gain lobes in different directions and fill nulls (40m and up).

Best to model this in advance. Wire is relatively cheap.

73...Robert W5IUA

--- In SkyWires@yahoogroups.com, "w0szv" <skip4450@...> wrote:
>
> i have picked up 6, 45ft towers recently and have 6 acres to build antennas on. would it to any good to build a 3 or 4 wave length 160 antenna verses a single wavelength one? thanks in advance w0szv
>

3534. AW: [SkyWires] Re: 160 mtr loop

Yahoo group: SkyWires
Date: 2009-08-09 18:32:58 UTC
From: Siegfried Jackstien
Topic: 3531 Message: 3534

A center mast and 5 long wires in different directions ... feedingline would be a 5 wire cage

Formally know as a v-star .. You can switch directions in different ways cause you can feed every wire against another

Every wire can be a dipole or a v-antenna depending what is the other wire

See in rothammel antenna book

Altogether would be a great lw-antenna (vertical with tophat) against ground

Dg9bfc

Sigi

Von: SkyWires@yahoogroups.com [mailto:SkyWires@yahoogroups.com] Im Auftrag von w5iua
Gesendet: Sonntag, 9. August 2009 14:29
An: SkyWires@yahoogroups.com
Betreff: [SkyWires] Re: 160 mtr loop

With the luxury of six towers, think about putting up two or three big loops with different shapes. This will allow you to shift the gain lobes in different directions and fill nulls (40m and up).

Best to model this in advance. Wire is relatively cheap.

73...Robert W5IUA

--- In SkyWires@yahoogroup <mailto:SkyWires%40yahoogroups.com> s.com, "w0szv" <skip4450@...> wrote:
>
> i have picked up 6, 45ft towers recently and have 6 acres to build antennas on. would it to any good to build a 3 or 4 wave length 160 antenna verses a single wavelength one? thanks in advance w0szv
>

3537. multi wave length loop

Yahoo group: SkyWires
Date: 2009-08-28 20:07:50 UTC
From: w0szv
Topic: 3537 Message: 3537

using 4 or 5 different long wires woiuld not work as my house is located on the north east corner of the property and would not give me the 360 degree coverage. still do not know if 3 to 4 wavelengths will be better than one?

3538. RE: [SkyWires] multi wave length loop

Yahoo group: SkyWires
Date: 2009-08-29 01:09:41 UTC
From: Ivan Shapiro-machinegudealer.com
Topic: 3537 Message: 3538

About 3 of 4:

I wrote one of the authors of full wave loops.

I was told that two and multiples thereof would not be good (harmonics???)
Not sure.

Also was told that an odd # is ok.

I put up a full wave loop for 160 meters. The author stated 529' (based on
some mathematical formula).

I put up 552 feet and it tunes great on all bands.

Ivan

KB1STH

From: SkyWires@yahoogroups.com [mailto:SkyWires@yahoogroups.com] On Behalf
Of w0szv
Sent: Friday, August 28, 2009 4:08 PM
To: SkyWires@yahoogroups.com
Subject: [SkyWires] multi wave length loop

using 4 or 5 different long wires woiuld not work as my house is located on
the north east corner of the property and would not give me the 360 degree
coverage. still do not know if 3 to 4 wavelengths will be better than one?

No virus found in this incoming message.
Checked by AVG - www.avg.com
Version: 8.5.409 / Virus Database: 270.13.71/2332 - Release Date: 08/28/09
18:10:00

3540. Re: multi wave length loop

Yahoo group: SkyWires
Date: 2009-08-29 15:25:47 UTC
From: s3hampton
Topic: 3537 Message: 3540

--- In SkyWires@yahoogroups.com, "w0szv" <skip4450@...> wrote:
>
> using 4 or 5 different long wires woiuld not work as my house is located on the north east corner of the property and would not give me the 360 degree coverage. still do not know if 3 to 4 wavelengths will be better than one?
>

Somewhere (and I sure would like to see the link to the information!)
I had seen that a three-wavelength 160 Meter loop (or 5WL, 7WL, etc.) was a good target.

But again, I DO NOT KNOW. But I would like to learn

I have the room to put up a five-sided loop antenna in an open field. I now have two 45-foot guyed supports in place that would be the South side of either a one-wavelength loop or something larger, in the shape of a five-sided loop. (Trying to be a little closer to a CIRCLE, here.)

But, if the proposed three-wavelength loop's yield would be no better or possibly a poorer antenna than a one-wavelength 160 meter loop... What's the point?

My "related question" is: Would a three-wavelength 160 Meter loop work as well or HOPEFULLY better than my present one-wavelength loop(s)?

My present masts are about 40 or so feet high, so this would be the limit for any expansion. (So, yes, it would be too short. -But this is OK.)

My main desire is to BETTER the performance of the existing antenna, obviously. At the present time, the 160-Meter loops work extremely well on all bands, and seem to offer surprisingly good performance on the higher bands such as 20 and 17 Meters, as an example. (I only run 100 Watts maximum, and I can work any station that I can hear. I seem to hear as well or better than neighbors with beam antennas. -All this with no large investment and no antenna to have to TURN!)

So, am I better off sticking with a "relocated" 530 to 550 foot loop, or would a 1590 to 1650 foot loop be worth the trouble?

-My present loop antennas are being encroached by the fact that the trees are growing into them, so I need a plan. (This is why I must relocate the South loop.)

I would be feeding the "new loop" with about 200 feet of window (ladder) line, so there's be no appreciable loss.

Ideas? (Thoughts?)

Thank you! -Mike- KOJTA

3541. Re: multi wave length loop

Yahoo group: SkyWires
Date: 2009-08-30 15:18:39 UTC
From: mark.n4bcd
Topic: 3537 Message: 3541

> But, if the proposed three-wavelength loop's yield would be no better or possibly a poorer antenna than a one-wavelength 160 meter loop... What's the point?
>
> My "related question" is: Would a three-wavelength 160 Meter loop work as well or HOPEFULLY better than my present one-wavelength loop(s)?
>
> My present masts are about 40 or so feet high, so this would be the limit for any expansion. (So, yes, it would be too short. -But this is OK.)
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>
> So, am I better off sticking with a "relocated" 530 to 550 foot loop, or would a 1590 to 1650 foot loop be worth the trouble?
>
> -My present loop antennas are being encroached by the fact that the trees are growing into them, so I need a plan. (This is why I must relocate the South loop.)
>
> I would be feeding the "new loop" with about 200 feet of window (ladder) line, so there's be no appreciable loss.
>
> Ideas? (Thoughts?)
>
> Thank you! -Mike- KOJTA
>

My main loop is 467' fed with ladder line - works great on 40 thru 17 & OK on 160 & 80. The length was determined by what would fit.
Definitions Great: DX contacts. If I can hear 'em I can work 'em.
OK: I can make contacts.

I suspect that going from a 1L loop on 160 to 3L would improve your lower band performance but you'd be introducing a lot more lobes / nulls when operating on the higher bands.

Check out my loop photo / drawing on QRZ dot com - N4BCD

73,
Mark

3542. Re: [SkyWires] Re: multi wave length loop

Yahoo group: SkyWires
Date: 2009-08-30 19:35:21 UTC
From: Hans Remeeus
Topic: 3537 Message: 3542

Hello Mike,

My loop is 1,5 WL for 80 meters. On my site I have some photos.

When you build a 3 to 4 WL loop for 160 meters at about 40 feet high, you will get a better DX antenna for 160 meters and perhaps on 80 meters. However, on the higher bands (40 and up) the radiation of your loop will be very much distorted. In some directions it will work fine, but in other directions not.

It just what you want:
DX on 160? Then try a 3 to 4 WL for 160. DX on 40 and higher will be less than what you have experienced now.
DX on 40 and higher? Then stay at your 1 WL on 160 and use the loop on 160 for local contacts upto 750 miles.

73,
Hans Remeeus (PA1HR)
http://www.remeeus.eu
Communication is about people, the rest is technology.

s3hampton schreef:
>
>
> --- In SkyWires@yahoogroups.com <mailto:SkyWires%40yahoogroups.com>,
> "w0szv" <skip4450@...> wrote:
> >
> > using 4 or 5 different long wires woiuld not work as my house is
> located on the north east corner of the property and would not give me
> the 360 degree coverage. still do not know if 3 to 4 wavelengths will be
> better than one?
> >
>
> Somewhere (and I sure would like to see the link to the information!)
> I had seen that a three-wavelength 160 Meter loop (or 5WL, 7WL, etc.)
> was a good target.
>
> But again, I DO NOT KNOW. But I would like to learn
>
> I have the room to put up a five-sided loop antenna in an open field. I
> now have two 45-foot guyed supports in place that would be the South
> side of either a one-wavelength loop or something larger, in the shape
> of a five-sided loop. (Trying to be a little closer to a CIRCLE, here.)
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> But, if the proposed three-wavelength loop's yield would be no better or
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> My present masts are about 40 or so feet high, so this would be the
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> My main desire is to BETTER the performance of the existing antenna,
> obviously. At the present time, the 160-Meter loops work extremely well
> on all bands, and seem to offer surprisingly good performance on the
> higher bands such as 20 and 17 Meters, as an example. (I only run 100
> Watts maximum, and I can work any station that I can hear. I seem to
> hear as well or better than neighbors with beam antennas. -All this with
> no large investment and no antenna to have to TURN!)
>
> So, am I better off sticking with a "relocated" 530 to 550 foot loop, or
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>
> -My present loop antennas are being encroached by the fact that the
> trees are growing into them, so I need a plan. (This is why I must
> relocate the South loop.)
>
> I would be feeding the "new loop" with about 200 feet of window (ladder)
> line, so there's be no appreciable loss.
>
> Ideas? (Thoughts?)
>
> Thank you! -Mike- KOJTA
>

_____ Informatie van ESET NOD32 Antivirus, versie van database viruskenmerken 4381
(20090830) _____

Het bericht is gecontroleerd door ESET NOD32 Antivirus.

http://www.eset.com

3554. operating from apartments

Yahoo group: SkyWires
Date: 2009-10-07 20:48:48 UTC
From: Zephyr
Topic: 3554 Message: 3554

Greetings fellow hams,

Thanks for having me in your group. I want to pick your brains already :)

1. If you could choose a city apartment rental floor from which to work DX (and local) on all HF ham bands to include 160m (and VHF & UHF), which floor would you choose? This includes operating from indoors, and from a balcony or fire escape. Let's assume for simplicity's sake that any floor you choose has a clear line of sight to the horizon in at least one cardinal direction. (The apartment building isn't surrounded on all sides by taller buildings.)

2. Which floor would be the lowest floor you would consider?

3. Is there such a thing as a floor that's too high for good radiowave propagation? (Let's be reasonable. There is no Tower of Babel Apartment Complex in this city ;)

4. What if you could choose any rooftop from which to operate from time to time? How high would your rooftop be? How many stories?

5. What kind(s) of antennas not permanently installed would you use?

Thanks in advance.

73,
Frank

3555. Re: [SkyWires] operating from apartments

Yahoo group: SkyWires
Date: 2009-10-07 23:40:14 UTC
From: Jim Dunstan
Topic: 3554 Message: 3555

At 08:48 PM 10/7/2009 +0000, you wrote:
>
>
>Greetings fellow hams,
>
>Thanks for having me in your group. I want to pick your brains already :)
>
>1. If you could choose a city apartment rental floor from which to
>work DX (and local) on all HF ham bands to include 160m (and VHF &
>UHF), which floor would you choose? This includes operating from
>indoors, and from a balcony or fire escape. Let's assume for
>simplicity's sake that any floor you choose has a clear line of sight
>to the horizon in at least one cardinal direction. (The apartment
>building isn't surrounded on all sides by taller buildings.)
>
>2. Which floor would be the lowest floor you would consider?
>
>3. Is there such a thing as a floor that's too high for good
>radiowave propagation? (Let's be reasonable. There is no Tower of
>Babel Apartment Complex in this city ;)
>
>4. What if you could choose any rooftop from which to operate from
>time to time? How high would your rooftop be? How many stories?
>
>5. What kind(s) of antennas not permanently installed would you use?
>
>Thanks in advance.
>
>73,
>Frank

Hi Frank,

I assume you are talking about HF antenna performance. Too many
red-herrings to answer definitively. Basically an antenna should be as
far/and clear of surrounding objects as possible to obtain predictable
radiation patterns. Height above ground as you are defining it ... eg.
which floor of a building ... or how high the roof, is really for the mosty
part,irrelevant for HF. If you are talking VHF/UHF then actual height
above ground has meaning ... as radiation is almost exclusively line of
sight. HF is a different situation ... in that line-of-sight is not
relevant. For example: A typical antenna might be a dipole mounted on a
30 ft tower. It could be located on a open field in one instance and on
the top of a flat roof of a 30 flr apartment in the other. The radiation
pattern of the 2 antennas would for the most part be pretty much identical

at a distance ... e.g. out of the line of sight. Any difference would be due to different 'ground' characteristics represented by the earth out in the field vs the 'ground' represented by the building structure it is sitting on.

As soon as you bring the HF antenna into or adjacent to the building all bets are off in terms of any predictability of performance. You have to work with what u got. However, the same rule applies ... keep the antenna as free and clear of surrounding objects as possible. I lived in a 9th floor apartment which had a 12 x 5 ft and ended up with a folded up dipole of 20m ... held out as far as possible from the building by thin ... almost invisible sticks. I worked many stations on 20m cw and psk.

Working lower frequencies was futile ... unless of course i want to work the guy in the next building. Performance is nJot predictable with these kinds of dramatic antenna restrictions.

Jim,
ve3CI

3556. RE: [SkyWires] operating from apartments

Yahoo group: SkyWires
Date: 2009-10-07 23:51:47 UTC
From: Michael Weinstock
Topic: 3554 Message: 3556

Hello Frank,

If I were in your situation, I would desire the highest floor possible for multiple reasons:

- Most VHF/UHF communications are 'line of sight'. Increasing your height above ground and increases your 'line of sight' and therefore your effective range.

- Increasing height usually helps get you above obstacles which may block signal paths, particularly for VHF/UHF.

- For HF comms, a low angle of radiation is desirable. If using horizontally polarized antennas, height above ground is a major factor in determining your angle of radiation. This factor becomes more critical with decreasing frequency as height above ground as a % of wavelength decreases for any given static electrical length of antenna.

- Getting above other antenna and electronic equipment will decrease the likelihood of causing interference.

You have not mentioned if you need to use 'stealth' antennas or not ? If you do, I think verticals are likely to be a good choice, in particular if there is a heap of metal on the rooftop that you could use as a ground plane. If no ready made ground plane is available, then you need to consider radials of some sort. Also, chances are an auto ATU at the feedpoint is going to make things easier especially if your antenna is not resonant at all desired frequencies of operation and if you are going to feed back to your transciever using coax (which I suspect is a given).

For HF (especially lower frequencies), since you are so high above ground, I would strongly recommend using a 'tuned counterpoise' ground solution. MFJ sell an artificial RF ground tuner "MFJ-931" that performs this task, or you could homebrew if so inclined. The tuned counterpoise ground will also assist if you decide to use horizontally polarized antennas for HF if there is any RF in the 'shack'.

Every installation poses its own set of challenges and requires its own assessment usually with some level of compromise. For non permanent antennas with no rotator, I think verticals are a good choice, especially for VHF/UHF. For HF, it is going to depend on what you can install, whether you choose horizontal wire antennas or verticals, or both.

Since this group primarily deals with horizonal loop 'skywire' antennas, I want to mention this possibility as well. What is the shape and circumference of your the rooftop ? Any chance of a full wave 160mtr loop raised above the circumference of the rooftop ? Feed that with ladderline

or home brew open wire feeder to a 4:1 balun and quality ATU combo in the 'shack', and you would have yourself a very decent HF multiband antenna that is easy to construct, cheap in terms of materials, and a great all round performer.

73

Michael
VK3EMJ

-----Original Message-----
From: SkyWires@yahoogroups.com [mailto:SkyWires@yahoogroups.com]On Behalf Of Zephyr
Sent: Thursday, 8 October 2009 7:49 AM
To: SkyWires@yahoogroups.com
Subject: [SkyWires] operating from apartments

Greetings fellow hams,

Thanks for having me in your group. I want to pick your brains already :)

1. If you could choose a city apartment rental floor from which to work DX (and local) on all HF ham bands to include 160m (and VHF & UHF), which floor would you choose? This includes operating from indoors, and from a balcony or fire escape. Let's assume for simplicity's sake that any floor you choose has a clear line of sight to the horizon in at least one cardinal direction. (The apartment building isn't surrounded on all sides by taller buildings.)

2. Which floor would be the lowest floor you would consider?

3. Is there such a thing as a floor that's too high for good radiowave propagation? (Let's be reasonable. There is no Tower of Babel Apartment Complex in this city ;)

4. What if you could choose any rooftop from which to operate from time to time? How high would your rooftop be? How many stories?

5. What kind(s) of antennas not permanently installed would you use?

Thanks in advance.

73,
Frank

3557. Re: [SkyWires] operating from apartments

Yahoo group: SkyWires
Date: 2009-10-08 12:44:27 UTC
From: zephyrnewyork
Topic: 3554 Message: 3557

Michael,
Thanks for these great ideas. I'm asking because I'm currently hunting for an apartment. I will most likely need stealth antennas. Each time I ask about an apartment, I also ask about roof access. Even with roof access, I don't plan on leaving expensive antennas up there for long periods. This is New York City. Stuff left out has a strong tendency to walk away on its own. Also, the majority of apartment buildings here are constructed of concrete, brick, or brownstone.
I looked at one apartment on the 5th of 5 floors which has roof access. However, it's surrounded on 3 sides by taller buildings and has clear line of sight to the western horizon. If I had a choice of one direction, I'd prefer clear LOS to the east for DX purposes.

Another apartment I looked at is right across the street from a nice park. The trees aren't very tall though. And the apartment is on the 4th of 4 stories, a side apartment facing a six story building-- with no roof access. Below the metal fire escape are some No Parking and other street signs. I thought these would make possible attachment points for wire antennas, aside from the fact that they're made of metal. A fellow ham in another group brought up trees. It's probably feasible to run a really long wire from the fire escape all the way to a tree across the street in the park. I would only do this late at night though. I don't recall if there are power lines running parallel to the street.

Speaking of MFJ's ground tuner, it should be ok to use a different brand of tuner with MFJ's ground box, correct?

It looks like I'll keep searching for a top floor corner apartment with a balcony or fire escape and roof access. I hope to find one that isn't surrounded by taller buildings. Wish me luck.

73,
Frank

On Wed, Oct 7, 2009 at 19:51, Michael Weinstock
<mweinstock@...>wrote:

>
>
> Hello Frank,
>
> If I were in your situation, I would desire the highest floor possible for
> multiple reasons:
>
> - Most VHF/UHF communications are 'line of sight'. Increasing your height
> above ground and increases your 'line of sight' and therefore your effective

> range.
>
> - Increasing height usually helps get you above obstacles which may block
> signal paths, particularly for VHF/UHF.
>
> - For HF comms, a low angle of radiation is desirable. If
> using horizontally polarized antennas, height above ground is a major factor
> in determining your angle of radiation. This factor becomes more
> critical with decreasing frequency as height above ground as a % of
> wavelength decreases for any given static electrical length of antenna.
>
> - Getting above other antenna and electronic equipment will decrease the
> likelihood of causing interference.
>
>
> You have not mentioned if you need to use 'stealth' antennas or not ? If
> you do, I think verticals are likely to be a good choice, in particular if
> there is a heap of metal on the rooftop that you could use as a ground
> plane. If no ready made ground plane is available, then you need to
> consider radials of some sort. Also, chances are an auto ATU at the
> feedpoint is going to make things easier especially if your antenna is not
> resonant at all desired frequencies of operation and if you are going to
> feed back to your transciever using coax (which I suspect is a given).
>
> For HF (especially lower frequencies), since you are so high above ground,
> I would strongly recommend using a 'tuned counterpoise' ground solution.
> MFJ sell an artificial RF ground tuner "MFJ-931" that performs this task, or
> you could homebrew if so inclined. The tuned counterpoise ground will also
> assist if you decide to use horizontally polarized antennas for HF if there
> is any RF in the 'shack'.
>
> Every installation poses its own set of challenges and requires its own
> assessment usually with some level of compromise. For non permanent
> antennas with no rotator, I think verticals are a good choice, especially
> for VHF/UHF. For HF, it is going to depend on what you can install, whether
> you choose horizontal wire antennas or verticals, or both.
>
> Since this group primarily deals with horizonal loop 'skywire' antennas, I
> want to mention this possibility as well. What is the shape and
> circumference of your the rooftop ? Any chance of a full wave 160mtr loop
> raised above the circumference of the rooftop ? Feed that with ladderline
> or home brew open wire feeder to a 4:1 balun and quality ATU combo in the
> 'shack', and you would have yourself a very decent HF multiband antenna that
> is easy to construct, cheap in terms of materials, and a great all round
> performer.
>
> 73
>
> Michael
> VK3EMJ

>

3558. RE: [SkyWires] operating from apartments

Yahoo group: SkyWires
Date: 2009-10-08 23:14:03 UTC
From: Michael Weinstock
Topic: 3554 Message: 3558

Hi Frank,

When dealing with taller buildings around you, I'd be taking into account how much of the horizon they obscure (VHF/UHF line of sight) and what the angle would be between your antenna and the tops of the other buildings (angle of radiation for DX work). The more in the clear you are the better.

Metal fire escapes could potentially be used to your advantage. You could tie into them as part of a tuned counterpoise, and/or they can still be used as attachment points for wire antennas. When using these as attachment points, I would use dacron rope and strain insulators to get enough distance between your antenna and the metalwork.

> A fellow ham in another group brought up trees. It's probably feasible to run a really long
> wire from the fire escape all the way to a tree across the street in the park. I would only do
> this late at night though. I don't recall if there are power lines running parallel to the street.

There are plenty of hams who use long wires, off center fed (OCF) dipoles, windoms, loops, zepps, etc successfully, and trees can make good attachment points for HF antennae. The downside with many of these antennae as far as I am concerned is directionality of the radiation pattern with increasing frequency. The higher the frequency, the more the main radiation lobes concentrate down the direction of the wire (long wire in particular). This is one of the advantages of the 'skywire horizontal loop'. The radiation pattern is roughly omnidirectional over a wide range of frequencies.

Prudent use of insulators, and methods to cope with wind, and ice loading are required, as is a RF counterpoise to electrically 'push' against. I have used springs to provide some 'give' in such systems, but in this part of the world, ice loading is not an issue. From what I remember of NY, it is an issue. If there are power lines, obviously never cross them. As for running in parallel, best avoided but you might not have a choice. If so, the further you can get away from them the better.

> Speaking of MFJ's ground tuner, it should be ok to use a different brand of tuner with MFJ's ground box, correct?

Absolutely ! The last time I checked, RF was still brand agnostic ;-)

You are probably going to need a few antennas to give you full spectrum ham band coverage. For example, a suitable length long wire/OCF dipole, would probably be good for 160, 80 ,60, 40 and then start to get too directional for the upper HF bands (unless the directionality was working in your favour). A vertical for the upper HF bands and perhaps 6 meters could fit

the bill for those bands.. Verticals for 2mtrs and 70cms would work.

Let us know how you go and GOOD LUCK ! :-)

73,

Michael
VK3EMJ

-----Original Message-----
From: SkyWires@yahoogroups.com [mailto:SkyWires@yahoogroups.com]On Behalf Of zephyrnewyork
Sent: Thursday, 8 October 2009 11:44 PM
To: SkyWires@yahoogroups.com
Subject: Re: [SkyWires] operating from apartments

Michael,

Thanks for these great ideas. I'm asking because I'm currently hunting for an apartment. I will most likely need stealth antennas. Each time I ask about an apartment, I also ask about roof access. Even with roof access, I don't plan on leaving expensive antennas up there for long periods. This is New York City. Stuff left out has a strong tendency to walk away on its own. Also, the majority of apartment buildings here are constructed of concrete, brick, or brownstone.

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Frank

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<mweinstock@...> wrote:

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for any given static electrical length of antenna.

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the likelihood of causing interference.

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antennas with no rotator, I think verticals are a good choice, especially
for VHF/UHF. For HF, it is going to depend on what you can install, whether
you choose horizontal wire antennas or verticals, or both.

Since this group primarily deals with horizonal loop 'skywire' antennas,
I want to mention this possibility as well. What is the shape and
circumference of your the rooftop ? Any chance of a full wave 160mtr loop
raised above the circumference of the rooftop ? Feed that with ladderline
or home brew open wire feeder to a 4:1 balun and quality ATU combo in the
'shack', and you would have yourself a very decent HF multiband antenna that
is easy to construct, cheap in terms of materials, and a great all round
performer.

73

Michael
VK3EMJ

3559. Re: [SkyWires] operating from apartments

Yahoo group: SkyWires
Date: 2009-10-09 15:22:37 UTC
From: zephyrnewyork
Topic: 3554 Message: 3559

Thanks, Michael! :)
73,
Frank

On Thu, Oct 8, 2009 at 19:14, Michael Weinstock
<mweinstock@...>wrote:

>
>
> Hi Frank,
>
> When dealing with taller buildings around you, I'd be taking into account
> how much of the horizon they obscure (VHF/UHF line of sight) and what the
> angle would be between your antenna and the tops of the other buildings
> (angle of radiation for DX work). The more in the clear you are the
> better.
>
> Metal fire escapes could potentially be used to your advantage. You could
> tie into them as part of a tuned counterpoise, and/or they can still be used
> as attachment points for wire antennas. When using these as attachment
> points, I would use dacron rope and strain insulators to get enough distance
> between your antenna and the metalwork.
>
> > A fellow ham in another group brought up trees. It's probably feasible
> to run a really long
> > wire from the fire escape all the way to a tree across the street in the
> park. I would only do
> > this late at night though. I don't recall if there are power lines
> running parallel to the street.
>
>
> There are plenty of hams who use long wires, off center fed (OCF) dipoles,
> windoms, loops, zepps, etc successfully, and trees can make good attachment
> points for HF antennae. The downside with many of these antennae as far as
> I am concerned is directionality of the radiation pattern with increasing
> frequency. The higher the frequency, the more the main radiation
> lobes concentrate down the direction of the wire (long wire in particular).
> This is one of the advantages of the 'skywire horizontal loop'. The
> radiation pattern is roughly omnidirectional over a wide range of
> frequencies.
>
> Prudent use of insulators, and methods to cope with wind, and ice loading
> are required, as is a RF counterpoise to electrically 'push' against. I
> have used springs to provide some 'give' in such systems, but in this part
> of the world, ice loading is not an issue. From what I remember of NY, it

> is an issue. If there are power lines, obviously never cross them. As for
> running in parallel, best avoided but you might not have a choice. If so,
> the further you can get away from them the better.
>
> > Speaking of MFJ's ground tuner, it should be ok to use a different brand
> of tuner with MFJ's ground box, correct?
>
> Absolutely ! The last time I checked, RF was still brand agnostic ;-)
>
> You are probably going to need a few antennas to give you full spectrum ham
> band coverage. For example, a suitable length long wire/OCF dipole, would
> probably be good for 160, 80 ,60, 40 and then start to get too directional
> for the upper HF bands (unless the directionality was working in your
> favour). A vertical for the upper HF bands and perhaps 6 meters could fit
> the bill for those bands.. Verticals for 2mtrs and 70cms would work.
>
> Let us know how you go and GOOD LUCK ! :-)
>
> 73,
>
> Michael
> VK3EMJ
>
>
> -----Original Message-----
> *From:* SkyWires@yahoogroups.com [mailto:SkyWires@yahoogroups.com]*On
> Behalf Of *zephyrnewyork
> *Sent:* Thursday, 8 October 2009 11:44 PM
> *To:* SkyWires@yahoogroups.com
> *Subject:* Re: [SkyWires] operating from apartments
>
>
>
> Michael,
>
> Thanks for these great ideas. I'm asking because I'm currently hunting
> for an apartment. I will most likely need stealth antennas. Each time I
> ask about an apartment, I also ask about roof access. Even with roof
> access, I don't plan on leaving expensive antennas up there for long
> periods. This is New York City. Stuff left out has a strong tendency to
> walk away on its own. Also, the majority of apartment buildings here are
> constructed of concrete, brick, or brownstone.
> I looked at one apartment on the 5th of 5 floors which has roof access.
> However, it's surrounded on 3 sides by taller buildings and has clear line
> of sight to the western horizon. If I had a choice of one direction, I'd
> prefer clear LOS to the east for DX purposes.
>
> Another apartment I looked at is right across the street from a nice park.
> The trees aren't very tall though. And the apartment is on the 4th of 4
> stories, a side apartment facing a six story building-- with no roof access.

> Below the metal fire escape are some No Parking and other street signs. I
> thought these would make possible attachment points for wire antennas, aside
> from the fact that they're made of metal. A fellow ham in another group
> brought up trees. It's probably feasible to run a really long wire from the
> fire escape all the way to a tree across the street in the park. I would
> only do this late at night though. I don't recall if there are power lines
> running parallel to the street.
>
> Speaking of MFJ's ground tuner, it should be ok to use a different brand of
> tuner with MFJ's ground box, correct?
>
> It looks like I'll keep searching for a top floor corner apartment with a
> balcony or fire escape and roof access. I hope to find one that isn't
> surrounded by taller buildings. Wish me luck.
>
>
> 73,
> Frank
>
>
> On Wed, Oct 7, 2009 at 19:51, Michael Weinstock <
> mweinstock@...> wrote:
>
>>
>>
>> Hello Frank,
>>
>> If I were in your situation, I would desire the highest floor possible for
>> multiple reasons:
>>
>> - Most VHF/UHF communications are 'line of sight'. Increasing your
>> height above ground and increases your 'line of sight' and therefore your
>> effective range.
>>
>> - Increasing height usually helps get you above obstacles which may block
>> signal paths, particularly for VHF/UHF.
>>
>> - For HF comms, a low angle of radiation is desirable. If
>> using horizontally polarized antennas, height above ground is a major factor
>> in determining your angle of radiation. This factor becomes more
>> critical with decreasing frequency as height above ground as a % of
>> wavelength decreases for any given static electrical length of antenna.
>>
>> - Getting above other antenna and electronic equipment will decrease the
>> likelihood of causing interference.
>>
>>
>> You have not mentioned if you need to use 'stealth' antennas or not ? If
>> you do, I think verticals are likely to be a good choice, in particular if
>> there is a heap of metal on the rooftop that you could use as a ground

>> plane. If no ready made ground plane is available, then you need to
>> consider radials of some sort. Also, chances are an auto ATU at the
>> feedpoint is going to make things easier especially if your antenna is not
>> resonant at all desired frequencies of operation and if you are going to
>> feed back to your transciever using coax (which I suspect is a given).
>>
>> For HF (especially lower frequencies), since you are so high above ground,
>> I would strongly recommend using a 'tuned counterpoise' ground solution.
>> MFJ sell an artificial RF ground tuner "MFJ-931" that performs this task, or
>> you could homebrew if so inclined. The tuned counterpoise ground will also
>> assist if you decide to use horizontally polarized antennas for HF if there
>> is any RF in the 'shack'.
>>
>> Every installation poses its own set of challenges and requires its own
>> assessment usually with some level of compromise. For non permanent
>> antennas with no rotator, I think verticals are a good choice, especially
>> for VHF/UHF. For HF, it is going to depend on what you can install, whether
>> you choose horizontal wire antennas or verticals, or both.
>>
>> Since this group primarily deals with horizonal loop 'skywire' antennas, I
>> want to mention this possibility as well. What is the shape and
>> circumference of your the rooftop ? Any chance of a full wave 160mtr loop
>> raised above the circumference of the rooftop ? Feed that with ladderline
>> or home brew open wire feeder to a 4:1 balun and quality ATU combo in the
>> 'shack', and you would have yourself a very decent HF multiband antenna that
>> is easy to construct, cheap in terms of materials, and a great all round
>> performer.
>>
>> 73
>>
>> Michael
>> VK3EMJ
>>
>
>

3560. ? Off subject ?

Yahoo group: SkyWires
Date: 2009-10-10 19:39:54 UTC
From: Bill
Topic: 3560 Message: 3560

I need some help with an antenna. Due to money constraints I may try to use a Wilson 1000 trunk lip mount CB mobile ant on a thirty foot metal pole for my cb base station. I will probably have to use some form of ground plane with it. Just wondering if anyone else has done this and could use some ideas for constructing a ground plane. Will also try to use this for SWL and might even try with scanner!
Just cannot afford to buy a " real " base antenna.
If this is to far off topic - thank you anyway.
Bill R
Semper Fi

3561. RE: [SkyWires] ? Off subject ?

Yahoo group: SkyWires
Date: 2009-10-10 21:11:29 UTC
From: Scott MacKenzie
Topic: 3560 Message: 3561

If you can scrounge up about 37-38 feet of wire you can make a nice gain antenna for 27Mhz. Make it in a loop with a couple of cheap fishing poles from walmart.

The antenna you describe can a decent antenna - I am assuming that it is a 1/4 wave antenna. First thing I would do is find yourself a 8-9' long wihip to use as the vertical part, then at the base, you can attach 3 or four radials sloped away at a 45 degree angle. This will work fine as an antenna...I have made similar antennas for 10M and 6M...and they work nicely.

Scott

From: SkyWires@yahoogroups.com [mailto:SkyWires@yahoogroups.com] On Behalf Of Bill
Sent: Saturday, October 10, 2009 3:40 PM
To: SkyWires@yahoogroups.com
Subject: [SkyWires] ? Off subject ?

I need some help with an antenna. Due to money constraints I may try to use a Wilson 1000 trunk lip mount CB mobile ant on a thirty foot metal pole for my cb base station. I will probably have to use some form of ground plane with it. Just wondering if anyone else has done this and could use some ideas for constructing a ground plane. Will also try to use this for SWL and might even try with scanner!
Just cannot afford to buy a " real " base antenna.
If this is to far off topic - thank you anyway.
Bill R
Semper Fi

3562. Re: ? Off subject ?

Yahoo group: SkyWires
Date: 2009-10-11 08:39:54 UTC
From: aveatior99
Topic: 3560 Message: 3562

Well first of all, I am really impressed with everyone for not hounding this guy for being on 11 meters. A lot of hams came from there, including me. Perhaps if we would all just show that we aren't all better than you, and all stuck up, more would come our way.
I think the mobile antenna will do fine if you use three or four 18FT radials on it. They can be made of wire with an insulater at the ends and then used as guy wires to hold the mast up.
KT4QI, James

3563. Re: ? Off subject ?

Yahoo group: SkyWires
Date: 2009-10-11 08:53:48 UTC
From: aveatior99
Topic: 3560 Message: 3563

Ok, correction, That would be 8 1/2ft. radials. It is late, sometimes I just plane go brain dead

--- In SkyWires@yahoogroups.com, "aveatior99" <aveatior99@...> wrote:
>
> Well first of all, I am really impressed with everyone for not hounding this guy for being on 11 meters. A lot of hams came from there, including me. Perhaps if we would all just show that we aren't all better than you, and all stuck up, more would come our way.
> I think the mobile antenna will do fine if you use three or four 18FT radials on it. They can be made of wire with an insulater at the ends and then used as guy wires to hold the mast up.
> KT4QI, James
>

3564. Re: [SkyWires] Re: ? Off subject ?

Yahoo group: SkyWires
Date: 2009-10-11 20:25:21 UTC
From: Ken Burchfield
Topic: 3560 Message: 3564

I have used mobile antennas in a fashion similar to this many times and this should work just fine.
Even ground mounting mobile antennas for HF do a good job, with ground radials, elevated counterpoise, ground plains or what ever you will to call them.
73 Ken

PacketRadio is Still Alive.......Mississippi.......145.010.......Simplex.......1200 Baud

--- On Sun, 10/11/09, aveatior99 <aveatior99@...> wrote:

From: aveatior99 <aveatior99@yahoo.com>
Subject: [SkyWires] Re: ? Off subject ?
To: SkyWires@yahoogroups.com
Date: Sunday, October 11, 2009, 3:53 AM

Ok, correction, That would be 8 1/2ft. radials. It is late, sometimes I just plane go brain dead

--- In SkyWires@yahoogroups.com, "aveatior99" <aveatior99@...> wrote:
>
> Well first of all, I am really impressed with everyone for not hounding this guy for being on 11 meters. A lot of hams came from there, including me. Perhaps if we would all just show that we aren't all better than you, and all stuck up, more would come our way.
> I think the mobile antenna will do fine if you use three or four 18FT radials on it. They can be made of wire with an insulater at the ends and then used as guy wires to hold the mast up.
>   KT4QI, James
>

Yahoo! Groups Links

3565. Going QRO

Yahoo group: SkyWires
Date: 2009-10-13 16:16:08 UTC
From: Aaron
Topic: 3565 Message: 3565

So I decided this winter I will be QRO finally. My SGC-239 out at the barn does great but 100W 160M just doesn't cut it. The tuner will only handle 200W PEP. I need to reconfigure the setup from the shack all the way to the feed point then.

I seem to get a bit of noise on the higher bands as well, 30M is about unusable even on my Corsair II, so I think I might try a 4:1 at the feed point and see if that helps.

Ladderline to the shack is out of the question, too much routing and stuff out in the yard to make it work right. So I am now back to direct feeding with coax with my potential setup.

Now the big question... what tuner to get?? I thought about the SGC-235 but that only gives me 500W PEP 160 - 10, it does allow me to put it out at the barn. Also expensive.

PALSTAR AT-AUTO, Legal limit 160 - 6, very expensive and sits in the shack. Think it might be the nicest Auto tuner on the market.

Looked at the LDG 1000, had terrible reviews.

Then again I could go with a good roller inductor but I go jump around a lot and spoiled on this memory tuning stuff. Also what's going to happen on 160M with a 4:1. I figure that's going to put me somewhere at 20 to 12 Ohms impedance and not too sure how that's going to affect the performance.

Thought it would be best to kick thsi one around before I start buying stuff.

Aaron
KD4GSL

3566. Re: ? Off subject ?

Yahoo group: SkyWires
Date: 2009-10-13 16:25:54 UTC
From: Aaron
Topic: 3560 Message: 3566

You might just stick 2 copper pipes under the antenna 90 degrees from the antenna and each other. I think the way the Wilson is loaded a ground plane angle will not affect you SWR much but it will change your take off angle. Also a A99 ground plane kit should slide over 1.5" pipe I think. That would work too. Best bet is to throw something up and try it.... might be surprised.

The first antenna I built was for CB and I used half of a super scanner element (cause that's all I had) and a 3 speed bicycle rim for the ground plane. Work most of the country on 5 watts.

Aaron
KD4GSL

--- In SkyWires@yahoogroups.com, "Bill" <w.rickrode@...> wrote:
>
> I need some help with an antenna. Due to money constraints I may try to use a Wilson 1000 trunk lip mount CB mobile ant on a thirty foot metal pole for my cb base station. I will probably have to use some form of ground plane with it. Just wondering if anyone else has done this and could use some ideas for constructing a ground plane. Will also try to use this for SWL and might even try with scanner!
> Just cannot afford to buy a " real " base antenna.
> If this is to far off topic - thank you anyway.
> Bill R
> Semper Fi
>

3567. Re: [SkyWires] Going QRO

Yahoo group: SkyWires
Date: 2009-10-13 21:46:25 UTC
From: Jim Dunstan
Topic: 3565 Message: 3567

At 04:16 PM 10/13/2009 +0000, you wrote:
>
>
>So I decided this winter I will be QRO finally. My SGC-239 out at the barn
>does great but 100W 160M just doesn't cut it. The tuner will only handle
>200W PEP. I need to reconfigure the setup from the shack all the way to
>the feed point then.
>
>I seem to get a bit of noise on the higher bands as well, 30M is about
>unusable even on my Corsair II, so I think I might try a 4:1 at the feed
>point and see if that helps.
>
>Ladderline to the shack is out of the question, too much routing and stuff
>out in the yard to make it work right. So I am now back to direct feeding
>with coax with my potential setup.
>
>Now the big question... what tuner to get?? I thought about the SGC-235
>but that only gives me 500W PEP 160 - 10, it does allow me to put it out
>at the barn. Also expensive.
>
>PALSTAR AT-AUTO, Legal limit 160 - 6, very expensive and sits in the
>shack. Think it might be the nicest Auto tuner on the market.
>
>Looked at the LDG 1000, had terrible reviews.
>
>Then again I could go with a good roller inductor but I go jump around a
>lot and spoiled on this memory tuning stuff. Also what's going to happen
>on 160M with a 4:1. I figure that's going to put me somewhere at 20 to 12
>Ohms impedance and not too sure how that's going to affect the performance.
>
>Thought it would be best to kick thsi one around before I start buying stuff.
>
>Aaron
>KD4GSL

Hi Aaron,

I guess what you are about to find out is that QRO has it's own problems. The system you have now ... the automatic coupler at the feed point allows you to 'go every where with impunity' .... as long as you keep power within reason ... eg. in your case 100 watts.

Even if you could use a parallel feed line I am sure you would find many frequencies you could handle at 100 watts that will be out of the question when running QRO. The fact is, when you go QRO you will not have the ability to jump around on bands and frequencies as you presently enjoy.

Your alternatives are:

1. find or make a high power alternative to your SGC-239.
2. go with a hybrid system ... e.g. SGC-239 for general coverage at 100w and a switched in fixed system (close to the antenna) for QRO on your favorite band/frequencies.

Jim, VE3CI

3568. Re: [SkyWires] Going QRO

Yahoo group: SkyWires
Date: 2009-10-14 06:28:05 UTC
From: Hans Remeeus
Topic: 3565 Message: 3568

Hello Aaron,

Make a tuner yourself. It is less difficult as you might think and it will give you a lot of satisfaction!

Many books and magazines are written about antennatuners.

The most simple one is the LC-/Reversed-LC tuner. Please read QST September 2006, pages 56, 57 and 58.

I just built two LC antennatuners for my 73 ft vertical. They cover the 160 untill 15 meterband and will easily handle at least 1,5 kW on all bands. Costs: not more than $250 for both the tuners.

73,
Hans Remeeus (PA1HR)
http://www.remeeus.eu
Communication is about people, the rest is technology.

Aaron schreef:
>
>
> So I decided this winter I will be QRO finally. My SGC-239 out at the
> barn does great but 100W 160M just doesn't cut it. The tuner will only
> handle 200W PEP. I need to reconfigure the setup from the shack all the
> way to the feed point then.
>
> I seem to get a bit of noise on the higher bands as well, 30M is about
> unusable even on my Corsair II, so I think I might try a 4:1 at the feed
> point and see if that helps.
>
> Ladderline to the shack is out of the question, too much routing and
> stuff out in the yard to make it work right. So I am now back to direct
> feeding with coax with my potential setup.
>
> Now the big question... what tuner to get?? I thought about the SGC-235
> but that only gives me 500W PEP 160 - 10, it does allow me to put it out
> at the barn. Also expensive.
>
> PALSTAR AT-AUTO, Legal limit 160 - 6, very expensive and sits in the
> shack. Think it might be the nicest Auto tuner on the market.
>
> Looked at the LDG 1000, had terrible reviews.
>
> Then again I could go with a good roller inductor but I go jump around a
> lot and spoiled on this memory tuning stuff. Also what's going to happen

> on 160M with a 4:1. I figure that's going to put me somewhere at 20 to
> 12 Ohms impedance and not too sure how that's going to affect the
> performance.
>
> Thought it would be best to kick thsi one around before I start buying
> stuff.
>
> Aaron
> KD4GSL
>

_____ Informatie van ESET NOD32 Antivirus, versie van database viruskenmerken 4505 (20091014) _____

Het bericht is gecontroleerd door ESET NOD32 Antivirus.

http://www.eset.com

3569. Re: [SkyWires] Going QRO

Yahoo group: SkyWires
Date: 2009-10-14 06:38:30 UTC
From: Hans Remeeus
Topic: 3565 Message: 3569

$250 for two tuners, not per tuner.

73,
Hans Remeeus (PA1HR)
http://www.remeeus.eu
Communication is about people, the rest is technology.

Hans Remeeus schreef:
>
> I just built two LC antennatuners for my 73 ft vertical. They cover the
> 160 untill 15 meterband and will easily handle at least 1,5 kW on all
> bands. Costs: not more than $250 for both the tuners.
>

_____ Informatie van ESET NOD32 Antivirus, versie van database viruskenmerken 4505 (20091014) _____

Het bericht is gecontroleerd door ESET NOD32 Antivirus.

http://www.eset.com

3581. Re: Going QRO

Yahoo group: SkyWires
Date: 2009-11-23 02:36:00 UTC
From: abemitchell777
Topic: 3565 Message: 3581

Hi Aaron,
You may be one that can learn from other's mistakes (I usually have to pay for my own and learn slow). Recently I was enjoying my home brew amp that uses eight MRF-151G MOSFETS. It is over built with low power and SWR protection. Since it would do 2.4KW RMS or 3.2KW PEP into a dummy load I felt it was built proof running it at 1.2KW to 1.4KW. I do not like tuners in line and take pride in my resonant antennas. The one I've been on is flat at 3.95 and the needle quivers at 3.97. It is an inverted V with a legal limit ferrite type balun. Having just come home with a Swan ST-1A tuner I started playing on 14.24 and 7.24. The 20m tuned up easy and worked fine (probably heated the balun a bit?) but the 40m tuned a bit slower. All seemed well until well the SWR reading jumped from flat to infinity and there was a flash in the amp that I hoped was a relay.
I had forgotten that there would be a lot of heat for the balun to dissipate. Baluns are not so good at dissipating heat! The flash was one of the MFR 151Gs popping apart. The amp uses eight of them at $115 each plus shipping. After testing I decided two were defiantly bad and I may have gotten off cheap only having to get off $240 and change. A $950 transistor bill would have been a hard spanking.
So I guess what I'm saying is things can get expensive when we forget simple things like getting off resonance causes heat and the heat has a relationship between the power level and how for off resonance we are. And even with built in protection in an overbuilt "bullet proof" amp things can get nasty faster than we can flip a switch. QRO can get expensive if we get lax on the simple things.
Abe
P.S. I'm now using an RG-8 air wound balun feeding the 75m wires and included a 40m set of wires on the same feed point. I hope to get a 235' to 345' piece of wire up soon.

3582. Re: ? Off subject ?

Yahoo group: SkyWires
Date: 2009-11-23 04:33:37 UTC
From: abemitchell777
Topic: 3560 Message: 3582

Hi Bill,
Want a real high performance base antenna for almost nothing? It will be a 5/8 wave ground plane optimized for a great impedance match and low angle signal radiation (low SWR and great low local and skip lobes).
The parts will be:
PARTS:

1. a 3" piece of ¾" PVC pipe

2. about a foot of 14 gauge enameled wire (you can use a white or black insulated wire from a piece of romax but it will change the hole spacing on the PVC pipe)

3. about 125' of any non insulated wire (you can use insulated wire by making all 5 radials 5% shorter)

4. feed line of coax that will reach from antenna to transmitter with a PL-259 at one end

DIRECTIONS:

1. Take the 14ga enameled wire and wrap 11 turns (this should leave an inch or so at each end as the coil should be ¾ of an inch) around the PVC pipe ending with an inch or two of wire left at each end of the coil. This will be about a 1.588 microhenry coil
2. mark and drill a small hole in one side of the PVC pipe at both ends of the coil when the coil is about centered on the pipe
3. drill a small hole all the way through (both sides so 2 holes) ¼" from one end of the pipe
4. drill 2 holes all of the way through ¼" from the other end of the pipe at 90^ angles (this will be 4 holes, the 4 radials going in 4 different directions.
5. put the wire at the ends of the coil through the holes at the end of the coil and pull them out the ends of the pipe, the coil should be tight
6. take a 23' wire and feed it through both holes at one end of the pipe, tie and solder it, also soldering the wire from the coil to it as this is your vertical radiator. And use about 3" of wire to make a small 1" loop at the other end, this is to tie a string or rope to.
7. take 2 wires 52' long and feed them through the 4 holes at the other end of the pipe, centering the wires so about 26' of wire is coming from each hole (you should keep these as close to the same length as possible). Solder the 2 wires together where they cross in the pipe.
8. strip the shield back a couple inches and solder the center to the wire from the coil as far in the pipe as you can. Solder the shield to the 4 radials and push the center farther into the pipe being very careful the shield and center do not touch.
9. when you pull this up by the vertical radiator (rope over a tree limb or convenient high object works fine) it is best to get the coil 17' or 18' off the ground (higher is not your friend here as this height is the ½ wave point that will give you the best take off angle). The 4 radials should be tied with string to points that will let them angle down at about 45^, this is what will give you a 50 Ohm feed point. Check your new antenna and you will be

amazed at tah SWR and even more amazed at how well it performs.
10. NOW LOWER THE ROPE (you can leave the 4 radials tied in place) SO YOU CAN SEAL THE COAX WITH A GOOD SEALER, I WOULD USE MARINE GOOP OR BETTER FOR THIS. Sealing is a must! Or the coax will be junk very very soon.
Hope you have fun with this. I can give you other coil sizes if you need them, say you have 1" pipe but not ¾" pipe or ½" and not ¾". The radial will stay the same and are designed for 27.2 MHz.
I design and build a lot of antennas for others and myself. Most are variants of something from one of the ham books. This may be a good time to invite you to join the ham ranks. The code is no longer required and if you have been on 11m for long you will already know a lot of the test questions. As a tech you can use 200W on 28.3 to 28.5 SSB. There should be folks in your area to help you along. When you upgrade to general you can use 1500W and a whole new world of HF fun becomes open to you.
Abe K7ABE

3585. Re: [SkyWires] [Private Photo Share] Cali Girl- Has sent you private photos.

Yahoo group: SkyWires
Date: 2009-11-30 09:03:42 UTC
From: Hans Remeeus
Topic: 3584 Message: 3585

I prefer blond and deltaloops...

73,
Hans Remeeus (PA1HR)
http://www.remeeus.eu
Communication is about people, the rest is technology.

carliqktfriends schreef:
>
>
> I do not want the entire group seeing these photos.Because some may
> recognize me.

>
> Enjoy babe :)
>

3588. Advice required

Yahoo group: SkyWires
Date: 2009-12-07 13:15:32 UTC
From: kenandsylv
Topic: 3588 Message: 3588

Hi guys, the question i have is about my Loop that i have been using for about 2 years now.It is 263ft long as this you will see is determined by the shape of the building, bit of a fluke.

I live in an upstairs apartment in a block of 4 and due to local restrictions i cannot have any outside antennas.

You may ask then were is this loop that you have had up for 2 years,well it is tucked inside the plastic rain gutter all around the building.

The shape of the building is an "L" shape like 2 oblongs at right angles to each other

I feed it in the the sharp corner with a 4:1 balun and then about 20ft of 50 ohm co-ax into the shack,all of this feeder is in the attic space. It works quite well but i am being constantly being told that i should feed it with ladder line.

My question to you guys is how much benefit will i have if i feed it with the equivalent length of 450 ohm ladder line and then into the 4:1 balun.

I have to consider that in the attic there are all the TV antennas so i do not want any problems there as at the moment all is clear.

Thanks in advance.

73

Ken

G3SDW Torquay,Devon. UK

3589. RE: [SkyWires] Advice required

Yahoo group: SkyWires
Date: 2009-12-07 13:41:33 UTC
From: Mike W7KOL
Topic: 3588 Message: 3589

Hi Ken,

I have a 1,160 Ft. Loop on my farm, I started feeding it with ladder line like they all say so, I kept getting RF in my home, in my wife's clock radio at 2 AM

I tried Ferrites, Finally I bought RG-213 Coax, I run it from my tuner 80 feet out to my antenna base, then a balun and up to the feed about 55 feet with ladder line,

I have had no difference in signal reports. My experience is less RF problems using coax, I don't think you will find a difference,

73's Mike W7KOL

To: SkyWires@yahoogroups.com
From: kenandsylv@...
Date: Mon, 7 Dec 2009 13:15:32 +0000
Subject: [SkyWires] Advice required

Hi guys, the question i have is about my Loop that i have been using for about 2 years now.It is 263ft long as this you will see is determined by the shape of the building, bit of a fluke.

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I have to consider that in the attic there are all the TV antennas so i do not want any problems there as at the moment all is clear.

Thanks in advance.

73

Ken

G3SDW Torquay,Devon. UK

Windows Live Hotmail gives you a free,exclusive gift.
http://www.microsoft.com/windows/windowslive/hotmail_bl1/hotmail_bl1.aspx?ocid=PID23879::T
:WLMTAGL:ON:WL:en-ww:WM_IMHM_7:092009

3590. RE: [SkyWires] Advice required

Yahoo group: SkyWires
Date: 2009-12-07 13:44:55 UTC
From: Mike W7KOL
Topic: 3588 Message: 3590

Actually I have NO, RF problems now that I switched to coax.

Mike W7KOL

_____
Windows Live Hotmail gives you a free,exclusive gift.
http://www.microsoft.com/windows/windowslive/hotmail_bl1/hotmail_bl1.aspx?ocid=PID23879::T
:WLMTAGL:ON:WL:en-ww:WM_IMHM_7:092009

3591. RE: [SkyWires] Advice required

Yahoo group: SkyWires
Date: 2009-12-07 14:09:43 UTC
From: Michael Weinstock
Topic: 3588 Message: 3591

Hi Ken,

There is a great loop modelling program called rjeloop4.exe available at the following URL:

http://www.smeter.net/antennas/large-transmitting-loop.php

The reason I'm suggest this program is that it allows you to model the differences between using 50 Ohm feedline versus 450 Ohm feedline. Where the loop is an odd multiple of a 1/2 wavelength at a given frequency, there will be a very high impedance presented at the feedpoint. There is potential to significantly reduce the feedline losses by moving to openwire feeder or ladderline by virtue of lowering the impedance mismatch between antenna and feedline as well as using a feedline with lower losses than coaxial cable.

As for the potential for causing interference... theoretically, balanced feeder should not radiate and hence it should not be a source of interference... but this is the case only as long as it is truly balanced with equal and opposite currents in each wire that cancel each other out. If your like me and do not have the luxury of access to an RF ammeter, an old timer taught me a neat trick shortly after I got my licence. Solder some short flyleads onto a couple of torch/flashlight bulbs and place them in each leg of the feedline. I suggest doing this at the balun for convenience. Tune up on low power and then slowly increase power levels until the bulbs start to glow. The amount of power needed before the bulbs start to glow will vary with frequency due to changing impedance at the bulb insertion point into the legs of the feedline. Equal current in each leg should mean equal brightness from each bulb. If the bulbs do not glow evenly, then it is reasonable to assume your feedline is unbalanced and hence radiating. You may even get different results on different bands.... balanced on some and unbalanced on others.

Another trick I was taught was to apply a helical twist to an open wire feeder. This is easier to do with wider spaced open wire feeder as compared to commercial ladder line, but it still can be done on the commercial stuff. The reason for doing this is to try to even out the exposure of each leg to items (such as downpipes, gutters, wires, etc) that might couple to the feedline and hence detune it such that it becomes unbalanced. This twist can also help to cancel out the effects of any local sources of interference close to the feedline as well as provide some extra physical stability to the feedline.

My suggestion is to have a play with the program... model your loop at frequencies you operate on and check the effects of changing the feedline impedance from 50 to 450 Ohms. If you are satisfied that you can improve

the efficiency of your setup by moving to ladderline, then do so. Once you have installed the ladderline, tune on low power and check the current balance using the inline torch bulbs. If you are satisfied that the feedline is adequately balanced, then theoretically, it should not be radiating and hence should not be a source of interference.

That said, when you start to radiate extra watts as signal strength froma low loss feeder setup rather than heating the coax, you might find greater potential for interference on transmit. In that case, turning your power down should theoretically get you back to similar field strengths on TX that you had with coaxial feed and hence hopefully no interference. On RX you would have the benefit of the extra efficiency in the system.

Let us know how you go.

73,

Michael Weinstock
Melbourne, Australia
VK3EMJ

-----Original Message-----
From: SkyWires@yahoogroups.com [mailto:SkyWires@yahoogroups.com]On Behalf Of kenandsylv
Sent: Tuesday, 8 December 2009 12:16 AM
To: SkyWires@yahoogroups.com
Subject: [SkyWires] Advice required

Hi guys, the question i have is about my Loop that i have been using for about 2 years now.It is 263ft long as this you will see is determined by the shape of the building, bit of a fluke.

I live in an upstairs apartment in a block of 4 and due to local restrictions i cannot have any outside antennas.

You may ask then were is this loop that you have had up for 2 years,well it is tucked inside the plastic rain gutter all around the building.

The shape of the building is an "L" shape like 2 oblongs at right angles to each other

I feed it in the the sharp corner with a 4:1 balun and then about 20ft of 50 ohm co-ax into the shack,all of this feeder is in the attic space. It works quite well but i am being constantly being told that i should feed it with ladder line.

My question to you guys is how much benefit will i have if i feed it with the equivalent length of 450 ohm ladder line and then into the 4:1 balun.

I have to consider that in the attic there are all the TV antennas so i do not want any problems there as at the moment all is clear.

Thanks in advance.

73

Ken

G3SDW Torquay,Devon. UK

3592. Re: [SkyWires] Advice required

Yahoo group: SkyWires
Date: 2009-12-07 14:24:52 UTC
From: Harold Burton
Topic: 3588 Message: 3592

Rule 1 to live by.... If it's not broken, don't fix it! If you are satisfied with
the performance of your present antenna and it's not causing any RF
complaints I'd be really reluctant to make any changes. At the very least,
try to make any changes easily reversible. That way, if the changes cause
problems to arise you can put it back like it was without major labor and
cost issues. Having said that, it's possible one of our local Group Gurus
may be able to tell you how to quadruple the performance of your antenna.
Good luck with it.

Harold
KD5SAK

----- Original Message -----
From: "kenandsylv" <kenandsylv@...>
To: <SkyWires@yahoogroups.com>
Sent: Monday, December 07, 2009 7:15 AM
Subject: [SkyWires] Advice required

> Hi guys, the question i have is about my Loop that i have been using for
> about 2 years now.It is 263ft long as this you will see is determined by
> the shape of the building, bit of a fluke.
>
> I live in an upstairs apartment in a block of 4 and due to local
> restrictions i cannot have any outside antennas.
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> I feed it in the the sharp corner with a 4:1 balun and then about 20ft of
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>
> I have to consider that in the attic there are all the TV antennas so i do
> not want any problems there as at the moment all is clear.
>
> Thanks in advance.
>
> 73

>
> Ken
>
> G3SDW Torquay,Devon. UK

3593. Re: Advice required

Yahoo group: SkyWires
Date: 2009-12-07 18:30:21 UTC
From: kenandsylv
Topic: 3588 Message: 3593

Thanks guys on all the points and i will give it a go.

I must admit to having a laugh to my self about the flash light bulbs as when i was first licensed back in`63, it was a trick we used to use then for tuning up an end fed long wire we called them loop lamps and i won first prize at the local radio club in the annual construction contest for my bare faced cheek for having the nerve to enter it.

It is quite easy to play with this loop as i can get to the feed point by going through the landing window onto a flat roof area.

Judging by your thoughts i do not think that there will be much either way as the feeder is so short and if i use ladder line then it will have to lie along the rafters horizontally so this in it self will unbalance it.

I will have a try and let the group know what happens.

Also i will check the modelling program too and see what comes of that.

73

Ken

G3SDW

3594. Re: [SkyWires] Advice required

Yahoo group: SkyWires
Date: 2009-12-07 18:29:07 UTC
From: Dr.Ace Ratliff
Topic: 3588 Message: 3594

Ken,
My advice is "If it's not broke, don't fix it."
73, Ace
--
Dr.Ace Ratliff
www.WH2T.com <http://www.wh2t.com/>

On Mon, Dec 7, 2009 at 8:15 AM, kenandsylv <kenandsylv@...> wrote:

>
>
> Hi guys, the question i have is about my Loop that i have been using for
> about 2 years now.It is 263ft long as this you will see is determined by the
> shape of the building, bit of a fluke.
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> not want any problems there as at the moment all is clear.
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> Thanks in advance.
>
> 73
>
> Ken
>
> G3SDW Torquay,Devon. UK
>
>
>

3595. New to the group:

Yahoo group: SkyWires
Date: 2009-12-07 19:05:42 UTC
From: dmir2001
Topic: 3595 Message: 3595

Hello:

Name here, is John, KB9PBM... Have a lot of questions about loops but let me give a lttle background first... I own 25 acres of heavely wood land in Upper Michigan... That is where this antenna will go in the future... The trees are not very tall, but there are a LOT of them... Will trees affect performance? What would be the best wire to use? I , since I have the room, want to put up a full wave 160 M antenna... Wonder how much used power poles are? I have to have the local power Co. install poles to the future QTH... Anyway, thats enough questions for now... TIA, and VY 73 ... John ... Butler, WI...

3596. Re: Advice required

Yahoo group: SkyWires
Date: 2009-12-07 19:32:36 UTC
From: kenandsylv
Topic: 3588 Message: 3596

Michael just to say thank for the link on the loop calculator.

It is a great and very simple to use and also very informative and using either 50 ohn Co-Ax or 450 ladder line feeders well there seems to be very very little in it, so other than playing and that i do enjoy i think that as others have said "If it aint` broke don`t fix it".

73 from the UK

Ken

G3SDW

3597. RE: [SkyWires] Re: Advice required

Yahoo group: SkyWires
Date: 2009-12-07 21:53:48 UTC
From: Michael Weinstock
Topic: 3588 Message: 3597

My pleasure Ken.

Re the program, I really like that it explains much of the theory in addition to the modelling and it is simple keypresses to vary the frequency of operation over a wide range. Lets face it... we are more likely to go band hopping with other parameters constance than we are to fiddle the feedline length each time we change bands ;-)

From the additional info you have provided... short feedline, rafter mounting of balanced feedline and modelling the differences, I would be inclined to change my mind too and leave the coax in place. At my QTH, as I load up an 80mtr loop on 160mtrs, using the balanced feeder provides me with about 3db less loss in the system as compared to coax. That is enough to make it worthwhile for me... but everyone's mileage will vary.

It is very much a case of competing priorities and practicalities.

73,

Michael
Melbourne, Australia
VK3EMJ

-----Original Message-----
From: SkyWires@yahoogroups.com [mailto:SkyWires@yahoogroups.com]On Behalf Of kenandsylv
Sent: Tuesday, 8 December 2009 6:33 AM
To: SkyWires@yahoogroups.com
Subject: [SkyWires] Re: Advice required

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73 from the UK

Ken

G3SDW

3598. Arborist Slick Line

Yahoo group: SkyWires
Date: 2009-12-09 20:22:35 UTC
From: k0elw
Topic: 3598 Message: 3598

I recently became aware of the technique arborists use to
get lines up in trees when I had an arborist doing tree work on
my lot. (Including taking down a dead tree, and reposition a line
25 ft higher than before!)

We've all struggled with tangled fish line, breaking getting snagged,
etc and spending to much time getting a line up in the air.

Arborist slick line is a wax-coated heavy string which does not tangle.
You do not coil it or wind it on a spool, just store in a bucket or stuff bag.

http://wesspur.com/throw-line/throw-line-kits.html
Here is one outfit that sells a kit.

Here is a demo:
http://www.youtube.com/watch?v=EDTNO43PbJI&feature=related

I'm really surprised I've never seen hams use or discuss this technique.

73 de K0ELW

3599. NZ4O Daily LF/MF/HF/6M Frequency Radiowave Propagation Forecast #2009-39

Yahoo group: SkyWires
Date: 2009-12-11 14:08:56 UTC
From: Thomas F. Giella NZ4O
Topic: 3599 Message: 3599

The NZ4O Daily LF/MF/HF/6M Frequency Radiowave Propagation Forecast #2009-39 has been published on Friday 12/11/2009 at 1400 UTC, valid 0000 UTC Saturday 12/12/2009 through 2359 UTC Friday 12/18/2009 at http://www.wcflunatall.com/nz4o3.htm .

73 & GUD DX,
Thomas F. Giella, NZ4O
Lakeland, FL, USA
nz4o@...

LF/MF/HF/VHF/UHF Frequency Radiowave Propagation Email Reflector:
http://lists.contesting.com/mailman/listinfo/spaceweather
NZ4O Daily Solar Space Weather & Geomagnetic Data Archive:
http://www.wcflunatall.com/nz4o1.htm
NZ4O Solar Space Weather & Geomagnetic Data In Graphic & Image Format:
http://www.wcflunatall.com/nz4o2.htm
NZ4O Daily LF/MF/HF/6M Frequency Radiowave Propagation Forecast & Archive:
http://www.wcflunatall.com/nz4o3.htm
NZ4O Solar Cycle 24 Forecast Discussion & Archive:
http://www.wcflunatall.com/nz4o4.htm
NZ4O 160 Meter Radio Propagation Theory Notes:
http://www.wcflunatall.com/nz4o5.htm
NZ4O Solar Space Weather & Geomagnetic Raw Forecast Data Links:
http://www.wcflunatall.com/nz4o6.htm

3601. Some Solar Cycle 24 Firsts

Yahoo group: SkyWires
Date: 2009-12-16 14:53:19 UTC
From: Thomas F. Giella NZ4O
Topic: 3601 Message: 3601

Posted Wednesday December 16, 2009 at 1400 UTC at
http://www.wcflunatall.com/nz4o4.htm

Sunspot group #11035 near N30W13 has grown into the largest (seven times larger than the Earth) and most magnetically complex (beta-gamma) sunspot group of solar cycle 24. At 0102 UTC the sunspot group released a small C5.3 solar flare, the largest solar flare of solar cycle 24. More small C class solar flares are possible, with a chance for an isolated medium size M class solar flare.

#11035 also produced the first partially geoeffective (Earth facing) coronal mass ejection (CME) of solar cycle 24. The CME will arrive at Earth in a approximately two days and could spark a geomagnetic storm and visible aurora. Another geoeffective CME is possible, with an associated sudden ionosphere disturbance (SID) and shortwave fadeout (SWF).

The sunspot count is 38 which is the highest of solar cycle 24. The solar flux index is 82 which is tied for the highest SFI of solar Cycle 24.

With the increased sunspot count we should see improved propagation conditions on 15 and 12 meters.

73, GUD DX, Merry X-mas & Happy New Year,
Thomas F. Giella, NZ4O
Lakeland, FL, USA
nz4o@...

COL LF/MF/HF/VHF/UHF Frequency Radiowave Propagation Email Reflector:
http://lists.contesting.com/mailman/listinfo/spaceweather
NZ4O Daily Solar Space Weather & Geomagnetic Data Archive:
http://www.wcflunatall.com/nz4o1.htm
NZ4O Solar Space Weather & Geomagnetic Data In Graphic & Image Format:
http://www.wcflunatall.com/nz4o2.htm
NZ4O Daily LF/MF/HF/6M Frequency Radiowave Propagation Forecast & Archive:
http://www.wcflunatall.com/nz4o3.htm
NZ4O Solar Cycle 24 Forecast Discussion & Archive:
http://www.wcflunatall.com/nz4o4.htm
NZ4O 160 Meter Radio Propagation Theory Notes:
http://www.wcflunatall.com/nz4o5.htm
NZ4O Solar Space Weather & Geomagnetic Raw Forecast Data Links:
http://www.wcflunatall.com/nz4o6.htm
Harmful Man Induced Climate Change (Global Warming) Refuted:
http://www.wcflunatall.com/globalwarminglie.htm

3602. NZ4O Daily LF/MF/HF/6M Frequency Radiowave Propagation Forecast #2009-40

Yahoo group: SkyWires
Date: 2009-12-18 13:18:39 UTC
From: Thomas F. Giella NZ4O
Topic: 3602 Message: 3602

The NZ4O Daily LF/MF/HF/6M Frequency Radiowave Propagation Forecast #2009-40 has been published on Friday 12/18/2009 at 1300 UTC, valid 0000 UTC Saturday 12/19/2009 through 2359 UTC Friday 12/25/2009 at http://www.wcflunatall.com/nz4o3.htm .

73 & GUD DX,
Thomas F. Giella, NZ4O
Lakeland, FL, USA
nz4o@...

LF/MF/HF/VHF/UHF Frequency Radiowave Propagation Email Reflector:
http://lists.contesting.com/mailman/listinfo/spaceweather
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http://www.wcflunatall.com/nz4o2.htm
NZ4O Daily LF/MF/HF/6M Frequency Radiowave Propagation Forecast & Archive:
http://www.wcflunatall.com/nz4o3.htm
NZ4O Solar Cycle 24 Forecast Discussion & Archive:
http://www.wcflunatall.com/nz4o4.htm
NZ4O 160 Meter Radio Propagation Theory Notes:
http://www.wcflunatall.com/nz4o5.htm
NZ4O Solar Space Weather & Geomagnetic Raw Forecast Data Links:
http://www.wcflunatall.com/nz4o6.htm

3604. Three Solar Cycle 24 Sunspot Groups

Yahoo group: SkyWires
Date: 2009-12-20 12:50:07 UTC
From: Thomas F. Giella NZ4O
Topic: 3604 Message: 3604

Posted Sunday December 20, 2009 at 1200 UTC at
http://www.wcflunatall.com/nz4o4.htm
We now officially have solar cycle 24 sunspot group #11036, located near S29W19 with a beta magnetic signature. We also have solar cycle 24 sunspot group #11037, located near N18E54 with a beta magnetic signature.

We now have three solar cycle 24 numbered sunspot groups in existence at the same time, a new record high for solar cycle 24. Also the sunspot number is 43, also a new record high for solar cycle 24.

73, GUD DX, Merry X-mas & Happy New Year,
Thomas F. Giella, NZ4O
Lakeland, FL, USA
nz4o@...

COL LF/MF/HF/VHF/UHF Frequency Radiowave Propagation Email Reflector:
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NZ4O Solar Space Weather & Geomagnetic Data In Graphic & Image Format:
http://www.wcflunatall.com/nz4o2.htm
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NZ4O Solar Cycle 24 Forecast Discussion & Archive:
http://www.wcflunatall.com/nz4o4.htm
NZ4O 160 Meter Radio Propagation Theory Notes:
http://www.wcflunatall.com/nz4o5.htm
NZ4O Solar Space Weather & Geomagnetic Raw Forecast Data Links:
http://www.wcflunatall.com/nz4o6.htm
Harmful Man Induced Climate Change (Global Warming) Refuted:
http://www.wcflunatall.com/globalwarminglie.htm

3606. New Solar Cycle 24 Sunspot Group

Yahoo group: SkyWires
Date: 2009-12-24 13:04:33 UTC
From: Thomas F. Giella NZ4O
Topic: 3606 Message: 3606

Posted Thursday December 24, 2009 at 1300 UTC at
http://www.wcflunatall.com/nz4o4.htm

A new solar cycle 24 sunspot group emerged early this morning. It is located near S27E26 and appears to have a simple beta magnetic signature. If and when it's numbered by NOAA/SWPC it will be #11040.

If numbered then the month of December has seen seven solar cycle 24 sunspot groups emerge. And of course that is a new record for solar cycle 24.

The solar flux index values for December 23rd were 80.7 78.4 76.8 and the sunspot number 23.

73, GUD DX, Merry X-mas & Happy New Year,
Thomas F. Giella, NZ4O
Lakeland, FL, USA
nz4o@...

COL LF/MF/HF/VHF/UHF Frequency Radiowave Propagation Email Reflector:
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NZ4O Daily LF/MF/HF/6M Frequency Radiowave Propagation Forecast & Archive:
http://www.wcflunatall.com/nz4o3.htm
NZ4O Solar Cycle 24 Forecast Discussion & Archive:
http://www.wcflunatall.com/nz4o4.htm
NZ4O 160 Meter Radio Propagation Theory Notes:
http://www.wcflunatall.com/nz4o5.htm
NZ4O Solar Space Weather & Geomagnetic Raw Forecast Data Links:
http://www.wcflunatall.com/nz4o6.htm
Harmful Man Induced Climate Change (Global Warming) Refuted:
http://www.wcflunatall.com/globalwarminglie.htm

3608. Balun or not to Balun

Yahoo group: SkyWires
Date: 2010-01-04 03:00:01 UTC
From: Aaron
Topic: 3608 Message: 3608

I have been kicking around either dropping a 4:1 or 9:1 in hope to reduce my noise level on the higher bands. Not sure if my tuner will match it on 160 with the balun, think that might drop the impeadence down too low. This may not work but thought I would get some more info on the matter before I try.

Setup:
75' Coax to SGC 239 Tuner to 35' of 450 Ladder Line to 530'ish of loop

I'm planning on putting the balun right between the tuner and the ladder line and hopefully it might balance they antenna out. I may be wrong but again that's why I am here bouncing ideas around.

Aaron
KD4GSL

3609. AW: [SkyWires] Balun or not to Balun

Yahoo group: SkyWires
Date: 2010-01-04 12:13:19 UTC
From: Siegfried Jackstien
Topic: 3608 Message: 3609

Did this with a fc 1000 tuner and it worked quite good

If you have problems on 160 try to lengthen the ladderline

Greetz

Dg9bfc

Sigi

Von: SkyWires@yahoogroups.com [mailto:SkyWires@yahoogroups.com] Im Auftrag von Aaron
Gesendet: Montag, 4. Januar 2010 04:00
An: SkyWires@yahoogroups.com
Betreff: [SkyWires] Balun or not to Balun

I have been kicking around either dropping a 4:1 or 9:1 in hope to reduce my noise level on the higher bands. Not sure if my tuner will match it on 160 with the balun, think that might drop the impeadence down too low. This may not work but thought I would get some more info on the matter before I try.

Setup:
75' Coax to SGC 239 Tuner to 35' of 450 Ladder Line to 530'ish of loop

I'm planning on putting the balun right between the tuner and the ladder line and hopefully it might balance they antenna out. I may be wrong but again that's why I am here bouncing ideas around.

Aaron
KD4GSL

3610. Re: [SkyWires] Balun or not to Balun

Yahoo group: SkyWires
Date: 2010-01-04 14:50:56 UTC
From: Jim Dunstan
Topic: 3608 Message: 3610

At 03:00 AM 1/4/2010 +0000, you wrote:
>
>
>I have been kicking around either dropping a 4:1 or 9:1 in hope to reduce
>my noise level on the higher bands. Not sure if my tuner will match it on
>160 with the balun, think that might drop the impeadence down too low.
>This may not work but thought I would get some more info on the matter
>before I try.
>
>Setup:
>75' Coax to SGC 239 Tuner to 35' of 450 Ladder Line to 530'ish of loop
>
>I'm planning on putting the balun right between the tuner and the ladder
>line and hopefully it might balance they antenna out. I may be wrong but
>again that's why I am here bouncing ideas around.
>
>Aaron
>KD4GSL

Hi

The best place for a balun in your arrangement "antenna > ladder line > SGC coupler > to coax" is between the coupler and the coax. In this case it only needs to be a RF choke. You can also put a RF choke on the control/pwr line (right at the coupler). This will go a long way to eliminating antenna currents on the outside of the coax shield which in turn will promote balance in the ladder line. You indicate correctly that receive noise is increased by imbalance in the ladder line and common mode currents on the coax. The choke/balun (1:1) at the coax/coupler works best at that impedance ..... who knows what impedances will be encountered on the other side of the coupler.

You want the feed line to be neutral .... that is to contribute a minimum of radiation on xmit and to contribute a minimum of RF pickup on receive. this is achieved if the ladder line is in balance and the currents on the outside of the coax shield are divorced from the ladder line/loop (e.g. choked). If the line is not balanced and coax choked ... then the feed line will act as an effective part of the antenna as it comes through the noisiest part of the environment down to the shack.

73

Jim, VE3CI

3611. Love my new loop but RF problems on upper bands

Yahoo group: SkyWires
Date: 2010-01-06 00:03:59 UTC
From: goddardcat
Topic: 3611 Message: 3611

I just put up a 160 meter full wave horizontal loop at our lake place. It's 536 feet of 15 Ga insulated stranded THNN fed with 450 ohm ladder line to an MFJ 949C tuner. The height varies from around 20 to 40 feet as it winds through the trees. It works really well until I try to load it on 15 meters and above. I am getting RF back into the tuner on those bands. I'm using the balanced line terminals on the tuner which go through a 4:1 balun. Any ideas on what I could do to solve the RF problem?

73 Bill NZ0T

3612. Re: [SkyWires] Love my new loop but RF problems on upper bands

Yahoo group: SkyWires
Date: 2010-01-06 00:51:19 UTC
From: Michael Weinstock
Topic: 3611 Message: 3612

Hi Bill,

What is your station ground setup ?

I found a really good article the other day talking about 'ungrounded grounds'... where your station ground might be a poor RF ground with increasing frequency. Sounds like a possible match for the behaviour you are describing.

What might seem a reasonable station ground at lower frequencies could in fact represent a high impedance path to earth especially on the higher HF bands as you are reporting. If the length of your path to ground is around 1/4 wavelength on a given frequency, it will act as an impedance transformer isolating your shack from your station ground.

There are many different solutions to this problem and I recommend you take a look at this URL:

http://www.radioworks.com/nbgnd.html

I have an MFJ-931 artificial RF ground to use as a tuned counterpoise and it works great. I usually use it when I am operating portable as my station ground lead is very short in my case (about 5 feet).

I also have an MFJ-949C tuner. I think the 4:1 balun inside is rather diminuitive, but I doubt that to be the source of the problem. You could try an outboard more substantial balun.. would probably be more efficient, but again, I doubt that is the ultimate source of the hot tuner you are describing ?

73,

Michael Weinstock
VK3EMJ

> goddardcat <NZ0T@...> wrote:
>
> I just put up a 160 meter full wave horizontal loop at our lake place.
> It's 536 feet of 15 Ga insulated stranded THNN fed with 450 ohm ladder
> line to an MFJ 949C tuner. The height varies from around 20 to 40 feet
> as it winds through the trees. It works really well until I try to load
> it on 15 meters and above. I am getting RF back into the tuner on those
> bands. I'm using the balanced line terminals on the tuner which go
> through a 4:1 balun. Any ideas on what I could do to solve the RF
> problem?
>
> 73 Bill NZ0T

3613. Re: Love my new loop but RF problems on upper bands

Yahoo group: SkyWires
Date: 2010-01-06 16:45:24 UTC
From: k9jfk
Topic: 3611 Message: 3613

Hi Bill...

I think you need to change your feedline length slightly. Sounds like it is giving you a high impedance at the tuner. Check out this article

http://www.w5dxp.com/notuner.htm

You'll get the idea; add a couple of feet and recheck. If the problem goes away, great. If not, start checking out something else.

73 - Jim - K9JFK

--- In SkyWires@yahoogroups.com, "goddardcat" <NZ0T@...> wrote:
>
> I just put up a 160 meter full wave horizontal loop at our lake place. It's 536 feet of 15 Ga insulated stranded THNN fed with 450 ohm ladder line to an MFJ 949C tuner. The height varies from around 20 to 40 feet as it winds through the trees. It works really well until I try to load it on 15 meters and above. I am getting RF back into the tuner on those bands. I'm using the balanced line terminals on the tuner which go through a 4:1 balun. Any ideas on what I could do to solve the RF problem?
>
> 73 Bill NZ0T
>

3614. Re: [SkyWires] Love my new loop but RF problems on upper bands

Yahoo group: SkyWires
Date: 2010-01-06 18:05:53 UTC
From: Jim Dunstan
Topic: 3611 Message: 3614

At 12:03 AM 1/6/2010 +0000, you wrote:
>
>
>I just put up a 160 meter full wave horizontal loop at our lake place.
>It's 536 feet of 15 Ga insulated stranded THNN fed with 450 ohm ladder
>line to an MFJ 949C tuner. The height varies from around 20 to 40 feet as
>it winds through the trees. It works really well until I try to load it on
>15 meters and above. I am getting RF back into the tuner on those bands.
>I'm using the balanced line terminals on the tuner which go through a 4:1
>balun. Any ideas on what I could do to solve the RF problem?
>
>73 Bill NZ0T

Hi Bill,

not sure what you mean by "getting RF back into the tuner" .... but I assume your tuner/balun doesn't match your radio to the feed line very well on 15m. The time honored solution is to add some extra parallel feed line between the present end of the feed line and the input to your tuner. This added parallel feed line can be 450 ohm ... or some good quality 300 ohm feed line. It can simply be rolled in a large loop next to the tuner. Start with 5 feet and add more if needed .... each time checking how the tuner works on 15m. When you find the 15m sweet spot ... you may find it causes a problem on other bands .... if not ... leave it in. If it does cause problems on other bands ... simply make the extra line removable.

73

Jim, VE3CI

3615. AW: [SkyWires] Love my new loop but RF problems on upper bands

Yahoo group: SkyWires
Date: 2010-01-06 20:50:13 UTC
From: Siegfried Jackstien
Topic: 3611 Message: 3615

That is exactly how i tuned my 168m loop .. With 2 different lengths of wire
I can work any band

Most of them without tuner . and on the other bands swr is low so
tunerlosses and feedlinelosses are low

See loop.xls in the file area

Dg9bfc

Sigi

Von: SkyWires@yahoogroups.com [mailto:SkyWires@yahoogroups.com] Im Auftrag
von Jim Dunstan
Gesendet: Mittwoch, 6. Januar 2010 19:06
An: SkyWires@yahoogroups.com
Betreff: Re: [SkyWires] Love my new loop but RF problems on upper bands

At 12:03 AM 1/6/2010 +0000, you wrote:
>
>
>I just put up a 160 meter full wave horizontal loop at our lake place.
>It's 536 feet of 15 Ga insulated stranded THNN fed with 450 ohm ladder
>line to an MFJ 949C tuner. The height varies from around 20 to 40 feet as
>it winds through the trees. It works really well until I try to load it on
>15 meters and above. I am getting RF back into the tuner on those bands.
>I'm using the balanced line terminals on the tuner which go through a 4:1
>balun. Any ideas on what I could do to solve the RF problem?
>
>73 Bill NZ0T

Hi Bill,

not sure what you mean by "getting RF back into the tuner" .... but I
assume your tuner/balun doesn't match your radio to the feed line very well
on 15m. The time honored solution is to add some extra parallel feed line
between the present end of the feed line and the input to your tuner. This
added parallel feed line can be 450 ohm ... or some good quality 300 ohm
feed line. It can simply be rolled in a large loop next to the tuner.
Start with 5 feet and add more if needed .... each time checking how the
tuner works on 15m. When you find the 15m sweet spot ... you may find it
causes a problem on other bands .... if not ... leave it in. If it does
cause problems on other bands ... simply make the extra line removable.

73

Jim, VE3CI

3616. AW: [SkyWires] Re: Love my new loop but RF problems on upper bands

Yahoo group: SkyWires
Date: 2010-01-06 20:54:44 UTC
From: Siegfried Jackstien
Topic: 3611 Message: 3616

I know i can build this with relaycontacts or just some banana plugs . BUT:

Does anybody in this group know where to find these knife switches???

Dg9bfc

Sigi

Von: SkyWires@yahoogroups.com [mailto:SkyWires@yahoogroups.com] Im Auftrag von k9jfk
Gesendet: Mittwoch, 6. Januar 2010 17:45
An: SkyWires@yahoogroups.com
Betreff: [SkyWires] Re: Love my new loop but RF problems on upper band

Hi Bill...

I think you need to change your feedline length slightly. Sounds like it is giving you a high impedance at the tuner. Check out this article

http://www.w5dxp. <http://www.w5dxp.com/notuner.htm> com/notuner.htm

You'll get the idea; add a couple of feet and recheck. If the problem goes away, great. If not, start checking out something else.

73 - Jim - K9JFK

--- In SkyWires@yahoogroup <mailto:SkyWires%40yahoogroups.com> s.com, "goddardcat" <NZ0T@...> wrote:
>
> I just put up a 160 meter full wave horizontal loop at our lake place. It's 536 feet of 15 Ga insulated stranded THNN fed with 450 ohm ladder line to an MFJ 949C tuner. The height varies from around 20 to 40 feet as it winds through the trees. It works really well until I try to load it on 15 meters and above. I am getting RF back into the tuner on those bands. I'm using the balanced line terminals on the tuner which go through a 4:1 balun. Any ideas on what I could do to solve the RF problem?
>
> 73 Bill NZ0T
>

3617. Re: Love my new loop but RF problems on upper bands

Yahoo group: SkyWires
Date: 2010-01-08 22:17:36 UTC
From: goddardcat
Topic: 3611 Message: 3617

Actually I already have extra feed line from feeding my old 160 dipole. Maybe I should try changing the length.

--- In SkyWires@yahoogroups.com, Jim Dunstan <jimdunstan@...> wrote:
>
> At 12:03 AM 1/6/2010 +0000, you wrote:
> >
> >
> >I just put up a 160 meter full wave horizontal loop at our lake place.
> >It's 536 feet of 15 Ga insulated stranded THNN fed with 450 ohm ladder
> >line to an MFJ 949C tuner. The height varies from around 20 to 40 feet as
> >it winds through the trees. It works really well until I try to load it on
> >15 meters and above. I am getting RF back into the tuner on those bands.
> >I'm using the balanced line terminals on the tuner which go through a 4:1
> >balun. Any ideas on what I could do to solve the RF problem?
> >
> >73 Bill NZ0T
>
> Hi Bill,
>
> not sure what you mean by "getting RF back into the tuner" .... but I
> assume your tuner/balun doesn't match your radio to the feed line very well
> on 15m. The time honored solution is to add some extra parallel feed line
> between the present end of the feed line and the input to your tuner. This
> added parallel feed line can be 450 ohm ... or some good quality 300 ohm
> feed line. It can simply be rolled in a large loop next to the tuner.
> Start with 5 feet and add more if needed .... each time checking how the
> tuner works on 15m. When you find the 15m sweet spot ... you may find it
> causes a problem on other bands .... if not ... leave it in. If it does
> cause problems on other bands ... simply make the extra line removable.
>
> 73
>
> Jim, VE3CI
>

3618. Re: [SkyWires] Re: Love my new loop but RF problems on upper bands

Yahoo group: SkyWires
Date: 2010-01-08 23:36:35 UTC
From: Jim Dunstan
Topic: 3611 Message: 3618

At 10:17 PM 1/8/2010 +0000, you wrote:
>
>
>Actually I already have extra feed line from feeding my old 160 dipole.
>Maybe I should try changing the length.

Hi,

The problem being 15m I recommend adding only a few feet at a time. It may not take much to bring the impedance into the range your tuner/balun can handle.

Jim, VE3CI

3619. 80/160 m Loops

Yahoo group: SkyWires
Date: 2010-01-10 03:21:35 UTC
From: monk6702000
Topic: 3619 Message: 3619

I Currently Have A 80 Meter Horz. Loop. I Want To Get On 160m Butt

I Only Have Enough Real estate For 80m Loop! My Question Is ???

Could You Take A 160m Wire And Double Course It Around The Perimiter

Twice One Above The Other??? And If So. What Would The Spacing Have To

Be ???

Thanks S. Grater
KC9OJI

3620. Re: [SkyWires] 80/160 m Loops

Yahoo group: SkyWires
Date: 2010-01-10 04:09:10 UTC
From: Dr.Ace Ratliff
Topic: 3619 Message: 3620

Yes, The easiest way is to use a two conductor lamp cord.

--
Dr.Ace Ratliff
www.WH2T.com

On Sat, Jan 9, 2010 at 10:21 PM, monk6702000 <skgrater@att.net> wrote:

>
>
> I Currently Have A 80 Meter Horz. Loop. I Want To Get On 160m Butt
>
> I Only Have Enough Real estate For 80m Loop! My Question Is ???
>
> Could You Take A 160m Wire And Double Course It Around The Perimiter
>
> Twice One Above The Other??? And If So. What Would The Spacing Have To
>
> Be ???
>
> Thanks S. Grater
> KC9OJI
>
>
>

3621. Re: [SkyWires] 80/160 m Loops

Yahoo group: SkyWires
Date: 2010-01-10 04:38:37 UTC
From: icra@galaxynet.com
Topic: 3619 Message: 3621

> I Currently Have A 80 Meter Horz. Loop. I Want To Get On 160m
> Butt
>
> I Only Have Enough Real estate For 80m Loop! My Question Is ???
>
> Could You Take A 160m Wire And Double Course It Around The
> Perimiter
>
> Twice One Above The Other??? And If So. What Would The Spacing Have
> To
>
> Be ???
>

Another option I have heard of.....

Put a trap on the far side from the feed point.....

160 would become a folded dipole....higher bands would remain a loop

I have never tried it, but have heard it works

Mel
N7OKL

3622. Re: [SkyWires] 80/160 m Loops

Yahoo group: SkyWires
Date: 2010-01-10 04:40:50 UTC
From: icra@galaxynet.com
Topic: 3619 Message: 3622

> Yes, The easiest way is to use a two conductor lamp cord.
>

> I Currently Have A 80 Meter Horz. Loop. I Want To Get On 160m Butt
>
> I Only Have Enough Real estate For 80m Loop! My Question Is ???
>
> Could You Take A 160m Wire And Double Course It Around The
> Perimiter
>
> Twice One Above The Other??? And If So. What Would The Spacing Have
> To
>
> Be ???
>
This is something I have thought about trying.....

Anyone run it through EZNEC (or another program) to see what the patterns would look like?

Mel
N7OKL

3623. AW: [SkyWires] 80/160 m Loops

Yahoo group: SkyWires
Date: 2010-01-10 09:28:28 UTC
From: Siegfried Jackstien
Topic: 3619 Message: 3623

I think that open at the opposide would be easier .

Now you have a bent dipole for 160 . should work better as the 2 conductor loop .

Dg9bfc

Sigi

Von: SkyWires@yahoogroups.com [mailto:SkyWires@yahoogroups.com] Im Auftrag von monk6702000
Gesendet: Sonntag, 10. Januar 2010 04:22
An: SkyWires@yahoogroups.com
Betreff: [SkyWires] 80/160 m Loops

I Currently Have A 80 Meter Horz. Loop. I Want To Get On 160m Butt

I Only Have Enough Real estate For 80m Loop! My Question Is ???

Could You Take A 160m Wire And Double Course It Around The Perimiter

Twice One Above The Other??? And If So. What Would The Spacing Have To

Be ???

Thanks S. Grater
KC9OJI

3624. Re: [SkyWires] 80/160 m Loops

Yahoo group: SkyWires
Date: 2010-01-10 13:59:13 UTC
From: Jim Dunstan
Topic: 3619 Message: 3624

At 03:21 AM 1/10/2010 +0000, you wrote:
>
>
>I Currently Have A 80 Meter Horz. Loop. I Want To Get On 160m Butt
>
>I Only Have Enough Real estate For 80m Loop! My Question Is ???
>
>Could You Take A 160m Wire And Double Course It Around The Perimiter
>
>Twice One Above The Other??? And If So. What Would The Spacing Have To
>
>Be ???
>
>Thanks S. Grater
>KC9OJI

Hi,

Yes you could .... but let's be clear. From a radiation point of view you will still have an 80m horizontal loop ..... the added inductance (and some capacitance) will serve to make it easier to feed the loop on 160m. You didn't mention the kind of feed system you are presently using. If it is coax ... then you are attempting to make the feed point a lower impedance on 160m.

If you break the single turn loop (present configuration) at a point opposite the feed point then the loop will become a 160m dipole that is bent into a square (if that is the present shape). You will then have no difficulty feeding the loop on 160m. If the shape is such that there is a support at the half way mark on the loop then a relay could be placed there to make (80m) and break (160m) the circuit. Someone mentioned putting a trap at that point (i presume tuned to 160m).

Someone also mentioned using zip cord to make a 2 turn loop. You could also simply feed the loop with open wire line .... using a length that brings the impedance to a manageable value for your tuner. There, a lot of possibilities.

73

Jim, VE3CI

3625. Re: [SkyWires] 80/160 m Loops

Yahoo group: SkyWires
Date: 2010-01-10 23:29:29 UTC
From: Jim Dunstan
Topic: 3619 Message: 3625

At 08:59 AM 1/10/2010 -0500, you wrote:
>
>
>At 03:21 AM 1/10/2010 +0000, you wrote:
> >
> >
> >I Currently Have A 80 Meter Horz. Loop. I Want To Get On 160m Butt
> >
> >I Only Have Enough Real estate For 80m Loop! My Question Is ???
> >
> >Could You Take A 160m Wire And Double Course It Around The Perimiter
> >
> >Twice One Above The Other??? And If So. What Would The Spacing Have To
> >
> >Be ???
> >
> >Thanks S. Grater
> >KC9OJI
>
>Hi,
>
>Yes you could .... but let's be clear. From a radiation point of view you
>will still have an 80m horizontal loop ..... the added inductance (and some
>capacitance) will serve to make it easier to feed the loop on 160m. You
>didn't mention the kind of feed system you are presently using. If it is
>coax ... then you are attempting to make the feed point a lower impedance
>on 160m.
>
>If you break the single turn loop (present configuration) at a point
>opposite the feed point then the loop will become a 160m dipole that is
>bent into a square (if that is the present shape). You will then have no
>difficulty feeding the loop on 160m. If the shape is such that there is a
>support at the half way mark on the loop then a relay could be placed there
>to make (80m) and break (160m) the circuit. Someone mentioned putting a
>trap at that point (i presume tuned to 160m).
>
>Someone also mentioned using zip cord to make a 2 turn loop. You could
>also simply feed the loop with open wire line .... using a length that
>brings the impedance to a manageable value for your tuner. There, a lot of
>possibilities.
>
>73
>
>Jim, VE3CI

Hi,

As an addendum ..... all of the discussion so far has been on methods to get the RF into the antenna (e.g. the 80m horizontal loop). A further alternative would be to consider the whole loop/feed line as an antenna. I am reminded of a situation I had many years ago when I had a balanced antenna (100 ft doublet in an inverted Vee configuration) mounted with the apex 30 ft over the ridge of the roof of a 2 story house (about 60 ft total above ground). I operated 100w AM in those days. I used a balanced tuner with ordinary 300 ohm TV twinlead feeding the doublet.

It worked gang busters 10-80m .. but was just so so on 160m .... as I was interested in calling in to an early morning net. I had no problem loading the doublet on 160m ... but didn't get out that well. then I tried using the whole antenna/feed system as a vertical radiator .... the shack was in the basement and the feed line went out the basement window ... up the side of the house ... up the 30 ft mast to the doublet. I simply loaded the shorted feed line against ground (using the plumbing in the basement). the performance was a great improvement ... and I had no difficulty working the net in the mornings.

Just another idea. Feed your feed line as a vertical and let the loop work like a capacity hat. simple to try.

73

Jim, VE3CI

3626. Re: [SkyWires] 80/160 m Loops

Yahoo group: SkyWires
Date: 2010-01-12 22:33:41 UTC
From: Steven Grater
Topic: 3619 Message: 3626

Thanks To All For Your Sugestions. All Where Good But Think In My Case
The Idea Of Using A Trap Is The Best Choice. What Would The Trap Be
Tuned For 160m Center Freq 1.8 Mhz?? Something I Can Build Or Better Off
Bought ??? Thanks For Your Input In Advance!!

S.Grater
KC9PJI

--- On Sat, 1/9/10, monk6702000 <skgrater@...> wrote:

From: monk6702000 <skgrater@...>
Subject: [SkyWires] 80/160 m Loops
To: SkyWires@...m
Date: Saturday, January 9, 2010, 9:21 PM

I Currently Have A 80 Meter Horz. Loop. I Want To Get On 160m Butt

I Only Have Enough Real estate For 80m Loop! My Question Is ???

Could You Take A 160m Wire And Double Course It Around The Perimiter

Twice One Above The Other??? And If So. What Would The Spacing Have To

Be ???

Thanks S. Grater
KC9OJI

3627. Re: Re: [SkyWires] 80/160 m Loops

Yahoo group: SkyWires
Date: 2010-01-12 23:02:20 UTC
From: Michael Weinstock
Topic: 3619 Message: 3627

Hi Steven,

My understanding of the trap option is that traps should be tuned for the lowest frequency of the band in question.

Regards,

Michael Weinstock
VK3EMJ
Melbourne, Australia

> Steven Grater <skgrater@...> wrote:
>
> Thanks To All For Your Sugestions. All Where Good But Think In My Case
> The Idea Of Using A Trap Is The Best Choice. What Would The Trap Be
> Tuned For 160m Center Freq 1.8 Mhz?? Something I Can Build Or Better Off
> Bought ??? Thanks For Your Input In Advance!!

>
> --- On Sat, 1/9/10, monk6702000 <skgrater@...> wrote:
>
>
> From: monk6702000 <skgrater@...>
> Subject: [SkyWires] 80/160 m Loops
> To: SkyWires@yahoogroups.com
> Date: Saturday, January 9, 2010, 9:21 PM
>
>
> Â
>
>
>
> I Currently Have A 80 Meter Horz. Loop. I Want To Get On 160m Butt
>
> I Only Have Enough Real estate For 80m Loop! My Question Is ???
>
> Could You Take A 160m Wire And Double Course It Around The Perimiter
>
> Twice One Above The Other??? And If So. What Would The Spacing Have To
>
> Be ???
>
> Thanks S. Grater
> KC9OJI

3628. AW: [SkyWires] 80/160 m Loops

Yahoo group: SkyWires
Date: 2010-01-12 23:12:37 UTC
From: Siegfried Jackstien
Topic: 3619 Message: 3628

No do not use a trap use a high voltage switch or relay .

You will have a lot of losses with that trap .

A friend from me did this test he had a 80m loop ha made the feedingpoint outside in the garden

So the opposide was near his window .

A short piece of ladderline to his window ended in two bananaplugs he could make tests on different bands with or without trap open and closed . Best was let the trap away . Finally he had an arrangement that worked very good

He had a bridge that he could close or open the ladderline and that´s it

Just turn your loop around feedingpoint away from you and you can reach the magic point easy

Dg9bfc

Sigi

Von: SkyWires@yahoogroups.com [mailto:SkyWires@yahoogroups.com] Im Auftrag von Steven Grater
Gesendet: Dienstag, 12. Januar 2010 23:34
An: SkyWires@yahoogroups.com
Betreff: Re: [SkyWires] 80/160 m Loops

Thanks To All For Your Sugestions. All Where Good But Think In My Case

The Idea Of Using A Trap Is The Best Choice. What Would The Trap Be

Tuned For 160m Center Freq 1.8 Mhz?? Something I Can Build Or Better Off

Bought ??? Thanks For Your Input In Advance!!

S.Grater

KC9PJI

--- On Sat, 1/9/10, monk6702000 <skgrater@...> wrote:

From: monk6702000 <skgrater@...>
Subject: [SkyWires] 80/160 m Loops
To: SkyWires@yahoogroups.com
Date: Saturday, January 9, 2010, 9:21 PM

I Currently Have A 80 Meter Horz. Loop. I Want To Get On 160m Butt

I Only Have Enough Real estate For 80m Loop! My Question Is ???

Could You Take A 160m Wire And Double Course It Around The Perimiter

Twice One Above The Other??? And If So. What Would The Spacing Have To

Be ???

Thanks S. Grater
KC9OJI

3630. Re: Balun or not to Balun

Yahoo group: SkyWires
Date: 2010-01-19 23:37:17 UTC
From: Aaron
Topic: 3608 Message: 3630

Well the 1:1 didnt do anything special... still getting high noise on 20, 30, and 40. Think tomorrow if I have time I am going to rewire my tuner box and the cables and connectors. The only 2 other options I know of at this point is either try another or aditional 4:1 or 9:1 like I mentioned.... or try running direct coax feed again. I know there is room for improvement just not sure where or what is the key just yet.

Aaron
KD4GSL

--- In SkyWires@yahoogroups.com, "Aaron" <wm.aaron.lamb@...> wrote:
>
> I have been kicking around either dropping a 4:1 or 9:1 in hope to reduce my noise level on the higher bands. Not sure if my tuner will match it on 160 with the balun, think that might drop the impeadence down too low. This may not work but thought I would get some more info on the matter before I try.
>
> Setup:
> 75' Coax to SGC 239 Tuner to 35' of 450 Ladder Line to 530'ish of loop
>
> I'm planning on putting the balun right between the tuner and the ladder line and hopefully it might balance they antenna out. I may be wrong but again that's why I am here bouncing ideas around.
>
> Aaron
> KD4GSL
>

3631. Re: Balun or not to Balun

Yahoo group: SkyWires
Date: 2010-01-20 00:28:07 UTC
From: Alan
Topic: 3608 Message: 3631

Hello, don't think putting a balun on will reduce noise. I run 4to1 balun then twinlead to antenna. A 4 to 1 will make it easier to match to the rig. BTW mine works just fine on 160...73, Alan

--- In SkyWires@yahoogroups.com, "Aaron" <wm.aaron.lamb@...> wrote:
>
> I have been kicking around either dropping a 4:1 or 9:1 in hope to reduce my noise level on the higher bands. Not sure if my tuner will match it on 160 with the balun, think that might drop the impeadence down too low. This may not work but thought I would get some more info on the matter before I try.
>
> Setup:
> 75' Coax to SGC 239 Tuner to 35' of 450 Ladder Line to 530'ish of loop
>
> I'm planning on putting the balun right between the tuner and the ladder line and hopefully it might balance they antenna out. I may be wrong but again that's why I am here bouncing ideas around.
>
> Aaron
> KD4GSL
>

3632. AW: [SkyWires] Re: Balun or not to Balun

Yahoo group: SkyWires
Date: 2010-01-23 22:29:36 UTC
From: Siegfried Jackstien
Topic: 3608 Message: 3632

Balun maybe can reduce noise IF the feedingline is acting as a second receiving source

A balun may improve balance on the ladderline and the line will not radiate (or receive)

My 0.02 dollars *g*

Dg9bfc

Sigi

Von: SkyWires@yahoogroups.com [mailto:SkyWires@yahoogroups.com] Im Auftrag von Alan
Gesendet: Mittwoch, 20. Januar 2010 01:28
An: SkyWires@yahoogroups.com
Betreff: [SkyWires] Re: Balun or not to Balun

Hello, don't think putting a balun on will reduce noise. I run 4to1 balun then twinlead to antenna. A 4 to 1 will make it easier to match to the rig. BTW mine works just fine on 160...73, Alan

--- In SkyWires@yahoogroup <mailto:SkyWires%40yahoogroups.com> s.com, "Aaron" <wm.aaron.lamb@...> wrote:
>
> I have been kicking around either dropping a 4:1 or 9:1 in hope to reduce my noise level on the higher bands. Not sure if my tuner will match it on 160 with the balun, think that might drop the impeadence down too low. This may not work but thought I would get some more info on the matter before I try.
>
> Setup:
> 75' Coax to SGC 239 Tuner to 35' of 450 Ladder Line to 530'ish of loop
>
> I'm planning on putting the balun right between the tuner and the ladder line and hopefully it might balance they antenna out. I may be wrong but again that's why I am here bouncing ideas around.
>
> Aaron
> KD4GSL
>

3634. cage loop

Yahoo group: SkyWires
Date: 2010-01-27 20:12:21 UTC
From: kb5vwz
Topic: 3634 Message: 3634

Hi, I am new to the group so I have a question for the collective.
I am planning my station for when I return to Texas. I have ready to install 4 towers next December when I get back. My idea is to assemble a cage loop strung between the 4 towers. The towers will be 40 feet apart in a square set up. My idea is to build 4 cage loops roughly 40 feet long, make a short jumper across each corner and feed this monster with coax at one corner. The elevation at each elevated mounting is planned to be at 39 feet. Two towers will have beams above, (VHF, UHF, the other with a tri-bander and VHF vertical) No, I am not considering a 4 square vertical array as two towers are up against a metal building. I have read nothing but good things about loops when installed elevated above ground at least 40 feet. I have heard DX stations ask for comparisons too and from my receive location they have sounded better. I have also heard stations using the DX blaster dipole set up, therefore the idea of the cage loop.
I also have a SGC 230 antenna coupler I might connect to this project so that I can get some multi-band operation.
Thoughts, Ideas, comments, are welcome.
73 de LA1BRA aka KB5VWZ
tom

3635. RE: [SkyWires] cage loop

Yahoo group: SkyWires
Date: 2010-01-27 20:31:17 UTC
From: Mike W7KOL
Topic: 3634 Message: 3635

Hi Tom,

I have had loops of all sizes, my first was for 80 meters, If you have room and can get 260 some feet of wire up for 80 M, you will not regret it.
My loop now is 1,160 feet although there's no need for that big of one, They do very well and I have mine a little over 40 feet high so your height will work. You can see mine at www.freewebs.com/w7kol 73's Mike

_____
Hotmail: Trusted email with powerful SPAM protection.
http://clk.atdmt.com/GBL/go/196390707/direct/01/

3636. Re: [SkyWires] cage loop

Yahoo group: SkyWires
Date: 2010-01-28 01:13:51 UTC
From: Jim Dunstan
Topic: 3634 Message: 3636

At 08:12 PM 1/27/2010 +0000, you wrote:
>
>
>Hi, I am new to the group so I have a question for the collective.
>I am planning my station for when I return to Texas. I have ready to
>install 4 towers next December when I get back. My idea is to assemble a
>cage loop strung between the 4 towers. The towers will be 40 feet apart in
>a square set up. My idea is to build 4 cage loops roughly 40 feet long,
>make a short jumper across each corner and feed this monster with coax at
>one corner. The elevation at each elevated mounting is planned to be at 39
>feet. Two towers will have beams above, (VHF, UHF, the other with a
>tri-bander and VHF vertical)
>No, I am not considering a 4 square vertical array as two towers are up
>against a metal building. I have read nothing but good things about loops
>when installed elevated above ground at least 40 feet. I have heard DX
>stations ask for comparisons too and from my receive location they have
>sounded better. I have also heard stations using the DX blaster dipole set
>up, therefore the idea of the cage loop.
>I also have a SGC 230 antenna coupler I might connect to this project so
>that I can get some multi-band operation.
>Thoughts, Ideas, comments, are welcome.
>73 de LA1BRA aka KB5VWZ
>tom

Hi Tom,

Just to be sure I understand .... you are building a horizontal loop approximately 160 ft in circumference which will be supported by 4 towers 40 ft in height. The loop will consist of 4 cage elements similar to the cage elements in the DX Blaster dipole.

Generally speaking, the cage elements when used in the dipole configuration are shorter in length than a single wire to obtain resonance at a particular frequency ... the resonance is broader (less sharp) making for operational convenience. If using a single wire ... I would expect a 160 ft loop to resonate somewhere below the 40m band .... e.g. 6.3 mhz. It will be interesting to predict where this loop (with caged elements) will resonate .... perhaps in the 60m band. However, I would expect the radiation pattern to be similar to a standard wire loop of similar dimensions .. although overall efficiency will be a little better ... the testimony of caged dipole users seem to endow them with special powers hi hi. I will be especially interested in knowing what the caging of the elements will do to the natural resonance of the loop ... it is not something I have seen published anywhere.

After all the work involved in caging the elements and stringing them up between the towers the SBC coupler will be very useful getting the loop working efficiently on all bands.

73

Jim, VE3CI

3637. Re: [SkyWires] cage loop

Yahoo group: SkyWires
Date: 2010-01-28 01:26:09 UTC
From: John Schroeder
Topic: 3634 Message: 3637

Wondering?

By cage loop, do you mean a circular antenna with anywhere from 3 to 6 wires in a circle around some sort of support? If you ahve a ARRL Wire Antenna Classics book around, the story starts on page 1-15...

John ... KB9PBM ...

--- On Wed, 1/27/10, Jim Dunstan <jimdunstan@rogers.com> wrote:

From: Jim Dunstan <jimdunstan@...>
Subject: Re: [SkyWires] cage loop
To: SkyWires@yahoogroups.com
Date: Wednesday, January 27, 2010, 7:13 PM

At 08:12 PM 1/27/2010 +0000, you wrote:
>
>
>Hi, I am new to the group so I have a question for the collective.
>I am planning my station for when I return to Texas. I have ready to
>install 4 towers next December when I get back. My idea is to assemble a
>cage loop strung between the 4 towers. The towers will be 40 feet apart in
>a square set up. My idea is to build 4 cage loops roughly 40 feet long,
>make a short jumper across each corner and feed this monster with coax at
>one corner. The elevation at each elevated mounting is planned to be at 39
>feet. Two towers will have beams above, (VHF, UHF, the other with a
>tri-bander and VHF vertical)
>No, I am not considering a 4 square vertical array as two towers are up
>against a metal building. I have read nothing but good things about loops
>when installed elevated above ground at least 40 feet. I have heard DX
>stations ask for comparisons too and from my receive location they have
>sounded better. I have also heard stations using the DX blaster dipole set
>up, therefore the idea of the cage loop.
>I also have a SGC 230 antenna coupler I might connect to this project so
>that I can get some multi-band operation.
>Thoughts, Ideas, comments, are welcome.
>73 de LA1BRA aka KB5VWZ
>tom

Hi Tom,

Just to be sure I understand .... you are building a horizontal loop approximately 160 ft in circumference which will be supported by 4 towers 40 ft in height. The loop will consist of 4 cage elements similar to the cage elements in the DX Blaster dipole.

Generally speaking, the cage elements when used in the dipole configuration are shorter in length than a single wire to obtain resonance at a particular frequency ... the resonance is broader (less sharp) making for operational convenience. If using a single wire ... I would expect a 160 ft loop to resonate somewhere below the 40m band .... e.g. 6.3 mhz. It will be interesting to predict where this loop (with caged elements) will resonate .... perhaps in the 60m band. However, I would expect the radiation pattern to be similar to a standard wire loop of similar dimensions .. although overall efficiency will be a little better ... the testimony of caged dipole users seem to endow them with special powers hi hi. I will be especially interested in knowing what the caging of the elements will do to the natural resonance of the loop ... it is not something I have seen published anywhere.

After all the work involved in caging the elements and stringing them up between the towers the SBC coupler will be very useful getting the loop working efficiently on all bands.

73

Jim, VE3CI

3638. RE: [SkyWires] cage loop

Yahoo group: SkyWires
Date: 2010-01-28 04:37:28 UTC
From: Gary
Topic: 3634 Message: 3638
Attachments: 1 described; binary payloads are missing from this source WARC

Hi guys I also am new to this group but an old fart ham. hi hi

I want to put up a loop around my property I have a big lot should be abt 800ft.

What would be the best way to feed it. I have an ant tuner that will feed bal line wire or coax

ART 15.

Gary K6JAJ

Gary K6JAJ

3639. 75 Ohm RG6 !

Yahoo group: SkyWires
Date: 2010-01-29 06:29:41 UTC
From: David_J55
Topic: 3639 Message: 3639

Hello All.

I'll bet I'm asking for trouble, but has anyone built chokes or baluns from RG6 coax? This will be used with an FT-857D at 100W or less.

73 de David ki6fbx k

3640. Re: [SkyWires] 75 Ohm RG6 !

Yahoo group: SkyWires
Date: 2010-01-29 10:48:59 UTC
From: ac2ad
Topic: 3639 Message: 3640

Hello David
I run Rg6 at 1kw plus and working on 100 countries on 75 ssb
>
>
>
> I'll bet I'm asking for trouble, but has anyone built chokes or baluns
> from RG6 coax? This will be used with an FT-857D at 100W or less.
>
> 73 de David ki6fbx k
>
>

3641. Re: cage loop

Yahoo group: SkyWires
Date: 2010-01-29 21:05:47 UTC
From: kb5vwz
Topic: 3634 Message: 3641

I logged onto ARRL but was not able to find the reference...but yes to your question of 6 wires in a loop config.
Hopefully someone steps up with a computer model.....

--- In SkyWires@yahoogroups.com, John Schroeder <dmir2001@...> wrote:
>
> Wondering?
> Â
> By cage loop, do you mean a circular antenna with anywhere from 3 to 6 wires in a circle around some sort of support? If you ahve a ARRL Wire Antenna Classics book around, the story starts on page 1-15...
> Â
> John ... KB9PBM ...
>
>
> --- On Wed, 1/27/10, Jim Dunstan <jimdunstan@...> wrote:
>
>
> From: Jim Dunstan <jimdunstan@...>
> Subject: Re: [SkyWires] cage loop
> To: SkyWires@yahoogroups.com
> Date: Wednesday, January 27, 2010, 7:13 PM
>
>
> Â
>
>
>
> At 08:12 PM 1/27/2010 +0000, you wrote:
> >
> >
> >Hi, I am new to the group so I have a question for the collective.
> >I am planning my station for when I return to Texas. I have ready to
> >install 4 towers next December when I get back. My idea is to assemble a
> >cage loop strung between the 4 towers. The towers will be 40 feet apart in
> >a square set up. My idea is to build 4 cage loops roughly 40 feet long,
> >make a short jumper across each corner and feed this monster with coax at
> >one corner. The elevation at each elevated mounting is planned to be at 39
> >feet. Two towers will have beams above, (VHF, UHF, the other with a
> >tri-bander and VHF vertical)
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> >against a metal building. I have read nothing but good things about loops
> >when installed elevated above ground at least 40 feet. I have heard DX
> >stations ask for comparisons too and from my receive location they have
> >sounded better. I have also heard stations using the DX blaster dipole set

> >up, therefore the idea of the cage loop.
> >I also have a SGC 230 antenna coupler I might connect to this project so
> >that I can get some multi-band operation.
> >Thoughts, Ideas, comments, are welcome.
> >73 de LA1BRA aka KB5VWZ
> >tom
>
> Hi Tom,
>
> Just to be sure I understand .... you are building a horizontal loop
> approximately 160 ft in circumference which will be supported by 4 towers
> 40 ft in height. The loop will consist of 4 cage elements similar to the
> cage elements in the DX Blaster dipole.
>
> Generally speaking, the cage elements when used in the dipole configuration
> are shorter in length than a single wire to obtain resonance at a
> particular frequency ... the resonance is broader (less sharp) making for
> operational convenience. If using a single wire ... I would expect a 160
> ft loop to resonate somewhere below the 40m band .... e.g. 6.3 mhz. It
> will be interesting to predict where this loop (with caged elements) will
> resonate .... perhaps in the 60m band. However, I would expect the
> radiation pattern to be similar to a standard wire loop of similar
> dimensions .. although overall efficiency will be a little better ... the
> testimony of caged dipole users seem to endow them with special powers hi
> hi. I will be especially interested in knowing what the caging of the
> elements will do to the natural resonance of the loop ... it is not
> something I have seen published anywhere.
>
> After all the work involved in caging the elements and stringing them up
> between the towers the SBC coupler will be very useful getting the loop
> working efficiently on all bands.
>
> 73
>
> Jim, VE3CI
>

3642. AW: [SkyWires] cage loop

Yahoo group: SkyWires
Date: 2010-01-29 21:36:47 UTC
From: Siegfried Jackstien
Topic: 3634 Message: 3642

Balanced line would be best . lower losses when high swr is on the line

Dg9bfc

Sigi

Von: SkyWires@yahoogroups.com [mailto:SkyWires@yahoogroups.com] Im Auftrag von Gary
Gesendet: Donnerstag, 28. Januar 2010 05:37
An: SkyWires@yahoogroups.com
Betreff: RE: [SkyWires] cage loop
Wichtigkeit: Hoch

Hi guys I also am new to this group but an old fart ham. hi hi

I want to put up a loop around my property I have a big lot should be abt 800ft.

What would be the best way to feed it. I have an ant tuner that will feed bal line wire or coax

ART 15.

Gary K6JAJ

Gary K6JAJ

3644. Re: cage loop

Yahoo group: SkyWires
Date: 2010-01-30 17:54:34 UTC
From: kb5vwz
Topic: 3634 Message: 3644

Found some references on the www for cage dipoles which had some good info. I have not found any other references of anyone using a loop as I propose.
From what all the reading I have done, the band width at resonance should be very wide (broad banded),
I have the ARRL version of Enzec, but I am struggling here...(hint hint)
I started out using 1005/freq (7.000) to come up with starting point,(right out of the ARRL book) then thought about broad banding the thing by using a cage..(large diameter=band width) So here I am.

I for one have not seen anyone do this, at least not on the web, so one of two things, it will not work or I have come up with a novel idea...

Snowing in Stavanger tonight (30 Jan 10)
73 de LA1BRA tom

--- In SkyWires@yahoogroups.com, "kb5vwz" <kb5vwz@...> wrote:
>
> I logged onto ARRL but was not able to find the reference...but yes to your question of 6 wires in a loop config.
> Hopefully someone steps up with a computer model.....
>
>
> --- In SkyWires@yahoogroups.com, John Schroeder <dmir2001@> wrote:
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> > Wondering?
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> > By cage loop, do you mean a circular antenna with anywhere from 3 to 6 wires in a circle around some sort of support? If you ahve a ARRL Wire Antenna Classics book around, the story starts on page 1-15...
> > Â
> > John ... KB9PBM ...
> >
> >
> > --- On Wed, 1/27/10, Jim Dunstan <jimdunstan@> wrote:
> >
> >
> > From: Jim Dunstan <jimdunstan@>
> > Subject: Re: [SkyWires] cage loop
> > To: SkyWires@yahoogroups.com
> > Date: Wednesday, January 27, 2010, 7:13 PM
> >
> >
> > Â
> >
> >
> >

> > At 08:12 PM 1/27/2010 +0000, you wrote:
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> > >
> > >Hi, I am new to the group so I have a question for the collective.
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> > >I also have a SGC 230 antenna coupler I might connect to this project so
> > >that I can get some multi-band operation.
> > >Thoughts, Ideas, comments, are welcome.
> > >73 de LA1BRA aka KB5VWZ
> > >tom
> >
> > Hi Tom,
> >
> > Just to be sure I understand .... you are building a horizontal loop
> > approximately 160 ft in circumference which will be supported by 4 towers
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> > After all the work involved in caging the elements and stringing them up
> > between the towers the SBC coupler will be very useful getting the loop
> > working efficiently on all bands.
> >
> > 73

> >
> > Jim, VE3CI
> >
>

3645. Re: cage loop

Yahoo group: SkyWires
Date: 2010-02-01 20:59:20 UTC
From: kb5vwz
Topic: 3634 Message: 3645

Any one interested to run EZNEC or similar on this project?

--- In SkyWires@yahoogroups.com, "kb5vwz" <kb5vwz@...> wrote:
>
> Found some references on the www for cage dipoles which had some good info. I have not found any other references of anyone using a loop as I propose.
> From what all the reading I have done, the band width at resonance should be very wide (broad banded),
> I have the ARRL version of Enzec, but I am struggling here...(hint hint)
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> I for one have not seen anyone do this, at least not on the web, so one of two things, it will not work or I have come up with a novel idea...
>
> Snowing in Stavanger tonight (30 Jan 10)
> 73 de LA1BRA tom
>
>
> --- In SkyWires@yahoogroups.com, "kb5vwz" <kb5vwz@> wrote:
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> > I logged onto ARRL but was not able to find the reference...but yes to your question of 6 wires in a loop config.
> > Hopefully someone steps up with a computer model.....
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> >
> > --- In SkyWires@yahoogroups.com, John Schroeder <dmir2001@> wrote:
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> > > Wondering?
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> > > By cage loop, do you mean a circular antenna with anywhere from 3 to 6 wires in a circle around some sort of support? If you ahve a ARRL Wire Antenna Classics book around, the story starts on page 1-15...
> > > Â
> > > John ... KB9PBM ...
> > >
> > >
> > > --- On Wed, 1/27/10, Jim Dunstan <jimdunstan@> wrote:
> > >
> > >
> > > From: Jim Dunstan <jimdunstan@>
> > > Subject: Re: [SkyWires] cage loop
> > > To: SkyWires@yahoogroups.com
> > > Date: Wednesday, January 27, 2010, 7:13 PM

> > >
> > >
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> > > At 08:12 PM 1/27/2010 +0000, you wrote:
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> > > >that I can get some multi-band operation.
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> > > Just to be sure I understand .... you are building a horizontal loop
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> > > After all the work involved in caging the elements and stringing them up
> > > between the towers the SBC coupler will be very useful getting the loop
> > > working efficiently on all bands.
> > >
> > > 73
> > >
> > > Jim, VE3CI
> > >
> >
>

3650. Free Calls From PC to Phone - Download it

Yahoo group: SkyWires
Date: 2010-02-06 08:31:54 UTC
From: Farah Khan
Topic: 3650 Message: 3650

VoIP Services and PC to Phone Service
http://pc-to-phone.vpedia.info/voip-services-and-pc-to-phone-service.html

---

Making PC to Phone VoIP Calls
http://pc-to-phone.vpedia.info/making-pc-to-phone-voip-calls-over-dial.html

---

Free Internet Phone Calls
http://pc-to-phone.vpedia.info/free-internet-phone-calls.html

---

Find the cheapest PC to Phone service
http://pc-to-phone.vpedia.info/find-cheapest-pc-to-phone-service-or.html

---

PC-to-Phone
http://pc-to-phone.vpedia.info/pc-to-phone.html

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http://groups.yahoo.com/subscribe/activefun

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3651. Hot Locations For Honeymoon

Yahoo group: SkyWires
Date: 2010-02-06 09:18:05 UTC
From: Veer K
Topic: 3651 Message: 3651

Honeymoon Locations
http://luxury-hotels-worldwide.vpedia.info/honeymoon-locations.html

---

Most Expensive Restaurants In World
http://luxury-hotels-worldwide.vpedia.info/most-expensive-restaurants-in-world.html

---

Budget Hotels Becoming More Popular
http://luxury-hotels-worldwide.vpedia.info/budget-hotels-becoming-more-popular.html

---

More On Korean B In London
http://luxury-hotels-worldwide.vpedia.info/more-on-korean-b-in-london.html

---

Burj Al Arab Most Expensive Hotel
http://luxury-hotels-worldwide.vpedia.info/burj-al-arab-most-expensive-hotel_20.html

---

Join Best Yahoo Groups

Join ActiveFun For 100% Entertainment. The Best Group Of Yahoo!

http://groups.yahoo.com/subscribe/activefun

This email is not send to individuals. This is Post in Group. If you are receiving this message via email it means you are subscribed to a Yahoo group and have requested to receive individual e-mail. If you no longer wish to receive emails than edit your membership to no e-mail.

3652. Re: [SkyWires] Hot Locations For Honeymoon

Yahoo group: SkyWires
Date: 2010-02-06 09:42:32 UTC
From: Hans Remeeus
Topic: 3651 Message: 3652

LoopSkyWire without SPAM:

http://groups.yahoo.com/group/LoopSkyWire/join

73,
Hans Remeeus (PA1HR)
http://www.remeeus.eu
Communication is about people, the rest is technology.

3653. ~*~ When A Girl Come Close To Me ~*~

Yahoo group: SkyWires
Date: 2010-02-06 10:02:21 UTC
From: Santa Banta
Topic: 3653 Message: 3653

When A Girl Come Close To Me
Click Here And Read This SMS This SMS
http://activefun.net/when-a-girl-come-close-to-me/

Difference Between Friend and Blood
Click Here And Read This SMS
http://activefun.net/difference-between-friend-and-blood/

Convincingly Funny World
Click Here And Read This SMS
http://activefun.net/convincingly-funny-world/

Smart Sms
Click Here And Read This SMS
http://activefun.net/smart-sms/

Book Of Your Life
Click Here And Read This SMS
http://activefun.net/book-of-your-life/

Join Best Yahoo Groups

Join ActiveFun For 100% Entertainment. The Best Group Of Yahoo!

http://groups.yahoo.com/subscribe/activefun

This email is not send to individuals. This is Post in Group. If you are receiving this message via email it means you are subscribed to a Yahoo group and have requested to receive individual e-mail. If you no longer wish to receive emails than edit your membership to no e-mail.

3654. Aamir Khan In Romantic Mood

Yahoo group: SkyWires
Date: 2010-02-06 10:53:05 UTC
From: Fasial Khan
Topic: 3654 Message: 3654

Aamir Khan In Romantic Mood
Click Here For Complete Album
http://nicefun.net/aamir-khan-in-romantic-mood-vt22654.html

Anil Kapoor with Cute Girl
Click Here For Complete Album
http://nicefun.net/anil-kapoor-with-cute-girl-vt22655.html

Deepika Padukone with King Khan
Click Here For Complete Album
http://nicefun.net/deepika-padukone-with-king-khan-vt22651.html

---

Join Best Yahoo Groups

Join ActiveFun For 100% Entertainment. The Best Group Of Yahoo!

http://groups.yahoo.com/subscribe/activefun

This email is not send to individuals. This is Post in Group. If you are receiving this message via email it means you are subscribed to a Yahoo group and have requested to receive individual e-mail. If you no longer wish to receive emails than edit your membership to no e-mail.

3655. Junk Mail

Yahoo group: SkyWires
Date: 2010-02-06 11:26:56 UTC
From: W7KOL
Topic: 3655 Message: 3655

Looks like we all got hit with spamers using this sight to mail us,

So for me, no more notices to my email, I'll just check in with the group here.

73's keep those antenna ideas coming.

Mike

3656. Re: [SkyWires] Junk Mail

Yahoo group: SkyWires
Date: 2010-02-06 11:37:56 UTC
From: raymond mitchell
Topic: 3655 Message: 3656

The junk mail sure piled up today. Is there any way to get rid of the junk? I really enjoy the antenna info and shared experience but the smut has to go! And I was moaning about the free stuff junk mails, I’m in this for the radio aspect.
K7ABE

--- On Sat, 2/6/10, W7KOL <w7kol@...> wrote:

From: W7KOL <w7kol@...>
Subject: [SkyWires] Junk Mail
To: SkyWires@yahoogroups.com
Date: Saturday, February 6, 2010, 3:26 AM

Looks like we all got hit with spamers using this sight to mail us,

So for me, no more notices to my email, I'll just check in with the group here.

73's keep those antenna ideas coming.

Mike

3657. ShahRukh Khan With X GirlFriend

Yahoo group: SkyWires
Date: 2010-02-06 11:41:45 UTC
From: We Girls
Topic: 3657 Message: 3657

ShahRukh Khan With X GirlFriend
Click Here For Complete Album
http://nicefun.net/bollywood-king-shahrukh-khan-with-girlfriend-vt22650.html

---

Bachan Family Photo
Click Here For Complete Album
http://nicefun.net/bachan-family-photo-vt22692.html

Bachna Ae Haseeno
Click Here For Complete Album
http://nicefun.net/bachna-ae-haseeno-vt22689.html

VOGUE | The Indian Edition Is Here
Click Here For Complete Album
http://nicefun.net/vogue-the-indian-edition-is-here-vt22684.html

---

Join Best Yahoo Groups

Join ActiveFun For 100% Entertainment. The Best Group Of Yahoo!

http://groups.yahoo.com/subscribe/activefun

This email is not send to individuals. This is Post in Group. If you are receiving this message via email it means you are subscribed to a Yahoo group and have requested to receive individual e-mail. If you no longer wish to receive emails than edit your membership to no e-mail.

3658. RE: [SkyWires] Junk Mail

Yahoo group: SkyWires
Date: 2010-02-06 13:30:57 UTC
From: David Shrum
Topic: 3655 Message: 3658

LoopSkyWire without SPAM:

http://groups.yahoo.com/group/LoopSkyWire/join

There we approve you to become a member, if you mention in the ‘reason you want to join’ area that you are a member of this group, I’m sure you will get much faster approval.

This group (a very old story) we can’t change the way you join so anyone can join and that is why this group gets hit with so much spam. The original group owner is AWOL and the ‘Yahoo’ people won’t give ownership to any one of the co-moderators.

Dave N8PU

Co-moderator on both groups

P.S. Thanks Hans Remeeus (PA1HR) for the earlier mention.

From: SkyWires@yahoogroups.com [mailto:SkyWires@yahoogroups.com] On Behalf Of raymond mitchell
Sent: Saturday, February 06, 2010 6:38 AM
To: SkyWires@yahoogroups.com
Subject: Re: [SkyWires] Junk Mail

The junk mail sure piled up today. Is there any way to get rid of the junk? I really enjoy the antenna info and shared experience but the smut has to go! And I was moaning about the free stuff junk mails, I’m in this for the radio aspect.

K7ABE

--- On Sat, 2/6/10, W7KOL <w7kol@...> wrote:

From: W7KOL <w7kol@...>
Subject: [SkyWires] Junk Mail
To: SkyWires@yahoogroups.com
Date: Saturday, February 6, 2010, 3:26 AM

Looks like we all got hit with spamers using this sight to mail us,

So for me, no more notices to my email, I'll just check in with the group here.

73's keep those antenna ideas coming.

Mike

No virus found in this incoming message.
Checked by AVG - www.avg.com
Version: 9.0.733 / Virus Database: 271.1.1/2670 - Release Date: 02/05/10 14:35:00

3659. message content

Yahoo group: SkyWires
Date: 2010-02-11 23:46:26 UTC
From: w0szv
Topic: 3659 Message: 3659

Do we not have any moderators on this site??? Getting pretty bad when I have to tell my grandkids they can't read my radio related e-mails with me any more. If this continues I will be looking elsewhere for my antenna information.

3660. RE: [SkyWires] message content

Yahoo group: SkyWires
Date: 2010-02-12 00:01:11 UTC
From: David Shrum
Topic: 3659 Message: 3660

If you are new to this group, I can understand you comments, this is a long, old story; we moderators were not given the ability to make changes here, the group owner went AWOL so we are stuck. Now I posted the following comments just last Saturday February 6th.

Dave N8PU
==========
LoopSkyWire without SPAM:

http://groups.yahoo.com/group/LoopSkyWire/join

There we approve you to become a member, if you mention in the 'reason you want to join' area that you are a member of this group, I'm sure you will get much faster approval.

This group (a very old story) we can't change the way you join so anyone can join and that is why this group gets hit with so much spam. The original group owner is AWOL and the 'Yahoo' people won't give ownership to any one of the co-moderators.

Dave N8PU
Co-moderator on both groups
==========

-----Original Message-----
From: SkyWires@yahoogroups.com [mailto:SkyWires@yahoogroups.com] On Behalf Of w0szv
Sent: Thursday, February 11, 2010 6:46 PM
To: SkyWires@yahoogroups.com
Subject: [SkyWires] message content

Do we not have any moderators on this site??? Getting pretty bad when I have to tell my grandkids they can't read my radio related e-mails with me any more. If this continues I will be looking elsewhere for my antenna information.

No virus found in this outgoing message.
Checked by AVG - www.avg.com
Version: 9.0.733 / Virus Database: 271.1.1/2680 - Release Date: 02/11/10 11:09:00

3661. RE: [SkyWires] message content

Yahoo group: SkyWires
Date: 2010-02-12 00:28:11 UTC
From: Gary Haugen
Topic: 3659 Message: 3661

Hi
I am new here. Who is AWOL??
What is his call???
AW6OL
Tnx Gary K6JAJ

3662. RE: [SkyWires] message content - AWOL

Yahoo group: SkyWires
Date: 2010-02-12 00:37:06 UTC
From: David Shrum
Topic: 3659 Message: 3662

He went by "exemptfromlife", I do remember ever knowing his call.

Dave N8PU

From: SkyWires@yahoogroups.com [mailto:SkyWires@yahoogroups.com] On Behalf Of Gary Haugen
Sent: Thursday, February 11, 2010 7:28 PM
To: SkyWires@yahoogroups.com
Subject: RE: [SkyWires] message content

Hi

I am new here. Who is AWOL??

What is his call???

AW6OL

Tnx Gary K6JAJ

3663. Re: [SkyWires] message content

Yahoo group: SkyWires
Date: 2010-02-12 00:46:21 UTC
From: 556_NATO
Topic: 3659 Message: 3663

I 2nd that! This and several related groups are going to hades in a hand basket with all this porn spam! If there is not one with time to moderate, please set Mr. Scott or myself or both of us to moderator status so we can handle this please?

Walter - kg4bvd

----- Original Message -----
From: w0szv
To: SkyWires@yahoogroups.com
Sent: Thursday, February 11, 2010 5:46 PM
Subject: [SkyWires] message content

Do we not have any moderators on this site??? Getting pretty bad when I have to tell my grandkids they can't read my radio related e-mails with me any more. If this continues I will be looking elsewhere for my antenna information.

3665. Re: [SkyWires] message content

Yahoo group: SkyWires
Date: 2010-02-12 05:19:45 UTC
From: Andy
Topic: 3659 Message: 3665

> If there is not one with time to moderate, please set Mr. Scott or myself
> or both of us to moderator status so we can handle this please?

There is nothing you can do any better than is already being done.

If you were moderator, all you can do is delete the spam AFTER the damage has been done, and then zap the person who sent the spam. That is what has already happened here. (Yes, there are moderators.) The problem is they just sign up again and spam the group again, and you are powerless until after each one of them happens.

Other groups (including the [LoopSkyWire] group) give the moderators the ability to block new members from posting. This one doesn't. We're stuck with how this one works. Sorry.

Andy

3666. Re: [SkyWires] message content

Yahoo group: SkyWires
Date: 2010-02-12 05:56:23 UTC
From: Hans Remeeus
Topic: 3659 Message: 3666

A while ago we have made another group for LoopSkyWire interested
persons who don't like spam.

73,
Hans Remeeus (PA1HR)
http://www.remeeus.eu
Communication is about people, the rest is technology.

556_NATO schreef:
>
>
> I 2nd that! This and several related groups are going to hades in a
> hand basket with all this porn spam! If there is not one with time
> to moderate, please set Mr. Scott or myself or both of us to
> moderator status so we can handle this please?
>
> Walter - kg4bvd
>
> ----- Original Message -----
> *From:* w0szv <mailto:skip4450@...>
> *To:* SkyWires@yahoogroups.com <mailto:SkyWires@yahoogroups.com>
> *Sent:* Thursday, February 11, 2010 5:46 PM
> *Subject:* [SkyWires] message content
>
>
>
> Do we not have any moderators on this site??? Getting pretty bad
> when I have to tell my grandkids they can't read my radio related
> e-mails with me any more. If this continues I will be looking
> elsewhere for my antenna information.
>

3667. Re: [SkyWires] message content

Yahoo group: SkyWires
Date: 2010-02-12 06:13:57 UTC
From: 556_NATO
Topic: 3659 Message: 3667

Actually, that is not true, I own a few groups and have them set to "moderated", hence the term moderator. That way a message HAS to be approved before going out... You must not have much message board moderation / user experience?

----- Original Message -----
From: Andy
To: SkyWires@yahoogroups.com
Sent: Thursday, February 11, 2010 11:19 PM
Subject: Re: [SkyWires] message content

> If there is not one with time to moderate, please set Mr. Scott or myself
> or both of us to moderator status so we can handle this please?

There is nothing you can do any better than is already being done.

If you were moderator, all you can do is delete the spam AFTER the damage has been done, and then zap the person who sent the spam. That is what has already happened here. (Yes, there are moderators.) The problem is they just sign up again and spam the group again, and you are powerless until after each one of them happens.

Other groups (including the [LoopSkyWire] group) give the moderators the ability to block new members from posting. This one doesn't. We're stuck with how this one works. Sorry.

Andy

3668. Re: [SkyWires] message content

Yahoo group: SkyWires
Date: 2010-02-12 06:24:19 UTC
From: Hans Remeeus
Topic: 3659 Message: 3668

In this way every *message* has to be moderated.

What Andy means is moderating new *users*.

83,
Hans Remeeus (PA1HR)
http://www.remeeus.eu
Communication is about people, the rest is technology.

556_NATO schreef:
>
>
> Actually, that is not true, I own a few groups and have them set to
> "moderated", hence the term moderator. That way a message HAS to be
> approved before going out... You must not have much message board
> moderation / user experience?
>

3669. Re: [SkyWires] message content

Yahoo group: SkyWires
Date: 2010-02-12 07:25:22 UTC
From: 556_NATO
Topic: 3659 Message: 3669

Ah, ok, I understand now. But the question still is, why not change this to the every message moderated? It would not hurt my feelings!

----- Original Message -----
From: Hans Remeeus
To: SkyWires@yahoogroups.com
Sent: Friday, February 12, 2010 12:24 AM
Subject: Re: [SkyWires] message content

In this way every *message* has to be moderated.

What Andy means is moderating new *users*.

83,
Hans Remeeus (PA1HR)
http://www.remeeus.eu
Communication is about people, the rest is technology.

.

3670. RE: [SkyWires] message content

Yahoo group: SkyWires
Date: 2010-02-12 10:25:38 UTC
From: David Shrum
Topic: 3659 Message: 3670

The simple answer is we can't. Like I stated earlier, the original group owner went AWOL and didn't give the current moderators the ability to make any changes. Every time we get new members here this gets rehashed over and over again, if you search the archives you will see this is so.

Dave N8PU

From: SkyWires@yahoogroups.com [mailto:SkyWires@yahoogroups.com] On Behalf Of 556_NATO
Sent: Friday, February 12, 2010 2:25 AM
To: SkyWires@yahoogroups.com
Subject: Re: [SkyWires] message content

Ah, ok, I understand now. But the question still is, why not change this to the every message moderated? It would not hurt my feelings!

----- Original Message -----

From: Hans Remeeus <mailto:hans@...>

To: SkyWires@yahoogroups.com

Sent: Friday, February 12, 2010 12:24 AM

Subject: Re: [SkyWires] message content

In this way every *message* has to be moderated.

What Andy means is moderating new *users*.

83,
Hans Remeeus (PA1HR)
http://www.remeeus.eu
Communication is about people, the rest is technology.

.

<http://geo.yahoo.com/serv?s=97359714/grpId=10946119/grpspId=1705063108/msgId=3668/stime=1265955882/nc1=1/nc2=2/nc3=3>

No virus found in this incoming message.
Checked by AVG - www.avg.com
Version: 9.0.733 / Virus Database: 271.1.1/2682 - Release Date: 02/11/10 11:09:00

3671. Re: [SkyWires] message content

Yahoo group: SkyWires
Date: 2010-02-12 10:48:50 UTC
From: 556_NATO
Topic: 3659 Message: 3671

I don't know what you consider a "new member", but I have been here over 2 years! If you had paid attention, you'd know that? Sheesh, what is with all the attitude when this is mentioned, someone always has to be the one to say, research the archives.... If the "rehashing" gets you that upset, maybe you need another hobby that is less stressful?

----- Original Message -----
From: David Shrum
To: SkyWires@yahoogroups.com
Sent: Friday, February 12, 2010 4:25 AM
Subject: RE: [SkyWires] message content

The simple answer is we can't. Like I stated earlier, the original group owner went AWOL and didn't give the current moderators the ability to make any changes. Every time we get new members here this gets rehashed over and over again, if you search the archives you will see this is so.

Dave N8PU

From: SkyWires@yahoogroups.com [mailto:SkyWires@...m] On Behalf Of 556_NATO
Sent: Friday, February 12, 2010 2:25 AM
To: SkyWires@yahoogroups.com
Subject: Re: [SkyWires] message content

Ah, ok, I understand now. But the question still is, why not change this to the every message moderated? It would not hurt my feelings!

----- Original Message -----

From: Hans Remeeus

To: SkyWires@yahoogroups.com

Sent: Friday, February 12, 2010 12:24 AM

Subject: Re: [SkyWires] message content

In this way every *message* has to be moderated.

What Andy means is moderating new *users*.

83,
Hans Remeeus (PA1HR)
http://www.remeeus.eu
Communication is about people, the rest is technology.

.

No virus found in this incoming message.
Checked by AVG - www.avg.com

Version: 9.0.733 / Virus Database: 271.1.1/2682 - Release Date: 02/11/10 11:09:00

3672. Re: [SkyWires] message content

Yahoo group: SkyWires
Date: 2010-02-12 13:20:24 UTC
From: RAH1379@aol.com
Topic: 3659 Message: 3672

Just start a new group named Skywires II and everyone here can move to there and it can have a new owner.

3673. Re: [SkyWires] message content

Yahoo group: SkyWires
Date: 2010-02-12 17:13:44 UTC
From: Andy
Topic: 3659 Message: 3673

> Actually, that is not true, I own a few groups and have them set to
> "moderated", hence the term moderator. That way a message HAS to be
> approved before going out... You must not have much message board
> moderation / user experience?

What you seem to be missing (and it has been said here many times already), is that THIS group, doesn't give the moderators that capability. THIS group has no "owner", sort of like the "chief moderator", who controls what powers the other moderators can have. The moderators of THIS group do not have the capability of setting people to "moderated" status. It cannot be changed.

That is why the moderator of this group also moderates the OTHER Skywires Yahoogroup, also known as [LoopSkyWire]. On that group, like on almost every other Yahoogroup, the moderators DO have the ability to do what you say. Unlike this group, it is spam-free.

Andy

3674. Re: [SkyWires] message content

Yahoo group: SkyWires
Date: 2010-02-12 17:22:58 UTC
From: Andy
Topic: 3659 Message: 3674

> I don't know what you consider a "new member", but I have been here over 2
> years! If you had paid attention, you'd know that?

And if you had paid attention over the last two years, you would have seen that this issue has been discussed already, with explanations given about why the moderators can't stop the spam before it happens.

It's not a problem that you didn't. But it is a bit surprising that it had to be explained many times in the last few days alone.

> Sheesh, what is with all the attitude ...

What attitude???

The only attitude I see, is yours.

The "rehashing" apparently gets you upset. I don't see that it made Dave upset. He was just pointing you to where you could see it being repeated over and over. That is just something we, as members of this group, need to put up with whenever it happens. We all know it is a fact of life in this group. Dave doesn't seem to get upset about repeating it a few times a year.

Andy

3675. Re: [SkyWires] message content

Yahoo group: SkyWires
Date: 2010-02-12 17:21:31 UTC
From: Hans Remeeus
Topic: 3659 Message: 3675

Thanks Andy!

73,
Hans Remeeus (PA1HR)
http://www.remeeus.eu
Communication is about people, the rest is technology.

Andy schreef:
>
> What you seem to be missing (and it has been said here many times already),
> is that THIS group, doesn't give the moderators that capability. THIS group
> has no "owner", sort of like the "chief moderator", who controls what powers
> the other moderators can have. The moderators of THIS group do not have the
> capability of setting people to "moderated" status. It cannot be changed.
>
> That is why the moderator of this group also moderates the OTHER Skywires
> Yahoogroup, also known as [LoopSkyWire]. On that group, like on almost
> every other Yahoogroup, the moderators DO have the ability to do what you
> say. Unlike this group, it is spam-free.
>
> Andy
>

3676. Re: [SkyWires] message content

Yahoo group: SkyWires
Date: 2010-02-12 17:20:28 UTC
From: Hans Remeeus
Topic: 3659 Message: 3676

Then we would have three groups and that is not very wise.

There is a fully spam-free alternative Yahoo-group called *LoopSkyWire*

73,
Hans Remeeus (PA1HR)
http://www.remeeus.eu
Communication is about people, the rest is technology.

RAH1379@... schreef:
>
>
> *Just start a new group named Skywires II and everyone here can move to
> there and it can have a new owner.*
>

3677. Re: [SkyWires] message content

Yahoo group: SkyWires
Date: 2010-02-12 17:27:17 UTC
From: 556_NATO
Topic: 3659 Message: 3677

And if YOU had paid attention, Hans already answered that!

----- Original Message -----
From: Andy
To: SkyWires@yahoogroups.com
Sent: Friday, February 12, 2010 11:22 AM
Subject: Re: [SkyWires] message content

> I don't know what you consider a "new member", but I have been here over 2
> years! If you had paid attention, you'd know that?

And if you had paid attention over the last two years, you would have seen
that this issue has been discussed already, with explanations given about
why the moderators can't stop the spam before it happens.

It's not a problem that you didn't. But it is a bit surprising that it had
to be explained many times in the last few days alone.

> Sheesh, what is with all the attitude ...

What attitude???

The only attitude I see, is yours.

The "rehashing" apparently gets you upset. I don't see that it made Dave
upset. He was just pointing you to where you could see it being repeated
over and over. That is just something we, as members of this group, need to
put up with whenever it happens. We all know it is a fact of life in this
group. Dave doesn't seem to get upset about repeating it a few times a
year.

Andy

3678. Re: [SkyWires] message content

Yahoo group: SkyWires
Date: 2010-02-12 17:32:11 UTC
From: Andy
Topic: 3659 Message: 3678

> Just start a new group named Skywires II and everyone here can move to
> there and it can have a new owner.

No need to! There is already one. It is called [LoopSkyWire] and you can find it by going to:

http://groups.yahoo.com/group/LoopSkywire

It was created two years ago (its anniversary is almost here), and if you noticed in the current thread, one of its moderators is also a moderator of this group, and pointed us to it twice in the last few days.

Andy

3679. Re: [SkyWires] message content

Yahoo group: SkyWires
Date: 2010-02-12 17:40:06 UTC
From: 556_NATO
Topic: 3659 Message: 3679

> I don't know what you consider a "new member", but I have been here over 2
> years! If you had paid attention, you'd know that?

And if you had paid attention over the last two years, you would have seen
that this issue has been discussed already, with explanations given about
why the moderators can't stop the spam before it happens.

It's not a problem that you didn't. But it is a bit surprising that it had
to be explained many times in the last few days alone.

> Sheesh, what is with all the attitude ...

What attitude???

The only attitude I see, is yours.
(Looks like you are all in a knot?).

The "rehashing" apparently gets you upset. I don't see that it made Dave
upset. He was just pointing you to where you could see it being repeated
over and over. That is just something we, as members of this group, need to
put up with whenever it happens. We all know it is a fact of life in this
group. Dave doesn't seem to get upset about repeating it a few times a
year.

Andy

Sending 2 emails in a row with quotes sure seems like you have some kind of problem? If a simple question is too stressful, like I said, get another hobby and take a chill pill dude, man is the virtual air thick in here. I was NOT trying to start a flame, but I will take responsibility since I asked an innocent question and "got my head bitten off".

I was just making a valid point and was next going to ask if anyone knew the owner, his/her callsign/email and maybe could get access to change some things.

I found another group away from yahoo and google groups, so I will bug you gentlemen (and ladies) no longer since a sincere question gets so many feathers ruffled? I have NEVER run into such hostility from such a simple and valid question in my life. I have had major debates that were more civil than this in many groups!

Sorry I asked a simple, valid question, and maybe I did not see the other similar questions/answers as sometimes "good" emails go to the "spam box" and are deleted without me ever seeing them.

I understand the bad weather may have folks down with "cabin fever", so I hold no grudges and just ask the same of you please?

Sincerely,

Walter

3680. Re: [SkyWires] message content

Yahoo group: SkyWires
Date: 2010-02-12 18:57:28 UTC
From: raymond mitchell
Topic: 3659 Message: 3680

Hey all,
  Hope to have my 80m wire in the air soon. Part of it will have to skirt a 25’ and a 75’ edge of my 25 X 75 shop (borders property lines) and it may be hard to get it more than 10’ over the metal roof. I plan to feed at the opposite end where the loop is away from the metal roof shop. Any feedback or experience that may help or save me some grief?
   I'm kinda’ new to SkyWires but I have set up Yahoo Groups for special events. Some access can be open so no one has to approve each person. When the group is set up were a moderator has to approve each applicant and a few core group members have the moderator information then any one of them can serve as moderator (this is how I set up the Blackberry Festival Group), When the moderator does not share the log in moderator info or if one of the folks with the moderator access changes the password and does not inform the others of the change then the group is stuck with what ever and cannot make any changes.
   Yea, I know, this was not about wires in the air.
Abe

--- On Fri, 2/12/10, 556_NATO <556_nato@...> wrote:

From: 556_NATO <556_nato@...>
Subject: Re: [SkyWires] message content
To: SkyWires@yahoogroups.com
Date: Friday, February 12, 2010, 9:40 AM

> I don't know what you consider a "new member", but I have been here over 2
> years! If you had paid attention, you'd know that?

And if you had paid attention over the last two years, you would have seen
that this issue has been discussed already, with explanations given about
why the moderators can't stop the spam before it happens.

It's not a problem that you didn't. But it is a bit surprising that it had
to be explained many times in the last few days alone.

> Sheesh, what is with all the attitude ...

What attitude???

The only attitude I see, is yours.
(Looks like you are all in a knot?).

The "rehashing" apparently gets you upset. I don't see that it made Dave
upset. He was just pointing you to where you could see it being repeated
over and over. That is just something we, as members of this group, need to
put up with whenever it happens. We all know it is a fact of life in this
group. Dave doesn't seem to get upset about repeating it a few times a
year.

Andy

Sending 2 emails in a row with quotes sure seems like you have some kind of problem? If a simple question is too stressful, like I said, get another hobby and take a chill pill dude, man is the virtual air thick in here. I was NOT trying to start a flame, but I will take responsibility since I asked an innocent question and "got my head bitten off".
I was just making a valid point and was next going to ask if anyone knew the owner, his/her callsign/email and maybe could get access to change some things.
I found another group away from yahoo and google groups, so I will bug you gentlemen (and ladies) no longer since a sincere question gets so many feathers ruffled? I have NEVER run into such hostility from such a simple and valid question in my life. I have had major debates that were more civil than this in many groups!
Sorry I asked a simple, valid question, and maybe I did not see the other similar questions/answers as sometimes "good" emails go to the "spam box" and are deleted without me ever seeing them.
I understand the bad weather may have folks down with "cabin fever", so I hold no grudges and just ask the same of you please?
Sincerely,
Walter

3681. Re: [SkyWires] message content

Yahoo group: SkyWires
Date: 2010-02-12 19:16:30 UTC
From: raymond mitchell
Topic: 3659 Message: 3681

Hey,
  I’m new to SkyWires and hope to be in Loop SkyWires soon. Why does any one have to “own” it? Does the group belong to a person or the members? We are all HAMs, I hope, or at least share a desire to improve radio communications (part of our mission I try to make sure new techs understand) and should share a common integrity not found with many groups. A moderator should be able to find a few trusted friends to share the moderator login and password info with to help with the screening (yea, I know it is hard to get any one to step up but it sure makes life easier when thy do).
Abe
P.S. When every Board member has moderator access and can call one of the other Board members to get the info when they forget every thing goes well and smooth for the group.

--- On Fri, 2/12/10, RAH1379@... <RAH1379@...> wrote:

From: RAH1379@... <RAH1379@...>
Subject: Re: [SkyWires] message content
To: SkyWires@yahoogroups.com
Date: Friday, February 12, 2010, 5:20 AM

Just start a new group named Skywires II and everyone here can move to there and it can have a new owner.

3682. Re: [SkyWires] message content

Yahoo group: SkyWires
Date: 2010-02-12 19:17:04 UTC
From: RAH1379@aol.com
Topic: 3659 Message: 3682

Sorry if i don't catch everything said, i also have a full time job and family. I was only trying to throw out a suggestion i thought might help. The spam don't bother me, i just delete it. Again, i didn't mean to upset anyone, i was only trying to help.

Randy KB9KXH

In a message dated 2/12/2010 11:33:30 A.M. Central Standard Time, ai.egrps@... writes:

> Just start a new group named Skywires II and everyone here can move to
> there and it can have a new owner.

No need to! There is already one. It is called [LoopSkyWire] and you can find it by going to:

http://groups.http://grohttp://groups.<Wh
(http://groups.yahoo.com/group/LoopSkywire)

It was created two years ago (its anniversary is almost here), and if you noticed in the current thread, one of its moderators is also a moderator of this group, and pointed us to it twice in the last few days.

Andy

3683. Re: [SkyWires] message content

Yahoo group: SkyWires
Date: 2010-02-12 19:21:04 UTC
From: raymond mitchell
Topic: 3659 Message: 3683

It takes the missing moderator to make that change.
Abe

--- On Thu, 2/11/10, 556_NATO <556_nato@...> wrote:

From: 556_NATO <556_nato@bellsouth.net>
Subject: Re: [SkyWires] message content
To: SkyWires@yahoogroups.com
Date: Thursday, February 11, 2010, 11:25 PM

Ah, ok, I understand now. But the question still is, why not change this to the every message moderated? It would not hurt my feelings!

----- Original Message -----
From: Hans Remeeus
To: SkyWires@yahoogroup s.com
Sent: Friday, February 12, 2010 12:24 AM
Subject: Re: [SkyWires] message content

In this way every *message* has to be moderated.

What Andy means is moderating new *users*.

83,
Hans Remeeus (PA1HR)
http://www.remeeus. eu
Communication is about people, the rest is technology.

.

3684. Re: [SkyWires] message content

Yahoo group: SkyWires
Date: 2010-02-12 19:26:50 UTC
From: raymond mitchell
Topic: 3659 Message: 3684

Sounds good, do that. If you find that you do not have access you are like the rest of us, the ONE who could is AWOL. Sounds like no moderator changes can be made to this group without a moderator (this does seem to be a group without a moderator).
Abe

--- On Thu, 2/11/10, 556_NATO <556_nato@bellsouth.net> wrote:

From: 556_NATO <556_nato@...>
Subject: Re: [SkyWires] message content
To: SkyWires@yahoogroups.com
Date: Thursday, February 11, 2010, 11:25 PM

Ah, ok, I understand now. But the question still is, why not change this to the every message moderated? It would not hurt my feelings!

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To: SkyWires@yahoogroup s.com
Sent: Friday, February 12, 2010 12:24 AM
Subject: Re: [SkyWires] message content

In this way every *message* has to be moderated.

What Andy means is moderating new *users*.

83,
Hans Remeeus (PA1HR)
http://www.remeeus. eu
Communication is about people, the rest is technology.

.

3685. Re: [SkyWires] message content

Yahoo group: SkyWires
Date: 2010-02-12 19:31:17 UTC
From: raymond mitchell
Topic: 3659 Message: 3685

If you move to another country, get sick, or go SK, how would any of the members of "your" groups make any moderator required changes? Ah Haa!
Abe

--- On Thu, 2/11/10, 556_NATO <556_nato@...> wrote:

From: 556_NATO <556_nato@...>
Subject: Re: [SkyWires] message content
To: SkyWires@yahoogroups.com
Date: Thursday, February 11, 2010, 10:13 PM

Actually, that is not true, I own a few groups and have them set to "moderated", hence the term moderator. That way a message HAS to be approved before going out... You must not have much message board moderation / user experience?

----- Original Message -----
From: Andy
To: SkyWires@yahoogroup s.com
Sent: Thursday, February 11, 2010 11:19 PM
Subject: Re: [SkyWires] message content

> If there is not one with time to moderate, please set Mr. Scott or myself
> or both of us to moderator status so we can handle this please?

There is nothing you can do any better than is already being done.

If you were moderator, all you can do is delete the spam AFTER the damage has been done, and then zap the person who sent the spam. That is what has already happened here. (Yes, there are moderators.) The problem is they just sign up again and spam the group again, and you are powerless until after each one of them happens.

Other groups (including the [LoopSkyWire] group) give the moderators the ability to block new members from posting. This one doesn't. We're stuck with how this one works. Sorry.

Andy

3686. Re: [SkyWires] message content

Yahoo group: SkyWires
Date: 2010-02-12 20:23:28 UTC
From: 556_NATO
Topic: 3659 Message: 3686

You just made about as much sense as a 3 year old on LSD! Tard.

----- Original Message -----
From: raymond mitchell
To: SkyWires@yahoogroups.com
Sent: Friday, February 12, 2010 1:31 PM
Subject: Re: [SkyWires] message content

If you move to another country, get sick, or go SK, how would any of the members of "your" groups make any moderator required changes? Ah Haa!
Abe

--- On Thu, 2/11/10, 556_NATO <556_nato@...> wrote:

From: 556_NATO <556_nato@bellsouth.net>
Subject: Re: [SkyWires] message content
To: SkyWires@yahoogroups.com
Date: Thursday, February 11, 2010, 10:13 PM

Actually, that is not true, I own a few groups and have them set to "moderated", hence the term moderator. That way a message HAS to be approved before going out... You must not have much message board moderation / user experience?

----- Original Message -----
From: Andy
To: SkyWires@yahoogroup s.com
Sent: Thursday, February 11, 2010 11:19 PM
Subject: Re: [SkyWires] message content

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> or both of us to moderator status so we can handle this please?

There is nothing you can do any better than is already being done.

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Other groups (including the [LoopSkyWire] group) give the moderators the ability to block new members from posting. This one doesn't. We're stuck with how this one works. Sorry.

Andy

3687. AW: [SkyWires] message content

Yahoo group: SkyWires
Date: 2010-02-12 20:50:01 UTC
From: Siegfried Jackstien
Topic: 3659 Message: 3687

If you plan to feed it with ladderline just make a bridge near your shop that can be opened . now your 80m loop is a (bent) topbanddipole

Just an idea for anybody that can not build a megaloop (160m) . make a bridge that can be opened and you have 2 antennas in one

Dg9bfc

Sigi

Von: SkyWires@yahoogroups.com [mailto:SkyWires@yahoogroups.com] Im Auftrag von raymond mitchell
Gesendet: Freitag, 12. Februar 2010 19:57
An: SkyWires@yahoogroups.com
Betreff: Re: [SkyWires] message content

Hey all,

Hope to have my 80m wire in the air soon. Part of it will have to skirt a 25' and a 75' edge of my 25 X 75 shop (borders property lines) and it may be hard to get it more than 10' over the metal roof. I plan to feed at the opposite end where the loop is away from the metal roof shop. Any feedback or experience that may help or save me some grief?

I'm kinda' new to SkyWires but I have set up Yahoo Groups for special events. Some access can be open so no one has to approve each person. When the group is set up were a moderator has to approve each applicant and a few core group members have the moderator information then any one of them can serve as moderator (this is how I set up the Blackberry Festival Group), When the moderator does not share the log in moderator info or if one of the folks with the moderator access changes the password and does not inform the others of the change then the group is stuck with what ever and cannot make any changes.

Yea, I know, this was not about wires in the air.

Abe

--- On Fri, 2/12/10, 556_NATO <556_nato@...> wrote:

From: 556_NATO <556_nato@...>
Subject: Re: [SkyWires] message content
To: SkyWires@yahoogroups.com
Date: Friday, February 12, 2010, 9:40 AM

> I don't know what you consider a "new member", but I have been here over 2
> years! If you had paid attention, you'd know that?

And if you had paid attention over the last two years, you would have seen that this issue has been discussed already, with explanations given about why the moderators can't stop the spam before it happens.

It's not a problem that you didn't. But it is a bit surprising that it had to be explained many times in the last few days alone.

> Sheesh, what is with all the attitude ...

What attitude???

The only attitude I see, is yours.
(Looks like you are all in a knot?).

The "rehashing" apparently gets you upset. I don't see that it made Dave upset. He was just pointing you to where you could see it being repeated over and over. That is just something we, as members of this group, need to put up with whenever it happens. We all know it is a fact of life in this group. Dave doesn't seem to get upset about repeating it a few times a year.

Andy

Sending 2 emails in a row with quotes sure seems like you have some kind of problem? If a simple question is too stressful, like I said, get another hobby and take a chill pill dude, man is the virtual air thick in here. I was NOT trying to start a flame, but I will take responsibility since I asked an innocent question and "got my head bitten off".

I was just making a valid point and was next going to ask if anyone knew the owner, his/her callsign/email and maybe could get access to change some things.

I found another group away from yahoo and google groups, so I will bug you gentlemen (and ladies) no longer since a sincere question gets so many feathers ruffled? I have NEVER run into such hostility from such a simple and valid question in my life. I have had major debates that were more civil than this in many groups!

Sorry I asked a simple, valid question, and maybe I did not see the other similar questions/answers as sometimes "good" emails go to the "spam box" and are deleted without me ever seeing them.

I understand the bad weather may have folks down with "cabin fever", so I hold no grudges and just ask the same of you please?

Sincerely,

Walter

3688. Re: [SkyWires] message content

Yahoo group: SkyWires
Date: 2010-02-13 02:25:29 UTC
From: Andy
Topic: 3659 Message: 3688

> I’m new to SkyWires and hope to be in Loop SkyWires soon. Why does any
> one have to “own” it?

Because that is how all Yahoo!groups work. Every Yahoogroup has one Owner and optionally one or more other Moderators. It is inherent to the Yahoogroups structure.

The Owner has somewhat more privileges than the other Moderators, and can restrict what privileges the other Moderators have. That is unfortunately the problem with this group; the Owner restricted the other Moderators' privileges, and has disappeared, leaving them powerless to really fix the spam problem. Yahoo's policy has been one of "hands-off", rarely ever intervening for an Owner even when he/she disappears from the face of the earth.

This group has three Moderators in addition to the missing Owner. I happen to think they are doing a very good job, given the fact that their hands are tied.

Andy

3689. Re: [SkyWires] message content

Yahoo group: SkyWires
Date: 2010-02-13 02:56:00 UTC
From: Andy
Topic: 3659 Message: 3689

> Sorry if i don't catch everything said, i also have a full time job and
> family. I was only trying to throw out a suggestion i thought might help.
> The spam don't bother me, i just delete it. Again, i didn't mean to upset
> anyone, i was only trying to help.

I don't think you upset anyone.

I was just pointing out that your suggestion was done already. (Just in
case someone follows the suggestion and does it again ... it has happened!)

Andy

3690. Re: message content

Yahoo group: SkyWires
Date: 2010-02-15 19:36:27 UTC
From: Richard
Topic: 3659 Message: 3690

Thanks Dave

I have submitted a request to join http://groups.yahoo.com/group/LoopSkyWire 'as we speak'

Best DX and remember - be kind to one another.

Rich the Kiwi downunder.

--- In SkyWires@yahoogroups.com, "David Shrum" <dave.n8pu@...> wrote:
>
> If you are new to this group, I can understand you comments, this is a long,
> old story; we moderators were not given the ability to make changes here,
> the group owner went AWOL so we are stuck. Now I posted the following
> comments just last Saturday February 6th.
>
> Dave N8PU
> ===========
> LoopSkyWire without SPAM:
>
> http://groups.yahoo.com/group/LoopSkyWire/join
>
> There we approve you to become a member, if you mention in the 'reason you
> want to join' area that you are a member of this group, I'm sure you will
> get much faster approval.
>

--- a little of the junk removed to save your in box :)

3691. Re: [SkyWires] Advice required

Yahoo group: SkyWires
Date: 2010-02-18 05:22:30 UTC
From: zephyrnewyork
Topic: 3588 Message: 3691

Ken,

Which tuner do you prefer to use in your apartment? What do you do for grounds? Thanks.

73,
Frank

On 2009-12-07, kenandsylv <kenandsylv@...> wrote:
> Hi guys, the question i have is about my Loop that i have been using for
> about 2 years now.It is 263ft long as this you will see is determined by the
> shape of the building, bit of a fluke.
>
> I live in an upstairs apartment in a block of 4 and due to local
> restrictions i cannot have any outside antennas.
>
> You may ask then were is this loop that you have had up for 2 years,well it
> is tucked inside the plastic rain gutter all around the building.
>
> The shape of the building is an "L" shape like 2 oblongs at right angles to
> each other
>
> I feed it in the the sharp corner with a 4:1 balun and then about 20ft of 50
> ohm co-ax into the shack,all of this feeder is in the attic space. It works
> quite well but i am being constantly being told that i should feed it with
> ladder line.
>
> My question to you guys is how much benefit will i have if i feed it with
> the equivalent length of 450 ohm ladder line and then into the 4:1 balun.
>
> I have to consider that in the attic there are all the TV antennas so i do
> not want any problems there as at the moment all is clear.
>
> Thanks in advance.
>
> 73
>
> Ken
>
> G3SDW Torquay,Devon. UK
>
>

--
)'(2010

3697. Re: Balun or not to Balun

Yahoo group: SkyWires
Date: 2010-03-21 16:43:17 UTC
From: Aaron
Topic: 3608 Message: 3697

So I thought I would update this with some new findings. I don't need an external tuner anymore (well almost)!!

I recently bought a Elecraft 1:1/4:1 balun kit just to build and play around with. Last night I decided to bypass my SGC and see what would happen with the 4:1. To my amazement I found that I had acceptable standing wave almost on every band for the 60 & 40 meters.

160 is 1.9:1 at 1.800 with my lowest of 1.4:1 at 1.893 then up to 2.7:1 up towards 2.000

80 Meters is a high towards the lower end but is acceptable from 3.800 to 4.000

60 Seems to be about 3:1

40 is about 2.7:1 around 7.000 but stays consistently 3:1 across the band

30 is about 1.6:1 across the band

20 is about 1.6:1 at 14:200 with no higher than 2:1 on the band edges.

17 is no higher than 1.3:1 at the top of the band

15 is 1.3:1 to 1.6:1

12 is about 2:1

10 is 1.7:1 and dips to 1.4:1 at 28.300, 2:1 at 29.000 and no higher that 2.2:1 at the the high end of the band.

6 is 1.5:1 at 50.000 and dips to 1.2:1 at 50.500 then peaks to 1.9:1 at 51.500 and then dips back down to 1.2:1 at 52.500 and not greater than 2:1 the rest of the way up.

I am truly amazed and will start playing around with the ladder line length to see if I can shift 40 in range a little better. My internal tuner on the FT-950 (which can't tune much) had no issues picking up the slack where the standing wave was higher desired.

At this point I am not sure the external tuner out near the feed point is really needed anymore. I am not seeing any high ratios that would warrant the need for the extra equipment now and looks like I have accidently got this loop close to being right with falling into the harmonic ranges for multiband uses thanks to the 4:1. I did not have these results when I had the loop direct fed with coax when it first went up.

So to answer my own question... yes to the the 4:1 balun :)

Aaron
KD4GSL

--- In SkyWires@yahoogroups.com, "Aaron" <wm.aaron.lamb@...> wrote:
>
> I have been kicking around either dropping a 4:1 or 9:1 in hope to reduce my noise level

on the higher bands. Not sure if my tuner will match it on 160 with the balun, think that might drop the impeadence down too low. This may not work but thought I would get some more info on the matter before I try.
>
> Setup:
> 75' Coax to SGC 239 Tuner to 35' of 450 Ladder Line to 530'ish of loop
>
> I'm planning on putting the balun right between the tuner and the ladder line and hopefully it might balance they antenna out. I may be wrong but again that's why I am here bouncing ideas around.
>
> Aaron
> KD4GSL
>

3699. building new antenna

Yahoo group: SkyWires
Date: 2010-04-28 00:33:32 UTC
From: Steve
Topic: 3699 Message: 3699

i have been useing a 100ft long wire, fed by 15ft of 300 ohm ladder line, with my modified realistic dx394 shortwave receiver. it is hooked to the corner of the porch 15ft up and rises up to about 30ft in a tree. and it works pretty good but is kind of noisy i have decided to put up a triangle loop (not enough trees to do a square or circle) to see if it is quieter i will add about another 100ft to another tree up to about 40ft high then 80ft back to the porch, and feed it with 50 ohm coax again trying to get rid of noise. do i need to use a balun or an unun with the coax? or should i just feed the shield to one side of the loop and the center lead to the other side? any thoughts will be appriciated thanks steve

3700. Re: [SkyWires] building new antenna

Yahoo group: SkyWires
Date: 2010-04-28 15:24:20 UTC
From: Jim Dunstan
Topic: 3699 Message: 3700

At 12:33 AM 4/28/2010 +0000, you wrote:
>
>
>i have been useing a 100ft long wire, fed by 15ft of 300 ohm ladder line,
>with my modified realistic dx394 shortwave receiver. it is hooked to the
>corner of the porch 15ft up and rises up to about 30ft in a tree. and it
>works pretty good but is kind of noisy i have decided to put up a triangle
>loop (not enough trees to do a square or circle) to see if it is quieter i
>will add about another 100ft to another tree up to about 40ft high then
>80ft back to the porch, and feed it with 50 ohm coax again trying to get
>rid of noise. do i need to use a balun or an unun with the coax? or should
>i just feed the shield to one side of the loop and the center lead to the
>other side? any thoughts will be appriciated thanks steve

If you are concerned with noise .... especially noise generated closer to the listening position .... then feeding the loop directly with coax will not "shield" the receiving system from this RFI. If the coax is not properly terminated at the antenna all RFI picked up by the coax shield will be dutifully transferred to the loop and on to the radio input. You will be much better off continuing to use the 300 ohm feed line (TV type or ladder line). It will pickup less local RFI than directly connected coax.

It must be understood that in order for what is euphemistically called the "shield" of coax cable will only act as a shield if the inside is separated from the outside. This is tricky since they are connected ... e.g. one and the same at each end. So now you essentially have a 3 wire feed line .... the inside of the "shield and the center conductor being the feed line and the antenna consisting of the loop and a long wire (the outside of the shield) and the loop connected together. The loop part of the antenna nicely located away from local RFI and the long wire (the outside of the shield) courses nicely through the RFI zone! The signals from both of the antennas combine and go to the receiver input.

Now contrast this to the 300 ohm twin lead (supposedly unshielded) ..... It consists of only 2 wires .... all signals picked up by the loop will present RF voltages to the feed line which will in turn be presented to the receiver input (the receiver input must be balanced). However any signals picked up by the feed line itself will be in-phase at all points along its length .... right up to the receiver input where they are cancelled at the balanced input. At the other end of the feed line they are also cancelled as the antenna is also balanced. Voila! the 300 ohm balanced feed line is in effect shielded!

It will be much easier to have a shielded feed line if you use the 300 twin lead. Just be sure you use some kind of balun at the receiver ... which more than likely has an unbalanced antenna input. Most of the old style SW

receiver already included such a balanced input. If you do use coax feed line and you don't separate the inside from the outside then you will simply continue to have a long wire antenna with a loop on the end !!

Jim

3701. Re: [SkyWires] Balun or not to Balun

Yahoo group: SkyWires
Date: 2010-04-29 01:17:57 UTC
From: Jim Dunstan
Topic: 3608 Message: 3701

At 03:00 AM 1/4/2010 +0000, you wrote:
>
>
>I have been kicking around either dropping a 4:1 or 9:1 in hope to reduce
>my noise level on the higher bands. Not sure if my tuner will match it on
>160 with the balun, think that might drop the impeadence down too low.
>This may not work but thought I would get some more info on the matter
>before I try.
>
>Setup:
>75' Coax to SGC 239 Tuner to 35' of 450 Ladder Line to 530'ish of loop
>
>I'm planning on putting the balun right between the tuner and the ladder
>line and hopefully it might balance they antenna out. I may be wrong but
>again that's why I am here bouncing ideas around.
>
>Aaron
>KD4GSL

Hi Aaron,

I think the arrangement of coax/SGC239/ladder line will work. However I suggest putting the balun on the other side of the SGC tuner e.g. where it connects to the coax line. A 1:1 current balun will do the trick e.g. wind your own with coax. That impedance point is always at a constant low impedance (50 ohm range) ... where the balun works best. The other side of the tuner, where it connects to the 450 ohm ladder line can be almost any complex impedance ... what the SGC tuner is designed to deal with .... but is very hard to deal with as far as a voltage balun is concerned. I have used a similar arrangement ... and the physical arrangement of the SGC239 is particularly easy to work in this arrangement. the frame of the tuner is kept separate from ground and is connected to one side of the parallel line. The other side of the parallel line connects to the hot output lead. Very easy to do. Put another small homemade current balun on the DC power cable. This arrangement will keep the ladder line/antenna in balance and automatically match the 50 ohm cable impedance to the complex impedance presented at the end of the ladder line (within the range of the SGC239 ... which is considerable).

Jim, VE3CI

3712. Re: message content

Yahoo group: SkyWires
Date: 2010-05-11 22:58:22 UTC
From: Kurt
Topic: 3659 Message: 3712

Andy <ai.egrps@...> wrote:
>THIS group has no "owner", sort of like the "chief moderator", who controls what powers > the other moderators can have. The moderators of THIS group do not have the > capability of setting people to "moderated" status. It cannot be changed.

If you look at the member list, the owner of this group is Walter, "exemptfromlife" who created this group on September 4, 2003.

Are you in touch with Walter? He can upgrade your moderator privileges so that you can moderate messages and delete the spam before it gets posted.

73 DE N6MD

3713. Re: message content / NEW Group

Yahoo group: SkyWires
Date: 2010-05-11 23:10:39 UTC
From: Kurt
Topic: 3659 Message: 3713

--- In SkyWires@yahoogroups.com, Hans Remeeus <hans@...> wrote:
> There is a fully spam-free alternative Yahoo-group called *LoopSkyWire*
==========

Unfortunately, there do not seem to be any new messages in THAT group...

http://groups.yahoo.com/group/LoopSkyWire/

3714. Everyone Move to NEW Group and DELETE this Group?

Yahoo group: SkyWires
Date: 2010-05-11 23:16:29 UTC
From: Kurt
Topic: 3659 Message: 3714

Question... can you send out a message to all members of the old SKYWIRES Group and advise them to move to the NEW LoopSkyWire group?

http://groups.yahoo.com/group/LoopSkyWire

THEN, contact Yahoo support and ask them to Delete this OLD Group?

Would that work?

==========

> In a message dated 2/12/2010 11:33:30 A.M. Central Standard Time,
> ai.egrps@... writes:
> > Just start a new group named Skywires II and everyone here can move to
> > there and it can have a new owner.
>
> No need to! There is already one. It is called [LoopSkyWire] and you can
> find it by going to:
>
> _http://groups.http://grohttp://groups.<Wh_
> (http://groups.yahoo.com/group/LoopSkywire)
>
> It was created two years ago (its anniversary is almost here), and if you
> noticed in the current thread, one of its moderators is also a moderator of
> this group, and pointed us to it twice in the last few days.
>
> Andy
>

3715. Re: [SkyWires] Everyone Move to NEW Group and DELETE this Group?

Yahoo group: SkyWires
Date: 2010-05-12 05:46:47 UTC
From: Hans Remeeus
Topic: 3659 Message: 3715

Hello Kurt,

I think so, yes.

73,
Hans Remeeus (PA1HR)
http://www.remeeus.eu
Communication is about people, the rest is technology.

Op 12-5-2010 1:16, Kurt schreef:
>
> Question... can you send out a message to all members of the old
> SKYWIRES Group and advise them to move to the NEW LoopSkyWire group?
>
> http://groups.yahoo.com/group/LoopSkyWire
> <http://groups.yahoo.com/group/LoopSkyWire>
>
> THEN, contact Yahoo support and ask them to Delete this OLD Group?
>
> Would that work?
>

3716. Re: Everyone Move to NEW Group and DELETE this Group?

Yahoo group: SkyWires
Date: 2010-05-12 11:41:11 UTC
From: Aaron
Topic: 3659 Message: 3716

Someone needs to download all the files off this group before it gets deleted.

Aaron
KD4GSL

--- In SkyWires@yahoogroups.com, "Kurt" <lakehodgesradio@...> wrote:
>
> Question... can you send out a message to all members of the old SKYWIRES Group and advise them to move to the NEW LoopSkyWire group?
>
> http://groups.yahoo.com/group/LoopSkyWire
>
> THEN, contact Yahoo support and ask them to Delete this OLD Group?
>
> Would that work?
>
> ==
>
>
> > In a message dated 2/12/2010 11:33:30 A.M. Central Standard Time,
> > ai.egrps@ writes:
> > > Just start a new group named Skywires II and everyone here can move to
> > > there and it can have a new owner.
> >
> > No need to! There is already one. It is called [LoopSkyWire] and you can
> > find it by going to:
> >
> > _http://groups.http://grohttp://groups.<Wh_
> > (http://groups.yahoo.com/group/LoopSkywire)
> >
> > It was created two years ago (its anniversary is almost here), and if you
> > noticed in the current thread, one of its moderators is also a moderator of
> > this group, and pointed us to it twice in the last few days.
> >
> > Andy
> >
>

3720. Re: [SkyWires] Australia in Janurary 2011

Yahoo group: SkyWires
Date: 2010-05-13 15:00:08 UTC
From: Dennis Mingear
Topic: 3720 Message: 3720

Would the group administrator please delete this guy from the group so he can't spam here anymore.

Dennis ... AI6R

Wake Up Folks!, We're not allowed to vote for the people that actually run the country, but we are allowed to vote for the front men and women that do their dirty work for them.

--- On Wed, 5/12/10, Ghazala Aamir <gud.grl@...> wrote:

From: Ghazala Aamir <gud.grl@...>
Subject: [SkyWires] Australia in Janurary 2011
To: "SkyWires@yahoogroups.com" <SkyWires@yahoogroups.com>
Date: Wednesday, May 12, 2010, 11:23 PM

Australia in Janurary
http://bit.ly/ adp6A7
old hotel into the luxury category
http://bit.ly/ 9qaUKN
luxury hotel material?
http://bit.ly/ bMmiRL
One dead, two sick after stays at downtown Luxury Hotel

http://bit.ly/ 91lXXi
Luxury Timeshares/Destinat ion Clubs
http://bit.ly/ cbSf23

3721. Re: [SkyWires] Re: message content

Yahoo group: SkyWires
Date: 2010-05-13 16:19:38 UTC
From: Andy
Topic: 3659 Message: 3721

> If you look at the member list, the owner of this group is Walter,
> "exemptfromlife" who created this group on September 4, 2003.
>
> Are you in touch with Walter? He can upgrade your moderator privileges so
> that you can moderate messages and delete the spam before it gets posted.

The problem, as I recall, is that Walter ("exemptfromlife") has been missing from this group, and either didn't or won't grant enough privileges to the other three moderators to let them *prevent* spam before it happens. All they can do is kill it after it happens. They have been good at that; unfortunately it doesn't help those us who receive our posts in email and receive the spam before they can stop it.

Andy

3722. Re: [SkyWires] Everyone Move to NEW Group and DELETE this Group?

Yahoo group: SkyWires
Date: 2010-05-13 16:23:54 UTC
From: Andy
Topic: 3659 Message: 3722

> Question... can you send out a message to all members of the old SKYWIRES
> Group and advise them to move to the NEW LoopSkyWire group?

I think you just did that! ;-)

> THEN, contact Yahoo support and ask them to Delete this OLD Group?

Why delete it? Leave the old group here!

If you don't like the spam here, YOU can walk away from it, but don't make it so that everyone loses out by no longer being able to access the archives.

(Better yet, there are ways to recover a Yahoogroup when it gets neglected by its owner, and I think the moderators should pursue that avenue first before even considering killing the group.)

Andy

3723. Re: [SkyWires] Everyone Move to NEW Group and DELETE this Group?

Yahoo group: SkyWires
Date: 2010-05-13 18:41:20 UTC
From: Ken Burchfield
Topic: 3659 Message: 3723

THANK YOU ANDY!
Spam is the way of life in groups.
I's with you Andy.
73 Ken k5jxl

PacketRadio is Still Alive.....Mississippi.....145.010.....Simplex.....1200 Baud

--- On Thu, 5/13/10, Andy <ai.egrps@...> wrote:

From: Andy <ai.egrps@...>
Subject: Re: [SkyWires] Everyone Move to NEW Group and DELETE this Group?
To: SkyWires@yahoogroups.com
Date: Thursday, May 13, 2010, 11:23 AM

> Question... can you send out a message to all members of the old SKYWIRES
> Group and advise them to move to the NEW LoopSkyWire group?

I think you just did that! ;-)

> THEN, contact Yahoo support and ask them to Delete this OLD Group?

Why delete it? Leave the old group here!

If you don't like the spam here, YOU can walk away from it, but don't make
it so that everyone loses out by no longer being able to access the
archives.

(Better yet, there are ways to recover a Yahoogroup when it gets neglected
by its owner, and I think the moderators should pursue that avenue first
before even considering killing the group.)

Andy

3729. Re: Everyone Move to NEW Group and DELETE this Group?

Yahoo group: SkyWires
Date: 2010-05-30 23:59:46 UTC
From: w0szv
Topic: 3659 Message: 3729

why delete the group? too much good information to just delete it all. much better if you just hit the delete button on the posts you don't like until someone figures out how to fix the problem. Don't kill the horse just because it got out of the barn. Eldon w0szv

--- In SkyWires@yahoogroups.com, Andy <ai.egrps@...> wrote:
>
> > Question... can you send out a message to all members of the old SKYWIRES
> > Group and advise them to move to the NEW LoopSkyWire group?
>
> I think you just did that! ;-)
>
> > THEN, contact Yahoo support and ask them to Delete this OLD Group?
>
> Why delete it? Leave the old group here!
>
> If you don't like the spam here, YOU can walk away from it, but don't make
> it so that everyone loses out by no longer being able to access the
> archives.
>
> (Better yet, there are ways to recover a Yahoogroup when it gets neglected
> by its owner, and I think the moderators should pursue that avenue first
> before even considering killing the group.)
>
> Andy
>

3743. TOWER FOR SALE

Yahoo group: SkyWires
Date: 2010-06-08 15:57:32 UTC
From: kg4coq
Topic: 3743 Message: 3743

Hello All,

I have for sale 4-10 ft. sections of streight and 2-9 ft. top sections of Rohn 25 tower.

Sections are in good very useable shape but some need cleaning up... (Surface rust)

Selling all $250.00. I will trade my tower for a ICOM AH-4 TUNER or something else I may need.

Pickup in Largo Florida.

Will deliver within 30 miles of Largo Florida for $25.00 more to cover fuel cost.

Selling all because can't find anyone to help me put it up.

Please email me directly or call the following phone number.

Thank you,

Don Rosselli
KG4COQ
kg4coq@...
813) 928-1838
Largo,Florida 33773

3749. Re: Here is a question for you

Yahoo group: SkyWires
Date: 2010-07-08 13:39:47 UTC
From: Thomas F. Giella NZ4O
Topic: 3749 Message: 3749

Gary if you use coax on your 40 meter full wave loop you will lose the multiband operation advantage of the loop. Though it may also work on 15 meters.

You may also have a hard time matching the coax directly to the feedpoint of the loop as the feedpoint impedance will be above 100 ohms.

73 & GUD DX,
Thomas F. Giella, NZ4O
Lakeland, FL, USA
nz4o@...

NZ4O Amateur & SWL Autobiography: http://www.nz4o.org

3751. Loop user since 1986

Yahoo group: SkyWires
Date: 2010-09-03 18:55:04 UTC
From: jimw6nrj
Topic: 3751 Message: 3751

I presently have a 540' loop with a configuration between a square and a rectangle with the far side shorter than the nearer feed point side. I use 450 Ohm ladder line to a Johnson Matchbox in the shack. Starting at 32 feet in 1986, the antenna height is now 44 feet on average as the trees grew over the years. All ropes are on pulleys with brick weights with pulleys or bungee cords on the far end of the pulley rope pulled over the tree. They have survived 75 MPH winds. Observations: Play the corners and watch out for nulls! The antenna is extremely good off the far corner from the feed line on 40 and 20 (the Middle East for me). I have worked India on 40 as well as the deep-in-Asia ..."stan" countries with 400 watts. Off the sides on 40 my 4-element vertical wire array is 1 S-unit better than the loop. There are nulls on 15 and 10 that are frustrating, but the antenna is a pile-up buster on 17 in most all directions. The loop equals my 5/8 inverted L on 80 but is slightly poorer than my 3/8 inverted L on 160. The more radials I added to these L antennas in the middle of the loop the better the loop plays. Downward shooting RF may be reflected back into the loop wire and radiated ??? My newest experiment is a 15/12 Lazy H. After all that work to get the H up, the loop usually outperforms it in the favored H direction. Fellow club members ask, "why no beam?" One can not see my black wire loop from the streets next to my corner house. No neighbor issues and 250 countries and counting. Best antenna I have ever used, including an A3 beam at 40'.

3752. new user

Yahoo group: SkyWires
Date: 2010-09-03 20:42:26 UTC
From: xq6et
Topic: 3752 Message: 3752

thanks for allowing me to join your group!
73 bob xq6et

3753. gain

Yahoo group: SkyWires
Date: 2010-09-03 20:45:49 UTC
From: xq6et
Topic: 3753 Message: 3753

anyone have a software program to measure gain dbd ?
i would like to install a loop (triangle) 1 leg 1300 ft
1 leg 400 ft and another 1200 ft. total 2900 ft. what would
dbd on 160/80 etc to 10m be? average height 140ft agl.
any info appreciated
thanks
73 bob xq6et

3754. Needed to trade

Yahoo group: SkyWires
Date: 2010-09-07 21:58:44 UTC
From: kg4coq
Topic: 3754 Message: 3754

Hello All,

Looking to trade the following below for a Icom 706 Mark 2 or other radio of same type in good working order.

---

1. Ameritron 811-A Amplifier
2. Matched 3 811-A tubes (Brand new-still in original shipping carton.)
3. Icom IC-W32A Dual Band FM Transceiver (2M and 70 CM).

This equipment is owned by a elderly ham who needs to replace his radio and is in nice shape.

This equipment will be shipped to cont US ONLY.
PLEASE CONTACT OFF LIST AT EMAIL BELOW:
kg4coq@...

Thank you,
KG4COQ
Tampa Bay

3755. Worldband Radio

Yahoo group: SkyWires
Date: 2010-09-09 11:00:27 UTC
From: Antônio Schuler
Topic: 3755 Message: 3755

Worldband Radio

Wellcome to Worldband Radio. Our group is for all listeners and DXers that like to listen all band radio, shortwave, mediumwave, FM and longwave. The group is open to anyone with an interest in worldband radio. The members can post their logs and all information about the world of radio. So join it today. Words: SWL, DX, radio listening, worldwide listeners, receivers, antennas, QSL, reception reports.

http://groups.yahoo.com/group/worldbandradio

73s

Moderator
Worldband Radio

3756. Loop Question

Yahoo group: SkyWires
Date: 2010-09-23 06:45:38 UTC
From: ke7uyc
Topic: 322 Message: 3756

Hi There Im New Here and been thinking of building a 20 or 40 meter loop
what works best Ladder line or 4:1 balun with coax I Have always used coax in the passed for my antennas I mostly use 20 meters but 40 would be nice if i can work it in my yard from what I understand its 1005 Divide by Mhz to come up with wire footage is that correct?

3757. Re: [SkyWires] Loop Question

Yahoo group: SkyWires
Date: 2010-09-23 14:54:03 UTC
From: Dr.Ace Ratliff
Topic: 322 Message: 3757

Hello,
For a loop 1005/Mhz = feet . Ladder line is best for multi-band operation.
If U will only be using one band coax is fine.
73, Ace

--
Dr.Ace Ratliff
www.WH2T.com <http://www.wh2t.com/>

On Thu, Sep 23, 2010 at 2:45 AM, ke7uyc <ke7uyc@...> wrote:

>
>
> Hi There Im New Here and been thinking of building a 20 or 40 meter loop
> what works best Ladder line or 4:1 balun with coax I Have always used coax
> in the passed for my antennas I mostly use 20 meters but 40 would be nice if
> i can work it in my yard from what I understand its 1005 Divide by Mhz to
> come up with wire footage is that correct?
>
>
>

3759. Wire Loop

Yahoo group: SkyWires
Date: 2010-10-09 11:39:32 UTC
From: kg4coq
Topic: 3759 Message: 3759

I am looking to build a 80 meter loop but my lot is small (70'x50' useable). Anyone think I could run the loop in a zig-zag pattern using 4 to 6 pushup poles at 30 or 40 ft high ?

Please respond off list to;

kg4coq@hotmail.com

Thank you,

Don,
KG4COQ
TAMPA BAY

3760. AW: [SkyWires] Wire Loop

Yahoo group: SkyWires
Date: 2010-10-09 19:25:00 UTC
From: Siegfried Jackstien
Topic: 3759 Message: 3760

Should work .. Feed with ladderline and work 10-80

Dg9bfc

Sigi

Von: SkyWires@yahoogroups.com [mailto:SkyWires@yahoogroups.com] Im Auftrag von kg4coq
Gesendet: Samstag, 9. Oktober 2010 11:40
An: SkyWires@yahoogroups.com
Betreff: [SkyWires] Wire Loop

I am looking to build a 80 meter loop but my lot is small (70'x50' useable). Anyone think I could run the loop in a zig-zag pattern using 4 to 6 pushup poles at 30 or 40 ft high ?

Please respond off list to;

kg4coq@... <mailto:kg4coq%40hotmail.com>

Thank you,

Don,
KG4COQ
TAMPA BAY

3761. multiple resonant monoband loops vs one loop and a tuner

Yahoo group: SkyWires
Date: 2010-10-26 13:39:06 UTC
From: bas_tad
Topic: 3761 Message: 3761

Has anyone done any study on whether a tuned monoband loop performs better on its band than a multi-octave or random loop will perform on that particular band?

I've been using monoband loops on 20 and 17 meters and am planning on putting up a 40m loop. I have a handful of 100 ohm baluns and they seem to work great as long as I don't put the loop up too high.

Problem is now I've run out of room to run cables hihi. I'm seriously trying to decide between a remote antenna switch and a large loop, open wire feeder and a tuner in the shack.

Aren't large loops directional at multiple octaves of the operating frequency? How much so?

My loops have mostly been 'sloping' loops - triangle, fed at the top, with the loop itself acting as part of the guy system for the push up pole that is holding it up. (I like to say my antenna is holding up the pole that is holding up my antenna, but I digress ...) This obviously won't work for 40 and 160 meters.

Thoughts? References to any published material? I can only be anal about this once, hihi then they stay up until nature takes 'em down!

Thanks
Tracy N4LGH

..

3762. Re: Loop Question

Yahoo group: SkyWires
Date: 2010-10-26 13:53:47 UTC
From: bas_tad
Topic: 322 Message: 3762

--- In SkyWires@yahoogroups.com, "ke7uyc" <ke7uyc@...> wrote:
> what works best Ladder line or 4:1 balun with coax

I always use a 2:1 balun (1:2) for coax fed loops. The resonant impedance of a loop is near 100 ohms at most heights we would put them.

I'm not sure what the feedpoint impedances are at other than resonant frequencies, but if you use a 4:1 balun make sure it has a beefy Powdered Iron core instead of ferrite as you will have huge RF voltages present at the balun during tuning; if you run power you can actually damage a ferrite balun if the impedances are way off.

I'm struggling with the same question, but I've destroyed a ferrite balun tuning 500 watts into a 40 meter loop on 80 meters. I'll never do that again!

Tracy N4LGH

3763. AW: [SkyWires] multiple resonant monoband loops vs one loop and a tuner

Yahoo group: SkyWires
Date: 2010-10-26 19:47:57 UTC
From: Siegfried Jackstien
Topic: 3761 Message: 3763

I have very good results with a ladderline fed topbandloop

Maybe next will be a 2 wl loop for topband

Surely you have a cloverleaf pattern on the higher bands with points of lower signal between the biggain lobes

But where the lobes go there is much gain on the higher bands . and if you can model your antenna with mmana or eznec you see where your max gain goes

I did that before erecting the loop and made the direction and the lengths of the sides that most gain on 40 is to southwest (lp to vk and zl)

And that worked for me

Your situation may be different

But as a multibandantenna I would allwas erect a ladderline fed loop or a similar fed dipole

I had both and what I found out is that loop receives better (lower noise level)

So try it out

Dg9bfc

Sigi

Von: SkyWires@yahoogroups.com [mailto:SkyWires@yahoogroups.com] Im Auftrag von bas_tad
Gesendet: Dienstag, 26. Oktober 2010 13:39
An: SkyWires@yahoogroups.com
Betreff: [SkyWires] multiple resonant monoband loops vs one loop and a tuner

Has anyone done any study on whether a tuned monoband loop performs better on its band than a multi-octave or random loop will perform on that particular band?

I've been using monoband loops on 20 and 17 meters and am planning on putting up a 40m loop. I have a handful of 100 ohm baluns and they seem to work great as long as I don't put the loop up too high.

Problem is now I've run out of room to run cables hihi. I'm seriously trying to decide between a remote antenna switch and a large loop, open wire feeder

and a tuner in the shack.

Aren't large loops directional at multiple octaves of the operating frequency? How much so?

My loops have mostly been 'sloping' loops - triangle, fed at the top, with the loop itself acting as part of the guy system for the push up pole that is holding it up. (I like to say my antenna is holding up the pole that is holding up my antenna, but I digress ...) This obviously won't work for 40 and 160 meters.

Thoughts? References to any published material? I can only be anal about this once, hihi then they stay up until nature takes 'em down!

Thanks
Tracy N4LGH

..

3764. Balun 1 to 1 or 4 to 1

Yahoo group: SkyWires
Date: 2010-10-30 14:28:52 UTC
From: Joe
Topic: 3764 Message: 3764

Evening Gang,

I'm wondering here is the situation..

I have a random loop. It's all horizontally laid out strung between four trees.

It's random length, just what would fit as large as possible. It's probably resonant as a full wave loop somewhere near the 5 MHz band, (that i do not operate in.)

It is about 40 feet above the ground. Fed in one corner with some TV twin lead about 30 feet or so. then the remainder is some 50 ohm coax again ohhh 40 feet or so.

Now the question is here, I have a 1 to 1 balun,, and a 4 to 1 balun. What one would be the best to put of course where the coax to twin lead spot is.

Wat one would be the most efficient? By the way I will want to use this antenna on all bands 160 thru 10 meters.

Joe WB9SBD

3765. Re: [SkyWires] Balun 1 to 1 or 4 to 1

Yahoo group: SkyWires
Date: 2010-10-30 21:30:00 UTC
From: Bill Aycock
Topic: 3764 Message: 3765

Joe-- Your loop is not random, it is a definite length. You should measure it, to know. "Random"ness is a description of our state of Knowledge. In regard to an antenna, it is only random until you make it. When a post on a tuner is labeled "Random" that means, roughly, "Whatever" it is hooked to. Until you have measured the characteristics of the antenna, it is hard to answer the questions about the Baluns. The devices you refer to as "1:1" and "4:1" are really "Impedance transformers".
The TV Twin Lead has a "Characteristic Impedance" of 300 Ohms and is a "Balanced" line. The Coax is an "Unbalanced" line and has a Characteristic Impedance of 50 Ohms.
The major advantage of Twin Lead over Coax, is that there is less loss when the line is fed with a signal that has an Impedance that does not match the line.
Bill-- W4BSG

----- Original Message -----
From: "Joe" <nss@...>
To: <SkyWires@yahoogroups.com>
Sent: Saturday, October 30, 2010 9:28 AM
Subject: [SkyWires] Balun 1 to 1 or 4 to 1

> Evening Gang,
>
> I'm wondering here is the situation..
>
> I have a random loop. It's all horizontally laid out strung between
> four trees.
>
> It's random length, just what would fit as large as possible. It's
> probably resonant as a full wave loop somewhere near the 5 MHz band,
> (that i do not operate in.)
>
> It is about 40 feet above the ground. Fed in one corner with some TV
> twin lead about 30 feet or so. then the remainder is some 50 ohm coax
> again ohhh 40 feet or so.
>
> Now the question is here, I have a 1 to 1 balun,, and a 4 to 1 balun.
> What one would be the best to put of course where the coax to twin lead
> spot is.
>
> Wat one would be the most efficient? By the way I will want to use this
> antenna on all bands 160 thru 10 meters.
>
> Joe WB9SBD
>

>
>
>
> ---
>
> Yahoo! Groups Links
>
>
>
>

3766. AW: [SkyWires] Balun 1 to 1 or 4 to 1

Yahoo group: SkyWires
Date: 2010-10-30 22:50:32 UTC
From: Siegfried Jackstien
Topic: 3764 Message: 3766

So best would be ladderline to shack and symmetrical tuner in shack

Second best ladderline to shack and single ended tuner with 1:4 balun on the outputside

Third is coax to antenna and balun in the air (or some feet down and ladderline for the rest (what I call rubbish for multiband)

Greetz

Dg9bfc

Sigi

Von: SkyWires@yahoogroups.com [mailto:SkyWires@yahoogroups.com] Im Auftrag von Bill Aycock
Gesendet: Samstag, 30. Oktober 2010 21:30
An: SkyWires@yahoogroups.com
Betreff: Re: [SkyWires] Balun 1 to 1 or 4 to 1

Joe-- Your loop is not random, it is a definite length. You should measure it, to know. "Random"ness is a description of our state of Knowledge. In regard to an antenna, it is only random until you make it. When a post on a tuner is labeled "Random" that means, roughly, "Whatever" it is hooked to. Until you have measured the characteristics of the antenna, it is hard to answer the questions about the Baluns. The devices you refer to as "1:1" and "4:1" are really "Impedance transformers".
The TV Twin Lead has a "Characteristic Impedance" of 300 Ohms and is a "Balanced" line. The Coax is an "Unbalanced" line and has a Characteristic Impedance of 50 Ohms.
The major advantage of Twin Lead over Coax, is that there is less loss when the line is fed with a signal that has an Impedance that does not match the line.
Bill-- W4BSG

----- Original Message -----
From: "Joe" <nss@... <mailto:nss%40mwt.net> >
To: <SkyWires@yahoogroups.com <mailto:SkyWires%40yahoogroups.com> >
Sent: Saturday, October 30, 2010 9:28 AM
Subject: [SkyWires] Balun 1 to 1 or 4 to 1

> Evening Gang,
>
> I'm wondering here is the situation..
>

> I have a random loop. It's all horizontally laid out strung between
> four trees.
>
> It's random length, just what would fit as large as possible. It's
> probably resonant as a full wave loop somewhere near the 5 MHz band,
> (that i do not operate in.)
>
> It is about 40 feet above the ground. Fed in one corner with some TV
> twin lead about 30 feet or so. then the remainder is some 50 ohm coax
> again ohhh 40 feet or so.
>
> Now the question is here, I have a 1 to 1 balun,, and a 4 to 1 balun.
> What one would be the best to put of course where the coax to twin lead
> spot is.
>
> Wat one would be the most efficient? By the way I will want to use this
> antenna on all bands 160 thru 10 meters.
>
> Joe WB9SBD
>
>
>
>
> ------------------------------------
>
> Yahoo! Groups Links
>
>
>
>

3767. Re: AW: [SkyWires] Balun 1 to 1 or 4 to 1

Yahoo group: SkyWires
Date: 2010-10-31 07:55:20 UTC
From: Hans Remeeus
Topic: 3764 Message: 3767

I equal this opinion.

Ladderline gives you the best flexibility and in combination with a
symmetrical tuner the highest efficiency, when you want to use your loop
for more than one frequencyband.

When you want to use your loop for only one frequencyband the best thing
to do is to construct a one-wavelength sized loop with 1:2 balun and coax.

My loop is about 400 feet long and I use this antenna for all bands 160
and 10 meters. With ladderline and symmetrical antennatuner. Works GREAT!!

73,
Hans Remeeus (PA1HR)
http://www.remeeus.eu
Communication is about people, the rest is technology.

Op 31-10-2010 0:50, Siegfried Jackstien schreef:
>
>
> So best would be ladderline to shack and symmetrical tuner in shack
>
> Second best ladderline to shack and single ended tuner with 1:4 balun
> on the outputside
>
> Third is coax to antenna and balun in the air (or some feet down and
> ladderline for the rest (what I call rubbish for multiband)
>
> Greetz
>
> Dg9bfc
>
> Sigi
>

3768. Re: [SkyWires] Balun 1 to 1 or 4 to 1

Yahoo group: SkyWires
Date: 2010-10-31 14:33:27 UTC
From: Bill Aycock
Topic: 3764 Message: 3768

List--

Several people have made reference to a "Balanced Tuner" in this thread.

I (very much!) would like to know which tuners they mean.

In the situation described (ie, ladder line to rig) There MUST be a transition from Balanced (Ladder line) to Unbalanced (Rig input). Where this is done makes a difference.

I wish someone using this setup would describe it and identify the Tuner.

Thanks--Bill--W4BSG

3770. Re: [SkyWires] Balun 1 to 1 or 4 to 1

Yahoo group: SkyWires
Date: 2010-10-31 14:59:42 UTC
From: Hans Remeeus
Topic: 3764 Message: 3770

The most excellent and very best tuner in the whole wide world!!:

http://www.remeeus.eu/amateur-radio/antennes-en-antennetuners/ll-tuner.html
http://www.lltuners.nl/
http://www.pa3eke.nl/joomla/tuners.html
http://www.pa3hgt.nl/LL.htm
http://www.eham.net/reviews/detail/6059
http://www.delta-india-golf.com/articles.php?article_id=235

73,
Hans Remeeus (PA1HR)
http://www.remeeus.eu
Communication is about people, the rest is technology.

Op 31-10-2010 15:33, Bill Aycock schreef:
> List--
>
> Several people have made reference to a "Balanced Tuner" in this thread.
>
> I (very much!) would like to know which tuners they mean.
>
> In the situation described (ie, ladder line to rig) There MUST be a
> transition from Balanced (Ladder line) to Unbalanced (Rig input). Where this
> is done makes a difference.
>
> I wish someone using this setup would describe it and identify the Tuner.
>
> Thanks--Bill--W4BSG
>
>

3773. Re: [SkyWires] Balun 1 to 1 or 4 to 1

Yahoo group: SkyWires
Date: 2010-10-31 17:39:52 UTC
From: goldtr8@charter.net
Topic: 3764 Message: 3773
Attachments: 2 described; binary payloads are missing from this source WARC

[Attachment content not displayed]

3776. Re: [SkyWires] Balun 1 to 1 or 4 to 1

Yahoo group: SkyWires
Date: 2010-11-01 02:49:48 UTC
From: Alan Wilson
Topic: 3764 Message: 3776

You can find a used johnson matchbox for around 100 bucks or so. I've had one and did a comparison on using one without 4to1 balun as opposed to using a standard mfj tuner with a 4to1 built in and never saw a difference in receive or transmit signal. So, just try what you can with what you have. I know I'll catch heck from you purists out there but the results speak for themselves. I sold the matchbox and just use a 4to1 and about 10ft of rgx through the wall to my old mfj tuner and I have one of the loudest signals around western montana...73 and gud luck, Alan

3777. Re: [SkyWires] Balun 1 to 1 or 4 to 1

Yahoo group: SkyWires
Date: 2010-11-01 16:54:27 UTC
From: Jim Snider
Topic: 3764 Message: 3777

There is some very good reading on DX Engineering website
around baluns, tuners and balanced line.

W8BS

Jim Snider W8BS
Sent from my iPhone

On Oct 31, 2010, at 10:49 PM, Alan Wilson <ke4nu7@...> wrote:

> You can find a used johnson matchbox for around 100 bucks or so. I've
> had one and did a comparison on using one without 4to1 balun as opposed
> to using a standard mfj tuner with a 4to1 built in and never saw a
> difference in receive or transmit signal. So, just try what you can with
> what you have. I know I'll catch heck from you purists out there but the
> results speak for themselves. I sold the matchbox and just use a 4to1
> and about 10ft of rgx through the wall to my old mfj tuner and I have
> one of the loudest signals around western montana...73 and gud luck, Alan
>

3778. Re: 2 WL or 1 WL 160

Yahoo group: SkyWires
Date: 2010-11-04 12:25:24 UTC
From: Thomas F. Giella NZ4O
Topic: 3778 Message: 3778

Sigi if you have the room for a single turn 2 wl long loop on 160 meters you will see the takeoff angle of the highest current drop from 90 deg. straight up down to a 45 deg. angle that will allow you to work some DX.

73 & GUD DX,
Thomas F. Giella, NZ4O
Lakeland, FL, USA
nz4o@...

NZ4O Amateur & SWL Autobiography: http://www.nz4o.org
NZ4O Daily LF/MF/HF/6M Radiowave Propagation Forecast:
http://www.solarcycle24.org

3779. AW: [SkyWires] Re: 2 WL or 1 WL 160

Yahoo group: SkyWires
Date: 2010-11-04 12:30:10 UTC
From: Siegfried Jackstien
Topic: 3778 Message: 3779

But only if you have tall trees .... right?!?
Sigi
Dg9bfc

-----Ursprüngliche Nachricht-----
Von: SkyWires@yahoogroups.com [mailto:SkyWires@yahoogroups.com] Im Auftrag von Thomas F. Giella NZ4O
Gesendet: Donnerstag, 4. November 2010 12:25
An: a Sky Wires eGroup Unm; a Sky Wires eGroup Mod
Betreff: [SkyWires] Re: 2 WL or 1 WL 160

Sigi if you have the room for a single turn 2 wl long loop on 160 meters you

will see the takeoff angle of the highest current drop from 90 deg. straight

up down to a 45 deg. angle that will allow you to work some DX.

73 & GUD DX,
Thomas F. Giella, NZ4O
Lakeland, FL, USA
nz4o@...

NZ4O Amateur & SWL Autobiography: http://www.nz4o.org
NZ4O Daily LF/MF/HF/6M Radiowave Propagation Forecast:
http://www.solarcycle24.org

Yahoo! Groups Links

3780. Re: [SkyWires] Digest Number 1228

Yahoo group: SkyWires
Date: 2010-11-05 12:50:22 UTC
From: Thomas F. Giella NZ4O
Topic: 3780 Message: 3780

SkyWire Loop AntennasSigi mine is up at only 35 feet and works very well.

73,
Thomas, NZ4O
----- Original Message -----
From: SkyWires@yahoogroups.com
To: SkyWires@yahoogroups.com
Sent: Friday, November 05, 2010 5:53 AM
Subject: [SkyWires] Digest Number 1228

SkyWire Loop Antennas
Messages In This Digest (2 Messages)
1a. Re: 2 WL or 1 WL 160 From: Thomas F. Giella NZ4O
1b. AW: [SkyWires] Re: 2 WL or 1 WL 160 From: Siegfried Jackstien
View All Topics | Create New Topic Messages
1a. Re: 2 WL or 1 WL 160
Posted by: "Thomas F. Giella NZ4O" nz4o@tampabay.rr.com thomasgiella
Thu Nov 4, 2010 5:25 am (PDT)

Sigi if you have the room for a single turn 2 wl long loop on 160 meters you will see the takeoff angle of the highest current drop from 90 deg. straight up down to a 45 deg. angle that will allow you to work some DX.

73 & GUD DX,
Thomas F. Giella, NZ4O
Lakeland, FL, USA
nz4o@tampabay.rr.com

NZ4O Amateur & SWL Autobiography: http://www.nz4o.org
NZ4O Daily LF/MF/HF/6M Radiowave Propagation Forecast:
http://www.solarcycle24.org

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Messages in this topic (2)
1b. AW: [SkyWires] Re: 2 WL or 1 WL 160
Posted by: "Siegfried Jackstien" siegfried.jackstien@freenet.de dg9bfc
Thu Nov 4, 2010 5:30 am (PDT)

But only if you have tall trees .... right?!?
Sigi
Dg9bfc

-----Ursprüngliche Nachricht-----
Von: SkyWires@yahoogroups.com [mailto:SkyWires@yahoogroups.com] Im Auftrag von Thomas F. Giella NZ4O
Gesendet: Donnerstag, 4. November 2010 12:25
An: a Sky Wires eGroup Unm; a Sky Wires eGroup Mod

Betreff: [SkyWires] Re: 2 WL or 1 WL 160

Sigi if you have the room for a single turn 2 wl long loop on 160 meters you

will see the takeoff angle of the highest current drop from 90 deg. straight

up down to a 45 deg. angle that will allow you to work some DX.

73 & GUD DX,
Thomas F. Giella, NZ4O
Lakeland, FL, USA
nz4o@...

NZ4O Amateur & SWL Autobiography: http://www.nz4o.org
NZ4O Daily LF/MF/HF/6M Radiowave Propagation Forecast:
http://www.solarcycle24.org

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Visit Your Group | Yahoo! Groups Terms of Use | Unsubscribe

3781. New

Yahoo group: SkyWires
Date: 2010-11-10 20:23:14 UTC
From: richdjschmuke
Topic: 3781 Message: 3781

I just joined the group and this is a test message.
Rich , Kdozz

3782. Re: [SkyWires] New

Yahoo group: SkyWires
Date: 2010-11-10 21:25:39 UTC
From: Ken Burchfield
Topic: 3781 Message: 3782

Hi Rich,
Welcome Here:
Enjoy your work and Photos on Ham-Antenna.
73 Ken

PacketRadio is Still Alive.....Mississippi.....145.010.....Simplex.....1200 Baud

--- On Wed, 11/10/10, richdjschmuke <rdj@...> wrote:

From: richdjschmuke <rdj@...>
Subject: [SkyWires] New
To: SkyWires@yahoogroups.com
Date: Wednesday, November 10, 2010, 2:23 PM

I just joined the group and this is a test message.
Rich ,
Kdozz

3783. RE: [SkyWires] New

Yahoo group: SkyWires
Date: 2010-11-11 00:06:04 UTC
From: Richard Schmuke
Topic: 3781 Message: 3783
Attachments: 2 described; binary payloads are missing from this source WARC

Thanks for the welcome Ken, I do enjoy messing with wire in the air. I just changed from a 80M size, multi band loop to a 160 size and having a few problems. I thought if I read the mail here for awhile I might learn something.

Rich ,KDØZZ ,

from the middle of Missouri , out in the sticks with the hicks and the ticks.

From: SkyWires@yahoogroups.com [mailto:SkyWires@yahoogroups.com] On Behalf Of Ken Burchfield

Hi Rich,
Welcome Here:
Enjoy your work and Photos on Ham-Antenna.
73 Ken

PacketRadio is Still
Alive.......Mississippi.......145.010.......Simplex.......1200 Baud

I just joined the group and this is a test message.
Rich , Kdozz

No virus found in this incoming message.
Checked by AVG - www.avg.com
Version: 9.0.869 / Virus Database: 271.1.1/3249 - Release Date: 11/10/10 13:34:00

3784. RE: [SkyWires] New

Yahoo group: SkyWires
Date: 2010-11-11 00:32:04 UTC
From: Ken Burchfield
Topic: 3781 Message: 3784

Rich, I also had a large loop up , but now all my antennas are in need of repair.My OCFD is the second antenna that I now have , I have tried many ,many wire antennas, some of the arrays have worked great, but had their, limit because of the fixed direction.
....Nothing found the the 2 image that were send.
73. Ken

PacketRadio is Still Alive.......Mississippi.......145.010.......Simplex.......1200 Baud

--- On Wed, 11/10/10, Richard Schmuke <rdj@...> wrote:

From: Richard Schmuke <rdj@...>
Subject: RE: [SkyWires] New
To: SkyWires@yahoogroups.com
Date: Wednesday, November 10, 2010, 6:06 PM

Thanks
for the welcome Ken, I do enjoy messing with wire in the air. I just changed
from a 80M size, multi band loop to a 160 size and having a few problems. I
thought if I read the mail here for awhile I might learn something.

Rich
,KDØZZ ,

from
the middle of Missouri , out in the sticks with the hicks and the ticks.

3785. 80 to 160

Yahoo group: SkyWires
Date: 2010-11-11 03:28:25 UTC
From: Richard Schmuke
Topic: 3785 Message: 3785

I put up a 80M □size□ loop and used a 4:1 balun, feed with RG-8, works all bands 10 thru 40. It was a great antenna. I added some more wire to bring it up to 160 size but it does not cover the bands like it did when smaller. It has been trimmed to lowest SWR in 20m band. 80M size was 1.1:1 in the middle of 20M band , at 160m size the best I can get on 20M is 1.8:1with a MFJ-259B. 15M, and above are all out of range for my internal tuner. Would the antenna change impedance when I doubled the length?? What am I missing. I know the 80M loop would have a impedance of 100 ohms and worked fine with the 4:1 balun. I am not seeing any good spots at resonance like I did on the shorter antenna, I get dips but not low SWR for a solid state rig.

Rich , KDØZZ

I was taught to respect my elders. It's just getting harder to find them.

3786. 80 to 160

Yahoo group: SkyWires
Date: 2010-11-11 11:44:54 UTC
From: Palle Dall Larsen
Topic: 3785 Message: 3786

Hi all,
I,m using a 82 meter delta-loop.
Knowing the impedance is 100 ohms, I have build a 2:1 balun to get the 50 ohms imp.
The loop works fine on all bands (10 to 80) with minor adjusting for the internal tuner in my IC-746.
73 de OZ1LHK / Palle

3787. Re: [SkyWires] 80 to 160

Yahoo group: SkyWires
Date: 2010-11-11 16:14:36 UTC
From: Ken Burchfield
Topic: 3785 Message: 3787

Rich, if you have not seen Jason's page , good information on Full wave Loops. also some nice Links in the Links section.
73 Ken

PacketRadio is Still Alive.......Mississippi.......145.010.......Simplex.......1200 Baud

--- On Wed, 11/10/10, Richard Schmuke <rdj@...> wrote:

From: Richard Schmuke <rdj@...>
Subject: [SkyWires] 80 to 160
To: SkyWires@yahoogroups.com
Date: Wednesday, November 10, 2010, 9:28 PM

I put up a 80M “size” loop and used a 4:1 balun,
feed with RG-8, works all bands 10 thru 40. It was a great antenna. I added some more wire to bring it up to 160 size but it does not cover the bands like it did when smaller. It has been trimmed to lowest SWR in 20m band. 80M size was 1.1:1 in the middle of 20M band , at 160m size the best I can get on 20M is 1.8:1with a MFJ-259B. 15M, and above are all out of range for my internal tuner. Would the antenna change impedance when I doubled the length?? What am I missing. I know the 80M loop would have a impedance of 100 ohms and worked fine with the 4:1 balun. I am not seeing any good spots at resonance like I did on the shorter antenna, I get dips but not low SWR for a solid state rig.

Rich , KDØZZ

I was taught to respect my
elders. It's just getting harder to find them.

3788. 80 to 160

Yahoo group: SkyWires
Date: 2010-11-12 23:10:12 UTC
From: Dr.Ace Ratliff
Topic: 3785 Message: 3788

Palle,
The loop impedance will only be around 100 ohms on the 80 mtr band. I think a 4:1 balun might be a better overall pick.
73, WH2T
--
Dr.Ace Ratliff
www.WH2T.com

3789. Re: [SkyWires] 80 to 160

Yahoo group: SkyWires
Date: 2010-11-12 23:15:00 UTC
From: Dr.Ace Ratliff
Topic: 3785 Message: 3789

Rich,
U need to adjust the loop length by a few feet at most. Measure the VSWR at the top and bottom of the 20 mtr band without using any antenna tuner. This will tell U if U need to make the loop a little longer or a little shorter.
73, Ace

--
Dr.Ace Ratliff
www.WH2T.com

3790. RE: [SkyWires] 80 to 160

Yahoo group: SkyWires
Date: 2010-11-13 00:01:47 UTC
From: Richard Schmuke
Topic: 3785 Message: 3790
Attachments: 2 described; binary payloads are missing from this source WARC

Dr. Ace, I did check and adjust but for some reason I could not get the 160 size as close as I was hoping for on 20 and the other band were nowhere close. It was sort of a sq and one leg dropped too low and was close to a line of cedar trees Checking was done without any tuner and a MFJ 259B. I tried my old 4:1 voltage balun , a 2:1 voltage balun and my 4:1 current Gunanella balun, made with two separate cores on ferrite rods. All baluns are homemade and checked on the bench first. I took down the 160 size and reinstalled it as a 80M size delta , current balun, tweaked to the middle of the 20M phone band. The section of the band where I work (SSB) is 1.3:1 at the low end and 1.2:1 at 14.300 MHz , resonate at 14.240@ 1.0:1. 15 and 40 are also well within range and the tuner will take of the band edges. I was looking for a little gain on 20 without a separate tower, rotor and beam. I am well pleased with the loop . The only reason I changed to the larger was looking for better. I will stick with the loop I have now.

This helps to keep me out of the bars and chasing the young girls.

Rich , KDØZZ

They say that memory is the second thing to go with age and I am thankful I am blessed with the fact that I dont remember what the first thing is.

From: SkyWires@yahoogroups.com [mailto:SkyWires@yahoogroups.com] On Behalf Of Dr.Ace Ratliff
Sent: Friday, November 12, 2010 5:15 PM
To: SkyWires@yahoogroups.com
Subject: Re: [SkyWires] 80 to 160

Rich,

U need to adjust the loop length by a few feet at most. Measure the VSWR at the top and bottom of the 20 mtr band without using any antenna tuner. This will tell U if U need to make the loop a little longer or a little shorter.

73, Ace

--
Dr.Ace Ratliff
www.WH2T.com

No virus found in this incoming message.
Checked by AVG - www.avg.com
Version: 9.0.869 / Virus Database: 271.1.1/3251 - Release Date: 11/12/10 04:40:00

3791. Re: [SkyWires] 80 to 160

Yahoo group: SkyWires
Date: 2010-11-13 00:27:35 UTC
From: Ken Burchfield
Topic: 3785 Message: 3791

Dr. ACE, I enjoyed your old website withe antenna data, I could not find a working link to that page, Have you taken it down?
73 Ken

PacketRadio is Still Alive.......Mississippi.......145.010.......Simplex.......1200 Baud

--- On Fri, 11/12/10, Dr.Ace Ratliff <Ace@...> wrote:

From: Dr.Ace Ratliff <Ace@...>
Subject: [SkyWires] 80 to 160
To: SkyWires@yahoogroups.com
Date: Friday, November 12, 2010, 5:10 PM

Palle,
The loop impedance will only be around 100 ohms on the 80 mtr band. I think a 4:1 balun might be a better overall pick.
73, WH2T
--
Dr.Ace Ratliff
www.WH2T.com

3792. new member

Yahoo group: SkyWires
Date: 2010-11-23 18:38:14 UTC
From: John Wilson
Topic: 1187 Message: 3792

Tnx for the invite

Name Is John my call is K5JRW been a ham since 1980 I like working with
wire antenna's.
At this time I have home build ocf dipole,a 160-10 zepp fed with ladder line and a 160 meter inverted L. Have been reading about loops and want try my hand at one.
73 from K5JRW

3793. AW: [SkyWires] new member

Yahoo group: SkyWires
Date: 2010-11-23 20:40:20 UTC
From: Siegfried Jackstien
Topic: 1187 Message: 3793

If you have the room for it . try a fullwaveloop for 160 . fed with ladderline

Dg9bfc

Sigi

Von: SkyWires@yahoogroups.com [mailto:SkyWires@yahoogroups.com] Im Auftrag von John Wilson
Gesendet: Dienstag, 23. November 2010 18:38
An: SkyWires@yahoogroups.com
Betreff: [SkyWires] new member

Tnx for the invite

Name Is John my call is K5JRW been a ham since 1980 I like working with wire antenna's.
At this time I have home build ocf dipole,a 160-10 zepp fed with ladder line and a 160 meter inverted L. Have been reading about loops and want try my hand at one.
73 from K5JRW

3795. I need some help!!!!

Yahoo group: SkyWires
Date: 2010-12-04 12:17:13 UTC
From: Paul Huckle
Topic: 3795 Message: 3795

Hi Guys

Im new to all this CB radio stuff, So im looking for a cheap-ish CB radio & all the bits I need for my recovery truck. So I can keep up with the motoway traffic reports & possibly make some new friends around the UK on my travels, So if anyone can help i`m happy to travel to collect the set up I need as i`m based in Sutton Brigde area PE12 near Peterbrough.

I can be contacted on 07787-872343 text me & I will be more than happy to call you back.

Many Thanks for all & any help

Regards Paul

3796. 11M Antron 99 on 10M

Yahoo group: SkyWires
Date: 2011-01-02 19:27:23 UTC
From: ke6vhm
Topic: 3796 Message: 3796

Greetings and Happy New Year

I have been given a "Antron 99" 11M antenna in good shape and FREE. I was wondering what the deal is with NO counterpoise radials. I was given no literature on this antenna. The guy that gave it to me used it on 11M and never had any counterpoise. Do I need to put on a radial system or not? I do know i will have to cut for resonance on 10M

Thanks in advance
73 de Frank

3797. AW: [SkyWires] 11M Antron 99 on 10M

Yahoo group: SkyWires
Date: 2011-01-02 21:47:06 UTC
From: Siegfried Jackstien
Topic: 3796 Message: 3797

Antron99 can be tuned to 10m ... you do not need to cut
As far as I know....
It is an endfed antenna with stepup transformer coil at the base
that coil has a capacitive tuning ring over it
you can ad radials ... but it will not help much
if you just wanna use it on 10m ... okay go for it ... but there are better
"cb" antennas that can be used on 10
dg9bfc
sigi

3798. Re: [SkyWires] 11M Antron 99 on 10M

Yahoo group: SkyWires
Date: 2011-01-02 21:49:26 UTC
From: Dr.Ace Ratliff
Topic: 3796 Message: 3798

I used a 5/8 wave "Penetrator" with great sucess on 10

On Sun, Jan 2, 2011 at 4:47 PM, Siegfried Jackstien <
siegfried.jackstien@...> wrote:

>
>
> Antron99 can be tuned to 10m ... you do not need to cut
> As far as I know....
> It is an endfed antenna with stepup transformer coil at the base
> that coil has a capacitive tuning ring over it
> you can ad radials ... but it will not help much
> if you just wanna use it on 10m ... okay go for it ... but there are better
> "cb" antennas that can be used on 10
> dg9bfc
> sigi
>
>
>

--
Dr.Ace Ratliff
www.WH2T.com

3799. Re: 11M Antron 99 on 10M

Yahoo group: SkyWires
Date: 2011-01-04 16:41:51 UTC
From: Steve
Topic: 3796 Message: 3799

I've used CB antennae on 10, 11, 12, and 15, but the farther you go from the frequency it was cut for, the less efficient it will be, and the more the RF from the radio will be used to heat the components in your tuner instead of being radiated.

3800. window-to-window loop.

Yahoo group: SkyWires
Date: 2011-01-04 16:46:18 UTC
From: Steve
Topic: 3800 Message: 3800

I want to construct a random-length loop in the trees in my backyard, and start/end it at two thumb screws in a sheet of plexiglass in the window. On the other side will be a balun of some kind and coax to the tuner. I will use ~ 200 ft. or so of wire.

Will this work? The loop will be distorted based on which limbs I can get it over, but it will not double back on itself.

Thanks,

Steve
KA1ZFY

3801. Re: [SkyWires] window-to-window loop.

Yahoo group: SkyWires
Date: 2011-01-04 17:02:28 UTC
From: Michael Goins
Topic: 3800 Message: 3801

It will work, will depend on height as to the angle of takeoff, length as to which bands will load, and may or may not need a balun, depending on how you feed it. With ladderline or twinlead and a decent tuner, it will load on multiple bands, but efficiency is a try-and-see affair because of height and length.

If you want to monoband it, coax will work, and some cut-and-try with a 4:1 balun will likely work (200 ohm impedance theoretically).

Mike, k5wmg
Pipe Creek, Texas
Green cars, slow boats, big dogs, old trucks, little radios, and summers off to write

On Tue, Jan 4, 2011 at 10:46 AM, Steve <chobersdeert@...> wrote:

>
>
> I want to construct a random-length loop in the trees in my backyard, and
> start/end it at two thumb screws in a sheet of plexiglass in the window. On
> the other side will be a balun of some kind and coax to the tuner. I will
> use ~ 200 ft. or so of wire.
>
> Will this work? The loop will be distorted based on which limbs I can get
> it over, but it will not double back on itself.
>
> Thanks,
>
> Steve
> KA1ZFY
>
>
>

3802. RE: [SkyWires] window-to-window loop.

Yahoo group: SkyWires
Date: 2011-01-04 18:38:59 UTC
From: Richard Schmuke
Topic: 3800 Message: 3802
Attachments: 2 described; binary payloads are missing from this source WARC

It will work , a loop does not have to be a exact shape. If you used about 140' or 280' you can trim it in and not even need a tuner. Around 140' give you a good 40M loop. I have a 80m loop and it works 40 thru 10 without need for a tuner. For 80 it needs a 2:1 balun and 40 thru 10 I use a homemade 4:1 balun. You can lay out the wire then use monofilament fishing line to support it to the trees.

Rich , Kd0zz

From: SkyWires@yahoogroups.com [mailto:SkyWires@yahoogroups.com] On Behalf Of Steve
Sent: Tuesday, January 04, 2011 10:46 AM
To: SkyWires@yahoogroups.com
Subject: [SkyWires] window-to-window loop.

I want to construct a random-length loop in the trees in my backyard, and start/end it at two thumb screws in a sheet of plexiglass in the window. On the other side will be a balun of some kind and coax to the tuner. I will use ~ 200 ft. or so of wire.

Will this work? The loop will be distorted based on which limbs I can get it over, but it will not double back on itself.

Thanks,

Steve
KA1ZFY

No virus found in this incoming message.
Checked by AVG - www.avg.com
Version: 9.0.872 / Virus Database: 271.1.1/3358 - Release Date: 01/04/11 01:34:00

3803. Re: [SkyWires] window-to-window loop.

Yahoo group: SkyWires
Date: 2011-01-04 19:06:01 UTC
From: Dr.Ace Ratliff
Topic: 3800 Message: 3803

Steve,
Yes, It will work and should resonate around 5 Mhz.
73, Ace
--
Dr.Ace Ratliff
www.WH2T.com

On Tue, Jan 4, 2011 at 11:46 AM, Steve <chobersdeert@...> wrote:

>
>
> I want to construct a random-length loop in the trees in my backyard, and
> start/end it at two thumb screws in a sheet of plexiglass in the window. On
> the other side will be a balun of some kind and coax to the tuner. I will
> use ~ 200 ft. or so of wire.
>
> Will this work? The loop will be distorted based on which limbs I can get
> it over, but it will not double back on itself.
>
> Thanks,
>
> Steve
> KA1ZFY
>
>
>

3804. Re: [SkyWires] window-to-window loop.

Yahoo group: SkyWires
Date: 2011-01-05 03:07:08 UTC
From: Steve Eisenberg
Topic: 3800 Message: 3804

Thanks, guys, for responding to my loop question. One more:

Should I point it perpendicular to the ground, or parallel? I want it for DX only, no NVIS, etc.
Thanks,
SteveKA1ZFY

3805. Comparative Analysis of a Horizontal Loop Antenna with WSPR

Yahoo group: SkyWires
Date: 2011-01-16 08:12:56 UTC
From: kp4md
Topic: 3805 Message: 3805

I am posting some results I'm finding using WSPR to analyze a 40 meter full wave horizontal loop antenna here => http://www.qsl.net/kp4md/wspr.htm <http://www.qsl.net/kp4md/wspr.htm> Reading others' experiences adds to our insight in this very interesting area.
Carol, KP4MD/W6http://www.qsl.net/kp4md <http://www.qsl.net/kp4md>

3807. Change from 220 ft dipole g5rv to 160 meter loop questions

Yahoo group: SkyWires
Date: 2011-01-26 20:03:53 UTC
From: perryc
Topic: 3807 Message: 3807

Hi all. New to the group.
I presently have up a 220 ft g5rv dipole, at 35 ft
works good but it's very noisy.
I am thinking of building a full wave 160 meter loop.
Won't be able to get it more then 30 feet up.
Any ideas info about static or voltage coming in from being in the air.

Ke6anm

3808. AW: [SkyWires] Change from 220 ft dipole g5rv to 160 meter loop questions

Yahoo group: SkyWires
Date: 2011-01-26 20:11:31 UTC
From: Siegfried Jackstien
Topic: 3807 Message: 3808

Loop has less static as dipole as there are no open ends ..
Will be more quiet for the noise but stronger for the signal
I have a fullwave loop up here and it works all bands
Feed that beast with ladderline
Dg9bfc
Sigi

> -----Ursprüngliche Nachricht-----
> Von: SkyWires@yahoogroups.com [mailto:SkyWires@yahoogroups.com] Im Auftrag
> von perryc
> Gesendet: Mittwoch, 26. Januar 2011 20:04
> An: SkyWires@yahoogroups.com
> Betreff: [SkyWires] Change from 220 ft dipole g5rv to 160 meter loop
> questions
>
>
>
> Hi all. New to the group.
> I presently have up a 220 ft g5rv dipole, at 35 ft
> works good but it's very noisy.
> I am thinking of building a full wave 160 meter loop.
> Won't be able to get it more then 30 feet up.
> Any ideas info about static or voltage coming in from being in the air.
>
> Ke6anm
>
>
>
>

3809. Feed the Loop

Yahoo group: SkyWires
Date: 2011-01-26 20:57:52 UTC
From: Richard Schmuke
Topic: 3807 Message: 3809

I have a approximately 80M delta loop up, patterned after M0MCX mega loop. In 2009 I put it up with a 4:1 current balun and RG-8, adjusted the loop to best SWR on 20M. It work great on 20 I also use it on 40 and FB there. In 2010 I increased it to a 160 size but never could get SWR down. I went back to 80M size. I don't think I will ever work 160 but I would like to do 75 phone now and then during a contest. I run 100 to 500W SSB. My question is feeding my 80/75 loop and use it on 75,40 and 20.

#1 Remove the 4:1 current balun and RG-8

#2 Add how much 450 ohm ladder line, does length make a difference??

#3 Add a 1:1 current balun and short (2ft) run of RG-8 to my tuner (MFJ-962D) ??

#4 Or I should do what???

00

3810. AW: [SkyWires] Feed the Loop

Yahoo group: SkyWires
Date: 2011-01-27 11:46:02 UTC
From: Siegfried Jackstien
Topic: 3807 Message: 3810

Hi rich
Lenght of ladderline does make difference what load is on the shackside ...
I have a 160 loop up here ... but in wavelengths it is very close to ground
for the lower band(s) ... so what I did is I use about 20m from feedingpoint
to shack on 80 and ad another 20m to work on 160 (added length is in attic
in a zig zag circle) ... in the 2 lower band the ladderline transforms the
low impedance (close to ground) to higher impedance ... so now I can use a
1:9 balun with a low swr ...
On the higher bands impedance goes up ... so ladderline is almost matched
and there is no transformation
On the 2 lower bands I use transforming of the ladderline (resonant line)
and on the higher bands it is a matched line (nearly)

What impedance you have on what band depends on high is your antenna
If you have one of the higher bands that give you bad results in swr you
could test to shorten the loop and make the ladderline longer or vice versa
...
That would let the lower bands on the same spot but could change the
impedance on a higher band ... lots of try and errors :-)
Results in impedance and lobes changes also if you feed it at one side or in
a corner
My setup is feeding in a corner cause you have then no slack by the
feedingline and I tried both feedings and feeding in the edge gave me better
results for going multiband ...

Problem with feeding a loop is that on fundamental it has low impedance and
on the higher bands the impedance goes up ...
With testing different length(s) of ladderline I could find a solution that
gave me 9 bands with low swr without needing a tuner
No tuner needed ... no tuner losses ... :-)
I had some shorter window-line lengths that were left over from several
fielddays ... and so with that I could test different feedingpoints and
baluns ... but your setup could be a bit different ... so better you try it
out ....
Dg9bfc
Sigi
Ps if you make a relay (a gooood one) in the opposite wire you can use your
80m loop on topband as bent dipole .... better than nothing on 160 but the
bigger one is better :-)

> -----Ursprüngliche Nachricht-----
> Von: SkyWires@yahoogroups.com [mailto:SkyWires@yahoogroups.com] Im Auftrag
> von Richard Schmuke
> Gesendet: Mittwoch, 26. Januar 2011 20:58
> An: SkyWires@yahoogroups.com

> Betreff: [SkyWires] Feed the Loop
>
>
>
> I have a approximately 80M delta loop up, patterned after M0MCX mega loop.
> In 2009 I put it up with a 4:1 current balun and RG-8, adjusted the loop
> to best SWR on 20M. It work great on 20 I also use it on 40 and FB there.
> In 2010 I increased it to a 160 size but never could get SWR down. I went
> back to 80M size. I don□t think I will ever work 160 but I would like to
> do 75 phone now and then during a contest. I run 100 to 500W SSB. My
> question is feeding my 80/75 loop and use it on 75,40 and 20.
>
> #1 Remove the 4:1 current balun and RG-8
>
> #2 Add how much 450 ohm ladder line, does length make a difference??
>
> #3 Add a 1:1 current balun and short (2ft) run of RG-8 to my tuner (MFJ-
> 962D) ??
>
> #4 Or I should do what???
>
>
>
> 00
>
>

3811. Big loop in a little space - Possible?????

Yahoo group: SkyWires
Date: 2011-01-28 10:18:39 UTC
From: Madhukar KR
Topic: 3811 Message: 3811

I have been following the group for some time now and find most of the posts are for BIG size loops for all bands. I Live in an urban area Bangalore in South India. There will be no problem putting up an antenna - as long as it stays withing the periphery of the property. I am keen on putting up an antenna for 80m-10m. The only possibility I see is for a Long Wire. But the dimension is 8mts x 6mts - (25' x 19'). So the Maximum I will be able to run will be about 100 Ft - including a length up one of the poles :)
My idea is to loose wind the balance 40 ft (rough calculation of about 140' for a 1/2 wave on 80m approx.) on one or two lengths of 2" or 4" PVC pipe on the longer sides.
My Questions to the group
1. Will the antenna work?
2. If it will, What will be the limitations?
3. Will it tune across the bands? - I have a MFJ 901B Antenna Tuner.

Looking for advice and possible solution.

73 de
Madhu - VU2MUD

3813. Re: Big loop in a little space - Possible?????

Yahoo group: SkyWires
Date: 2011-01-30 05:52:14 UTC
From: kp4md
Topic: 3811 Message: 3813

I have a 140 foot horizontal loop
<http://www.qsl.net/kp4md/kp4mdnec2.htm> (full wave on 40m) and a base loaded 6 foot screwdriver vertical that is tunable from 80-10m. I can transmit on 80 and 60m with either antenna, but the vertical is the better radiator there. The loop's transmitting efficiency is especially poor on 160 and 80 m. The loop gives superior signal to noise ratio when receiving on 160, 80 and 60m. I am also in an urban area where the local noise is primarily vertically polarized.
Carol, KP4MD/W6
--- In SkyWires@yahoogroups.com, "Madhukar KR" <vu2mud@...> wrote:
>
> I have been following the group for some time now and find most of the posts are for BIG size loops for all bands. I Live in an urban area Bangalore in South India. There will be no problem putting up an antenna - as long as it stays withing the periphery of the property. I am keen on putting up an antenna for 80m-10m. The only possibility I see is for a Long Wire. But the dimension is 8mts x 6mts - (25' x 19'). So the Maximum I will be able to run will be about 100 Ft - including a length up one of the poles :)
> My idea is to loose wind the balance 40 ft (rough calculation of about 140' for a 1/2 wave on 80m approx.) on one or two lengths of 2" or 4" PVC pipe on the longer sides.
> My Questions to the group
> 1. Will the antenna work?
> 2. If it will, What will be the limitations?
> 3. Will it tune across the bands? - I have a MFJ 901B Antenna Tuner.
>
> Looking for advice and possible solution.
>
> 73 de
> Madhu - VU2MUD
>

3814. Sierra/Nevada Mountain

Yahoo group: SkyWires
Date: 2011-02-04 22:00:44 UTC
From: Leland Pappy Ciszewski
Topic: 3814 Message: 3814

Hello Sir & Ma'am

i live at Beautiful Lake Tahoe. I would like to know where can i buy a 50'Mast so i put up my roof so i can pickup placerville or Auburn,Ca.
Also the military frequencies 225 - 420Mhz. Thank you

3815. Re: Sierra/Nevada Mountain

Yahoo group: SkyWires
Date: 2011-02-05 16:04:53 UTC
From: kp4md
Topic: 3814 Message: 3815

I would get 5 of the 10 foot chain link top rails
<http://www.homedepot.com/h_d1/N-5yc1v/R-100322532/h_d2/ProductDisplay?l\
angId=-1&storeId=10051&catalogId=10053> at Home Depot and guy them
every 10 feet or so.

--- In SkyWires@yahoogroups.com, "Leland Pappy Ciszewski"
<Lee_ciszewski@...> wrote:
>
> Hello Sir & Ma'am
>
> i live at Beautiful Lake Tahoe. I would like to know where can i buy a
50'Mast so i put up my roof so i can pickup placerville or Auburn,Ca.
> Also the military frequencies 225 - 420Mhz. Thank you
>

3816. LARGE vertical loop

Yahoo group: SkyWires
Date: 2011-02-05 21:50:17 UTC
From: Brian
Topic: 3816 Message: 3816

Hello All,

Well, as Yogi Berra said "Nostalgia ain't what it used to be". In spite of that, I've been bitten by the ham radio bug again after an absence of over 50 years. A couple of ham buddies from high school looked me up on the web, and one offered to set me up with his spare equipment if I wanted to renew my license.

All of which has gotten me thinking about antennas for my tree filled location here in redwood country on California's north coast. There are two tall trees, with none in between, that are separated by perhaps 200 feet that would lend themselves to supporting a LARGE vertical loop. It could be a rectangle as much as 175 feet long by 50 or more feet tall, and 10 feet off the ground.

My question is what would be an optimum use of all this space? I'm interested in all the bands from 80 through 10 meters, and will have a Harvey Wells Z Match antenna tuner for matching things up. Is there any advantage in making it as large as possible? Any trade-offs?

Thanks a bunch,

Brian Burns□the once and future K6UCD

See my website: lessonsinlutherie.com

3817. AW: [SkyWires] LARGE vertical loop

Yahoo group: SkyWires
Date: 2011-02-05 22:04:59 UTC
From: Siegfried Jackstien
Topic: 3816 Message: 3817

For multiband use you can just use a horizontal loop or a horizontal dipole
A vertical loop is only for one or 2 bands ... so think of building a dipole
or a horizontal loop with the 2 trees and a third support
Okay you would need a third pole tree mast .. whatever
But a vertical will not work multiband
Dg9bfc
Sigi

> -----Ursprüngliche Nachricht-----
> Von: SkyWires@yahoogroups.com [mailto:SkyWires@yahoogroups.com] Im Auftrag
> von Brian
> Gesendet: Samstag, 5. Februar 2011 21:50
> An: SkyWires@yahoogroups.com
> Betreff: [SkyWires] LARGE vertical loop
>
>
>
> Hello All,
>
> Well, as Yogi Berra said "Nostalgia ain't what it used to be". In spite of
> that, I've been bitten by the ham radio bug again after an absence of over
> 50 years. A couple of ham buddies from high school looked me up on the
> web, and one offered to set me up with his spare equipment if I wanted to
> renew my license.
>
> All of which has gotten me thinking about antennas for my tree filled
> location here in redwood country on California's north coast. There are
> two tall trees, with none in between, that are separated by perhaps 200
> feet that would lend themselves to supporting a LARGE vertical loop. It
> could be a rectangle as much as 175 feet long by 50 or more feet tall, and
> 10 feet off the ground.
>
> My question is what would be an optimum use of all this space? I'm
> interested in all the bands from 80 through 10 meters, and will have a
> Harvey Wells Z Match antenna tuner for matching things up. Is there any
> advantage in making it as large as possible? Any trade-offs?
>
> Thanks a bunch,
>
> Brian Burns□the once and future K6UCD
>
> See my website: lessonsinlutherie.com
>
>

>
>

3818. Re: [SkyWires] LARGE vertical loop

Yahoo group: SkyWires
Date: 2011-02-07 19:10:34 UTC
From: Andy
Topic: 3816 Message: 3818

> But a vertical will not work multiband

Why is it that a vertical loop doesn't work multiband?

Andy

3819. RE: [SkyWires] LARGE vertical loop

Yahoo group: SkyWires
Date: 2011-02-08 01:34:58 UTC
From: Brian Burns
Topic: 3816 Message: 3819

Hello Andy

~ Why is it that a vertical loop doesn't work multiband? ~

Here is an excellent link for general loop info in case you haven't run across it:

http://mysite.verizon.net/ka1fsb/loopants.html#shapesize

The general discussion of loop antennas at the link above makes no mention of a vertical loop's working only on one or two bands.

And here is an interesting quote from his article:

"It should be noted that horizontal loops can only transmit in the horizontal plane. And that vertical loops can be fed in such a way as to either effect horizontal polarization or vertical polarization depending on how (i.e., where) they are fed. If a vertically oriented antenna is fed at either the bottom or the top, the polarization will be horizontal; if fed on the side or bottom corner, it will be vertical. If you are going to the trouble of putting up a large vertical loop, be sure to feed it to take advantage of the low angle of radiation mentioned above!"

He is recommending feeding it at the side or corner for vertical polarization-- "to take advantage of the low angle of radiation mentioned above!"

Another aspect of the vertical loop:

"Large vertical loops that are 1 wavelength in circumference have a low angle take off and do well for DX only on the fundamental frequency. A 270' vert. loop would do fine on 80m but on harmonics the angle would increase which is normally the opposite of what you would want."

So, my question is, does feeding a vertical loop at the top or bottom for horizontal polarization make for the desirable lower take off angles on the higher bands as with a horizontal loop?

I'm going to all this trouble because my antenna site is ideal for a very large vertical loop, and is a
lousy site for a horizontal one.

I would ask KA1FSB directly if I had an email for him. Anybody know it, or how to find it? I tried QRZ.

Cheers,

Brian

3820. Re: [SkyWires] LARGE vertical loop

Yahoo group: SkyWires
Date: 2011-02-08 05:13:19 UTC
From: Andy
Topic: 3816 Message: 3820

> http://mysite.verizon.net/ka1fsb/loopants.html#shapesize

I've seen that website, many moons ago.

While he has some good information, I do take issue with parts of it.

> "It should be noted that horizontal loops can only transmit in the
> horizontal plane.

Well, that's not true. Full wave horizontal loops make excellent
cloud-burners (NVIS antennas), with little signal transmitted in the
horizontal plane.

Checking the article, I see that he was talking about horizontal
polarization (i.e., the polarization is in the horizontal plane),
not that it radiates only in the horizontal plane.

> He is recommending feeding it at the side or corner for vertical
> polarization-- "to take advantage of the low angle of radiation
> mentioned above!"

I don't follow that. Vertical polarization has little to do with
angle of radiation. The antenna itself can have low angle radiation
whether horizontally or vertically polarized (though the polarization
does interact with the earth and alter both its pattern and
polarization somewhat).

> So, my question is, does feeding a vertical loop at the top or bottom for
> horizontal polarization make for the desirable lower take off angles on the
> higher bands as with a horizontal loop?

I don't believe the feed point (and polarization) has a very great
effect on the radiation pattern, i.e., where the most signal goes.

On harmonics, the pattern of a loop tends to flatten out towards the
plane of the loop. In the limit it approaches the plane of the loop,
I think in all directions around the loop (if the loop itself has any
resemblance toround; hexagon, maybe even a square). This doesn't
depend on where the loop is fed. Yes, you'll get little lobes going
this way and that, but overall it is supposed to be fairly uniform
around the circumference of the loop. He says elsewhere that a
horizontal loop is omni-directional.

I realize reality may differ from this, so don't necessarily take my word on it.

> I would ask KA1FSB directly if I had an email for him. Anybody know it, or
> how to find it? I tried QRZ.

Elsewhere on his website he lists:

[email: ka1fsb@...]

(In case Yahoo hides that, it's his callsign at ATT dot net.)

Regards,
Andy

3821. LARGE Verticle loop

Yahoo group: SkyWires
Date: 2011-02-08 16:02:13 UTC
From: Bill
Topic: 3821 Message: 3821

(This is in reference to three recent posts)
The article by KA1FSB is pretty misleading. He seems to not realize where "gain" comes from, and has some other shortcomings. There is little technical or theoretical content. A better understanding can be reached from getting one of the free modeling programs and trying different types. Always model above real ground, because gain comes from distortion and reflection.
Bill--W4BSG

3822. 80M loop

Yahoo group: SkyWires
Date: 2011-02-08 17:14:50 UTC
From: Richard Schmuke
Topic: 3822 Message: 3822

I have had some great responses from people all over about a good signal on 40 & 20 from my 80m Delta loop with a 4:1 balun so I want to keep the loop but the SWR is not so hot on some of the other bands so thinking about ladder line and no coax SWR problems.
The old model voltage balun showed better SWR reading than the new current one on the antenna. The bench test was the other way , better with the new current, so that means ---DUH--?? Did the voltage balun hide a problem.
With ladder line I could work 80 on my 80m loop now it is 40 thru 10. Any opinions on changing from RG-8 coax feed to 450ohm ladder line?

Rich , KDØZZ
These are the humble ramblings of an old phart and in no way should they influence the actions of any intelligent and sane person

3823. Re: [SkyWires] 80M loop

Yahoo group: SkyWires
Date: 2011-02-08 17:39:01 UTC
From: Don Snodgrass "KG9OM"
Topic: 3822 Message: 3823

☐Hi Rich...

http://www.k4qky.com/amateur-radio/antennas/multi-band-loop provides a fairly detailed explanation of why I believe ladder line is a better alternative.

73 and hope the information is helpful,

Don

KG9OM

Don and Pat Snodgrass
5 Woodhaven Estates
Metropolis, Illinois
618-524-7590

donsno@...
http://www.k4qky.com/amateur-radio/about-kg9om

From: Richard Schmuke
Sent: Tuesday, February 08, 2011 11:14 AM
To: SkyWires@yahoogroups.com
Subject: [SkyWires] 80M loop

I have had some great responses from people all over about a good signal on 40 & 20 from my 80m Delta loop with a 4:1 balun so I want to keep the loop but the SWR is not so hot on some of the other bands so thinking about ladder line and no coax SWR problems.
The old model voltage balun showed better SWR reading than the new current one on the antenna. The bench test was the other way , better with the new current, so that means ---DUH--?? Did the voltage balun hide a problem.
With ladder line I could work 80 on my 80m loop now it is 40 thru 10. Any opinions on changing from RG-8 coax feed to 450ohm ladder line?

Rich , KDØZZ
These are the humble ramblings of an old phart and in no way should they influence the actions of any intelligent and sane person

3824. RE: [SkyWires] 80M loop

Yahoo group: SkyWires
Date: 2011-02-08 18:10:32 UTC
From: Richard Schmuke
Topic: 3822 Message: 3824
Attachments: 2 described; binary payloads are missing from this source WARC

Thank you for your reply. I have seen the website before of you beautiful place. I must complement you on how well behaved “Michael” is, my “Bagira” always steps on the keyboard at the wrong time or wants rub a knob the wrong way.

I do have a quick question about your Kenwood 590. Do you have a audio record board and can it be used to send your call or other things?

I am thinking about a replacement for my 450SAT.

Rich , Kd0zz

From: SkyWires@yahoogroups.com [mailto:SkyWires@yahoogroups.com] On Behalf Of Don Snodgrass "KG9OM"
Sent: Tuesday, February 08, 2011 11:39 AM
To: SkyWires@yahoogroups.com
Subject: Re: [SkyWires] 80M loop

Hi Rich...

<http://www.k4qky.com/amateur-radio/antennas/multi-band-loop>
http://www.k4qky.com/amateur-radio/antennas/multi-band-loop provides a fairly detailed explanation of why I believe ladder line is a better alternative.

73 and hope the information is helpful,

Don

KG9OM

Don and Pat Snodgrass
5 Woodhaven Estates
Metropolis, Illinois
618-524-7590

donsno@...
<http://www.k4qky.com/amateur-radio/about-kg9om>
http://www.k4qky.com/amateur-radio/about-kg9om

From: Richard Schmuke <mailto:rdj@...>

Sent: Tuesday, February 08, 2011 11:14 AM

To: SkyWires@yahoogroups.com

Subject: [SkyWires] 80M loop

I have had some great responses from people all over about a good signal on 40 & 20 from my 80m Delta loop with a 4:1 balun so I want to keep the loop but the SWR is not so hot on some of the other bands so thinking about ladder line and no coax SWR problems.
The old model voltage balun showed better SWR reading than the new current one on the antenna. The bench test was the other way , better with the new current, so that means ---DUH--?? Did the voltage balun hide a problem.
With ladder line I could work 80 on my 80m loop now it is 40 thru 10. Any opinions on changing from RG-8 coax feed to 450ohm ladder line?

Rich , KDØZZ
These are the humble ramblings of an old phart and in no way should they influence the actions of any intelligent and sane person

No virus found in this incoming message.
Checked by AVG - www.avg.com
Version: 9.0.872 / Virus Database: 271.1.1/3430 - Release Date: 02/08/11 01:34:00

3825. Re: [SkyWires] 80M loop

Yahoo group: SkyWires
Date: 2011-02-08 18:39:14 UTC
From: Don Snodgrass "KG9OM"
Topic: 3822 Message: 3825

☐Rich...

Although I don't use one, a voice module is available for the 590 for $65 as described at http://universal-radio.com/catalog/hamhf/29490590.html .

73,

Don

KG9OM

From: Richard Schmuke
Sent: Tuesday, February 08, 2011 12:10 PM
To: SkyWires@yahoogroups.com
Subject: RE: [SkyWires] 80M loop

Thank you for your reply. I have seen the website before of you beautiful place. I must complement you on how well behaved "Michael" is, my "Bagira" always steps on the keyboard at the wrong time or wants rub a knob the wrong way.

I do have a quick question about your Kenwood 590. Do you have a audio record board and can it be used to send your call or other things?

I am thinking about a replacement for my 450SAT.

Rich , Kd0zz

From: SkyWires@yahoogroups.com [mailto:SkyWires@yahoogroups.com] On Behalf Of Don Snodgrass "KG9OM"
Sent: Tuesday, February 08, 2011 11:39 AM
To: SkyWires@yahoogroups.com
Subject: Re: [SkyWires] 80M loop

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http://www.k4qky.com/amateur-radio/antennas/multi-band-loop provides a fairly detailed explanation of why I believe ladder line is a better alternative.

73 and hope the information is helpful,

Don

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Don and Pat Snodgrass
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Metropolis, Illinois
618-524-7590

donsno@...
http://www.k4qky.com/amateur-radio/about-kg9om

From: Richard Schmuke

Sent: Tuesday, February 08, 2011 11:14 AM

To: SkyWires@yahoogroups.com

Subject: [SkyWires] 80M loop

I have had some great responses from people all over about a good signal on 40 & 20 from my 80m Delta loop with a 4:1 balun so I want to keep the loop but the SWR is not so hot on some of the other bands so thinking about ladder line and no coax SWR problems.
The old model voltage balun showed better SWR reading than the new current one on the antenna. The bench test was the other way , better with the new current, so that means ---DUH--?? Did the voltage balun hide a problem.
With ladder line I could work 80 on my 80m loop now it is 40 thru 10. Any opinions on changing from RG-8 coax feed to 450ohm ladder line?

Rich , KDØZZ
These are the humble ramblings of an old phart and in no way should they influence the actions of any intelligent and sane person

No virus found in this incoming message.
Checked by AVG - www.avg.com
Version: 9.0.872 / Virus Database: 271.1.1/3430 - Release Date: 02/08/11 01:34:00

3826. RE: [SkyWires] LARGE Verticle loop

Yahoo group: SkyWires
Date: 2011-02-08 19:10:59 UTC
From: Brian Burns
Topic: 3821 Message: 3826

Hello Andy and Bill,

Well, this is so much like my "real life" job of doing the acoustic voicing of the classical guitars that I build. A function of so many variables that first you build it then you adjust it (:->).

So I think that I'll put up the largest vertical loop that my site will allow, and start dinking with it. Can't you see me changing bands by running outside in the rain to flip a bunch of knife switches?

Cheers,

Brian

3827. AW: [SkyWires] LARGE Verticle loop

Yahoo group: SkyWires
Date: 2011-02-08 19:19:55 UTC
From: Siegfried Jackstien
Topic: 3821 Message: 3827

> -----Ursprüngliche Nachricht-----
> Von: SkyWires@yahoogroups.com [mailto:SkyWires@yahoogroups.com] Im Auftrag
> von Brian Burns
> Gesendet: Dienstag, 8. Februar 2011 19:11
> An: SkyWires@yahoogroups.com
> Betreff: RE: [SkyWires] LARGE Verticle loop
>
>
>
>
>
> Hello Andy and Bill,
>
>
>
> Well, this is so much like my □real life□ job of doing the acoustic
> voicing of the classical guitars that I build. A function of so many
> variables that first you build it then you adjust it (:->)
>
>
>
> So I think that I□ll put up the largest vertical loop that my site will
> allow, and start dinking with it. Can□t you see me changing bands by
> running outside in the rain to flip a bunch of knife switches?
>
>
>
> Cheers,
>
>
>
> Brian
>
>

3828. AW: [SkyWires] LARGE Verticle loop

Yahoo group: SkyWires
Date: 2011-02-08 19:23:31 UTC
From: Siegfried Jackstien
Topic: 3821 Message: 3828

A friend from me wanted to work 160 bu could only errect a 80m loop ...
The trick now was he changed the feedingpoint of his loop from the roof to the otherside (far away in the backyard) ...
Now where the feedingpoint was (close to shack) he installed a knife switch
When working 160 he opened it and had a "bent" dipole for 160 made from his 80m loop
Do NOT use a trap at this point (tooo much loss)
If you use a relay use one for HIGH voltage (best c2 in a row)
Dg9bfc
Sigi

> -----Ursprüngliche Nachricht-----
> Von: SkyWires@yahoogroups.com [mailto:SkyWires@yahoogroups.com] Im Auftrag
> von Brian Burns
> Gesendet: Dienstag, 8. Februar 2011 19:11
> An: SkyWires@yahoogroups.com
> Betreff: RE: [SkyWires] LARGE Verticle loop
>
>
>
>
>
> Hello Andy and Bill,
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>
> Well, this is so much like my □real life□ job of doing the acoustic
> voicing of the classical guitars that I build. A function of so many
> variables that first you build it then you adjust it (:->)
>
>
>
> So I think that I□ll put up the largest vertical loop that my site will
> allow, and start dinking with it. Can□t you see me changing bands by
> running outside in the rain to flip a bunch of knife switches?
>
>
>
> Cheers,
>
>
>
> Brian
>

>

3829. Re: LARGE Verticle loop

Yahoo group: SkyWires
Date: 2011-02-08 22:32:36 UTC
From: Gary Haugen
Topic: 3821 Message: 3829

Bill

Do you have a favorite molding program??

Gary K6JAJ

3830. Re: LARGE Verticle loop

Yahoo group: SkyWires
Date: 2011-02-09 14:36:15 UTC
From: kp4md
Topic: 3821 Message: 3830

I modeled my loop with 4nec2 antenna modeling software, Voors, A, http://home.ict.nl/~arivoors/ <http://home.ict.nl/~arivoors/> .My loop modeling results are on webpage http://www.qsl.net/kp4md/kp4mdnec2.htm <http://www.qsl.net/kp4md/kp4mdnec2.htm>
<http://www.qsl.net/kp4md/kp4mdnec2.htm> Carol KP4MD/W6

--- In SkyWires@yahoogroups.com, "Gary Haugen" <k6jaj@...> wrote:
>
> Bill
>
> Do you have a favorite molding program??
>
> Gary K6JAJ
>

3831. Re: LARGE Verticle loop

Yahoo group: SkyWires
Date: 2011-02-09 14:47:31 UTC
From: Alan Wilson
Topic: 3821 Message: 3831

Impressive, thanks, Alan

3832. AW: [SkyWires] Re: LARGE Verticle loop

Yahoo group: SkyWires
Date: 2011-02-09 18:29:18 UTC
From: Siegfried Jackstien
Topic: 3821 Message: 3832

> -----Ursprüngliche Nachricht-----
> Von: SkyWires@yahoogroups.com [mailto:SkyWires@yahoogroups.com] Im Auftrag
> von kp4md
> Gesendet: Mittwoch, 9. Februar 2011 14:36
> An: SkyWires@yahoogroups.com
> Betreff: [SkyWires] Re: LARGE Verticle loop
>
>
>
> I modeled my loop with 4nec2 antenna modeling software, Voors, A,
> http://home.ict.nl/~arivoors/.
> My loop modeling results are on webpage
> http://www.qsl.net/kp4md/kp4mdnec2.htm
>
>
> <http://www.qsl.net/kp4md/kp4mdnec2.htm> Carol KP4MD/W6
>
>
> --- In SkyWires@yahoogroups.com, "Gary Haugen" <k6jaj@...> wrote:
> >
> > Bill
> >
> > Do you have a favorite molding program??
> >
> > Gary K6JAJ
> >
>
>
>

3833. AW: [SkyWires] Re: LARGE Verticle loop

Yahoo group: SkyWires
Date: 2011-02-09 18:33:24 UTC
From: Siegfried Jackstien
Topic: 3821 Message: 3833

I model all with mmana-gal
Also freeware
Many many ready models in
Newsgroup with help from others
Easy to use (my thougths)
Dg9bfc
Sigi

> -----Ursprüngliche Nachricht-----
> Von: SkyWires@yahoogroups.com [mailto:SkyWires@yahoogroups.com] Im Auftrag
> von kp4md
> Gesendet: Mittwoch, 9. Februar 2011 14:36
> An: SkyWires@yahoogroups.com
> Betreff: [SkyWires] Re: LARGE Verticle loop
>
>
>
> I modeled my loop with 4nec2 antenna modeling software, Voors, A,
> http://home.ict.nl/~arivoors/.
> My loop modeling results are on webpage
> http://www.qsl.net/kp4md/kp4mdnec2.htm
>
>
> <http://www.qsl.net/kp4md/kp4mdnec2.htm> Carol KP4MD/W6
>
>
> --- In SkyWires@yahoogroups.com, "Gary Haugen" <k6jaj@...> wrote:
> >
> > Bill
> >
> > Do you have a favorite molding program??
> >
> > Gary K6JAJ
> >
>
>
>

3834. Re: AW: [SkyWires] Re: LARGE Verticle loop

Yahoo group: SkyWires
Date: 2011-02-10 00:22:15 UTC
From: Gary Haugen
Topic: 3821 Message: 3834

Hi

Think all of you for the help. I am going to start with the free ones and find out what I'm doing. Hi hi

My city property is big 120ft by 400ft and I want to put a poll at each corner. The lot faces true north so the 400 would be true east and west.

Tnx again

Gary K6JAJ

3835. AW: AW: [SkyWires] Re: LARGE Verticle loop

Yahoo group: SkyWires
Date: 2011-02-10 13:04:57 UTC
From: Siegfried Jackstien
Topic: 3821 Message: 3835

2 wavelenght loop for topband ... huh that is a big loop
I can make a model in mmana if you need?!?
Dg9bfc
Sigi

> -----Ursprüngliche Nachricht-----
> Von: SkyWires@yahoogroups.com [mailto:SkyWires@yahoogroups.com] Im Auftrag
> von Gary Haugen
> Gesendet: Donnerstag, 10. Februar 2011 00:22
> An: SkyWires@yahoogroups.com
> Betreff: Re: AW: [SkyWires] Re: LARGE Verticle loop
>
>
>
> Hi
>
> Think all of you for the help. I am going to start with the free ones and
> find out what I'm doing. Hi hi
>
>
>
> My city property is big 120ft by 400ft and I want to put a poll at each
> corner. The lot faces true north so the 400 would be true east and west.
>
>
>
> Tnx again
>
> Gary K6JAJ
>
>
>
>
>
>

3836. (no subject)

Yahoo group: SkyWires
Date: 2011-02-11 23:03:16 UTC
From: Bob Boucher
Topic: 3836 Message: 3836

[Body unavailable in the source archive]

3837. texas loop idea

Yahoo group: SkyWires
Date: 2011-02-15 07:22:19 UTC
From: Tom
Topic: 3837 Message: 3837

Good morning men, question for the group at large. Has anyone modeled a loop built in a cage configuration? I made a quick drawing on paper and will try to upload to the files section. A quick summary, 4 towers at 40 feet to support the wire. Cage diameter could be anywhere from 6 inches to 12 inches. I see in the ARRL book, this arrangement is good for 40 meters using a single wire, but with a larger diamter cage this should lower the frequency a good bit, I just can't figure out how much.
Antenna will be near over sandy type soil on the Gulf Coast of Texas.
73
tom

3838. Re: [SkyWires] texas loop idea

Yahoo group: SkyWires
Date: 2011-02-15 07:32:44 UTC
From: raymond mitchell
Topic: 3837 Message: 3838

I've thought of making a loop curtain configured like a normal loop but using 4ft or 6ft wire fence for the loop to expand coverage on 75m (I like running without a tuner into resonate wires when I can). This would go up in the Livingston, Texas area where there is about 4ft of sand and a few inches of water on red clay.
Abe K7ABE

--- On Mon, 2/14/11, Tom <kb5vwz@...m> wrote:

From: Tom <kb5vwz@...>
Subject: [SkyWires] texas loop idea
To: SkyWires@yahoogroups.com
Date: Monday, February 14, 2011, 11:22 PM

Good morning men, question for the group at large. Has anyone modeled a loop built in a cage configuration? I made a quick drawing on paper and will try to upload to the files section. A quick summary, 4 towers at 40 feet to support the wire. Cage diameter could be anywhere from 6 inches to 12 inches. I see in the ARRL book, this arrangement is good for 40 meters using a single wire, but with a larger diamter cage this should lower the frequency a good bit, I just can't figure out how much.

Antenna will be near over sandy type soil on the Gulf Coast of Texas.

73

tom

_____
Never miss an email again!
Yahoo! Toolbar alerts you the instant new Mail arrives.
http://tools.search.yahoo.com/toolbar/features/mail/

3840. mfj-974h need a little help for loop

Yahoo group: SkyWires
Date: 2011-02-16 04:27:36 UTC
From: ke5htb
Topic: 3840 Message: 3840

Hello All I am new to this group and have read back into the grpoup to find a answer also. I have to say I got red eye from reading so I stopped and figured I will ask.

I just purchased a used mfj-974H balanced tuner and I can NOT get it to tune any band or do anything on my 80m loop and 450 ohm feed line.

NOW reading more tonight I will try longer feed line as mine is pretty short but I feel I should be able to see some deflections of some kind
with what I am using now. I went back to my dentron super tuner and it works ok. I just wanted to see the if there is any real differences in using the balanced tuner with my loop and to learn a little more about the different tuner and then I will probably sell this 1 after I play enough. I am planning on building 1 for myself to replace this and I have most of the parts now but not all yet. So I got this to hold me over till I can get my other built.

I can not tune any band any settings any inductor settings. it shows 1.5 swr and 10 watts and thats only thing close is the 10watts i tuned with. I tried every inductor letter 1 at a time and turned the dials slowly to see any changes at all on my meters on the radio and tuner- none at all.

I like to know if I need to add a ground wire from the bottom conection to the ground lug on this tuner like I did on my dentron tuner ? I dont see why I should but I am lost and I dont want to damage anything as I am disabled and cant afford to fix a radio or anything else.

OH radio is a 570dg all barefoot no amps just a basic setup. Ladder line all the way into tuner no chokes nothing in line on feedline at all. nothing special just aprox 270+- wire up at 30' and direct to tuner with 450 ohm. I believe and will say aprox 35to 30 ft ladder line max used to tuner.

Looking for suggestions and any help as I am going nuts and hope I didnt justy throw away money on a bad tuner now. be 2nd bad online deal in 8 years buying online. this 1 will hurt more cause guy has already said no returns at all so it is mine no matter what and looking inside of the tuner I do not see any loose wires or any of the normal MFJ missed wires or anything like that. I did notice 1 possible burn spot on the inductor switch but not a bad spot but it is there.

Guy says it worked 100% before he boxed it and shipped it to me. pack job was ok could have been better but it was ok. tuner did move around some inside. I do get some meter movements and light does still work so I dont think it was beat up in mail much or damaged that way.

HELP PLEASE what amd I maybe doing wrong or suggest things to try before I call MFJ and spend a small fortune fixing this and loose money by not buying a new 1 to dtart with for the 100.00 more. I feel what I paid was a fair price at 125 shipped so I am happy there. tuner was in real nice shape not beat up scratched up nothing to say it was abused.

only power run thru it was 25 watts fm to see if it worked.
I run 90% digital modes due to my other tuner did not like me too much for rfi in house on 20m only. so after trying this I was real bummed out totally.

thanks in advanced for ANY AND I MEAN ANY HELP AT ALL.

TIME TO TAKE PAIN MEDS TO RELIEVE MY (oops sorry caps) bad day stress and pain levels from sitting here too long.

Fred
Ke5htb

3841. Re: mfj-974h need a little help for loop

Yahoo group: SkyWires
Date: 2011-02-16 13:44:40 UTC
From: Alan Wilson
Topic: 3841 Message: 3841

Sounds like your doing everthing correctly. Since the dentron works fb with it. I suspect the tuner. I've used both link coupled (johnson matchbox) and 4to1 balun to normal tuner and saw no difference on transmit or or receive signal strength I'd go with whatever fits your situation. If you had it connected properly, the new tuner should have found a sweet spot somewhere on some band so I think you got a bad tuner..Especially since the guy said we wouldn't take it back..my 2cents..73, Alan

3842. bad tuner?

Yahoo group: SkyWires
Date: 2011-02-16 18:39:16 UTC
From: Bill Aycock
Topic: 3842 Message: 3842

My first try to reply to this post was rejected by Yahoo as "Legacy Format,
so, I'll try again.

All that you say indicates a bad tuner. Did you say that things moved
around inside? You need to check it.
Bill--W4BSG

After this , I may quit Skywires.

3843. Re: [SkyWires] bad tuner?

Yahoo group: SkyWires
Date: 2011-02-16 22:31:20 UTC
From: Fred
Topic: 3842 Message: 3843

On 2/16/2011 12:39 PM, Bill Aycock wrote:
> My first try to reply to this post was rejected by Yahoo as "Legacy Format,
> so, I'll try again.
>
> All that you say indicates a bad tuner. Did you say that things moved
> around inside? You need to check it.
> Bill--W4BSG
>
> After this , I may quit Skywires.
>
>
>
>

Actually I think tuner is ok just out of range on my loop for it
to do anything, I need to add more feedline to bring the numbers
more in line for the tuner to work it seems at least.
at least this is all I have to try 1 day when I get more l;adder
line to test with or make new 600 ladder line used that. but for
now I just put my dentron super tuner back inline and let it do
its job as I have my setups. being disabled it is not so easy to
fix things outside now a days so I have to wait for some help to
get here and get wire made or find some extra 450 someplace. then
in a small town where do you find 450 to have maybe 15-20 feet
max. heck smallest they sell even seems to be 50' anymore. and I
cant do that for a month either. so It stands still untill i can
do something else.

3844. Re: bad tuner?

Yahoo group: SkyWires
Date: 2011-02-16 23:13:34 UTC
From: Alan
Topic: 3842 Message: 3844

From my experience I would say your new tuner isn't working properly. If your other tuner works that tells me lots. I run a 160loop with about 50 ft of ladderline to a 4 to 1 balun. My autotuner will tune most bands just fine. I run into a problem in the lower phone band and below on 75 but can tune it with the manual tuner. I've tried the loop with both link tuner (johnson matchbox) and using a balun outside the shack and bring the coax in. My findings were no difference in xmit or rec signal strength so I so the matchbox and stay with balun and coa cause its just easier. The seller of that transmatch would make me wary. Geez no return on a tuner. If you a antenna analyzer you can play with matching the antenna also. I did that with the manual tuner. Made notes of resonant point and use them when I use the manual tuner. hope you get it figured out..73, alan

3845. Re: texas loop idea

Yahoo group: SkyWires
Date: 2011-02-17 03:13:33 UTC
From: kp4md
Topic: 3837 Message: 3845

Hi OM Tom!

Here's a model of your 4 wire square cage loop using 14 gauge wires with
1 foot cage width and 36 feet to each loop side.
The loop is suspended between four 40 foot steel towers in a square over
sandy soil.
This 4nec2 <http://home.ict.nl/~arivoors/> model is uploaded to the
files section as "40m cage loop.nec" and the screen captures are in the
photos section.

[40 meter cage loop]

The SWR curve shows broad resonances near 7.5 MHz and 13.6 MHz.
Using a cage elements rather than single wire loop sides does not appear
to significantly lower the loop resonant frequency.

[40 meter cage loop SWR vs. freq.]
[http://xa.yimg.com/kq/groups/10946119/sn/969376443/name/40m+cage+loop+i\
mpedance.jpg]

73,
Carol KP4MD/W6
YL

--- In SkyWires@yahoogroups.com, "Tom" <kb5vwz@...> wrote:
>
> Good morning men, question for the group at large. Has anyone modeled
a loop built in a cage configuration? I made a quick drawing on paper
and will try to upload to the files section. A quick summary, 4 towers
at 40 feet to support the wire. Cage diameter could be anywhere from 6
inches to 12 inches. I see in the ARRL book, this arrangement is good
for 40 meters using a single wire, but with a larger diamter cage this
should lower the frequency a good bit, I just can't figure out how much.
> Antenna will be near over sandy type soil on the Gulf Coast of Texas.
> 73
> tom
>

3846. AW: [SkyWires] bad tuner?

Yahoo group: SkyWires
Date: 2011-02-17 06:19:46 UTC
From: Siegfried Jackstien
Topic: 3842 Message: 3846

If nothing is loose in tuner it should be ok

Sometimes you can find bad solder joints in the mighty fine junk ...

So check if all connections in the tuner are ok

It should work well on any band with that loop

I think your are just using it wrong maybe?!?

Set caps to mid setting and turn inductance till swr drops just a bit ...
that should be right coil setting ... now with tuning the caps swr should be
well tuneable ... if not try one setting higher or lower ... but it should
absolutely work with your antenna ... other tuner works without problems so
seems as either you make a fault or tuner has a fault

Hope you find it

Dg9bfc
Sigi

> -----Ursprüngliche Nachricht-----
> Von: SkyWires@yahoogroups.com [mailto:SkyWires@yahoogroups.com] Im Auftrag
> von Fred
> Gesendet: Mittwoch, 16. Februar 2011 22:31
> An: SkyWires@yahoogroups.com
> Betreff: Re: [SkyWires] bad tuner?
>
>
>
>
>
> On 2/16/2011 12:39 PM, Bill Aycock wrote:
>
> My first try to reply to this post was rejected by Yahoo as "Legacy
> Format,
> so, I'll try again.
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> All that you say indicates a bad tuner. Did you say that things
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> After this , I may quit Skywires.
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>
>
>
> Actually I think tuner is ok just out of range on my loop for it to do
> anything, I need to add more feedline to bring the numbers more in line
> for the tuner to work it seems at least.
> at least this is all I have to try 1 day when I get more l;adder line to
> test with or make new 600 ladder line used that. but for now I just put my
> dentron super tuner back inline and let it do its job as I have my setups.
> being disabled it is not so easy to fix things outside now a days so I
> have to wait for some help to get here and get wire made or find some
> extra 450 someplace. then in a small town where do you find 450 to have
> maybe 15-20 feet max. heck smallest they sell even seems to be 50'
> anymore. and I cant do that for a month either. so It stands still untill
> i can do something else.
>
>
>
>
>
>

3847. Re: texas loop idea

Yahoo group: SkyWires
Date: 2011-02-17 06:35:09 UTC
From: Tom
Topic: 3837 Message: 3847

Ok, thanks for the picture and graphs.
Is it simple enough with your program to vary length some to move the resonance around? 7.5 and 13.6 are a bit out of bands hihi

73 de KB5VWZ overseas in Norway with snow on the ground
Tom, LA1BRA

--- In SkyWires@yahoogroups.com, "kp4md" <kp4md@...> wrote:
>
>
> Hi OM Tom!
>
> Here's a model of your 4 wire square cage loop using 14 gauge wires with
> 1 foot cage width and 36 feet to each loop side.
> The loop is suspended between four 40 foot steel towers in a square over
> sandy soil.
> This 4nec2 <http://home.ict.nl/~arivoors/> model is uploaded to the
> files section as "40m cage loop.nec" and the screen captures are in the
> photos section.
>
> [40 meter cage loop]
>
> The SWR curve shows broad resonances near 7.5 MHz and 13.6 MHz.
> Using a cage elements rather than single wire loop sides does not appear
> to significantly lower the loop resonant frequency.
>
> [40 meter cage loop SWR vs. freq.]
> [http://xa.yimg.com/kq/groups/10946119/sn/969376443/name/40m+cage+loop+i\
> mpedance.jpg]
>
> 73,
> Carol KP4MD/W6
> YL
>
>
> --- In SkyWires@yahoogroups.com, "Tom" <kb5vwz@> wrote:
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> > Good morning men, question for the group at large. Has anyone modeled
> a loop built in a cage configuration? I made a quick drawing on paper
> and will try to upload to the files section. A quick summary, 4 towers
> at 40 feet to support the wire. Cage diameter could be anywhere from 6
> inches to 12 inches. I see in the ARRL book, this arrangement is good
> for 40 meters using a single wire, but with a larger diamter cage this
> should lower the frequency a good bit, I just can't figure out how much.
> > Antenna will be near over sandy type soil on the Gulf Coast of Texas.

> > 73
> > tom
> >
>

3848. Re: texas loop idea

Yahoo group: SkyWires
Date: 2011-02-17 15:18:02 UTC
From: kp4md
Topic: 3837 Message: 3848

In the first model I posted, even with the resonant frequency at 7.5 MHz, the SWR is less than 2:1 over the entire 40 meter band.
In this new model, each cage loop side is increased to 38 feet length. The 40 meter resonance drops to 7.2 MHz, but the 20 meter resonance drops even lower to 12.8 MHz.
I've noticed that the second harmonic resonance of any loop I've modeled or built is somewhat displaced from twice the fundamental resonance. So, I trim the loop for a compromise point between the two bands and use the antenna tuner for a best match.
CarolKP4MD/W6
Here are the SWR and impedance plots for the 40 meter cage loop with 38 foot long sides.

--- In SkyWires@yahoogroups.com, "Tom" <kb5vwz@...> wrote:
>
> Ok, thanks for the picture and graphs.
> Is it simple enough with your program to vary length some to move the resonance around? 7.5 and 13.6 are a bit out of bands hihi
>
> 73 de KB5VWZ overseas in Norway with snow on the ground
> Tom, LA1BRA
>
> --- In SkyWires@yahoogroups.com, "kp4md" kp4md@ wrote:
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> >
> > Hi OM Tom!
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> > Here's a model of your 4 wire square cage loop using 14 gauge wires with
> > 1 foot cage width and 36 feet to each loop side.
> > The loop is suspended between four 40 foot steel towers in a square over
> > sandy soil.
> > This 4nec2 <http://home.ict.nl/~arivoors/> model is uploaded to the
> > files section as "40m cage loop.nec" and the screen captures are in the
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> >
> > [40 meter cage loop]
> >
> > The SWR curve shows broad resonances near 7.5 MHz and 13.6 MHz.
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> >
> > [40 meter cage loop SWR vs. freq.]
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[http://xa.yimg.com/kq/groups/10946119/sn/969376443/name/40m+cage+loop+i\
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> > mpedance.jpg]
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> > 73,
> > Carol KP4MD/W6
> > YL
> >
> >
> > --- In SkyWires@yahoogroups.com, "Tom" <kb5vwz@> wrote:
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> > > Good morning men, question for the group at large. Has anyone
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> > should lower the frequency a good bit, I just can't figure out how
much.
> > > Antenna will be near over sandy type soil on the Gulf Coast of
Texas.
> > > 73
> > > tom
> > >
> >
>

3849. RE: [SkyWires] Re: texas loop idea

Yahoo group: SkyWires
Date: 2011-02-17 15:34:33 UTC
From: Richard Schmuke
Topic: 3837 Message: 3849
Attachments: 3 described; binary payloads are missing from this source WARC

I found that when I made a caged antenna before (sorry it was a vertical) that a 20M antenna is more affected by a 5" dia cage than a 40M and that is why they don't seem to be the same ratio to each other.

Rich, Kd0zz

From: SkyWires@yahoogroups.com [mailto:SkyWires@yahoogroups.com] On Behalf Of kp4md
Sent: Thursday, February 17, 2011 9:18 AM
To: SkyWires@yahoogroups.com
Subject: [SkyWires] Re: texas loop idea

In the first model I posted, even with the resonant frequency at 7.5 MHz, the SWR is less than 2:1 over the entire 40 meter band.

In this new model, each cage loop side is increased to 38 feet length. The 40 meter resonance drops to 7.2 MHz, but the 20 meter resonance drops even lower to 12.8 MHz.

I've noticed that the second harmonic resonance of any loop I've modeled or built is somewhat displaced from twice the fundamental resonance. So, I trim the loop for a compromise point between the two bands and use the antenna tuner for a best match.

Carol

KP4MD/W6

Here are the SWR and impedance plots for the 40 meter cage loop with 38 foot long sides.

Image removed by sender.

Image removed by sender.

--- In SkyWires@yahoogroups.com, "Tom" <kb5vwz@...> wrote:
>
> Ok, thanks for the picture and graphs.
> Is it simple enough with your program to vary length some to move the resonance around? 7.5 and 13.6 are a bit out of bands hihi
>
> 73 de KB5VWZ overseas in Norway with snow on the ground
> Tom, LA1BRA
>
> --- In SkyWires@yahoogroups.com, "kp4md" kp4md@ wrote:
> >
> >

> > Hi OM Tom!
> >
> > Here's a model of your 4 wire square cage loop using 14 gauge wires with
> > 1 foot cage width and 36 feet to each loop side.
> > The loop is suspended between four 40 foot steel towers in a square over
> > sandy soil.
> > This 4nec2 <http://home.ict.nl/~arivoors/> model is uploaded to the
> > files section as "40m cage loop.nec" and the screen captures are in the
> > photos section.
> >
> > [40 meter cage loop]
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> > The SWR curve shows broad resonances near 7.5 MHz and 13.6 MHz.
> > Using a cage elements rather than single wire loop sides does not appear
> > to significantly lower the loop resonant frequency.
> >
> > [40 meter cage loop SWR vs. freq.]
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[http://xa.yimg.com/kq/groups/10946119/sn/969376443/name/40m+cage+loop+i\
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> > 73,
> > Carol KP4MD/W6
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> > --- In SkyWires@yahoogroups.com, "Tom" <kb5vwz@> wrote:
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> > a loop built in a cage configuration? I made a quick drawing on paper
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> > at 40 feet to support the wire. Cage diameter could be anywhere from 6
> > inches to 12 inches. I see in the ARRL book, this arrangement is good
> > for 40 meters using a single wire, but with a larger diamter cage this
> > should lower the frequency a good bit, I just can't figure out how much.
> > > Antenna will be near over sandy type soil on the Gulf Coast of Texas.
> > > 73
> > > tom
> > >
> >
>

No virus found in this incoming message.
Checked by AVG - www.avg.com
Version: 9.0.872 / Virus Database: 271.1.1/3448 - Release Date: 02/16/11
13:34:00

3850. Re: [SkyWires] mfj-974h need a little help for loop

Yahoo group: SkyWires
Date: 2011-02-18 03:20:51 UTC
From: Dr.Ace Ratliff
Topic: 3840 Message: 3850

Hello Fred,
To avoid problems matching any center fed antenna with high impedance open wire lines, keep the feedline around these lengths. 80 meter antenna 34-40, 90-102 or 160-172 feet
[Avoid 66, 135, 190 ft]

As for the tuner, start with the radio on 3.995 Mhz. Check that the tuners 160 meter front panel push button is not in the 160 meter position. Set the tuner's antenna knob to 1, Inductance to F and Transmitter knob to 1. Then transmit at about 25 watts Carrier. Rotate the Transmitter and Antenna knobs for maximum forward and minimum reflected power. If you can't get a match set the tuners Inductance to E and try again, If still no match set the tuners Inductance to D and try again. Never switch the inductor while transmitting.

Good Luck and 73, Ace

--
Dr.Ace Ratliff
www.WH2T.com <http://www.wh2t.com/>

On Tue, Feb 15, 2011 at 11:27 PM, ke5htb <ke5htb@...> wrote:

>
>
> Hello All I am new to this group and have read back into the grpoup to find
> a answer also. I have to say I got red eye from reading so I stopped and
> figured I will ask.
>
> I just purchased a used mfj-974H balanced tuner and I can NOT get it to
> tune any band or do anything on my 80m loop and 450 ohm feed line.
>
> NOW reading more tonight I will try longer feed line as mine is pretty
> short but I feel I should be able to see some deflections of some kind
> with what I am using now. I went back to my dentron super tuner and it
> works ok. I just wanted to see the if there is any real differences in using
> the balanced tuner with my loop and to learn a little more about the
> different tuner and then I will probably sell this 1 after I play enough. I
> am planning on building 1 for myself to replace this and I have most of the
> parts now but not all yet. So I got this to hold me over till I can get my
> other built.
>
> I can not tune any band any settings any inductor settings. it shows 1.5
> swr and 10 watts and thats only thing close is the 10watts i tuned with. I
> tried every inductor letter 1 at a time and turned the dials slowly to see
> any changes at all on my meters on the radio and tuner- none at all.

>
> I like to know if I need to add a ground wire from the bottom conection to
> the ground lug on this tuner like I did on my dentron tuner ? I dont see why
> I should but I am lost and I dont want to damage anything as I am disabled
> and cant afford to fix a radio or anything else.
>
> OH radio is a 570dg all barefoot no amps just a basic setup. Ladder line
> all the way into tuner no chokes nothing in line on feedline at all. nothing
> special just aprox 270+- wire up at 30' and direct to tuner with 450 ohm. I
> believe and will say aprox 35to 30 ft ladder line max used to tuner.
>
> Looking for suggestions and any help as I am going nuts and hope I didnt
> justy throw away money on a bad tuner now. be 2nd bad online deal in 8 years
> buying online. this 1 will hurt more cause guy has already said no returns
> at all so it is mine no matter what and looking inside of the tuner I do not
> see any loose wires or any of the normal MFJ missed wires or anything like
> that. I did notice 1 possible burn spot on the inductor switch but not a bad
> spot but it is there.
>
> Guy says it worked 100% before he boxed it and shipped it to me. pack job
> was ok could have been better but it was ok. tuner did move around some
> inside. I do get some meter movements and light does still work so I dont
> think it was beat up in mail much or damaged that way.
>
> HELP PLEASE what amd I maybe doing wrong or suggest things to try before I
> call MFJ and spend a small fortune fixing this and loose money by not buying
> a new 1 to dtart with for the 100.00 more. I feel what I paid was a fair
> price at 125 shipped so I am happy there. tuner was in real nice shape not
> beat up scratched up nothing to say it was abused.
>
> only power run thru it was 25 watts fm to see if it worked.
> I run 90% digital modes due to my other tuner did not like me too much for
> rfi in house on 20m only. so after trying this I was real bummed out
> totally.
>
> thanks in advanced for ANY AND I MEAN ANY HELP AT ALL.
>
> TIME TO TAKE PAIN MEDS TO RELIEVE MY (oops sorry caps) bad day stress and
> pain levels from sitting here too long.
>
> Fred
> Ke5htb
>
>
>

3851. Re: texas loop idea

Yahoo group: SkyWires
Date: 2011-02-18 06:43:02 UTC
From: Tom
Topic: 3837 Message: 3851

OK, many thanks once again. I have a SGC 230 antenna tuner I am going to use with this loop, so the info is useful to be sure that the 230 will find a match too..this also helps me decide to feed with coax or some variation of ladder line.
regards
tom

--- In SkyWires@yahoogroups.com, "kp4md" <kp4md@...> wrote:
>
> In the first model I posted, even with the resonant frequency at 7.5
> MHz, the SWR is less than 2:1 over the entire 40 meter band.
> In this new model, each cage loop side is increased to 38 feet length.
> The 40 meter resonance drops to 7.2 MHz, but the 20 meter resonance
> drops even lower to 12.8 MHz.
> I've noticed that the second harmonic resonance of any loop I've modeled
> or built is somewhat displaced from twice the fundamental resonance.
> So, I trim the loop for a compromise point between the two bands and use
> the antenna tuner for a best match.
> CarolKP4MD/W6
> Here are the SWR and impedance plots for the 40 meter cage loop with 38
> foot long sides.
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> --- In SkyWires@yahoogroups.com, "Tom" <kb5vwz@> wrote:
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> > Ok, thanks for the picture and graphs.
> > Is it simple enough with your program to vary length some to move the
> resonance around? 7.5 and 13.6 are a bit out of bands hihi
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> > > Hi OM Tom!
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> > > Here's a model of your 4 wire square cage loop using 14 gauge wires
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> > > 1 foot cage width and 36 feet to each loop side.
> > > The loop is suspended between four 40 foot steel towers in a square
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> > > sandy soil.
> > > This 4nec2 <http://home.ict.nl/~arivoors/> model is uploaded to
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> > > [40 meter cage loop]
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> > > [40 meter cage loop SWR vs. freq.]
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> > > for 40 meters using a single wire, but with a larger diamter cage
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> much.
> > > > Antenna will be near over sandy type soil on the Gulf Coast of
> Texas.
> > > > 73
> > > > tom
> > > >
> > >
> >
>

3852. AW: [SkyWires] Re: texas loop idea

Yahoo group: SkyWires
Date: 2011-02-18 10:54:31 UTC
From: Siegfried Jackstien
Topic: 3837 Message: 3852

If you use a tuner at the antenna there is absolutely no need to make it
cage style
Dg9bfc
Sigi

> -----Ursprüngliche Nachricht-----
> Von: SkyWires@yahoogroups.com [mailto:SkyWires@yahoogroups.com] Im Auftrag
> von Tom
> Gesendet: Freitag, 18. Februar 2011 06:43
> An: SkyWires@yahoogroups.com
> Betreff: [SkyWires] Re: texas loop idea
>
>
>
> OK, many thanks once again. I have a SGC 230 antenna tuner I am going to
> use with this loop, so the info is useful to be sure that the 230 will
> find a match too..this also helps me decide to feed with coax or some
> variation of ladder line.
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> > > > > [40 meter cage loop]
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> > > > > The SWR curve shows broad resonances near 7.5 MHz and 13.6 MHz.
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> > > > > 73
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>
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3853. Re: texas loop idea

Yahoo group: SkyWires
Date: 2011-02-18 15:09:40 UTC
From: Tom
Topic: 3837 Message: 3853

Fair comment, but I'll try and explain why my thoughts went this way. A antenna manufactruer makes a pretty good case for his cage dipoles. I was thinking if the same efficency worked for that big dipole, why would it not work well in a loop?
Now having said that, I have not built this thing yet,I'm still trying to get a clearer view if it would be worth the extra time/expense/effort...On the model made for this, it actually looks like it will work OK, but of course following the mails here, loops do work well. I have the real estate to put one up, just trying one a step better...I hope.
regards
to all
tom

--- In SkyWires@yahoogroups.com, "Siegfried Jackstien" <siegfried.jackstien@...> wrote:
>
> If you use a tuner at the antenna there is absolutely no need to make it
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> Dg9bfc
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>
>
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> > Von: SkyWires@yahoogroups.com [mailto:SkyWires@yahoogroups.com] Im Auftrag
> > von Tom
> > Gesendet: Freitag, 18. Februar 2011 06:43
> > An: SkyWires@yahoogroups.com
> > Betreff: [SkyWires] Re: texas loop idea
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> > "kp4md" <kp4md@> wrote:
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> > > Here are the SWR and impedance plots for the 40 meter cage loop with 38
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3854. AW: [SkyWires] Re: texas loop idea

Yahoo group: SkyWires
Date: 2011-02-18 19:17:00 UTC
From: Siegfried Jackstien
Topic: 3837 Message: 3854

If you wanna have more gain the cage does not help
Okay it lowers resistance (but not that much)
It makes antenna wideband (not needed with a tuner)
SO I THINK IT IS WORTHLESS
Dg9bfc
Sigi

> -----Ursprüngliche Nachricht-----
> Von: SkyWires@yahoogroups.com [mailto:SkyWires@yahoogroups.com] Im Auftrag
> von Tom
> Gesendet: Freitag, 18. Februar 2011 15:10
> An: SkyWires@yahoogroups.com
> Betreff: [SkyWires] Re: texas loop idea
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>
> Fair comment, but I'll try and explain why my thoughts went this way. A
> antenna manufactruer makes a pretty good case for his cage dipoles. I was
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3855. (no subject)

Yahoo group: SkyWires
Date: 2011-02-20 04:10:58 UTC
From: JAMES BISCHOF
Topic: 3855 Message: 3855

wa2qin

3856. Re: texas loop idea

Yahoo group: SkyWires
Date: 2011-02-21 05:55:21 UTC
From: perryc
Topic: 3837 Message: 3856

I wonder if anyone ever tried to make a loop out of 24 inch wide chicken wire.
Wonder how that coud be modeled.
ke6anm

--- In SkyWires@yahoogroups.com, "Siegfried Jackstien" <siegfried.jackstien@...> wrote:
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> > Von: SkyWires@yahoogroups.com [mailto:SkyWires@yahoogroups.com] Im Auftrag
> > von Tom
> > Gesendet: Freitag, 18. Februar 2011 15:10
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3857. Re: [SkyWires] Re: texas loop idea

Yahoo group: SkyWires
Date: 2011-02-21 09:42:02 UTC
From: raymond mitchell
Topic: 3837 Message: 3857

Yes, 24" chicken wire or 4ft to 5ft rabbit fence. Some of us have it on hand and it is easy enough to hang in the trees.letting the fence hang down with double support at each corner would be easier but hanging the fence horizontal is doable too if that is what it takes. I don't mind puting it up and taking it down several times to get it resonate so no tuner is needed (I avoid tuners when I can). And my goal is a single wide band, a double 75 or 160 designed for 75m phone use.
Abe K7ABE

--- On Sun, 2/20/11, perryc <canoemaneh@...> wrote:

From: perryc <canoemaneh@...>
Subject: [SkyWires] Re: texas loop idea
To: SkyWires@yahoogroups.com
Date: Sunday, February 20, 2011, 9:55 PM

I wonder if anyone ever tried to make a loop out of 24 inch wide chicken wire.

Wonder how that coud be modeled.

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--- In SkyWires@yahoogroups.com, "Siegfried Jackstien" <siegfried.jackstien@...> wrote:

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> > von Tom

> > Gesendet: Freitag, 18. Februar 2011 15:10

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3858. Loop Feed Experiments: Results

Yahoo group: SkyWires
Date: 2011-02-22 08:30:09 UTC
From: John
Topic: 3858 Message: 3858

How do your experiences relate to this:

In my backyard I have a 276 foot square loop of 18 ga. wire average height 15 feet above the ground. I fed it four ways: Coaxial, 450-ohm line, simply fed by bringing the two ends (tied around and into the two holes of an insulator) into the shack (balanced wire terminals, MFJ window panel), then using only one end of the loop connected (as in a long wire antenna) with counterpoises on every band. The feeds were fed into an MFJ Versa Tuner 2.

These are the results (from best SWR and most tunable to biggest SWR and least tunable).

1. Open-ended loop, fed like a long wire with counterpoises, but working far better than a regular long wire, as it has all the principles of the closed loop. Will even tune with the Icom 746's built-in tuner and will tune 160 (1838 kHz) down to 1.2:1 with the outboard manual tuner.
NB: The AH-4 puts a noise factor into the open loop and cuts way down on its performance according to signal reports. (in m experience, any manual tuner is better than any automatic tuner and gives much better signal reports.)

2. The closed loop with two wire ends. Will tune all bands with the exception of 160. 20 meters can be easily brought to 1:1.

3. 450 ohm feed. 20 m (14070) can be brought down only to 1.5:1

4. Coaxial feed. Better with a 4:1 balun at the feed point than with a direct connection, but still not as good as the ladder line. It cannot be tuned to a lower frequency for which it is resonant (3952). Manually tunable, but with very high SWR's.

3859. RE: [SkyWires] Loop Feed Experiments: Results

Yahoo group: SkyWires
Date: 2011-02-22 13:35:30 UTC
From: Bob Hardin
Topic: 3858 Message: 3859

You wrote "then using only one end of the loop connected (as in a long wire antenna) with counterpoises on every band."

Could you please elaborate on this setup?

Do you have counterpoises for every band? If so what are they and how are they wired?

Thanks,

KD8LZT

3860. RE: [SkyWires] Loop Feed Experiments: Results

Yahoo group: SkyWires
Date: 2011-02-22 15:06:08 UTC
From: Richard Schmuke
Topic: 3858 Message: 3860
Attachments: 2 described; binary payloads are missing from this source WARC

John , please keep in touch, I find this quite interesting. I have a same size loop, delta shaped, feed point 40 ft high, other two points about 30ft, fed with 55 ft of Belden 8237 RG-8 and a 4:1 dual rod current balun. The antenna was trimmed for best SWR at the middle of the 20M phone band after installation. The way I understand it you would need a 2:1 balun to feed it with coax at 80/75 meters.

I am now using a MFJ Versa tuner 3, MFJ-962D

I have been thinking about changing to 450 ohm line this spring so I could use mine for 75M, my 450 feed line would be about 50 ft. I have a homemade Lexan window pass thru, ceramic insulators for the 450 line.

I am surprised it did not go 1:1 on 20m with the 450 line.

What was the approximate length of the 450 line?

Does anyone have any ideas?

Rich ,KDØZZ ,

from the middle of Missouri , out in the sticks with the hicks and the ticks.

From: SkyWires@yahoogroups.com [mailto:SkyWires@yahoogroups.com] On Behalf Of John
Sent: Tuesday, February 22, 2011 2:30 AM
To: SkyWires@yahoogroups.com
Subject: [SkyWires] Loop Feed Experiments: Results

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In my backyard I have a 276 foot square loop of 18 ga. wire average height 15 feet above the ground. I fed it four ways: Coaxial, 450-ohm line, simply fed by bringing the two ends (tied around and into the two holes of an insulator) into the shack (balanced wire terminals, MFJ window panel), then using only one end of the loop connected (as in a long wire antenna) with counterpoises on every band. The feeds were fed into an MFJ Versa Tuner 2.

These are the results (from best SWR and most tunable to biggest SWR and least tunable).

1. Open-ended loop, fed like a long wire with counterpoises, but working far better than a regular long wire, as it has all the principles of the closed loop. Will even tune with the Icom 746's built-in tuner and will tune 160 (1838 kHz) down to 1.2:1 with the outboard manual tuner.
NB: The AH-4 puts a noise factor into the open loop and cuts way down on its

performance according to signal reports. (in m experience, any manual tuner is better than any automatic tuner and gives much better signal reports.)

2. The closed loop with two wire ends. Will tune all bands with the exception of 160. 20 meters can be easily brought to 1:1.

3. 450 ohm feed. 20 m (14070) can be brought down only to 1.5:1

4. Coaxial feed. Better with a 4:1 balun at the feed point than with a direct connection, but still not as good as the ladder line. It cannot be tuned to a lower frequency for which it is resonant (3952). Manually tunable, but with very high SWR's.

No virus found in this incoming message.
Checked by AVG - www.avg.com
Version: 9.0.872 / Virus Database: 271.1.1/3458 - Release Date: 02/21/11 13:34:00

3861. AW: [SkyWires] Loop Feed Experiments: Results

Yahoo group: SkyWires
Date: 2011-02-22 17:12:52 UTC
From: Siegfried Jackstien
Topic: 3858 Message: 3861

For that low height over ground you would need 1:1 in fundamental
On first harmonic 1:2 and on higher bands 1:4
That is what I found out here
I have a fullsized topbandloop fed with ladderline
And I use the line for transforming the low impedance up on 180 and 80 (and
a balun for bring that down to 50 ohms)
Dg9bfc
Sigi

> -----Ursprüngliche Nachricht-----
> Von: SkyWires@yahoogroups.com [mailto:SkyWires@yahoogroups.com] Im Auftrag
> von Richard Schmuke
> Gesendet: Dienstag, 22. Februar 2011 15:06
> An: SkyWires@yahoogroups.com
> Betreff: RE: [SkyWires] Loop Feed Experiments: Results
>
>
>
> John , please keep in touch, I find this quite interesting. I have a same
> size loop, delta shaped, feed point 40 ft high, other two points about
> 30ft, fed with 55 ft of Belden 8237 RG-8 and a 4:1 dual rod current balun.
> The antenna was trimmed for best SWR at the middle of the 20M phone band
> after installation. The way I understand it you would need a 2:1 balun to
> feed it with coax at 80/75 meters.
>
> I am now using a MFJ Versa tuner 3, MFJ-962D
>
> I have been thinking about changing to 450 ohm line this spring so I could
> use mine for 75M, my 450 feed line would be about 50 ft. I have a homemade
> Lexan window pass thru, ceramic insulators for the 450 line.
>
> I am surprised it did not go 1:1 on 20m with the 450 line.
>
> What was the approximate length of the 450 line?
>
> Does anyone have any ideas?
>
> Rich ,KDØZZ ,
>
> from the middle of Missouri , out in the sticks with the hicks and the
> ticks.
>
>
>
>

>
>
>
> From: SkyWires@yahoogroups.com [mailto:SkyWires@yahoogroups.com] On Behalf
> Of John
> Sent: Tuesday, February 22, 2011 2:30 AM
> To: SkyWires@yahoogroups.com
> Subject: [SkyWires] Loop Feed Experiments: Results
>
>
>
>
>
> How do your experiences relate to this:
>
> In my backyard I have a 276 foot square loop of 18 ga. wire average height
> 15 feet above the ground. I fed it four ways: Coaxial, 450-ohm line,
> simply fed by bringing the two ends (tied around and into the two holes of
> an insulator) into the shack (balanced wire terminals, MFJ window panel),
> then using only one end of the loop connected (as in a long wire antenna)
> with counterpoises on every band. The feeds were fed into an MFJ Versa
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>

3862. Re: AW: [SkyWires] Loop Feed Experiments: Results

Yahoo group: SkyWires
Date: 2011-02-25 07:50:22 UTC
From: Michael Shepard
Topic: 3858 Message: 3862

Dear Sir,

Thank you for your help. I may be able to set up a full length Skywire. I am not sure if I should aim for the middle of the band when making the lenght. I am also not sure if I can get it up 40-80 feet at all places and hold it very rigid. I am planning on using what most power companies use as power transmission line. The center is a strong steel center surrounded with aluminum. I livce out in the country and the only one I worry about coming into contact with it would be any transoptation vehicle at my home or visitors over 20 feet tall. Would 20 feet be ok? The tower is 89 feet tall. I was planning on feeding it close to one bottom corner.

Thank you again

Michael

Shepard

n5wtr

--- On Tue, 2/22/11, Siegfried Jackstien <siegfried.jackstien@...> wrote:

From: Siegfried Jackstien <siegfried.jackstien@...>
Subject: AW: [SkyWires] Loop Feed Experiments: Results
To: SkyWires@yahoogroups.com
Date: Tuesday, February 22, 2011, 11:12 AM

For that low height over ground you would need 1:1 in fundamental
On first harmonic 1:2 and on higher bands 1:4
That is what I found out here
I have a fullsized topbandloop fed with ladderline
And I use the line for transforming the low impedance up on 180 and 80 (and
a balun for bring that down to 50 ohms)
Dg9bfc
Sigi

> -----Ursprüngliche Nachricht-----
> Von: SkyWires@yahoogroups.com [mailto:SkyWires@yahoogroups.com] Im Auftrag
> von Richard Schmuke
> Gesendet: Dienstag, 22. Februar 2011 15:06
> An: SkyWires@yahoogroups.com
> Betreff: RE: [SkyWires] Loop Feed Experiments: Results
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> John , please keep in touch, I find this quite interesting. I have a same
> size loop, delta shaped, feed point 40 ft high, other two points about
> 30ft, fed with 55 ft of Belden 8237 RG-8 and a 4:1 dual rod current balun.

> The antenna was trimmed for best SWR at the middle of the 20M phone band
> after installation. The way I understand it you would need a 2:1 balun to
> feed it with coax at 80/75 meters.
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> I am now using a MFJ Versa tuner 3, MFJ-962D
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> I have been thinking about changing to 450 ohm line this spring so I could
> use mine for 75M, my 450 feed line would be about 50 ft. I have a homemade
> Lexan window pass thru, ceramic insulators for the 450 line.
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> What was the approximate length of the 450 line?
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>
> From: SkyWires@yahoogroups.com [mailto:SkyWires@yahoogroups.com] On Behalf
> Of John
> Sent: Tuesday, February 22, 2011 2:30 AM
> To: SkyWires@yahoogroups.com
> Subject: [SkyWires] Loop Feed Experiments: Results
>
>
>
>
>
> How do your experiences relate to this:
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> 15 feet above the ground. I fed it four ways: Coaxial, 450-ohm line,
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> an insulator) into the shack (balanced wire terminals, MFJ window panel),
> then using only one end of the loop connected (as in a long wire antenna)
> with counterpoises on every band. The feeds were fed into an MFJ Versa
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> Version: 9.0.872 / Virus Database: 271.1.1/3458 - Release Date: 02/21/11
> 13:34:00
>
>

3863. Re: [SkyWires] Loop Feed Experiments: Results !! Thank You Sir !!

Yahoo group: SkyWires
Date: 2011-02-25 07:57:53 UTC
From: Michael Shepard
Topic: 3858 Message: 3863

Dear Sir,

Thank you for your help. I may be able to set up a full length Skywire. I am not sure if I should aim for the middle of the band when making the lenght. I am also not sure if I can get it up 40-80 feet at all places and hold it very rigid. I am planning on using what most power companies use as power transmission line. The center is a strong steel center surrounded with aluminum. I livce out in the country and the only one I worry about coming into contact with it would be any transoptation vehicle at my home or visitors over 20 feet tall. Would 20 feet be ok? The tower is 89 feet tall. I was planning on feeding it close to one bottom corner.

Thank you again

Michael

Shepard

n5wtr

--- On Tue, 2/22/11, John <johnorzel@...> wrote:

From: John <johnorzel@...>
Subject: [SkyWires] Loop Feed Experiments: Results
To: SkyWires@yahoogroups.com
Date: Tuesday, February 22, 2011, 2:30 AM

How do your experiences relate to this:

In my backyard I have a 276 foot square loop of 18 ga. wire average height 15 feet above the ground. I fed it four ways: Coaxial, 450-ohm line, simply fed by bringing the two ends (tied around and into the two holes of an insulator) into the shack (balanced wire terminals, MFJ window panel), then using only one end of the loop connected (as in a long wire antenna) with counterpoises on every band. The feeds were fed into an MFJ Versa Tuner 2.

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4. Coaxial feed. Better with a 4:1 balun at the feed point than with a direct connection, but still not as good as the ladder line. It cannot be tuned to a lower frequency for which it is resonant (3952). Manually tunable, but with very high SWR's.

3864. AW: AW: [SkyWires] Loop Feed Experiments: Results

Yahoo group: SkyWires
Date: 2011-02-25 11:32:12 UTC
From: Siegfried Jackstien
Topic: 3858 Message: 3864

What do you mean with full length??? For what band(s) ???
Dg9bfc
Sigi

> -----Ursprüngliche Nachricht-----
> Von: SkyWires@yahoogroups.com [mailto:SkyWires@yahoogroups.com] Im Auftrag
> von Michael Shepard
> Gesendet: Freitag, 25. Februar 2011 07:50
> An: SkyWires@yahoogroups.com
> Betreff: Re: AW: [SkyWires] Loop Feed Experiments: Results
>
>
>
> Dear Sir,
>
> Thank you for your help. I may be able to set up a full length
> Skywire. I am not sure if I should aim for the middle of the band when
> making the lenght. I am also not sure if I can get it up 40-80 feet at all
> places and hold it very rigid. I am planning on using what most power
> companies use as power transmission line. The center is a strong steel
> center surrounded with aluminum. I livce out in the country and the only
> one I worry about coming into contact with it would be any transoptation
> vehicle at my home or visitors over 20 feet tall. Would 20 feet be ok? The
> tower is 89 feet tall. I was planning on feeding it close to one bottom
> corner.
>
> Thank you again
>
> Michael
>
> Shepard
>
> n5wtr
>
>
> --- On Tue, 2/22/11, Siegfried Jackstien <siegfried.jackstien@...>
> wrote:
>
>
>
> From: Siegfried Jackstien <siegfried.jackstien@...>
> Subject: AW: [SkyWires] Loop Feed Experiments: Results
> To: SkyWires@yahoogroups.com
> Date: Tuesday, February 22, 2011, 11:12 AM
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> > Von: SkyWires@yahoogroups.com
> <http://us.mc324.mail.yahoo.com/mc/compose?to=SkyWires%40yahoogroups.com>
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>] Im Auftrag
> > von Richard Schmuke
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> > An: SkyWires@yahoogroups.com
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> > 30ft, fed with 55 ft of Belden 8237 RG-8 and a 4:1 dual rod
> current balun.
> > The antenna was trimmed for best SWR at the middle of the 20M
> phone band
> > after installation. The way I understand it you would need a 2:1
> balun to
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> > I am now using a MFJ Versa tuner 3, MFJ-962D
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> > use mine for 75M, my 450 feed line would be about 50 ft. I have a
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> > I am surprised it did not go 1:1 on 20m with the 450 line.
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> > What was the approximate length of the 450 line?
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> > From: SkyWires@yahoogroups.com
> <http://us.mc324.mail.yahoo.com/mc/compose?to=SkyWires%40yahoogroups.com>
> [mailto:SkyWires@yahoogroups.com
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> > 13:34:00
> >
> >
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>

3865. Re: AW: [SkyWires] Loop Feed Experiments: Results

Yahoo group: SkyWires
Date: 2011-03-06 07:31:31 UTC
From: Michael Shepard
Topic: 3858 Message: 3865

hey folks I'm about to go up with skyloop. Does 1747 ft sound ok for overall length? next question, does each leg need to be same length as others? My legs that I can accomadate are...400' on west to east....480' north to south ....or there abouts....I may cut some lenght on corners to get a higher Hz......I'm not sure about height...may be able to get it up ...not real sure how much....house at tower is at top of rise on hill......all wires go down hill by about 10 ft or so to the east...Thanks Michael.....n5wtr....73's...and thanks...

--- On Fri, 2/25/11, Michael Shepard <n5wtr@yahoo.com> wrote:

From: Michael Shepard <n5wtr@...>
Subject: Re: AW: [SkyWires] Loop Feed Experiments: Results
To: SkyWires@yahoogroups.com
Date: Friday, February 25, 2011, 1:50 AM

Dear Sir,

Thank you for your help. I may be able to set up a full length Skywire. I am not sure if I should aim for the middle of the band when making the lenght. I am also not sure if I can get it up 40-80 feet at all places and hold it very rigid. I am planning on using what most power companies use as power transmission line. The center is a strong steel center surrounded with aluminum. I livce out in the country and the only one I worry about coming into contact with it would be any transoptation vehicle at my home or visitors over 20 feet tall. Would 20 feet be ok? The tower is 89 feet tall. I was planning on feeding it close to one bottom corner.

Thank you again

Michael

Shepard

n5wtr

--- On Tue, 2/22/11, Siegfried Jackstien <siegfried.jackstien@...> wrote:

From: Siegfried Jackstien <siegfried.jackstien@...>
Subject: AW: [SkyWires] Loop Feed Experiments: Results
To: SkyWires@yahoogroups.com
Date: Tuesday, February 22, 2011, 11:12 AM

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> Gesendet: Dienstag, 22. Februar 2011 15:06
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> use mine for 75M, my 450 feed line would be about 50 ft. I have a homemade
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> From: SkyWires@yahoogroups.com [mailto:SkyWires@yahoogroups.com] On Behalf
> Of John
> Sent: Tuesday, February 22, 2011 2:30 AM
> To: SkyWires@yahoogroups.com
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> 13:34:00
>
>

3866. Re: AW: AW: [SkyWires] Loop Feed Experiments: Results

Yahoo group: SkyWires
Date: 2011-03-06 07:44:08 UTC
From: Michael Shepard
Topic: 3858 Message: 3866

Dear Sigi......

I'm about to go up with the sky wire loop....I'm trying for an all bands..and it can go thru a tuner if I desire...just turn the knob.. The idea is to get about 375 north to south leg.....and sabout 480 on west to east.. Hopefully I can get it up to a desirable height. All wires will run down hill from house and tower. this drop in height will be maybe 10 ft in 375 ft. not sure what I can use to get it up in height....Money is tight right now. Should I make it longer or will that help any? I can go south as much as 600 ft on eack leg.
power line gets in the way near end...One friend, now a silent key said I may want to tunnel to the ground side near base of power line. I think not..what do you think....he said it makes a big ear..Love hearing from you guys ..I'm 60 and about to go on disability..this will be my only thing to do 'cept ragchew...I appogize so my fist on this key board..Guess I should go on to get my xtra?..I was up to 19 wpm..then someone broke the key and now I don't try much...I may be putting it up 2nite..73's..n5wtr

--- On Fri, 2/25/11, Siegfried Jackstien <siegfried.jackstien@...> wrote:

From: Siegfried Jackstien <siegfried.jackstien@...>
Subject: AW: AW: [SkyWires] Loop Feed Experiments: Results
To: SkyWires@yahoogroups.com
Date: Friday, February 25, 2011, 5:32 AM

What do you mean with full length??? For what band(s) ???
Dg9bfc
Sigi

> -----Ursprüngliche Nachricht-----
> Von: SkyWires@yahoogroups.com [mailto:SkyWires@yahoogroups.com] Im Auftrag
> von Michael Shepard
> Gesendet: Freitag, 25. Februar 2011 07:50
> An: SkyWires@yahoogroups.com
> Betreff: Re: AW: [SkyWires] Loop Feed Experiments: Results
>
>
>
> Dear Sir,
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> Thank you for your help. I may be able to set up a full length
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> companies use as power transmission line. The center is a strong steel
> center surrounded with aluminum. I livce out in the country and the only
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> vehicle at my home or visitors over 20 feet tall. Would 20 feet be ok? The

> tower is 89 feet tall. I was planning on feeding it close to one bottom
> corner.
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> For that low height over ground you would need 1:1 in fundamental
> On first harmonic 1:2 and on higher bands 1:4
> That is what I found out here
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>] Im Auftrag
> > von Richard Schmuke
> > Gesendet: Dienstag, 22. Februar 2011 15:06
> > An: SkyWires@yahoogroups.com
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> > I am now using a MFJ Versa tuner 3, MFJ-962D
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> > I have been thinking about changing to 450 ohm line this spring so
> I could
> > use mine for 75M, my 450 feed line would be about 50 ft. I have a
> homemade
> > Lexan window pass thru, ceramic insulators for the 450 line.
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> > I am surprised it did not go 1:1 on 20m with the 450 line.
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> > Does anyone have any ideas?
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> 02/21/11
> > 13:34:00
> >
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3867. 800 foot large loop with 450 ohm feed line

Yahoo group: SkyWires
Date: 2011-03-07 15:27:38 UTC
From: MICHAEL AVERY
Topic: 3867 Message: 3867

I use a 800 foot large loop fed with 450 ohm ladder line into a pre MFJ made Vectronics tuner with 160 thru 6 meter coverage that works very well. AC8GN

On Mar 6, 2011, Michael Shepard wrote:

?

Dear Sigi......

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3868. Loop Skywire vs. GAP Titan DX: A WSPR data study

Yahoo group: SkyWires
Date: 2011-03-07 16:55:19 UTC
From: kp4md
Topic: 3868 Message: 3868

Using WSPR network data, the performance of a 40 meter Loop SkyWire antenna was compared to a Gap Titan DX multiband vertical antenna on 40 and 20 meters. The study data are posted at http://www.qsl.net/kp4md/wspr.htm <http://www.qsl.net/kp4md/wspr.htm>
Carol, KP4MD/W6
CONCLUSIONS
1. The WSPR network data permitted a comparison of signals from two antennas to a distant destination.
2. Over the study time period, the WSPR network data corroborated the VOACAP predictions for trends in ionospheric propagation.
3. The 40 meter full wave horizontal loop antenna produced consistently higher (2 to 11 dB) signal to noise ratio reports than the Gap Titan DX antenna. Differences in radiation patterns and efficiency are probable causes.
4. The 40 meter full wave horizontal loop antenna with predominantly high angle radiation maintained contact while the Gap Titan DX antenna lost signal when the ionospheric propagation changed to a multiple hop mode.
5. The Gap Titan DX antenna offers advantages of simple mounting, compact size and a low standing wave ratio without need for re-tuning on multiple frequency bands, but being a shortened antenna compromises radiation efficiency.
6. The low cost and simple construction loop antenna provided higher radiated signal strengths in this study, but requires greater physical area, multiple supports, and antenna tuning unit adjustment when changing frequency bands.
[Gap Titan DX]

3869. Re: [SkyWires] Loop Skywire vs. GAP Titan DX: A WSPR data study

Yahoo group: SkyWires
Date: 2011-03-07 17:23:07 UTC
From: Dennis Mingear
Topic: 3868 Message: 3869

Facinating post Carol, thanks,

I use a loop horizontal loop up about 12 feet and somewhere between a 40 and 80 meter in size.

I'm always amazed by how well it works on 40 meters when talking to friends each afternnoon throughout the western U.S.

From Alaska to Southern Ca., New Mexico and Utah.

Every time I go to another antenna, G5RV or random wire or low hanging dipole, in the end I always come back to my loop and AH-4 antenna tuner.

Dennis ... AI6R

--- On Mon, 3/7/11, kp4md <kp4md@...> wrote:

From: kp4md <kp4md@...>
Subject: [SkyWires] Loop Skywire vs. GAP Titan DX: A WSPR data study
To: SkyWires@yahoogroups.com
Date: Monday, March 7, 2011, 8:55 AM

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3870. AW: AW: AW: [SkyWires] Loop Feed Experiments: Results

Yahoo group: SkyWires
Date: 2011-03-07 18:34:09 UTC
From: Siegfried Jackstien
Topic: 3858 Message: 3870

If you plan to use it on the 3 lowest bands ... put as much wire up as high as possible
On the higher bands you will have a cloverleaf pattern BUT where one of the multiple lopes go there is a lot of signal
So try it out on all bands!!!
Feed that beast with ladderline and a good tuner and you will almost never want another antenna
Dg9bfc
Sigi
Ps legsmust not be exactly symmetrical ... my deltaloop for 160 is 40/60/70m ...

> -----Ursprüngliche Nachricht-----
> Von: SkyWires@yahoogroups.com [mailto:SkyWires@yahoogroups.com] Im Auftrag
> von Michael Shepard
> Gesendet: Sonntag, 6. März 2011 07:44
> An: SkyWires@yahoogroups.com
> Betreff: Re: AW: AW: [SkyWires] Loop Feed Experiments: Results
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> > Dg9bfc
> > Sigi
> >
> > > -----Ursprüngliche Nachricht-----
> > > Von: SkyWires@yahoogroups.com
> <http://us.mc324.mail.yahoo.com/mc/compose?to=SkyWires%40yahoogroups.com>
> >
> <http://us.mc324.mail.yahoo.com/mc/compose?to=SkyWires%40yahoogroups.com>
> > [mailto:SkyWires@yahoogroups.com
> <http://us.mc324.mail.yahoo.com/mc/compose?to=SkyWires%40yahoogroups.com>
> >
> <http://us.mc324.mail.yahoo.com/mc/compose?to=SkyWires%40yahoogroups.com>
> >] Im Auftrag
> > > von Richard Schmuke
> > > Gesendet: Dienstag, 22. Februar 2011 15:06
> > > An: SkyWires@yahoogroups.com
> <http://us.mc324.mail.yahoo.com/mc/compose?to=SkyWires%40yahoogroups.com>
> >
> <http://us.mc324.mail.yahoo.com/mc/compose?to=SkyWires%40yahoogroups.com>

> > > Betreff: RE: [SkyWires] Loop Feed Experiments: Results
> > >
> > >
> > >
> > > John , please keep in touch, I find this quite interesting. I
> have
> > a same
> > > size loop, delta shaped, feed point 40 ft high, other two points
> > about
> > > 30ft, fed with 55 ft of Belden 8237 RG-8 and a 4:1 dual rod
> > current balun.
> > > The antenna was trimmed for best SWR at the middle of the 20M
> > phone band
> > > after installation. The way I understand it you would need a 2:1
> > balun to
> > > feed it with coax at 80/75 meters.
> > >
> > > I am now using a MFJ Versa tuner 3, MFJ-962D
> > >
> > > I have been thinking about changing to 450 ohm line this spring
> so
> > I could
> > > use mine for 75M, my 450 feed line would be about 50 ft. I have
> a
> > homemade
> > > Lexan window pass thru, ceramic insulators for the 450 line.
> > >
> > > I am surprised it did not go 1:1 on 20m with the 450 line.
> > >
> > > What was the approximate length of the 450 line?
> > >
> > > Does anyone have any ideas?
> > >
> > > Rich ,KDØZZ ,
> > >
> > > from the middle of Missouri , out in the sticks with the hicks
> and
> > the
> > > ticks.
> > >
> > >
> > >
> > >
> > >
> > >
> > >
> > > From: SkyWires@yahoogroups.com
> <http://us.mc324.mail.yahoo.com/mc/compose?to=SkyWires%40yahoogroups.com>
> > >
> <http://us.mc324.mail.yahoo.com/mc/compose?to=SkyWires%40yahoogroups.com>

> > [mailto:SkyWires@yahoogroups.com
> <http://us.mc324.mail.yahoo.com/mc/compose?to=SkyWires%40yahoogroups.com>
> >
> <http://us.mc324.mail.yahoo.com/mc/compose?to=SkyWires%40yahoogroups.com>
> >] On Behalf
> > > Of John
> > > Sent: Tuesday, February 22, 2011 2:30 AM
> > > To: SkyWires@yahoogroups.com
> <http://us.mc324.mail.yahoo.com/mc/compose?to=SkyWires%40yahoogroups.com>
> >
> <http://us.mc324.mail.yahoo.com/mc/compose?to=SkyWires%40yahoogroups.com>
> > > Subject: [SkyWires] Loop Feed Experiments: Results
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> > >
> > >
> > >
> > > How do your experiences relate to this:
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> > > In my backyard I have a 276 foot square loop of 18 ga. wire
> > average height
> > > 15 feet above the ground. I fed it four ways: Coaxial, 450-ohm
> > line,
> > > simply fed by bringing the two ends (tied around and into the
> two
> > holes of
> > > an insulator) into the shack (balanced wire terminals, MFJ
> window
> > panel),
> > > then using only one end of the loop connected (as in a long wire
> > antenna)
> > > with counterpoises on every band. The feeds were fed into an MFJ
> > Versa
> > > Tuner 2.
> > >
> > > These are the results (from best SWR and most tunable to biggest
> > SWR and
> > > least tunable).
> > >
> > > 1. Open-ended loop, fed like a long wire with counterpoises, but
> > working
> > > far better than a regular long wire, as it has all the
> principles
> > of the
> > > closed loop. Will even tune with the Icom 746's built-in tuner
> and
> > will
> > > tune 160 (1838 kHz) down to 1.2:1 with the outboard manual
> tuner.
> > > NB: The AH-4 puts a noise factor into the open loop and cuts way

> > down on
> > > its performance according to signal reports. (in m experience,
> any
> > manual
> > > tuner is better than any automatic tuner and gives much better
> > signal
> > > reports.)
> > >
> > > 2. The closed loop with two wire ends. Will tune all bands with
> > the
> > > exception of 160. 20 meters can be easily brought to 1:1.
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> > > 3. 450 ohm feed. 20 m (14070) can be brought down only to 1.5:1
> > >
> > > 4. Coaxial feed. Better with a 4:1 balun at the feed point than
> > with a
> > > direct connection, but still not as good as the ladder line. It
> > cannot be
> > > tuned to a lower frequency for which it is resonant (3952).
> > Manually
> > > tunable, but with very high SWR's.
> > >
> > > No virus found in this incoming message.
> > > Checked by AVG - www.avg.com
> > > Version: 9.0.872 / Virus Database: 271.1.1/3458 - Release Date:
> > 02/21/11
> > > 13:34:00
> > >
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> >
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> >
> >
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>
>

3871. Re: AW: AW: AW: [SkyWires] Loop Feed Experiments: Results

Yahoo group: SkyWires
Date: 2011-03-08 12:55:57 UTC
From: Michael Shepard
Topic: 3858 Message: 3871

Dear Sigi,

I am trying to figure out the length total. I do want to put up as much as possible. The wire I intend to use is the common power wire. It has a steel center for tensel strenght and aluminum outer wrap. I need to weigh lenght vs. return of signal reception. I will try to get a good length. Do I go multiples for 160, mid band times number of multiples. I may be able to put up as much as 2176 ft. Should this a good length for most bands? I can use a tuner if needed. I would like to have some affirmation about the lenght.

Again thank you for your help. I will try to go out and construct some steel towers to hold this wire up high.

73's n5wtr

Your friend in Texas

Mike

--- On Mon, 3/7/11, Siegfried Jackstien <siegfried.jackstien@...> wrote:

From: Siegfried Jackstien <siegfried.jackstien@...>
Subject: AW: AW: AW: [SkyWires] Loop Feed Experiments: Results
To: SkyWires@yahoogroups.com
Date: Monday, March 7, 2011, 12:34 PM

If you plan to use it on the 3 lowest bands ... put as much wire up as high as possible
On the higher bands you will have a cloverleaf pattern BUT where one of the multiple lopes go there is a lot of signal
So try it out on all bands!!!
Feed that beast with ladderline and a good tuner and you will almost never want another antenna
Dg9bfc
Sigi
Ps legsmust not be exactly symmetrical ... my deltaloop for 160 is 40/60/70m
...

> -----Ursprüngliche Nachricht-----
> Von: SkyWires@yahoogroups.com [mailto:SkyWires@yahoogroups.com] Im Auftrag
> von Michael Shepard
> Gesendet: Sonntag, 6. März 2011 07:44
> An: SkyWires@yahoogroups.com
> Betreff: Re: AW: AW: [SkyWires] Loop Feed Experiments: Results
>
>
>
> Dear Sigi......

>
> I'm about to go up with the sky wire loop....I'm trying for an all
> bands..and it can go thru a tuner if I desire...just turn the knob.. The
> idea is to get about 375 north to south leg.....and sabout 480 on west to
> east.. Hopefully I can get it up to a desirable height.
> All wires will run down hill from house and tower. this drop in height
> will be maybe 10 ft in 375 ft. not sure what I can use to get it up in
> height....Money is tight right now.
> Should I make it longer or will that help any? I can go south as much as
> 600 ft on eack leg.
> power line gets in the way near end...One friend, now a silent key said I
> may want to tunnel to the ground side near base of power line. I think
> not..what do you think....he said it makes a big ear..Love hearing from
> you guys ..I'm 60 and about to go on disability..this will be my only
> thing to do 'cept ragchew...I appogize so my fist on this key board..Guess
> I should go on to get my xtra?..I was up to 19 wpm..then someone broke the
> key and now I don't try much...I may be putting it up 2nite..73's..n5wtr
>
> --- On Fri, 2/25/11, Siegfried Jackstien <siegfried.jackstien@...>
> wrote:
>
>
>
> From: Siegfried Jackstien <siegfried.jackstien@...>
> Subject: AW: AW: [SkyWires] Loop Feed Experiments: Results
> To: SkyWires@yahoogroups.com
> Date: Friday, February 25, 2011, 5:32 AM
>
>
>
> What do you mean with full length??? For what band(s) ???
> Dg9bfc
> Sigi
>
> > -----Ursprüngliche Nachricht-----
> > Von: SkyWires@yahoogroups.com
> <http://us.mc324.mail.yahoo.com/mc/compose?to=SkyWires%40yahoogroups.com>
> [mailto:SkyWires@yahoogroups.com
> <http://us.mc324.mail.yahoo.com/mc/compose?to=SkyWires%40yahoogroups.com>
>] Im Auftrag
> > von Michael Shepard
> > Gesendet: Freitag, 25. Februar 2011 07:50
> > An: SkyWires@yahoogroups.com
> <http://us.mc324.mail.yahoo.com/mc/compose?to=SkyWires%40yahoogroups.com>
> > Betreff: Re: AW: [SkyWires] Loop Feed Experiments: Results
> >
> >
> >
> > Dear Sir,
> >

> > Thank you for your help. I may be able to set up a full length
> > Skywire. I am not sure if I should aim for the middle of the band
> when
> > making the lenght. I am also not sure if I can get it up 40-80
> feet at all
> > places and hold it very rigid. I am planning on using what most
> power
> > companies use as power transmission line. The center is a strong
> steel
> > center surrounded with aluminum. I livce out in the country and
> the only
> > one I worry about coming into contact with it would be any
> transoptation
> > vehicle at my home or visitors over 20 feet tall. Would 20 feet be
> ok? The
> > tower is 89 feet tall. I was planning on feeding it close to one
> bottom
> > corner.
> >
> > Thank you again
> >
> > Michael
> >
> > Shepard
> >
> > n5wtr
> >
> >
> > --- On Tue, 2/22/11, Siegfried Jackstien
> <siegfried.jackstien@...
> <http://us.mc324.mail.yahoo.com/mc/compose?to=siegfried.jackstien%40freene
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> > wrote:
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> > Subject: AW: [SkyWires] Loop Feed Experiments: Results
> > To: SkyWires@yahoogroups.com
> <http://us.mc324.mail.yahoo.com/mc/compose?to=SkyWires%40yahoogroups.com>
> > Date: Tuesday, February 22, 2011, 11:12 AM
> >
> >
> >
> > For that low height over ground you would need 1:1 in fundamental
> > On first harmonic 1:2 and on higher bands 1:4
> > That is what I found out here
> > I have a fullsized topbandloop fed with ladderline

> > And I use the line for transforming the low impedance up on 180
> and
> > 80 (and
> > a balun for bring that down to 50 ohms)
> > Dg9bfc
> > Sigi
> >
> > > -----Ursprüngliche Nachricht-----
> > > Von: SkyWires@yahoogroups.com
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> >
> <http://us.mc324.mail.yahoo.com/mc/compose?to=SkyWires%40yahoogroups.com>
> >] Im Auftrag
> > > von Richard Schmuke
> > > Gesendet: Dienstag, 22. Februar 2011 15:06
> > > An: SkyWires@yahoogroups.com
> <http://us.mc324.mail.yahoo.com/mc/compose?to=SkyWires%40yahoogroups.com>
> >
> <http://us.mc324.mail.yahoo.com/mc/compose?to=SkyWires%40yahoogroups.com>
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> > > The antenna was trimmed for best SWR at the middle of the 20M
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> so
> > I could
> > > use mine for 75M, my 450 feed line would be about 50 ft. I have
> a
> > homemade
> > > Lexan window pass thru, ceramic insulators for the 450 line.
> > >

> > > I am surprised it did not go 1:1 on 20m with the 450 line.
> > >
> > > What was the approximate length of the 450 line?
> > >
> > > Does anyone have any ideas?
> > >
> > > Rich ,KDØZZ ,
> > >
> > > from the middle of Missouri , out in the sticks with the hicks
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> >
> <http://us.mc324.mail.yahoo.com/mc/compose?to=SkyWires%40yahoogroups.com>
> >] On Behalf
> > > Of John
> > > Sent: Tuesday, February 22, 2011 2:30 AM
> > > To: SkyWires@yahoogroups.com
> <http://us.mc324.mail.yahoo.com/mc/compose?to=SkyWires%40yahoogroups.com>
> >
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> > > How do your experiences relate to this:
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> > > In my backyard I have a 276 foot square loop of 18 ga. wire
> > average height
> > > 15 feet above the ground. I fed it four ways: Coaxial, 450-ohm
> > line,
> > > simply fed by bringing the two ends (tied around and into the
> two
> > holes of
> > > an insulator) into the shack (balanced wire terminals, MFJ

> window
> > panel),
> > > then using only one end of the loop connected (as in a long wire
> > antenna)
> > > with counterpoises on every band. The feeds were fed into an MFJ
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> > > These are the results (from best SWR and most tunable to biggest
> > SWR and
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> > > 1. Open-ended loop, fed like a long wire with counterpoises, but
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> > of the
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> > will
> > > tune 160 (1838 kHz) down to 1.2:1 with the outboard manual
> tuner.
> > > NB: The AH-4 puts a noise factor into the open loop and cuts way
> > down on
> > > its performance according to signal reports. (in m experience,
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> > Manually
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> > > No virus found in this incoming message.
> > > Checked by AVG - www.avg.com
> > > Version: 9.0.872 / Virus Database: 271.1.1/3458 - Release Date:
> > 02/21/11
> > > 13:34:00

> > >
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> >
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>
>

3872. AW: AW: AW: AW: [SkyWires] Loop Feed Experiments: Results

Yahoo group: SkyWires
Date: 2011-03-08 21:30:01 UTC
From: Siegfried Jackstien
Topic: 3858 Message: 3872

What i do for such things is ... (made that 3 times here and some times more
for friends on other locations):
Take a google earth view (with that I have the trees in the satellite view)
Measure the length(s) between trees
Model the antenna in mmana
...
With that you can decide if you really want that big big mega loop ... or if
it is better to make it a bit shorter....
I did that modelling with my first deltaloop
I wanzed max gain in southwest direction on 40m
And with trying different setups (56/56/56 and 40/59/69) I could try where
the lobes go on the different bands ...
So what I first would do (prior to digging any hole for a pole)
Download mmana and learn how to use it
You do not need to be an expert on that
i learned how to use it just with playing around with that soft

Been there done that :-)

Greetz
Dg9bfc

Ps .... if weight is a problem (with that beast it will be) use electric
fence wire .... in summer it bends upwards if the field is very warm :-)

> -----Ursprüngliche Nachricht-----
> Von: SkyWires@yahoogroups.com [mailto:SkyWires@yahoogroups.com] Im Auftrag
> von Michael Shepard
> Gesendet: Dienstag, 8. März 2011 12:56
> An: SkyWires@yahoogroups.com
> Betreff: Re: AW: AW: AW: [SkyWires] Loop Feed Experiments: Results
>
>
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> Dear Sigi,
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> much as possible. The wire I intend to use is the common power wire. It
> has a steel center for tensel strenght and aluminum outer wrap. I need to
> weigh lenght vs. return of signal reception. I will try to get a good
> length. Do I go multiples for 160, mid band times number of multiples. I
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> most bands? I can use a tuner if needed. I would like to have some
> affirmation about the lenght.
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> Again thank you for your help. I will try to go out and construct

> some steel towers
> to hold this wire up high.
>
> 73's n5wtr
>
> Your friend in Texas
>
> Mike
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> --- On Mon, 3/7/11, Siegfried Jackstien <siegfried.jackstien@...>
> wrote:
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> From: Siegfried Jackstien <siegfried.jackstien@...>
> Subject: AW: AW: AW: [SkyWires] Loop Feed Experiments: Results
> To: SkyWires@yahoogroups.com
> Date: Monday, March 7, 2011, 12:34 PM
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> If you plan to use it on the 3 lowest bands ... put as much wire up
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> So try it out on all bands!!!
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> Dg9bfc
> Sigi
> Ps legsmust not be exactly symmetrical ... my deltaloop for 160 is
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> ...
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>] Im Auftrag
> > von Michael Shepard
> > Gesendet: Sonntag, 6. März 2011 07:44
> > An: SkyWires@yahoogroups.com
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> > Dear Sigi......
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> > I'm about to go up with the sky wire loop....I'm trying for an all
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> > idea is to get about 375 north to south leg.....and sabout 480 on
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> > not..what do you think....he said it makes a big ear..Love hearing
> from
> > you guys ..I'm 60 and about to go on disability..this will be my
> only
> > thing to do 'cept ragchew...I appogize so my fist on this key
> board..Guess
> > I should go on to get my xtra?..I was up to 19 wpm..then someone
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> > key and now I don't try much...I may be putting it up
> 2nite..73's..n5wtr
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> > --- On Fri, 2/25/11, Siegfried Jackstien
> <siegfried.jackstien@...
> <http://us.mc324.mail.yahoo.com/mc/compose?to=siegfried.jackstien%40freene
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> <http://us.mc324.mail.yahoo.com/mc/compose?to=siegfried.jackstien%40freene
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> > Subject: AW: AW: [SkyWires] Loop Feed Experiments: Results
> > To: SkyWires@yahoogroups.com
> <http://us.mc324.mail.yahoo.com/mc/compose?to=SkyWires%40yahoogroups.com>
> > Date: Friday, February 25, 2011, 5:32 AM
> >
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> >

> > What do you mean with full length??? For what band(s) ???
> > Dg9bfc
> > Sigi
> >
> > > -----Ursprüngliche Nachricht-----
> > > Von: SkyWires@yahoogroups.com
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> > [mailto:SkyWires@yahoogroups.com
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> >] Im Auftrag
> > > von Michael Shepard
> > > Gesendet: Freitag, 25. Februar 2011 07:50
> > > An: SkyWires@yahoogroups.com
> <http://us.mc324.mail.yahoo.com/mc/compose?to=SkyWires%40yahoogroups.com>
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> > >
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> band
> > when
> > > making the lenght. I am also not sure if I can get it up 40-80
> > feet at all
> > > places and hold it very rigid. I am planning on using what most
> > power
> > > companies use as power transmission line. The center is a strong
> > steel
> > > center surrounded with aluminum. I livce out in the country and
> > the only
> > > one I worry about coming into contact with it would be any
> > transoptation
> > > vehicle at my home or visitors over 20 feet tall. Would 20 feet
> be
> > ok? The
> > > tower is 89 feet tall. I was planning on feeding it close to one
> > bottom
> > > corner.
> > >
> > > Thank you again
> > >
> > > Michael

> > >
> > > Shepard
> > >
> > > n5wtr
> > >
> > >
> > > --- On Tue, 2/22/11, Siegfried Jackstien
> > <siegfried.jackstien@...
> <http://us.mc324.mail.yahoo.com/mc/compose?to=siegfried.jackstien%40freene
> t.de>
> >
> <http://us.mc324.mail.yahoo.com/mc/compose?to=siegfried.jackstien%40freene
> > t.de> >
> > > wrote:
> > >
> > >
> > >
> > > From: Siegfried Jackstien <siegfried.jackstien@...
> <http://us.mc324.mail.yahoo.com/mc/compose?to=siegfried.jackstien%40freene
> t.de>
> >
> <http://us.mc324.mail.yahoo.com/mc/compose?to=siegfried.jackstien%40freene
> > t.de> >
> > > Subject: AW: [SkyWires] Loop Feed Experiments: Results
> > > To: SkyWires@yahoogroups.com
> <http://us.mc324.mail.yahoo.com/mc/compose?to=SkyWires%40yahoogroups.com>
> >
> <http://us.mc324.mail.yahoo.com/mc/compose?to=SkyWires%40yahoogroups.com>
> > > Date: Tuesday, February 22, 2011, 11:12 AM
> > >
> > >
> > >
> > > For that low height over ground you would need 1:1 in
> fundamental
> > > On first harmonic 1:2 and on higher bands 1:4
> > > That is what I found out here
> > > I have a fullsized topbandloop fed with ladderline
> > > And I use the line for transforming the low impedance up on 180
> > and
> > > 80 (and
> > > a balun for bring that down to 50 ohms)
> > > Dg9bfc
> > > Sigi
> > >
> > > > -----Ursprüngliche Nachricht-----
> > > > Von: SkyWires@yahoogroups.com
> <http://us.mc324.mail.yahoo.com/mc/compose?to=SkyWires%40yahoogroups.com>
> >
> <http://us.mc324.mail.yahoo.com/mc/compose?to=SkyWires%40yahoogroups.com>
> > >

> >
> <http://us.mc324.mail.yahoo.com/mc/compose?to=SkyWires%40yahoogroups.com>
> > > [mailto:SkyWires@yahoogroups.com
> <http://us.mc324.mail.yahoo.com/mc/compose?to=SkyWires%40yahoogroups.com>
> >
> <http://us.mc324.mail.yahoo.com/mc/compose?to=SkyWires%40yahoogroups.com>
> > >
> >
> <http://us.mc324.mail.yahoo.com/mc/compose?to=SkyWires%40yahoogroups.com>
> > >] Im Auftrag
> > > > von Richard Schmuke
> > > > Gesendet: Dienstag, 22. Februar 2011 15:06
> > > > An: SkyWires@yahoogroups.com
> <http://us.mc324.mail.yahoo.com/mc/compose?to=SkyWires%40yahoogroups.com>
> >
> <http://us.mc324.mail.yahoo.com/mc/compose?to=SkyWires%40yahoogroups.com>
> > >
> >
> <http://us.mc324.mail.yahoo.com/mc/compose?to=SkyWires%40yahoogroups.com>
> > > > Betreff: RE: [SkyWires] Loop Feed Experiments: Results
> > > >
> > > >
> > > >
> > > > John , please keep in touch, I find this quite interesting. I
> > have
> > > a same
> > > > size loop, delta shaped, feed point 40 ft high, other two
> points
> > > about
> > > > 30ft, fed with 55 ft of Belden 8237 RG-8 and a 4:1 dual rod
> > > current balun.
> > > > The antenna was trimmed for best SWR at the middle of the 20M
> > > phone band
> > > > after installation. The way I understand it you would need a
> 2:1
> > > balun to
> > > > feed it with coax at 80/75 meters.
> > > >
> > > > I am now using a MFJ Versa tuner 3, MFJ-962D
> > > >
> > > > I have been thinking about changing to 450 ohm line this
> spring
> > so
> > > I could
> > > > use mine for 75M, my 450 feed line would be about 50 ft. I
> have
> > a
> > > homemade
> > > > Lexan window pass thru, ceramic insulators for the 450 line.
> > > >

> > > > I am surprised it did not go 1:1 on 20m with the 450 line.
> > > >
> > > > What was the approximate length of the 450 line?
> > > >
> > > > Does anyone have any ideas?
> > > >
> > > > Rich ,KDØZZ ,
> > > >
> > > > from the middle of Missouri , out in the sticks with the hicks
> > and
> > > the
> > > > ticks.
> > > >
> > > >
> > > >
> > > >
> > > >
> > > >
> > > >
> > > > From: SkyWires@yahoogroups.com
> <http://us.mc324.mail.yahoo.com/mc/compose?to=SkyWires%40yahoogroups.com>
> >
> <http://us.mc324.mail.yahoo.com/mc/compose?to=SkyWires%40yahoogroups.com>
> > >
> >
> <http://us.mc324.mail.yahoo.com/mc/compose?to=SkyWires%40yahoogroups.com>
> > > [mailto:SkyWires@yahoogroups.com
> <http://us.mc324.mail.yahoo.com/mc/compose?to=SkyWires%40yahoogroups.com>
> >
> <http://us.mc324.mail.yahoo.com/mc/compose?to=SkyWires%40yahoogroups.com>
> > >
> >
> <http://us.mc324.mail.yahoo.com/mc/compose?to=SkyWires%40yahoogroups.com>
> > >] On Behalf
> > > > Of John
> > > > Sent: Tuesday, February 22, 2011 2:30 AM
> > > > To: SkyWires@yahoogroups.com
> <http://us.mc324.mail.yahoo.com/mc/compose?to=SkyWires%40yahoogroups.com>
> >
> <http://us.mc324.mail.yahoo.com/mc/compose?to=SkyWires%40yahoogroups.com>
> > >
> >
> <http://us.mc324.mail.yahoo.com/mc/compose?to=SkyWires%40yahoogroups.com>
> > > Subject: [SkyWires] Loop Feed Experiments: Results
> > > >
> > > >
> > > >
> > > >
> > > >
> > > > How do your experiences relate to this:

> > > >
> > > > In my backyard I have a 276 foot square loop of 18 ga. wire
> > > average height
> > > > 15 feet above the ground. I fed it four ways: Coaxial, 450-ohm
> > > line,
> > > > simply fed by bringing the two ends (tied around and into the
> > two
> > > holes of
> > > > an insulator) into the shack (balanced wire terminals, MFJ
> > window
> > > panel),
> > > > then using only one end of the loop connected (as in a long
> wire
> > > antenna)
> > > > with counterpoises on every band. The feeds were fed into an
> MFJ
> > > Versa
> > > > Tuner 2.
> > > >
> > > > These are the results (from best SWR and most tunable to
> biggest
> > > SWR and
> > > > least tunable).
> > > >
> > > > 1. Open-ended loop, fed like a long wire with counterpoises,
> but
> > > working
> > > > far better than a regular long wire, as it has all the
> > principles
> > > of the
> > > > closed loop. Will even tune with the Icom 746's built-in tuner
> > and
> > > will
> > > > tune 160 (1838 kHz) down to 1.2:1 with the outboard manual
> > tuner.
> > > > NB: The AH-4 puts a noise factor into the open loop and cuts
> way
> > > down on
> > > > its performance according to signal reports. (in m experience,
> > any
> > > manual
> > > > tuner is better than any automatic tuner and gives much better
> > > signal
> > > > reports.)
> > > >
> > > > 2. The closed loop with two wire ends. Will tune all bands
> with
> > > the
> > > > exception of 160. 20 meters can be easily brought to 1:1.
> > > >

> > > > 3. 450 ohm feed. 20 m (14070) can be brought down only to
> 1.5:1
> > > >
> > > > 4. Coaxial feed. Better with a 4:1 balun at the feed point
> than
> > > with a
> > > > direct connection, but still not as good as the ladder line.
> It
> > > cannot be
> > > > tuned to a lower frequency for which it is resonant (3952).
> > > Manually
> > > > tunable, but with very high SWR's.
> > > >
> > > > No virus found in this incoming message.
> > > > Checked by AVG - www.avg.com
> > > > Version: 9.0.872 / Virus Database: 271.1.1/3458 - Release
> Date:
> > > 02/21/11
> > > > 13:34:00
> > > >
> > > >
> > >
> > >
> > >
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> > >
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> >
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>
>

3873. PUTTING UP 160M LOOP IN WV

Yahoo group: SkyWires
Date: 2011-03-15 01:54:32 UTC
From: James
Topic: 3873 Message: 3873

IM NEW TO THE GROUP (AND IM NOT SHOUTING, JUST A LOUSY TYPER).
IM PUTTING UP A LOOP FER 160 AS SOON AS THE WEATHER AND SPARE TIME WILL ALLOW.
HAVE LOTS OF TREES AND SPACE UP THE HILL BEHIND MY HOUSE.
FROM ROUGH MEASUREMENTS IT LOOKS LIKE THE LOOP WILL BE ABOUT 700 FEET AROUND.
JUST WONDERING IF THE ADDITIONAL LENGTH WILL MAKE THE LOOP HARD FOR THE TUNER AND OR WILL MAKE THE PATTERN LESS USEFUL ON THE HIGHER BANDS.
I PLAN TO FEED WITH 450 OHM LINE AND HOMEBREW LINK TUNER.
ANY EXPERIENCES THE GROUP HAS WITH THIS SITUATION WOULD BE HELPFUL.ANY SUGGESTIONS?
THANKS,KZ8K,JIM.

3874. Re: PUTTING UP 160M LOOP IN WV

Yahoo group: SkyWires
Date: 2011-03-15 19:57:53 UTC
From: Aaron
Topic: 3873 Message: 3874

Jim,

My loop is cut towards the bottom of 160. I feed it with about 35' of 450 to a balun designs 4:1 and then coax to the shack. My ft-950's internal tuner will get it on any band. Anyways my point is if you get it setup right for multiband the harmonics should be close. The 700' seems a bit big and should be resonant roughly around 400 kHz below the band.

If you are going for multiband with as much wire you can get up then give it a shot. Should work fine as long as the tuner can handle the impedences

Aaron
KD4GSL

--- In SkyWires@yahoogroups.com, "James" <hamkz8j@...> wrote:
>
> IM NEW TO THE GROUP (AND IM NOT SHOUTING, JUST A LOUSY TYPER).
> IM PUTTING UP A LOOP FER 160 AS SOON AS THE WEATHER AND SPARE TIME WILL ALLOW.
> HAVE LOTS OF TREES AND SPACE UP THE HILL BEHIND MY HOUSE.
> FROM ROUGH MEASUREMENTS IT LOOKS LIKE THE LOOP WILL BE ABOUT 700 FEET AROUND.
> JUST WONDERING IF THE ADDITIONAL LENGTH WILL MAKE THE LOOP HARD FOR THE TUNER AND OR WILL MAKE THE PATTERN LESS USEFUL ON THE HIGHER BANDS.
> I PLAN TO FEED WITH 450 OHM LINE AND HOMEBREW LINK TUNER.
> ANY EXPERIENCES THE GROUP HAS WITH THIS SITUATION WOULD BE HELPFUL.ANY SUGGESTIONS?
> THANKS,KZ8K,JIM.
>

3875. Super loop

Yahoo group: SkyWires
Date: 2011-03-15 22:07:26 UTC
From: ei5gub
Topic: 3875 Message: 3875

Hello all,im new here,Id like to build a Super Loop antenna like the 1 Radio works have,and would like to know if anyone knows the lenght of the 2 wires coming down to the Balun,Pythagorous therom says a little over 65 feet,can anyone help please

3876. Re: Super loop

Yahoo group: SkyWires
Date: 2011-03-17 02:02:38 UTC
From: Dr.Ace Ratliff
Topic: 3875 Message: 3876

See
http://replay.waybackmachine.org/20090222232502/http://www.bloomington.in.us/~wh2t/Super%20Loop%20Antenna.htm

--
Dr.Ace Ratliff
www.WH2T.com

3877. RE: [SkyWires] Re: Super loop

Yahoo group: SkyWires
Date: 2011-03-17 17:57:09 UTC
From: Brian Burns
Topic: 3875 Message: 3877
Attachments: 2 described; binary payloads are missing from this source WARC

Sorry Doc. That link is not working.

Cheers,

Brian Burns

From: SkyWires@yahoogroups.com [mailto:SkyWires@yahoogroups.com] On Behalf Of Dr.Ace Ratliff
Sent: Wednesday, March 16, 2011 7:03 PM
To: SkyWires@yahoogroups.com
Subject: [SkyWires] Re: Super loop

See

http://replay.waybackmachine.org/20090222232502/http://www.bloomington.in.us/~wh2t/Super%20Loop%20Antenna.htm <http://replay.waybackmachine.org/20090222232502/http:/www.bloomington.in.us/~wh2t/Super%20Loop%20Antenna.htm>

--
Dr.Ace Ratliff
www.WH2T.com

3878. Re: [SkyWires] Re: Super loop

Yahoo group: SkyWires
Date: 2011-03-17 19:52:28 UTC
From: Dr.Ace Ratliff
Topic: 3875 Message: 3878

Brian,
Keep trying the page works sometimes
Ace

On Thu, Mar 17, 2011 at 12:57 PM, Brian Burns <burnsguitar@...> wrote:

>
>
> Sorry Doc. That link is not working.
>
>
>
> Cheers,
>
>
>
> Brian Burns
>
>
>
> *From:* SkyWires@yahoogroups.com [mailto:SkyWires@yahoogroups.com] *On
> Behalf Of *Dr.Ace Ratliff
> *Sent:* Wednesday, March 16, 2011 7:03 PM
> *To:* SkyWires@yahoogroups.com
> *Subject:* [SkyWires] Re: Super loop
>
>
>
>
>
> See
>
>
> http://replay.waybackmachine.org/20090222232502/http://www.bloomington.in.us/~wh2t/Super
%20Loop%20Antenna.htm<http://replay.waybackmachine.org/20090222232502/http:/www.bloomingto
n.in.us/~wh2t/Super%20Loop%20Antenna.htm>
>
> --
> Dr.Ace Ratliff
> www.WH2T.com <http://www.wh2t.com/>
>
>
>

3879. Re: [SkyWires] Re: Super loop

Yahoo group: SkyWires
Date: 2011-03-17 20:04:33 UTC
From: Ken Burchfield
Topic: 3875 Message: 3879

Doc, your page does work must have:
Patients
Thanks
73 Ken

 PacketRadio is Still Alive.......Mississippi.......145.010.......Simplex.......1200 Baud

--- On Thu, 3/17/11, Dr.Ace Ratliff <Ace@...> wrote:

From: Dr.Ace Ratliff <Ace@...>
Subject: Re: [SkyWires] Re: Super loop
To: SkyWires@yahoogroups.com
Date: Thursday, March 17, 2011, 2:52 PM

Brian,
 Keep trying the page works sometimes
Ace

On Thu, Mar 17, 2011 at 12:57 PM, Brian Burns <burnsguitar@...> wrote:

Sorry Doc. That link is not working.

Cheers,

Brian Burns

From: SkyWires@yahoogroups.com [mailto:SkyWires@yahoogroups.com] On Behalf Of Dr.Ace Ratliff

Sent: Wednesday, March 16, 2011 7:03 PM
To: SkyWires@yahoogroups.com
Subject: [SkyWires] Re: Super loop

See

http://replay.waybackmachine.org/20090222232502/http://www.bloomington.in.us/~wh2t/Super%20Loop%20Antenna.htm

--
Dr.Ace Ratliff
www.WH2T.com

3880. Dr. Ace's Multi-Band Super Mini Loop Antenna

Yahoo group: SkyWires
Date: 2011-03-17 20:53:58 UTC
From: Marian Anghel
Topic: 3880 Message: 3880
Attachments: 1 described; binary payloads are missing from this source WARC

From WH2T - Dr. Ace's Multi-Band Super Mini Loop Antenna

Here's how to make the "Super" antenna.
To build this antenna you need a lot that is at least 100 feet across.
(This can be on a diagonal).
Antenna covers all bands 80-10 meters + 30, 17, 12 meter WARC Bands
This antenna works as a Full Wave Loop on 80 Meters and also works as a 2 wavelength open loop or Bi-Square on the 40 Meter band.
The gain is around 4 dBd on 40 mtrs, but it will seem much higher due to
the very low angle, radiation pattern.
Any antenna tuned for 80 Meters should also work on 20 and 10 meters as
well. If an antenna works on 40 it should work on 15 as well. A tuner
will probably be needed for 10, 18 and 24 MHz Band operations.
The loop is an inverted vertical triangle with the base
along the top and what would be the apex hanging down. Or it could be
erected horizontally if needed.
The feed point at the bottom uses a 3:1 or 4:1 balun and is then fed with any needed length of 50 ohm coax.
The top center is broken with an insulator and has a 29 feet 10 inch length of 450 ohm ladder line connected across the
insulator.

IMPORTANT - The 450 ohm ladder line is shorted across at the bottom end.

Here is how I calculated the loop size.
Dimensions -
One wavelength at say 7.25 MHz = 1005/7.25 = 138.62 or 138 feet 7.5 inches.
If this length is doubled and used on 80 meters as a loop
Then Freq(for a loop) = 1005/(2 x 138.62) = 3.625 MHz.
The 1/4 wave stub = 246 multiplied by (Velocity Factor of your type of ladder line) /7.25 = about 32 feet.
Ladder line / twin lead velocity factors vary by brand, type, insulation, etc.
The best method is to use a grid dip oscillator or antenna analyzer to
measure the resonant frequency of the 1/4 wave matching stub during
construction, rather than by just using the mathematical formula to
determine the length.

The perimeter of the 80 meter loop for 3.625 MHz = 277.24 - (2 x 29’ 10”)[2 x 29.86 feet = the length of both sides of the wire in the
ladder line]
= 217.52 ft. Let’s call it 217.5 feet.
If the top horizontal span is made 99.5 feet overall and the legs 59 feet each then the balun will hang about 30.5 ft below the top
center insulator.

The 29’ 10” ladder line can have its bottom - shorted end - tied to the
top of the balun with a short length of fishing line, weed eater line,
string, or cord etc.
On 40 meters the ladder line stub automatically acts as a
switch and opens the connection across the insulator so the antenna
works as 2 one wave length loops fed in phase.
This antenna is a high performance, full size, full wave, 80m loop antenna.
On 40m it is a 2 wave length open loop or Bi-Square.
The stub in the top leg of the antenna opens the loop when operating on 40m and selected other bands.
This improves the antennas radiation pattern.
Its gain is around 4dB, but it will seem a lot higher due to its excellent, low angle, radiation pattern.
The 50 Ohm coax from the balun to transmatch is not critical but recommended to be 1/2 wave length.
(99 Feet of RG-8X)
This antenna could also be configured as a 54’ 4.5” square
on a horizontal plane. The 217.5 ft loop can be pulled into almost any
shape but the bigger the “aperture” enclosed area the better it will
work.
I have NOT tried this experimental design yet. I believe my calculations are correct and should work.
I have heard rumors that something similar to this
Multi-Band loop antenna is available commercially
as a "Super Loop" from R a d i o W o r k s.

UPDATE
The antenna has been built and tested by Don / K8THU.
Here are excerpts from emails I got from Don in Nov, 2005
Hi Ace,
The stub needed to be longer than you quoted.
{Page info has been updated to longer stub}
The other measurements are exactly as you stated.
The antenna is resonant at 7.21 so I could shorten it slightly but have not done so.
I just was on 20 and worked N. Ireland and France again both with 5/8 reports.
I am using just 100 watts with my Kenwood 570 and the internal tuner.
Locally on ground wave on 75 meters I am getting 20 over 9 reports on distances about 300+ miles.
Don, K8THU
Hi Ace,
Ok, on Saturday we removed the 1/4 wave stub and found it was too short so we changed it and then pruned it
until the stub was resonant at 7.25. I did not alter the loop size other than the stub length.
Then we reassembled the whole antenna and found with the extra stub length the overall antenna resonant frequency was 7.21 Mhz.
so I left it there for now and began SWR testing.
The SWR readings are after the stub lengthening.
Ladder line is 14 ga. stranded and the other line is also 14 ga. stranded and insulated

(thnn?).
VSWR Measurement Results follow:
3.995 Mhz / SWR 1.1 to 1
3.751 Mhz / SWR 2 to 1
7.164 Mhz / SWR 1.1 to 1
7.290 Mhz / SWR 1.2 to 1
14.151 Mhz / SWR 1.3 to 1
14.348 Mhz / SWR 1.7 to 1
21.250 Mhz / SWR 2 to 1
21.441 Mhz / SWR 2.5 to 1
24.932 Mhz / SWR 3.5 to 1
24.987 Mhz / can't load
28.331 Mhz / SWR 3 to 1
29.650 Mhz / can't load
Usually I can't load on 10 meters.
40 and 20 are really quite good. Even 15 isn't too bad.
Don, K8THU
End of excerpts from emails.

3881. Questions about 80 meter fullwave loop

Yahoo group: SkyWires
Date: 2011-03-20 20:50:14 UTC
From: N H
Topic: 3881 Message: 3881

All,

I have been a subscriber for awhile, but I am just now getting ready to try out my first loop.

It will be cut as a fullwave loop for the low end of 80m (CW portion), and fed with around 100ft of 450 ohm ladder line. On the shack end, it will connect to a 4:1 balun, and then to a tuner with a match range of around 10:1. It will be a horizontal delta, up about 60ft or so.

I have a couple of questions.

1) Can I expect to be able to use this loop on 60 - 10 meters? If not, what bands would not work?

2) How about 160? Any chance it might tune up there also?

Thanks

Nathan
AB2ZU

3882. Re: Questions about 80 meter fullwave loop

Yahoo group: SkyWires
Date: 2011-03-20 21:34:22 UTC
From: Alan Wilson
Topic: 3881 Message: 3882

It probably tune all bands above 80 easily. You might be able to tune it on 160 but don't expect much..I had an 80m loop and increased the length to almost resonance in the 160 band. It tunes everything from 160-6 meters. I have a rough spot on lower 75 m band but it tune with patience..good luck, Alan

3883. AW: [SkyWires] Questions about 80 meter fullwave loop

Yahoo group: SkyWires
Date: 2011-03-21 10:46:30 UTC
From: Siegfried Jackstien
Topic: 3881 Message: 3883

You can maybe ad a remote switch opposide of feedingpoint and use the loop on 160 as "bent" dipole .... a friend had the same problem ... only room for 80m loop .... he made the feeding outside in the backyard ... so that the other side of the delta is close to the house (actually it was about a few feet from his window) .... so with a jumper he could close or open the loop ... that also effects lobes on the higher bands (he told me) ... so sometimes on 40 or 20m he closes the switch and sometimes it is open.... On funsamental frequency (80) the impedance of the loop will be way lower as on the higher bands ...

> -----Ursprüngliche Nachricht-----
> Von: SkyWires@yahoogroups.com [mailto:SkyWires@yahoogroups.com] Im Auftrag
> von N H
> Gesendet: Sonntag, 20. März 2011 20:50
> An: SkyWires@yahoogroups.com
> Betreff: [SkyWires] Questions about 80 meter fullwave loop
>
>
>
> All,
>
> I have been a subscriber for awhile, but I am just now getting ready to
> try out my first loop.
>
> It will be cut as a fullwave loop for the low end of 80m (CW portion),
> and fed with around 100ft of 450 ohm ladder line. On the shack end, it
> will connect to a 4:1 balun, and then to a tuner with a match range of
> around 10:1. It will be a horizontal delta, up about 60ft or so.
>
> I have a couple of questions.
>
> 1) Can I expect to be able to use this loop on 60 - 10 meters? If not,
> what bands would not work?
>
> 2) How about 160? Any chance it might tune up there also?
>
> Thanks
>
> Nathan
> AB2ZU
>
>
>
>

3884. Re: Questions about 80 meter fullwave loop

Yahoo group: SkyWires
Date: 2011-03-21 15:34:41 UTC
From: Thomas F. Giella NZ4O
Topic: 3881 Message: 3884

Your 80 meter full wave loop should work up through 10 meters. But as you will using a BALUN and tee network tuner you may have some frequencies that are hard to tune and apply full output power too due to complex reactance's/high voltages. You may also get some RFI in the shack.

I have a 300 foot long loop up in a square configuration and supported 35 feet up at each corner, fed with approximately 45 feet of 450 ohm window line and it tunes 80-10 perfectly with no touchiness or RFI. However I use a balanced link coupled Johnson Viking Matchbox tuner and that's the best way to go for an all band loop.

The antenna will not work on 160 meters because it's an RF shorted out half wave on that band and just a big air cooled dummy load. However if you let one end of the window line float then you will have an end fed horizontal wire that will work well as a high angle radiator out to approximately 800 miles. But as you are using coax between the BALUN and tuner you can't do that.

73 & GUD DX,
Thomas F. Giella, NZ4O
Lakeland, FL, USA
nz4o@...

NZ4O Amateur & SWL Autobiography: http://www.nz4o.org
NZ4O Solar Space Weather & Geomagnetic Data Archive:
http://www.solarcycle24data.org
NZ4O HF/6M Radiowave Propagation Forecast: http://www.solarcycle24.org

3885. Opinions please

Yahoo group: SkyWires
Date: 2011-03-27 15:23:23 UTC
From: ke6vhm
Topic: 3885 Message: 3885

Good day to you all. My lot will easily allow for a 558 ft loop (1160M). Actually there is more than that, but I dont want to go around the front yard. Room for about 592 ft goes all the way around the back yard, pool, house and part of the driveway, I will cut this back to the 558ft. This will be a rectangle (137+142x2=558) fed in the middle of one of the 142ft runs with ladder line. I am thinking of 24 ft off the ground and feed will be almost straight down to shack, I can make it straight if what will be better.

Havent decided on how run the feed into house yet.
Three options I figure.

1. Ladder line all the way to the Dentron Super Tuner through a window escushion made out of Corion counter top material (this is already in the sliding glass window and all the current coax leads and my ground goes through here) then coax to rig

2. Ladder line all the way to the wall below the sliding glass window then through the wall with porcelen insulators then continue the ladder line to the tuner coax to rig

3. Ladder line to a balun (if i do this what ratio of a balun?) to coax to Dentrom super tuner

4. you tell me

So your opinions please. Specific question I would like answered since the area (WxL) is determined by area available are these.

1. Will the feed going to the middle of one of the flat sides instead of a corner adversly effect the antenna in any way?

2. Which feed system would work the best? Now worried about how to dodo this - just which one?

3. Is there anything wrong with the 24' elevation?

4. Should I worry about the feed line going perfectly straight or would a small amgle be ok?

I will be running

Kenwood TS520 or Icom706 probabally 100 to 600 watts

If you need anymore info let me know

73 de Frank KE6VHM
Woodcrest CA

3886. Re: [SkyWires] Opinions please

Yahoo group: SkyWires
Date: 2011-03-27 15:56:17 UTC
From: DR Don
Topic: 3885 Message: 3886

Feeding in the center instead of a corner will have little effect, some minor shift of the lobes. The Dentron tuner uses a balun IIRC. I would keep any coax to a minimum as some freqs will produce high voltages at the end of the feedline and increase losses. I use a Dentron MT3000 now with a 4 to one balun feeding ladderline to a 176 foot dipole.
When I finish my house on 3000 SQ meters of land I will have a 160 loop up also. A run of ladder line to the house, slight leaning but no sharp turns, to the 4 to 1 balun under the eve of the roof and short coax to the tuner. I will use 10 meter long bamboo poles to support the loop.
The house sits on a hill about 60 feet above the lower flat ground. So in the prevailing direction of the loop I will be about 30 feet at the distal (far) side and 90 feet at the proximal (house) side. The far side wil be to the NNE from the house. That should hit most of NA and Europe with main lobe.
From all I read and experiences of others, I believe you should have no problem on the higher frequencies with a fairly low takeoff angle. On 160 and 80 it will be a NVIS but still offer some DX opportunities.
So GO FOR IT!

Don HC4/W4BWS

----- Original Message -----
From: ke6vhm
To: SkyWires@yahoogroups.com
Sent: Sunday, March 27, 2011 10:23 AM
Subject: [SkyWires] Opinions please

Good day to you all. My lot will easily allow for a 558 ft loop (1160M). Actually there is more than that, but I dont want to go around the front yard. Room for about 592 ft goes all the way around the back yard, pool, house and part of the driveway, I will cut this back to the 558ft. This will be a rectangle (137+142x2=558) fed in the middle of one of the 142ft runs with ladder line. I am thinking of 24 ft off the ground and feed will be almost straight down to shack, I can make it straight if what will be better.

Havent decided on how run the feed into house yet.
Three options I figure.

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4. Should I worry about the feed line going perfectly straight
or would a small amgle be ok?

I will be running

Kenwood TS520 or Icom706 probabally 100 to 600 watts

If you need anymore info let me know

73 de Frank KE6VHM
Woodcrest CA

3887. Re: Opinions please

Yahoo group: SkyWires
Date: 2011-04-05 23:28:14 UTC
From: ke6vhm
Topic: 3885 Message: 3887

My plan is to run the ladderline direct to the tuner and a very short run of coax to the rig. the feed line will be approx 22 feet long to the tuner and almost straight down, there will be a small turn to get in inside the house. I shouldn't need a balun outside since there is one in the tuner. Right?

Don - you mentioned a "balun IIRC" What does that acronim stand for please.

Thanks in advance for any answers to these.

Here are my original questions.

> 1. Ladder line all the way to the Dentron Super Tuner through
> a window escushion made out of Corion counter top material
> (this is already in the sliding glass window and all the
> current coax leads and my ground goes through here) then
> coax to rig
>
> 2. Ladder line all the way to the wall below the sliding glass
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>
> 3. Is there anything wrong with the 24' elevation?
>
> 4. Should I worry about the feed line going perfectly straight
> or would a small amgle be ok?
>
> I will be running
>
> Kenwood TS520 or Icom706 probabally 100 to 600 watts
>
> If you need anymore info let me know
>

> 73 de Frank KE6VHM
> Woodcrest CA
>

3888. Re: [SkyWires] Re: Opinions please

Yahoo group: SkyWires
Date: 2011-04-06 03:19:28 UTC
From: DR Don
Topic: 3885 Message: 3888

The acronim IIRC stands for "If I Remember Correctly".Yes you should be good- to-go with your plan if there is a balun in your tuner.
Don HC4/W4BWS

----- Original Message -----
From: ke6vhm
To: SkyWires@yahoogroups.com
Sent: Tuesday, April 05, 2011 6:28 PM
Subject: [SkyWires] Re: Opinions please

My plan is to run the ladderline direct to the tuner and a very short run of coax to the rig. the feed line will be approx 22 feet long to the tuner and almost straight down, there will be a small turn to get in inside the house. I shouldn't need a balun outside since there is one in the tuner. Right?

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> window then through the wall with porcelen insulators then
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> to do this - just which one?
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>
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>
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>
> Kenwood TS520 or Icom706 probabally 100 to 600 watts
>
> If you need anymore info let me know
>
> 73 de Frank KE6VHM
> Woodcrest CA
>

3893. PUTTING UP 160M LOOP IN WV

Yahoo group: SkyWires
Date: 2011-04-10 23:18:28 UTC
From: James
Topic: 3893 Message: 3893

An update on the loop project WEST VIRGINIA....the loop is up, and doing great.Started out with 570 feet total, up about 40 feet.After a frequency and reactance sweep , the loop showed to be too long....with a zero reactance at about 1700 khz ,I decided to shorten it about 30 feet.
Possible due to the vynl coating of the 12 guage stranded wire or due to the back side of the loop being only 30 feet up, the formula of 1005/freq. was off a bit.
After removing 30 feet (and having to change two support positions),another sweep of frequency vs reactance was done.
Now the loop has a zero reactance at 1800 khz ,3630 khz,7270 khz,14500,and 27500 khz.(dont have much use for the last one.)
NOW TO THE QUESTION FOR THE GROUP....
Although the reactance is zero at those frequencys,due to loop radiation resistance the SWR varies from about 2.5 on 160m to about 7.0 on 20 m.
Would it be acceptable to feed with coax and the small loss increases due to the mismatch ??
The feed line is only about 60 feet long of RG-8U.
Any input or advice would be appreciated.
thanks,de KZ8Jim.

3894. Re: [SkyWires] PUTTING UP 160M LOOP IN WV

Yahoo group: SkyWires
Date: 2011-04-11 00:25:56 UTC
From: donsno@frontier.com
Topic: 3894 Message: 3894
Attachments: 2 described; binary payloads are missing from this source WARC

[Attachment content not displayed]

3895. Re: PUTTING UP 160M LOOP IN WV

Yahoo group: SkyWires
Date: 2011-04-11 00:43:31 UTC
From: James
Topic: 3894 Message: 3895

Thanks don for the reply...well loops ARE resonant just like any tuned circuit.
There are cyclic values of reactance and radiation resistance....they are not a rhombic type antenna.
If one can establish a desirable zero reactance frequency , at all harmonics of that frequency another zero reactance will occure.
While a tuner .is a wonderfully useful device, i prefer to make it as easy as possible for it to do its job.
As the frequency goes up the loop radiation resistance goes up...swr increases and matching can get harder.
Having a large value of reactance with this swr just makes things more difficult for marginal tuners, such as internal or external auto tuners.
While one can simply ignore all this, i prefer not to.Thanks.
73 de KZ8Jim.

--- In SkyWires@yahoogroups.com, "donsno@..." <donsno@...> wrote:
>
> Hi James...
>
> I consider large loops like ours to be non-resonant multi-band tuned circuits best fed with ladder line direct to a tuner in the shack.
>
> More at http://WWW.k4qky.com/amateur-radio.com
>
> 73,
>
> Don
>
> kg9om
>
> - Sent from Don's HTC Thunderbolt
>
> ----- Reply message -----
> From: "James" <hamkz8j@...>
> To: <SkyWires@yahoogroups.com>
> Subject: [SkyWires] PUTTING UP 160M LOOP IN WV
> Date: Sun, Apr 10, 2011 6:18 pm
> An update on the loop project WEST VIRGINIA....the loop is up, and doing great.Started out with 570 feet total, up about 40 feet.After a frequency and reactance sweep , the loop showed to be too long....with a zero reactance at about 1700 khz ,I decided to shorten it about 30 feet.
>
> Possible due to the vynl coating of the 12 guage stranded wire or due to the back side of the loop being only 30 feet up, the formula of 1005/freq. was off a bit.
>
> After removing 30 feet (and having to change two support positions),another sweep of

frequency vs reactance was done.
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> Now the loop has a zero reactance at 1800 khz ,3630 khz,7270 khz,14500,and 27500 khz.(dont have much use for the last one.)
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> Although the reactance is zero at those frequencys,due to loop radiation resistance the SWR varies from about 2.5 on 160m to about 7.0 on 20 m.
>
> Would it be acceptable to feed with coax and the small loss increases due to the mismatch ??
>
> The feed line is only about 60 feet long of RG-8U.
>
> Any input or advice would be appreciated.
>
> thanks,de KZ8Jim.
>

3896. Will It Work?

Yahoo group: SkyWires
Date: 2011-04-11 20:20:35 UTC
From: Doug Fitts
Topic: 3896 Message: 3896

I am a newbie to the list, was suggested to install a Skywire Loop antenna as opposed to a G5RV I had planned to install. I did the research and will later do an exact dimension/measurement on my property later this afternoon. My notes tell me that this antenna is a full wavelength in most cases cut to the 80-meter band using the 1005/freq formula. for all band operation [10-80 meters].

The height of my single story house is about 18 feet at the highest point [middle] according to the limited house floor plans I have. The best I can do [if necessary] is put up a monopole at 15-20 feet at each corner with, two poles high enough to clear the roof at the north end of the house, each leg running about 56 feet in wire length in a square configuration. I have no trees on my property and a HOA spy team to contend with every now and then. So stealth is the name of my game as best as possible.

The equipment I have to play with is a Kenwood TS-440S and TS-520S HF radios, a Dentron "Super" tuner, a decent ground system leading into the shack and a Bird wattmeter in the line, eventually. Any suggestion on the above, will the dimensions work at the over all length of 224 feet [square]?

73

Doug W7FDF
Vail Arizona U.S.A.

3897. Re: [SkyWires] Will It Work?

Yahoo group: SkyWires
Date: 2011-04-11 20:48:31 UTC
From: Adrian Flynn
Topic: 3896 Message: 3897

On Mon, Apr 11, 2011 at 4:20 PM, Doug Fitts <w7fdf@...> wrote:

>
>
> . I have no trees on my property and a HOA spy team to contend with every
> now and then. So stealth is the name of my game as best as possible.
>
Unless my recollections is faulty (It might be) the last time I was in the
Vail area (1998 when we rebuilt the Grand Canyon Airport and kept it open
for normal operation at the same time AND most of the roads in Vail area
also) it was a wide spot in the road to the Grand Canyon, When did it get
high fa looting enough to have a dad blamed *HOA*?

> , a decent ground system leading into the shack .
>
>
>
How do you get a decent ground system with the water table 5000 feet below
ground?
Last I knew there were 2 wells in that area one owned by a motel?
I wish you luck keeping it hidden, might help to use TAN electrical wire so
it blends in with a artistic touch of green paint here and there, until the
birds find it to roost on.

>
> 73
>
> Doug W7FDF
> Vail Arizona U.S.A.
>
> __·_·_·
>
>
> --
> *73
> Adrian KF7DYU*
> *EX AZ *resident as of 3/2011
>
>

3898. Re: Will It Work?

Yahoo group: SkyWires
Date: 2011-04-11 21:55:40 UTC
From: Doug Fitts
Topic: 3896 Message: 3898

1998?...been a long time since you've been out this way to be sure. Vail Arizona [a suburb of Tucson] has really built up quite a bit with several new "sub-divisions" in my area, mine included. We moved here in September 2004. Water table at 5K depth? Not aware of that but, my ground rod is down over 10 feet [long story how it got that far]. With a 20M dipole up and my TS-520S wired in with the tuner, I have no issues with tuning on 20-meters.

So at some point I will put up a new Skywire Loop or an equiv. Yes, out here the HOA is "the boss" when it comes to certain aspects of our community. I have not approached them to put up any antenna in almost seven years and do not plan too!

--- In SkyWires@yahoogroups.com, Adrian Flynn <ADRIANJAMESFLYNN@...> wrote:
Unless my recollections is faulty (It might be) the last time I was in the Vail area (1998 when we rebuilt the Grand Canyon Airport and kept it open for normal operation at the same time AND most of the roads in Vail area also) it was a wide spot in the road to the Grand Canyon, When did it get high fa looting enough to have a dad blamed *HOA*?.....How do you get a decent ground system with the water table 5000 feet below ground? Last I knew there were 2 wells in that area one owned by a motel? I wish you luck keeping it hidden, might help to use TAN electrical wire so it blends in with a artistic touch of green paint here and there, until the birds find it to roost on.

3899. Re: Will It Work?

Yahoo group: SkyWires
Date: 2011-04-11 22:06:58 UTC
From: Doug Fitts
Topic: 3896 Message: 3899

I noticed your callsign on this list as K7SVU. Looking it up on the QRZ website it shows no record. However when I plug in your new callsign [below], I see you recently got a new license and callsign and living in another state. Curious why you vacated our beautiful climate out here?

Doug W7FDF

--- In SkyWires@yahoogroups.com, Adrian Flynn <ADRIANJAMESFLYNN@...> wrote:

Adrian KF7DYU*
*EX AZ *resident as of 3/2011

3900. Re: Will It Work?

Yahoo group: SkyWires
Date: 2011-04-11 22:13:02 UTC
From: Doug Fitts
Topic: 3896 Message: 3900

Correction....K7SVA. I recently had a cataract procedure on the right eye a couple of weeks ago and about to have the left eye "tuned up" this coming Thursday. I have Law & Order: SVU on the braincells for some reason...one of my favorite television shows. Think I will break for some lunch.

--- In SkyWires@yahoogroups.com, "Doug Fitts" <w7fdf@...> wrote:
>
>
>
> I noticed your callsign on this list as K7SVU. Looking it up on...

3901. Re: [SkyWires] Re: Will It Work?

Yahoo group: SkyWires
Date: 2011-04-12 01:54:40 UTC
From: Adrian Flynn
Topic: 3896 Message: 3901

I can breath in MI!
I originally moved to Phoenix, AZ in 1952 from PA as I could not breath there due to asthma.
I spent the next 30 or so years in the valley more than 80% of the time.
I then moved to Holbrook for the same reason I moved to AZ, and the same reason I just moved to Lansing, MI.
I am on O2 24/7/365 in MI 2 LPM in AZ just before I moved in March I was on 5 LPM and could not walk across the room without being short of breath. Here in MI I can walk around all I want, do LIGHT physical work and enjoy my 2 1/2 Month Granddaughter!
I hope to see her grow up but with 5 stents, on my second pacemaker/defibrillator, type 1 diabetes, COPD, Sleep Apnea, Nerves dying for diabetes, in both legs and one arm well I don't think I have much chance.
K7SVA is what my call would have been if I had upgraded from KN7SVA if you find a 1963 to 1965 callbook it should be in it as I got it in late 1963. Of course at that time you could not renew a Novice license and Girls got in the way.
Got my Tech in 09 and I hope to find an exam site I can get to here in MI. (I don't drive anymore) And I am thinking of going to K7SVA for vanity.

As for Vail I am thinking of the one north of Williams on the road to the Grand Canyon, it is at the junction of (AZ 180?) to Flagstaff.
It has a planes of fame air museum and a "Flintstones" tourist trap. The Air Museum has Gen Douglas MacArthur's personal "Super Constellation" on display.

So I only made a 350 mile error, that is almost as good as Google Maps for where I use to live in Sun Valley 10 miles east of Holbrook.
If you google sun valley AZ you will end up in "Star Valley" 15 miles East of Payson, but if you google "Navajo Sun Valley, AZ" you will find where I use to live. An error of 100 miles! and it only took me 6 years of fighting with google to get that far but they still will not remove the error.

You ought to be having real nice weather about now, we are running for 25 at night to 80 days and all over the place in between which is about the same as Sun Valley, AZ although they got MUCH colder than MI did this winter they hit -30°F for almost 2 weeks in December at night and maybe 20°F Days.

Good luck on your Stealth Antenna Project.

--
*73
Adrian KF7DYU*

On Mon, Apr 11, 2011 at 6:06 PM, Doug Fitts <w7fdf@...> wrote:

>
>
>
>
> I noticed your callsign on this list as K7SVU. Looking it up on the QRZ
> website it shows no record. However when I plug in your new callsign
> [below], I see you recently got a new license and callsign and living in
> another state. Curious why you vacated our beautiful climate out here?
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> Doug W7FDF
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> --- In SkyWires@yahoogroups.com, Adrian Flynn <ADRIANJAMESFLYNN@...>
> wrote:
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> Adrian KF7DYU*
> *EX AZ *resident as of 3/2011
>
>
>

3902. Re: Will It Work?

Yahoo group: SkyWires
Date: 2011-04-12 02:55:16 UTC
From: Doug Fitts
Topic: 3896 Message: 3902

WOW...looking at the map you are right smack dap in the middle of Michigan and only a few miles from "Motor City" [Detroit]! We have a few things in common Adrian. I am also from the east coast ["Nu Yak"] as my Boston friends say it. Born in Manhattan, went to high school in Da Bronx, got my Ham tix in 1959 as a young snotty nosed skinny kid with an attitude. That was 50+ years ago.

Today I am a type II diabetic on oral meds with high blood pressure now over 10 years, quit smoking 15+ years ago and gained a bunch of weight and holding on. Drove a city of Tucson bus for over 15 years until I retired April 10th 2009. I think it was the stress dealing with the public that got my BP elevated. Us "old geezers" [I'm age 67+] and you are only 3 years behind me.....have our good days and bad days to be sure. I am beginning to get the loss of feeling/tingling in the feet so things are changing.

Antennas....to get back/stay on topic.

I have a 20-meter dipole almost up and connected. We had rain all weekend so that stopped me from completing the antenna project. I am very interested in this Skywire Loop antenna arrangement but not sure if my property and "attitudes" of the "HOA Police" can handle the addition.

So far I've got no complaints from the neighbors and HOA people with my VHF and UHF antennas and other "stealth" antennas but, I do get once in a great while a written "notice" to cut the weeds in the front yard. Other then that I'd love to put up a 50 foot Rohn tower, a full size HF yagi and attach a couple of inverted V antennas to the tower but sadly....

Not in this life time!

However Adrian, I will look carefully at this Skywire Loop deal and see how best to install one. So far I've read that it out performs a typical dipole in many cases and that is interesting.

Its now 7:45pm PDT so its time for some chow and the wife just got home from the saltmines so I need to hold her hand for a few minutes and see how her day was. Will be in touch amigo.....73

Doug W7FDF

PS: congrats on the 2.5 month old granddaughter. I have four teenage/semi adult/think their grown grands through my son [3] and oldest daughter [1] in Florida and Georgia and I think we may have another grand "in the oven" with my youngest daughter in Seattle in the coming months.

--- In SkyWires@yahoogroups.com, Adrian Flynn <ADRIANJAMESFLYNN@...> wrote:
>
> I can breath in MI!
> I originally moved to Phoenix, AZ in 1952 from PA as I could not breath there due to

asthma.
> I spent the next 30 or so years in the valley more than 80% of the time. I then moved to Holbrook for the same reason I moved to AZ, and the same reason I just moved to Lansing, MI.
> I am on O2 24/7/365 in MI 2 LPM in AZ just before I moved in March I was on 5 LPM and could not walk across the room without being short of breath. Here in MI I can walk around all I want, do LIGHT physical work and enjoy my 2-1/2 Month Granddaughter!
> I hope to see her grow up but with 5 stents, on my second
> pacemaker/defibrillator, type 1 diabetes, COPD, Sleep Apnea, Nerves dying for diabetes, in both legs and one arm well I don't think I have much chance.
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>
> Good luck on your Stealth Antenna Project...*73 Adrian KF7DYU*

3903. AW: [SkyWires] Will It Work?

Yahoo group: SkyWires
Date: 2011-04-12 11:17:58 UTC
From: Siegfried Jackstien
Topic: 3896 Message: 3903

Fed via ladderline it will work 10-80
If you do not close the loop (or make a switch on other side) you can use it on 160 as a "bent" dipole (better as nothing on 160) ...
The lobes on the higher bands will change if you open or close the swizch (but can be tuned on the higher bands in both cases)
So no room for 160 loop?
Make an 80m loop with a switch ... fed via laderline
Hope that helps...
Dg9bfc
Sigi
Ps YES it will work :-)

> -----Ursprüngliche Nachricht-----
> Von: SkyWires@yahoogroups.com [mailto:SkyWires@yahoogroups.com] Im Auftrag
> von Doug Fitts
> Gesendet: Montag, 11. April 2011 20:21
> An: SkyWires@yahoogroups.com
> Betreff: [SkyWires] Will It Work?
>
>
>
> I am a newbie to the list, was suggested to install a Skywire Loop antenna
> as opposed to a G5RV I had planned to install. I did the research and will
> later do an exact dimension/measurement on my property later this
> afternoon. My notes tell me that this antenna is a full wavelength in most
> cases cut to the 80-meter band using the 1005/freq formula. for all band
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>
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> [middle] according to the limited house floor plans I have. The best I can
> do [if necessary] is put up a monopole at 15-20 feet at each corner with,
> two poles high enough to clear the roof at the north end of the house,
> each leg running about 56 feet in wire length in a square configuration. I
> have no trees on my property and a HOA spy team to contend with every now
> and then. So stealth is the name of my game as best as possible.
>
> The equipment I have to play with is a Kenwood TS-440S and TS-520S HF
> radios, a Dentron "Super" tuner, a decent ground system leading into the
> shack and a Bird wattmeter in the line, eventually. Any suggestion on the
> above, will the dimensions work at the over all length of 224 feet
> [square]?
>
> 73
>
> Doug W7FDF

> Vail Arizona U.S.A.
>
>
>
>

3904. Re: [SkyWires] Re: Will It Work?

Yahoo group: SkyWires
Date: 2011-04-12 13:44:29 UTC
From: Adrian Flynn
Topic: 3896 Message: 3904

On Mon, Apr 11, 2011 at 10:55 PM, Doug Fitts <w7fdf@...> wrote:

>
>
> WOW...looking at the map you are right smack dap in the middle of Michigan (AKA
> MI. swamps per locals) and only a few miles from "Motor City" [Detroit]!
> We have a few things in common Adrian. I am also from the east coast ["Nu
> Yak"] as my Boston friends say it. Born in Manhattan, went to high school in
> Da Bronx, got my Ham tix in 1959 as a young snotty nosed skinny kid with an
> attitude. That was 50+ years ago.
>
I was born in Erie, right on the lake. A great many of my early memories are
of standing in a hospital bed in a ward full of babies like me crying my
eyes out and looking out the windows at the fog on the lake at night.

>
> Today I am a type II diabetic on oral meds with high blood pressure
>

I also have high BP.

> now over 10 years, quit smoking 15+ years ago
>
>
>
I quit in 1991 3 packs a day to none in 2 days.

> and gained a bunch of weight and holding on. Drove a city of Tucson bus
>
>
>
I drove school bus for Holbrook schools for 5 years and on Friday nights I
would run down I-40 to the NM / AZ state line taking dormitory students home
it was only 90 miles each way!
I had the living **** scared out of me on one trip just past the petrified
forest as a gust of wind hit the bus. Blew the air door wide open blew both
roof hatches wide open,.....and PICKED THE BUS UP AND SET IT DOWN IN THE
LEFT LANE FROM THE RIGHT LANE! There were 2 cars in the left lane and how
they missed me I don't know as I was along for the ride!

> for over 15 years until I retired April 10th 2009. I think it was the
> stress dealing with the public that got my BP elevated. Us "old geezers"
> [I'm age 67+] and you are only 3 years behind me.....have our good days and
> bad days to be sure. I am beginning to get the loss of feeling/tingling in
> the feet so things are changing.
>

The first main sign I got of the dying nerves was it felt like my socks had bunched up under my foot.

>
> Antennas....to get back/stay on topic.
>
> I have a 20-meter dipole almost up and connected. We had rain all weekend
> so that stopped me from completing the antenna project. I am very interested
> in this Skywire Loop antenna arrangement but not sure if my property and
> "attitudes" of the "HOA Police" can handle the addition.
>
Like I said in my first post it might help to use "tan" colored electrical wire 14 Ga or 12 Ga, you can normally find it at a commercial electric supplier in either solid or stranded.

So far I've got no complaints from the neighbors and HOA people with my VHF and UHF antennas and other "stealth" antennas but, I do get once in a great while a written "notice" to cut the weeds in the front yard. Other then that I'd love to put up a 50 foot Rohn tower, a full size HF yagi and attach a couple of inverted V antennas to the tower but sadly....
I don't have any antennas up here yet we are still unpacking and cleaning as this place was not ready like it was suppose to be and we may be moving again soon if some things don't get done fast! We are going to have a talk with the owner today when he comes over. Found out he is not renting this place legally by MI laws LOL.

I would love to put up a tower and such also but on a disability income that is "Not in this life time!" as you say.

Not in this life time!

I do hope to have a MOPA completed and my SX-129X ready by the time I take my general next month (Some place some how)

However Adrian, I will look carefully at this Skywire Loop deal and see how best to install one. So far I've read that it out performs a typical dipole in many cases and that is interesting.
I think a friend of mine that lives east of Holbrook has one of them up, K7JDL Jeff Lineberry (He and I took our techs at the same time both missed one question and the same NUMBER on the test but we had different tests! He took his Gen last year (I was suppose to go with him but I was in the Hosp having a failed pacemaker replaced) and on that one he scored 100%
Its now 7:45pm PDT so its time for some chow and the wife just got home from the saltmines so I need to hold her hand for a few minutes and see how her day was. Will be in touch amigo.....73

Doug W7FDF

PS: congrats on the 2.5 month old granddaughter. I have four teenage/semi adult/think their grown grands through my son [3] and oldest daughter [1] in Florida and Georgia and I think we may have another grand "in the oven" with my youngest daughter in Seattle in the coming months.

This is my wife's first and my fourth (That is 2 more books) and we are as proud as can be which is normal but never decreases

I will keep in touch with you and as soon as I have my general and an antenna up will try to contact you.

>
>
> --
> *73
> Adrian KF7DYU*
>
>

3905. Re: Will It Work?

Yahoo group: SkyWires
Date: 2011-04-13 02:23:52 UTC
From: kp4md
Topic: 3896 Message: 3905

Hi Doug,
I'm also transplanted from NY, born in NY Hospital on York Ave, raised in the NE Bronx, licensed in 1970, I loved to visit Barry Electronics before I moved out of NY in 1976.. it was terrible how he died in that boating accident. Was also active duty Navy MC 83-87, then reserves till 91 and in Navy MARS.
I am very satisfied using a Loop Skywire in a motor home park in Northern California. I don't have room for a full 80 meter loop either, so I made mine 140 feet for 40 meters. It performs very efficiently on the harmonics, but less so off the resonant frequencies. I feed mine with a length of speaker wire to keep it stealthy.
Photos, sketches and all details of testing and results are posted on web page http://www.qsl.net/kp4md/kp4mdnec2.htm <http://www.qsl.net/kp4md/kp4mdnec2.htm> if you are curious. Everyone has their own preferred version of this antenna, but for me the Skywire beats any fan dipole or vertical I've ever used.
Carol, KP4MD/W6

--- In SkyWires@yahoogroups.com, "Doug Fitts" <w7fdf@...> wrote:
>
> WOW...looking at the map you are right smack dap in the middle of Michigan and only a few miles from "Motor City" [Detroit]! We have a few things in common Adrian. I am also from the east coast ["Nu Yak"] as my Boston friends say it. Born in Manhattan, went to high school in Da Bronx, got my Ham tix in 1959 as a young snotty nosed skinny kid with an attitude. That was 50+ years ago.

3906. Re: Will It Work?

Yahoo group: SkyWires
Date: 2011-04-13 02:57:45 UTC
From: Doug Fitts
Topic: 3896 Message: 3906

Well, as they say, "We Are All From Somewhere Else!!". I just looked at your link on the Skywire Loop antenna Carol and especially the construction aspect. I cannot wait to really sit down and look over all of the information presented.

Right now dinner [that I cooked] is ready, the wife just got home from her "place of economic worship", so we need to hold hands and partake of what is commonly called....chow! Thanks nonetheless for your input in this regard.

73

Doug W7FDF

PS: I know New York Hospital very well, on York Avenue [on the east side of Manhattan]. My wife's nephew worked out of that facility as a MD in training. Also, I worked from 1968-1973 [just after I got out of the Navy] at The Rockefeller University [I am sure you know the institution] right down the street on York Avenue and 66th Street. So many years ago and strong, positive memories at that location to be sure.

--- In SkyWires@yahoogroups.com, "kp4md" <kp4md@...> wrote:
>
> Hi Doug,
> I'm also transplanted from NY, born in NY Hospital on York Ave, raised in the NE Bronx, licensed in 1970, I loved to visit Barry Electronics before I moved out of.... NY in 1976..

3909. (no subject)

Yahoo group: SkyWires
Date: 2011-04-21 12:34:16 UTC
From: Pam
Topic: 3909 Message: 3909

this has nothing to do with ham radio is this the kind of thing you allow here?

3910. RE: [SkyWires] (unknown)

Yahoo group: SkyWires
Date: 2011-04-21 14:38:31 UTC
From: Richard Schmuke
Topic: 3909 Message: 3910
Attachments: 2 described; binary payloads are missing from this source WARC

Pam , I am not the owner of this list but someone on this list has their e-mail hi-jacked and this is the results. It is not allowed but hard to stop on any group. It is not the fault of the list moderator and owner.

Rich , Kd0zz

From: SkyWires@yahoogroups.com [mailto:SkyWires@yahoogroups.com] On Behalf Of Pam
Sent: Thursday, April 21, 2011 7:34 AM
To: SkyWires@yahoogroups.com
Subject: [SkyWires] (unknown)

this has nothing to do with ham radio is this the kind of thing you allow here?

3911. Balun

Yahoo group: SkyWires
Date: 2011-04-21 15:13:05 UTC
From: Richard Schmuke
Topic: 3911 Message: 3911

I made a 4:1 Guanella current balun last year, used PVC pipe and caps , worked great at first. Then after the last contest I noticed the SWR was off above 40M. I took it down and replaced it with a extra voltage balun I had. Cut open and of course destroyed the balun, it had condensation in it .
I made a new balun , with SS eye bolts and hardware, added two 1/16 drain/vent holes in the bottom , installed it in a PVC box with a removable cover. The packing is a closed cell foam so it won't hold moisture. Pictures of the new one are at.
http://s1102.photobucket.com/albums/g453/KD0ZZ/

Rich , KDØZZ , ☺

These are the humble ramblings of an old phart and in no way should they influence the actions of any intelligent and sane person

3914. newcomer

Yahoo group: SkyWires
Date: 2011-04-22 09:25:27 UTC
From: Ronald Bogaert
Topic: 3914 Message: 3914

hello guys,

I just joined this group but this is not what I am looking for really ("find spicy hookers in your neighbourhood" etc...)

Looks like this site is hacked ?

73 de Ronald, ON4BBQ

(" I fly because it releases my mind from the tyranny of petty things."
~Antoine de Saint-Exupéry)

3915. RE: [SkyWires] newcomer

Yahoo group: SkyWires
Date: 2011-04-22 09:31:19 UTC
From: Michael Weinstock
Topic: 3914 Message: 3915

Hi Ronald,

There is the occasional annoying email like this, but most emails are on the topic of interest, horizontal loops.

Totally up to you, but I prefer to hit the delete button occasionally rather than not follow a topic that interests me.

73 de Michael, VK3EMJ

-----Original Message-----
From: SkyWires@yahoogroups.com [mailto:SkyWires@yahoogroups.com]On Behalf Of Ronald Bogaert
Sent: Friday, 22 April 2011 7:25 PM
To: SkyWires@yahoogroups.com
Subject: [SkyWires] newcomer

hello guys,

I just joined this group but this is not what I am looking for really ("find spicy hookers in your neighbourhood" etc...)

Looks like this site is hacked ?

73 de Ronald, ON4BBQ

(" I fly because it releases my mind from the tyranny of petty things." ~Antoine de Saint-Exup?ry)

3917. RE: [SkyWires] newcomer

Yahoo group: SkyWires
Date: 2011-04-22 12:40:52 UTC
From: David Shrum
Topic: 3914 Message: 3917

This happens because the original group owner went/is AWOL and apparently forgot his password to get back in if he wanted to and left the current moderators without the ability to change the group so it would require approval to join; so anyone can join, post what they want and leave if they want. That happened this last time. All we can do it delete the unwanted post and ban the offender for the next time, but all they would have to do is change their user name and . You see where that□s going.

There is another group, LoopSkyWire where the group owner IS present and allows his moderators more control, and if you join you will have to be approved so that greatly slows down the hit and run posters like what just happened.

Dave N8PU

co-moderator of both groups

From: SkyWires@yahoogroups.com [mailto:SkyWires@yahoogroups.com] On Behalf Of Michael Weinstock
Sent: Friday, April 22, 2011 5:31 AM
To: SkyWires@yahoogroups.com
Subject: RE: [SkyWires] newcomer

Hi Ronald,

There is the occasional annoying email like this, but most emails are on the topic of interest, horizontal loops.

Totally up to you, but I prefer to hit the delete button occasionally rather than not follow a topic that interests me.

73 de Michael, VK3EMJ

-----Original Message-----
From: SkyWires@yahoogroups.com [mailto:SkyWires@yahoogroups.com]On Behalf Of Ronald Bogaert
Sent: Friday, 22 April 2011 7:25 PM
To: SkyWires@yahoogroups.com
Subject: [SkyWires] newcomer

hello guys,

I just joined this group but this is not what I am looking for really ("find spicy hookers in your neighbourhood" etc...)

Looks like this site is hacked ?

73 de Ronald, ON4BBQ

(" I fly because it releases my mind from the tyranny of petty things."
~Antoine de Saint-Exupéry)

No virus found in this message.
Checked by AVG - www.avg.com
Version: 10.0.1321 / Virus Database: 1500/3589 - Release Date: 04/21/11

3920. Re: newcomer

Yahoo group: SkyWires
Date: 2011-04-23 10:25:46 UTC
From: ON4BBQ
Topic: 3914 Message: 3920

hello Michael,

I will do as you say and hit the delete button occasionally.

Thanks for your reply.

73 de Ronald, ON4BBQ

--- In SkyWires@yahoogroups.com, "Michael Weinstock" <mweinstock@...> wrote:
>
> Hi Ronald,
>
> There is the occasional annoying email like this, but most emails are on the
> topic of interest, horizontal loops.
>
> Totally up to you, but I prefer to hit the delete button occasionally rather
> than not follow a topic that interests me.
>
> 73 de Michael, VK3EMJ
>
>
> -----Original Message-----
> From: SkyWires@yahoogroups.com [mailto:SkyWires@yahoogroups.com]On Behalf
> Of Ronald Bogaert
> Sent: Friday, 22 April 2011 7:25 PM
> To: SkyWires@yahoogroups.com
> Subject: [SkyWires] newcomer
>
>
>
>
> hello guys,
>
> I just joined this group but this is not what I am looking for really (
> "find spicy hookers in your neighbourhood" etc...)
>
> Looks like this site is hacked ?
>
> 73 de Ronald, ON4BBQ
>
>
>
>
> (" I fly because it releases my mind from the tyranny of petty things."
> ~Antoine de Saint-Exupéry)
>

3921. Re: newcomer

Yahoo group: SkyWires
Date: 2011-04-23 10:27:56 UTC
From: ON4BBQ
Topic: 3914 Message: 3921

hello Dave,

thanks for your reply. I will stay put here as well but in meantime I put in a request to join the group that you mentioned.

73 de Ronald, ON4BBQ

--- In SkyWires@yahoogroups.com, "David Shrum" <dave.n8pu@...> wrote:
>
> This happens because the original group owner went/is AWOL and apparently
> forgot his password to get back in if he wanted to and left the current
> moderators without the ability to change the group so it would require
> approval to join; so anyone can join, post what they want and leave if they
> want. That happened this last time. All we can do it delete the unwanted
> post and ban the offender for the next time, but all they would have to do
> is change their user name and . You see where that's going.
>
>
>
> There is another group, LoopSkyWire where the group owner IS present and
> allows his moderators more control, and if you join you will have to be
> approved so that greatly slows down the hit and run posters like what just
> happened.
>
>
>
> Dave N8PU
>
> co-moderator of both groups
>
>
>
> From: SkyWires@yahoogroups.com [mailto:SkyWires@yahoogroups.com] On Behalf
> Of Michael Weinstock
> Sent: Friday, April 22, 2011 5:31 AM
> To: SkyWires@yahoogroups.com
> Subject: RE: [SkyWires] newcomer
>
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>

> Hi Ronald,
>
>
>
> There is the occasional annoying email like this, but most emails are on the
> topic of interest, horizontal loops.
>
>
>
> Totally up to you, but I prefer to hit the delete button occasionally rather
> than not follow a topic that interests me.
>
>
>
> 73 de Michael, VK3EMJ
>
>
>
>
>
> -----Original Message-----
> From: SkyWires@yahoogroups.com [mailto:SkyWires@yahoogroups.com]On Behalf Of
> Ronald Bogaert
> Sent: Friday, 22 April 2011 7:25 PM
> To: SkyWires@yahoogroups.com
> Subject: [SkyWires] newcomer
>
>
>
> hello guys,
>
>
>
> I just joined this group but this is not what I am looking for really (
> "find spicy hookers in your neighbourhood" etc...)
>
>
>
> Looks like this site is hacked ?
>
>
>
> 73 de Ronald, ON4BBQ
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>
> (" I fly because it releases my mind from the tyranny of petty things."
> ~Antoine de Saint-Exupéry)
>
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> _____
>
> No virus found in this message.
> Checked by AVG - www.avg.com
> Version: 10.0.1321 / Virus Database: 1500/3589 - Release Date: 04/21/11
>

3930. New Balun Question

Yahoo group: SkyWires
Date: 2011-04-26 15:50:28 UTC
From: Richard Schmuke
Topic: 3930 Message: 3930

Over the weekend I took some SWR reading with my MFJ-259 for my friend K2HT on his newly erected 80M loop. It is installed with newly purchased but old style W2AU balun. It has great readings on 20 thru 80m. This should not be, so I did some research on the W2AU single rod type balun. Thru the years many people have worked with this balun but it has its faults. In W2FMI's book he tracks the drop off of impedance change as the frequency declines. The balun is a good 4:1 at about 5MHz and above but drops down to a 2:1 around 75/80M. Now the 80M loop comes into play it is a 100 Ohm antenna on 80M and a 200 Ohm on 40,20 &15. Well the "defective" balun fills the bill for matching with a run of 50 Ohm coax. The W2AU balun is made with 1/2 dia ferrite rod and 14ga wire. So I whipped out some 1/2 ferrite rod and magnet wire and made one the same style. I do not seem to get the impedance differential change I was hoping for. I moved the center resonate of the balun from 3 MHz (11 bifilar turns) thru 10 MHz (6 B turns) but could not get the 2:1 at lower frequencies. Has anyone else played around with baluns, I just can't bring myself to buy one to try it.

Rich , KDØZZ , ☺

These are the humble ramblings of an old phart and in no way should they influence the actions of any intelligent and sane person

3931. RE:] New Balun Question

Yahoo group: SkyWires
Date: 2011-04-28 03:12:39 UTC
From: Richard Schmuke
Topic: 3931 Message: 3931
Attachments: 2 described; binary payloads are missing from this source WARC

Don , WN9V put me on to some good reference material on baluns so I guess I will set the 4:1 rod type aside for today. The http://www.dxengineering.com/TechInfo.asp web site noted that a loop is better off with 300 Ohm line than 450 so I made a mount for 300 Ohm to my loop and will try it when the rain stops. Pictures at http://s1102.photobucket.com/albums/g453/KD0ZZ/ Listed as 300 Ohm Dipole

Rich , Kd0zz

Subject: Re: [Antenna_Builders] New Balun Question

Rich,

Thank you for sharing your findings. There is no
substitute for actually trying things as you have done.

To supplement what your experimental results, there is
a lot to be learned in the group of articles "Baluns
and Feedline Chokes" at

http://www.dxengineering.com/TechArticles.asp?ID={F83E1548-CC69-4C10-A037-5C47A4B645C2}

he even goes into baluns applied to various types of
loops.

You may wish to look over the author's other works
under "technical articles"

http://www.dxengineering.com/TechInfo.asp

Look around his articles and you will find
recommendations for feedline lengths, a factor that is
often overlooked.

WN9V
Don Wittlich

----- Original Message -----
From: "Richard Schmuke" <rdj@... <mailto:rdj%40wildblue.net> >
To: "Richard Schmuke" <rdj@wildblue.net <mailto:rdj%40wildblue.net> >
Sent: Tuesday, April 26, 2011 10:50 AM
Subject: [Antenna_Builders] New Balun Question

Over the weekend I took some SWR reading with my
MFJ-259 for my friend K2HT on his newly erected 80M
loop. It is installed with newly purchased but old
style W2AU balun. It has great readings on 20 thru 80m.
This should not be, so I did some research on the W2AU

single rod type balun. Thru the years many people have worked with this balun but it has its faults. In W2FMI's book he tracks the drop off of impedance change as the frequency declines. The balun is a good 4:1 at about 5MHz and above but drops down to a 2:1 around 75/80M. Now the 80M loop comes into play it is a 100 Ohm antenna on 80M and a 200 Ohm on 40,20 &15. Well the "defective" balun fills the bill for matching with a run of 50 Ohm coax. The W2AU balun is made with 1/2 dia ferrite rod and 14ga wire. So I whipped out some 1/2 ferrite rod and magnet wire and made one the same style. I do not seem to get the impedance differential change I was hoping for. I moved the center resonate of the balun from 3 MHz (11 bifilar turns) thru 10 MHz (6 B turns) but could not get the 2:1 at lower frequencies. Has anyone else played around with baluns, I just can't bring myself to buy one to try it.

Rich , KDØZZ , ☺

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influence the actions of any intelligent and sane person

Yahoo! Groups Links

3932. Quick Change Dipole

Yahoo group: SkyWires
Date: 2011-05-07 15:59:33 UTC
From: Richard Schmuke
Topic: 3932 Message: 3932

I like to change and play with antennas. I am getting ready to hoist up a 80/40M dipole but with my mind there is no telling what I will try next week. It is a problem running out into the tall grass sometimes and doing a adjustment at the ends. In the summer I get a lot of chiggers so I made the center of my dipole into a quick change with a couple of split bolts. I can drop the center support and do not have to unsolder and re-solder. If that is not clear I added three new pictures at http://s1102.photobucket.com/albums/g453/KD0ZZ/

Rich , KDØZZ , ☺

3933. Re:] New Balun Question

Yahoo group: SkyWires
Date: 2011-05-09 21:26:23 UTC
From: James
Topic: 3931 Message: 3933

I have the late W2FMI's book and take what he says as gospel. It certainly does go against a lot of what folks put on the internet. He did back his work up with actual experiments instead of just winding a few wires on a toroid or rod and thinking it worked great. According to his book a lot of what the "experts" tell us is not true.

3934. RE: [SkyWires] Re:] New Balun Question

Yahoo group: SkyWires
Date: 2011-05-09 23:37:08 UTC
From: Richard Schmuke
Topic: 3931 Message: 3934
Attachments: 2 described; binary payloads are missing from this source WARC

James , I also refer to Jerry Sevick's book's as my main reference. A week ago or so I wrote about a check I was doing on my friends 80M loop, with a W2AU 4:1 rod type balun using a MFJ259 and found good readings on 80M as well as above. In W2FMI's book , Understanding , Building and Using Balun, on page 32, figure 7-4 he shows a chart where the rod type balun drops off in impedance below 40M. So it would work with a 200ohm antenna at 7+ and a 100ohm antenna at 3.5MHz. I tried to duplicate this with different tries of a single rod balun. I got more even readings so I did not get the same results as he did. It was made on a ½ dia rod the same size as W2FMI and W2AU used , I will try some 10mm rod stock next try and change spacing between the adjacent bifilar turns. His books are my guide also but I do enjoy winding a few wires now and then.

Rich ,KDØZZ , ☺

from the middle of Missouri , out in the sticks with the hicks and the ticks.

From: SkyWires@yahoogroups.com [mailto:SkyWires@yahoogroups.com] On Behalf Of James
Sent: Monday, May 09, 2011 4:26 PM
To: SkyWires@yahoogroups.com
Subject: [SkyWires] Re:] New Balun Question

I have the late W2FMI's book and take what he says as gospel. It certainly does go against a lot of what folks put on the internet. He did back his work up with actual experiments instead of just winding a few wires on a toroid or rod and thinking it worked great. According to his book a lot of what the "experts" tell us is not true.

3935. Re:] New Balun Question

Yahoo group: SkyWires
Date: 2011-05-10 18:19:13 UTC
From: Dr.Ace Ratliff
Topic: 3931 Message: 3935

I thought you guys might like this info
http://classic-web.archive.org/web/20080429021037/www.bloomington.in.us/~wh2t/balun.html
73, Ace

--
Dr.Ace Ratliff
www.WH2T.com

3936. Correct balun type - voltage or current?

Yahoo group: SkyWires
Date: 2011-05-24 15:17:56 UTC
From: Mac
Topic: 3936 Message: 3936

What is the proper type balun for my application, 4:1 Current balun or 4:1 Voltage balun?

I have a full wave 80m skyloop (~ 287' #12ga AL fence wire) fed via (~35') 450ohm ladder line. Prior to entering the shack, the ladder line is coiled into a 9" loop of 3-4 turns (as an RF choke), then hooked to a 4:1 voltage balun. From there, I have a 3' piece of coax that enters the shack and connects to my antenna tuner.

In researching baluns lately, I'm a little concerned I have the wrong type balun in my setup (voltage vs. current). Additionally, I read one article that advocated NOT coiling ladder line as an RF choke - so, I'm a bit confused.

Any help and comment greatly appreciated.

Mac / K6OVI

3937. Re: [SkyWires] Correct balun type - voltage or current?

Yahoo group: SkyWires
Date: 2011-05-24 15:43:06 UTC
From: DR Don
Topic: 3936 Message: 3937

Mac, Take the coil out of the ladder line. Take about 20 feet of coax and wind in on a form of 4 to 6 inches diameter. Attach the ladderline to one end and the coax to the matchbox on the other end. The coil of coax will hopefully keep the RF off the coax into the station. I have operated loops and flattop antennas this way with good results multiband.
Dr Don HC4/W4BWS
----- Original Message -----
From: Mac
To: SkyWires@yahoogroups.com
Sent: Tuesday, May 24, 2011 10:17 AM
Subject: [SkyWires] Correct balun type - voltage or current?

What is the proper type balun for my application, 4:1 Current balun or 4:1 Voltage balun?

I have a full wave 80m skyloop (~ 287' #12ga AL fence wire) fed via (~35') 450ohm ladder line. Prior to entering the shack, the ladder line is coiled into a 9" loop of 3-4 turns (as an RF choke), then hooked to a 4:1 voltage balun. From there, I have a 3' piece of coax that enters the shack and connects to my antenna tuner.

In researching baluns lately, I'm a little concerned I have the wrong type balun in my setup (voltage vs. current). Additionally, I read one article that advocated NOT coiling ladder line as an RF choke - so, I'm a bit confused.

Any help and comment greatly appreciated.

Mac / K6OVI

3938. Re: Correct balun type - voltage or current?

Yahoo group: SkyWires
Date: 2011-05-25 14:31:17 UTC
From: kp4md
Topic: 3936 Message: 3938

Dear Mac,

I agree with Dr Don. The coil of coaxial cable he describes is a choke that serves as a Guanella-type 1:1 current balun. Voltage baluns become lossy and fail to keep RF off your transmission line when an antenna is not symmetrically balanced or when an antenna is operated away from its resonant frequency. Current baluns are superior under these conditions.

I've written about my experience with these at
<http://www.qsl.net/kp4md/kp4mdnec2.htm#balun>
http://www.qsl.net/kp4md/kp4mdnec2.htm#balun
<http://www.qsl.net/kp4md/kp4mdnec2.htm#balun> and have links to the following references posted on that web page.

Carol KP4MD/W6

1. " <http://www.eznec.com/Amateur/Articles/Baluns.pdf>
<http://www.eznec.com/Amateur/Articles/Baluns.pdf>
<http://www.eznec.com/Amateur/Articles/Baluns.pdf>
<http://www.eznec.com/Amateur/Articles/Baluns.pdf>
<http://www.eznec.com/Amateur/Articles/Baluns.pdf> Baluns: What They Do And How They Do It <http://www.eznec.com/Amateur/Articles/Baluns.pdf> ", Lewallen, R, W7EL, ARRL Antenna Compendium, Vol. 1, 1985, pp. 157-164.
http://www.eznec.com/Amateur/Articles/Baluns.pdf
<http://www.eznec.com/Amateur/Articles/Baluns.pdf>
2. "
<http://www.yccc.org/Articles/W1HIS/CommonModeChokesW1HIS2006Apr06.pdf>
Common-Mode Chokes
<http://www.yccc.org/Articles/W1HIS/CommonModeChokesW1HIS2006Apr06.pdf>
", Counselman C, W1HIS
http://www.yccc.org/Articles/W1HIS/CommonModeChokesW1HIS2006Apr06.pdf
<http://www.yccc.org/Articles/W1HIS/CommonModeChokesW1HIS2006Apr06.pdf>
3. " <http://www.audiosystemsgroup.com/RFI-Ham.pdf> A Ham's Guide to RFI, Ferrites, Baluns, and Audio Interfacing
<http://www.audiosystemsgroup.com/RFI-Ham.pdf> ", Brown J, K9YC
http://www.audiosystemsgroup.com/RFI-Ham.pdf
<http://www.audiosystemsgroup.com/RFI-Ham.pdf>
4. "Novel Matching Systems for High Frequencies", Guanella, G, Brown-Boverie Review, Vol 31, September 1944, pp. 327-329.
--- In SkyWires@yahoogroups.com, "DR Don" <w4bws1@...> wrote:
>
> Mac, Take the coil out of the ladder line. Take about 20 feet of coax and wind in on a form of 4 to 6 inches diameter. Attach the ladderline to one end and the coax to the matchbox on the other end. The coil of coax will hopefully keep the RF off the coax into the station.
> I have operated loops and flattop antennas this way with good results

multiband.
> Dr Don HC4/W4BWS
> ----- Original Message -----
> From: Mac
> To: SkyWires@yahoogroups.com
> Sent: Tuesday, May 24, 2011 10:17 AM
> Subject: [SkyWires] Correct balun type - voltage or current?
>
>
>
> What is the proper type balun for my application, 4:1 Current balun
or 4:1 Voltage balun?
>
> I have a full wave 80m skyloop (~ 287' #12ga AL fence wire) fed via
(~35') 450ohm ladder line. Prior to entering the shack, the ladder line
is coiled into a 9" loop of 3-4 turns (as an RF choke), then hooked to a
4:1 voltage balun. From there, I have a 3' piece of coax that enters the
shack and connects to my antenna tuner.
>
> In researching baluns lately, I'm a little concerned I have the
wrong type balun in my setup (voltage vs. current). Additionally, I read
one article that advocated NOT coiling ladder line as an RF choke - so,
I'm a bit confused.
>
> Any help and comment greatly appreciated.
>
> Mac / K6OVI
>

3939. need help

Yahoo group: SkyWires
Date: 2011-06-03 14:31:27 UTC
From: Michael Maxey
Topic: 3939 Message: 3939

i just bought a newer mobile home shingled roof shed etc here my trouble no antennas allowed i do see flagpoles from porches i have shed i can go to the roof at night i need antenna ideas please mike

3940. Re: need help

Yahoo group: SkyWires
Date: 2011-06-07 17:48:50 UTC
From: Aaron
Topic: 3939 Message: 3940

Mike,

Are you wanting to make make something or get a commercial antenna?

Also not sure of you lot size which could be an issue with ground radials. So if you limited to a vertical antenna with no radials that proposes another problem but not unachievable. In which case you need no think about a small end-fed antenna.

Something like this...
http://cgi.ebay.com/ULTIMAX100-END-FED-HF-ANTENNA-6-80-METERS-1500W-PEP-/270730925072?pt=LH_DefaultDomain_0&hash=item3f08d21410#ht_1892wt_857

I dont think thats worth buying but but it gives you a general idea. I'm pretty sure its just a wire attached to a 4:1 or 9:1 UNUN

Put the wire inside a fiberglass mast and away you go. On the flip side Zero-Five make a "No Radial" Vertical as well which seem to be getting fairly good reviews.

http://www.zerofive-antennas.com/content/multiband-foldover-10-40-meter-24-foot-no-radial-stealth-vertical-hoa-and-deed-restricted-ha

Anywas there are my thought... still up for debate.

Aaron
KD4GSL
--- In SkyWires@yahoogroups.com, "Michael Maxey" <mikekristenisiah4life@...> wrote:
>
> i just bought a newer mobile home shingled roof shed etc here my trouble no antennas allowed i do see flagpoles from porches i have shed i can go to the roof at night i need antenna ideas please mike
>

3941. Re: need help

Yahoo group: SkyWires
Date: 2011-06-10 06:50:25 UTC
From: Paul
Topic: 3939 Message: 3941

I hope this isn't too OT but because you mentioned flag poles, I thought I read that in 1996 the FCC passed a law that a person is allowed to have a TV antenna on a mast and that right supersedes any HOA rules or CC&Rs, as long as the Antenna is no more than 12 Ft above the roof line. And the person must, as much as possible, cooperate with the HOA or CC&Rs as far as placement - i.e. must be in the back of the house rather than the front yard.

If that is true, That "mast" that holds a TV antenna on top - I think we call them capacity hats - is the start of a vertical.

Or am I mistaken about the fact that HOA and CC&R's can't shut you down?

73,
Paul

3942. Re: [SkyWires] Re: need help

Yahoo group: SkyWires
Date: 2011-06-10 17:54:07 UTC
From: Andy
Topic: 3939 Message: 3942

> Or am I mistaken about the fact that HOA and CC&R's can't shut you down?

I am no expert here, not by any means. But I haven't heard of an FCC rule that overrides HOAs and CCRs.

There are things that TRY to make it possible to participate in your hobby. And I think some of these are state-wide, not country-wide.

But in the end, if the document you signed when you took on your lease says "no visible antennas", it's what you agreed to.

Andy

3943. 1/2 Mile Loop?

Yahoo group: SkyWires
Date: 2011-06-10 20:36:47 UTC
From: Aaron
Topic: 3943 Message: 3943

So I was talking to my neighbor and there is a good chance I can use his property and string up yet more wire... nearly a half miles worth. Would make it roughly a 5 wavelength loop at 1.8 MHz. The 2 major obstacles are that

1: I need to span about 645' of cornfield high enough not to pose a problem to any farming. This shouldn't be to hard if I have some really well mounted pulleys in the trees and come alongs to keep up such a high tension on the loop.

2: The feed point will be around 360 from the house. I guess the only way to feed it would be with 400 or even hand made 600

There are some other considerations in the back of my head in regards to NSD and lighting protection on such a monster.

Not too sure of the practicality or performance would be either but looks like one hell of a fun project if I get the go ahead.

Aaron
KD4GSL

3944. Re: [SkyWires] 1/2 Mile Loop?

Yahoo group: SkyWires
Date: 2011-06-10 20:57:38 UTC
From: Steve Eisenberg
Topic: 3943 Message: 3944

By the way, would it be a good idea to run one side of the ladder line to ground, for safety and noise reduction?

3945. AW: [SkyWires] 1/2 Mile Loop?

Yahoo group: SkyWires
Date: 2011-06-10 21:38:10 UTC
From: Siegfried Jackstien
Topic: 3943 Message: 3945

No ... ladderline and loop are balanced ... so earthing one side is a bad idea
At the point where you go from coax to ladderline (balun, tuner, whatever) there you can ground the coax (and depending on your setup the loop too via the balun or tuner)
A 1:4 (voltage) balun (as an example) has one side direct to 50ohms input ... center is grounded ...so dc wise you have a groundconnection for the loop
Okay a direct hit would burn up your balun BUT direct hit would burn up nearly everything :-)
Dg9bfc
Sigi

> -----Ursprüngliche Nachricht-----
> Von: SkyWires@yahoogroups.com [mailto:SkyWires@yahoogroups.com] Im Auftrag
> von Steve Eisenberg
> Gesendet: Freitag, 10. Juni 2011 20:58
> An: SkyWires@yahoogroups.com
> Betreff: Re: [SkyWires] 1/2 Mile Loop?
>
>
>
> By the way, would it be a good idea to run one side of the ladder
> line to ground, for safety and noise reduction?
>
>

3946. antenna restrictions

Yahoo group: SkyWires
Date: 2011-06-10 21:57:51 UTC
From: bob engle
Topic: 3946 Message: 3946

http://www.fcc.gov/guides/over-air-reception-devices-rule
will get you to the proper place to view the necessary information.
It is an interesting can of worms!
73
Bob
.

3947. Re: 1/2 Mile Loop?

Yahoo group: SkyWires
Date: 2011-06-10 22:08:40 UTC
From: Aaron
Topic: 3943 Message: 3947

The only thing I have ever heard of remotely doing anything like that on these big antennas is to tap a resistor off to ground to dissipate any static build up. But I was only told that by one person in a casual conversation so I'm not sure the validity of it.

Aaron

--- In SkyWires@...m, "Siegfried Jackstien" <siegfried.jackstien@...> wrote:
>
> No ... ladderline and loop are balanced ... so earthing one side is a bad
> idea
> At the point where you go from coax to ladderline (balun, tuner, whatever)
> there you can ground the coax (and depending on your setup the loop too via
> the balun or tuner)
> A 1:4 (voltage) balun (as an example) has one side direct to 50ohms input
> ... center is grounded ...so dc wise you have a groundconnection for the
> loop
> Okay a direct hit would burn up your balun BUT direct hit would burn up
> nearly everything :-)
> Dg9bfc
> Sigi
>
>
>
> > -----Ursprüngliche Nachricht-----
> > Von: SkyWires@yahoogroups.com [mailto:SkyWires@yahoogroups.com] Im Auftrag
> > von Steve Eisenberg
> > Gesendet: Freitag, 10. Juni 2011 20:58
> > An: SkyWires@yahoogroups.com
> > Betreff: Re: [SkyWires] 1/2 Mile Loop?
> >
> >
> >
> > By the way, would it be a good idea to run one side of the ladder
> > line to ground, for safety and noise reduction?
> >
> >
>

3948. Re: [SkyWires] Re: 1/2 Mile Loop?

Yahoo group: SkyWires
Date: 2011-06-10 22:21:05 UTC
From: Steve Eisenberg
Topic: 3943 Message: 3948

Ooops! It occurred to me that grounding one end of a loop would also ground the other end.....being as they are both the same piece of wire...
On the other hand, some mobile antennas have a resistor "shorting" both sides as it goes into the coax, as was mentioned.
SteveNH

3949. Re: [SkyWires] Re: 1/2 Mile Loop?

Yahoo group: SkyWires
Date: 2011-06-11 02:05:59 UTC
From: Andy
Topic: 3943 Message: 3949

> The only thing I have ever heard of remotely doing anything like that on these
> big antennas is to tap a resistor off to ground to dissipate any static build up.
> But I was only told that by one person in a casual conversation so I'm not sure
> the validity of it.

Using a large value resistor to ground is a perfectly valid, and good,
thing to do whenever your antenna has no DC path to ground. It bleeds
off static, which can build up from wind and rain.

For a balanced antenna/feedline, use two equal resistors to ground.
Don't disturb the balance.

Make sure to do calculations to tell that their power rating is
sufficient not to overheat when you transmit.

Alternatively, one could use inductors to ground (again, a pair to
keep it balanced is best), with enough reactance so they don't shunt
your signal too.

The resistors don't protect against nearby lightning strikes, which
induce a sudden voltage spike and can sometimes damage equipment. For
that, use lightning suppressors. I've seen a pair of spark plugs used
for that. Even they won't protect against a direct hit.

Andy

3951. Re: How To Beat The Soaring Prices!

Yahoo group: SkyWires
Date: 2011-06-17 01:11:52 UTC
From: Gary Kohtala
Topic: 3950 Message: 3951

What does this have to do with SkyWires? Moderator?

Best regards,

Gary, K7EK

3953. Re: 1/2 Mile Loop?

Yahoo group: SkyWires
Date: 2011-06-22 23:25:15 UTC
From: gabevee
Topic: 3943 Message: 3953

Nothing will..

I had a strike go through my lab. Here was the path:

Second tree over to the right... yup, it bypassed a tree right next to it.

Into the (or out of if ground up) metal vent in the gable.

Down a 2X4 stud, blasting half of the wood off across the lab for about 7 inches.

Down through the wood top of an antique radio. Too much stuff right now to move that to see what else it did.

But wait... it branched off through the middle of the air in the lab, right to a metal grounded band on a small Radio Shack AM-FM tuner.

Through the ground side of that tuner into the electrical wiring, into the house causing a temporary black out.

The AM-FM tuner still works great.

A small Radio Shack AM radio, the last of the "Flavoradios" for some reason now has no RF. I get noise, and even can inject an IF signal, but it no longer recieves radio signal.

It's all on one chip. Can't find the chip anymore (no longer manufactured). Crazy how the EM radiation from that strike only blew out that radio.

If I were in there that night as I had planned, I would likely never be able to tell you about it.

Gabe

--- In SkyWires@yahoogroups.com, Andy <ai.egrps@...> wrote:
>
> > The only thing I have ever heard of remotely doing anything like that on these
> > big antennas is to tap a resistor off to ground to dissipate any static build up.
> > But I was only told that by one person in a casual conversation so I'm not sure
> > the validity of it.
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> Using a large value resistor to ground is a perfectly valid, and good,
> thing to do whenever your antenna has no DC path to ground. It bleeds
> off static, which can build up from wind and rain.
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> For a balanced antenna/feedline, use two equal resistors to ground.
> Don't disturb the balance.
>
> Make sure to do calculations to tell that their power rating is
> sufficient not to overheat when you transmit.

>
> Alternatively, one could use inductors to ground (again, a pair to
> keep it balanced is best), with enough reactance so they don't shunt
> your signal too.
>
> The resistors don't protect against nearby lightning strikes, which
> induce a sudden voltage spike and can sometimes damage equipment. For
> that, use lightning suppressors. I've seen a pair of spark plugs used
> for that. Even they won't protect against a direct hit.
>
> Andy
>

3955. RE: [SkyWires] 78o6l 266xy5vr

Yahoo group: SkyWires
Date: 2011-06-28 21:52:19 UTC
From: David Shrum
Topic: 3955 Message: 3955

This member has been put on moderated status. The link has been edited out of this message.

Dave N8PU

From: SkyWires@yahoogroups.com [mailto:SkyWires@yahoogroups.com] On Behalf Of Dean Terrell
Sent: Tuesday, June 28, 2011 3:28 PM
To: skywires@yahoogroups.com
Subject: [SkyWires] 78o6l 266xy5vr

Yahoo! Groups Links

---

avast! Antivirus <http://www.avast.com> : Inbound message clean.

Virus Database (VPS): 6/28/2011
Tested on: 6/28/2011 5:45:54 PM
avast! - copyright (c) 1988-2011 AVAST Software.

---

avast! Antivirus <http://www.avast.com> : Outbound message clean.

Virus Database (VPS): 6/28/2011
Tested on: 6/28/2011 5:52:19 PM
avast! - copyright (c) 1988-2011 AVAST Software.

3956. "terminating resistor?"

Yahoo group: SkyWires
Date: 2011-06-28 22:26:51 UTC
From: Steve Eisenberg
Topic: 3956 Message: 3956

How about using a terminating resistor on the loops? B&W uses them on their folded dipoles, which look like squashed loops to me.
Thanks,
SteveKA1ZFY

3957. Re: [SkyWires] "terminating resistor?"

Yahoo group: SkyWires
Date: 2011-06-29 03:35:40 UTC
From: Andy
Topic: 3956 Message: 3957

> How about using a terminating resistor on the loops? B&W uses them
> on their folded dipoles, which look like squashed loops to me.

The B&W folded dipole is a folded dipole, and a folded dipole is NOT a loop.

Yes, a folded dipole appears electrically in the form of a loop, but
folded dipoles do not work at all like loops work. They behave like
dipoles, with a built-in impedance transformer. The currents in the
two adjacent wires are essentially the same (in magnitude and phase),
not like a loop. The performance of a loop depends on the area
enclosed by the loop. But a folded dipole can enclose zero area.
Loops don't work if you do that.

How much the TTFD or T2FD (which is the name for the B&W folded
dipole) behaves like an "ordinary" folded dipole, I can't say. But I
think it's fair to say it behaves more like a folded dipole (and
therefore a plain dipole), than like a loop.

I think I have seen terminating resistors used in large loops too,
giving them some degree of directionality which they otherwise would
not have had. I think they were used in receive-only antennas.

Andy

3958. Re: [SkyWires] "terminating resistor?"

Yahoo group: SkyWires
Date: 2011-06-29 03:45:19 UTC
From: Steve Eisenberg
Topic: 3956 Message: 3958

Thanks, Andy. I'll buy that.
SteveKA1ZFY

3959. AW: [SkyWires] "terminating resistor?"

Yahoo group: SkyWires
Date: 2011-06-29 13:25:51 UTC
From: Siegfried Jackstien
Topic: 3956 Message: 3959

Big loop with resistor .... i would call it a rhom

> -----Ursprüngliche Nachricht-----
> Von: SkyWires@yahoogroups.com [mailto:SkyWires@yahoogroups.com] Im Auftrag
> von Andy
> Gesendet: Mittwoch, 29. Juni 2011 03:36
> An: SkyWires@yahoogroups.com
> Betreff: Re: [SkyWires] "terminating resistor?"
>
>
>
> > How about using a terminating resistor on the loops? B&W uses them
> > on their folded dipoles, which look like squashed loops to me.
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> The B&W folded dipole is a folded dipole, and a folded dipole is NOT a
> loop.
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> folded dipoles do not work at all like loops work. They behave like
> dipoles, with a built-in impedance transformer. The currents in the
> two adjacent wires are essentially the same (in magnitude and phase),
> not like a loop. The performance of a loop depends on the area
> enclosed by the loop. But a folded dipole can enclose zero area.
> Loops don't work if you do that.
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> therefore a plain dipole), than like a loop.
>
> I think I have seen terminating resistors used in large loops too,
> giving them some degree of directionality which they otherwise would
> not have had. I think they were used in receive-only antennas.
>
> Andy
>
>
>

3960. AW: [SkyWires] "terminating resistor?"

Yahoo group: SkyWires
Date: 2011-06-29 13:28:04 UTC
From: Siegfried Jackstien
Topic: 3956 Message: 3960

Rhombic beam ... 2 v beams pointing to each other on the ends ...
Or a very large loop .... gives BIG gain in 2directions without terminating resistor .... unwanted backlobe is suppressed with adding that resistor on one end
Dg9bfc
Sigi

> -----Ursprüngliche Nachricht-----
> Von: SkyWires@yahoogroups.com [mailto:SkyWires@yahoogroups.com] Im Auftrag
> von Andy
> Gesendet: Mittwoch, 29. Juni 2011 03:36
> An: SkyWires@yahoogroups.com
> Betreff: Re: [SkyWires] "terminating resistor?"
>
>
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> folded dipoles do not work at all like loops work. They behave like
> dipoles, with a built-in impedance transformer. The currents in the
> two adjacent wires are essentially the same (in magnitude and phase),
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> Loops don't work if you do that.
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> How much the TTFD or T2FD (which is the name for the B&W folded
> dipole) behaves like an "ordinary" folded dipole, I can't say. But I
> think it's fair to say it behaves more like a folded dipole (and
> therefore a plain dipole), than like a loop.
>
> I think I have seen terminating resistors used in large loops too,
> giving them some degree of directionality which they otherwise would
> not have had. I think they were used in receive-only antennas.
>
> Andy
>
>
>

3961. Re: AW: [SkyWires] "terminating resistor?"

Yahoo group: SkyWires
Date: 2011-06-29 17:31:18 UTC
From: Marian Anghel
Topic: 3956 Message: 3961

The rhombic antenna has real very nice performing.
It is the wire antenna that I recomended first.
73 de yo2mbu Marian

Best regards

On 29.06.2011, at 16:25, "Siegfried Jackstien" <siegfried.jackstien@...> wrote:

Big loop with resistor .... i would call it a rhom

> -----Ursprüngliche Nachricht----
> Von: SkyWires@yahoogroups.com [mailto:SkyWires@yahoogroups.com] Im Auftrag
> von Andy
> Gesendet: Mittwoch, 29. Juni 2011 03:36
> An: SkyWires@yahoogroups.com
> Betreff: Re: [SkyWires] "terminating resistor?"
>
>
>
> > How about using a terminating resistor on the loops? B&W uses them
> > on their folded dipoles, which look like squashed loops to me.
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> two adjacent wires are essentially the same (in magnitude and phase),
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> dipole) behaves like an "ordinary" folded dipole, I can't say. But I
> think it's fair to say it behaves more like a folded dipole (and
> therefore a plain dipole), than like a loop.
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> I think I have seen terminating resistors used in large loops too,
> giving them some degree of directionality which they otherwise would
> not have had. I think they were used in receive-only antennas.
>
> Andy
>
>
>

3962. Antenna question...

Yahoo group: SkyWires
Date: 2011-07-06 12:30:06 UTC
From: kg4coq
Topic: 3962 Message: 3962

Hello.
Heres what I have for you today.

Two antennas,Number one is a Cushcraft R-7 Vertical. On a tripod,approx. 42 ft to very top to ground. (antenna built is 22 1/2 ft long itself)

Due to location restrictions on property,antenna number 2 (a 3/4 wave,22 ft 2 mtr fiberglass repeater antenna) is to be located 11 ft away on a small tower with total height of approx. 50 ft to very top to ground.

Question is will this setup interact with each other in any way ?
Not so worried about the 2 mtr but I am worried about the R-7 vertical. I realise the antennas themselfs will not interact due to freq. spacing but will the structure locations throw the R-7 pattern off ?

Please reply back directly to email address below:

Thank you for your thoughts...

DON,
KG4COQ
Tampa Bay

3963. Antenna question...

Yahoo group: SkyWires
Date: 2011-07-06 12:48:37 UTC
From: kg4coq
Topic: 3962 Message: 3963

Didnot include email address to above post.

kg4coq@...

Thank you,

DON
KG4COQ
TAMPA BAY

3964. AW: [SkyWires] Antenna question...

Yahoo group: SkyWires
Date: 2011-07-06 13:53:34 UTC
From: Siegfried Jackstien
Topic: 3962 Message: 3964

> -----Ursprüngliche Nachricht-----
> Von: SkyWires@yahoogroups.com [mailto:SkyWires@yahoogroups.com] Im Auftrag
> von kg4coq
> Gesendet: Mittwoch, 6. Juli 2011 12:30
> An: SkyWires@yahoogroups.com
> Betreff: [SkyWires] Antenna question...
>
>
>
> Hello.
> Heres what I have for you today.
>
> Two antennas,Number one is a Cushcraft R-7 Vertical. On a tripod,approx.
> 42 ft to very top to ground. (antenna built is 22 1/2 ft long itself)
>
> Due to location restrictions on property,antenna number 2 (a 3/4 wave,22
> ft 2 mtr fiberglass repeater antenna) is to be located 11 ft away on a
> small tower with total height of approx. 50 ft to very top to ground.
>
> Question is will this setup interact with each other in any way ?
> Not so worried about the 2 mtr but I am worried about the R-7 vertical. I
> realise the antennas themselfs will not interact due to freq. spacing but
> will the structure locations throw the R-7 pattern off ?
>
> Please reply back directly to email address below:
>
> Thank you for your thoughts...
>
> DON,
> KG4COQ
> Tampa Bay
>
>
>
>

3965. AW: [SkyWires] Antenna question...

Yahoo group: SkyWires
Date: 2011-07-06 13:58:09 UTC
From: Siegfried Jackstien
Topic: 3962 Message: 3965

Will they interact? ... yes ....
Will the interaction disturb the pattern ,,, yes ,,,, but only very little
... so you will not notice it ...
Problem could be that swr on some bands will be a bit different than without
the other antenna so close ... but I think you should just use it and see
the results
Dg9bfc
Sigi

> -----Ursprüngliche Nachricht-----
> Von: SkyWires@yahoogroups.com [mailto:SkyWires@yahoogroups.com] Im Auftrag
> von kg4coq
> Gesendet: Mittwoch, 6. Juli 2011 12:30
> An: SkyWires@yahoogroups.com
> Betreff: [SkyWires] Antenna question...
>
>
>
> Hello.
> Heres what I have for you today.
>
> Two antennas,Number one is a Cushcraft R-7 Vertical. On a tripod,approx.
> 42 ft to very top to ground. (antenna built is 22 1/2 ft long itself)
>
> Due to location restrictions on property,antenna number 2 (a 3/4 wave,22
> ft 2 mtr fiberglass repeater antenna) is to be located 11 ft away on a
> small tower with total height of approx. 50 ft to very top to ground.
>
> Question is will this setup interact with each other in any way ?
> Not so worried about the 2 mtr but I am worried about the R-7 vertical. I
> realise the antennas themselfs will not interact due to freq. spacing but
> will the structure locations throw the R-7 pattern off ?
>
> Please reply back directly to email address below:
>
> Thank you for your thoughts...
>
> DON,
> KG4COQ
> Tampa Bay
>
>
>
>

3966. Nice column in July CQ on building horizontal loop

Yahoo group: SkyWires
Date: 2011-07-11 17:20:03 UTC
From: Frank
Topic: 3966 Message: 3966

There is a nice column in this month's CQ magazine by Rich Arland on putting up a full-wave horizontal loop. Worth reading...he cites a few others for further reading.

Frank
K4FMH

3967. RE: [SkyWires] Nice column in July CQ on building horizontal loop

Yahoo group: SkyWires
Date: 2011-07-11 17:42:47 UTC
From: JIM
Topic: 3966 Message: 3967

Shape of loop? Can't figure out anything but a parallelogram (two sides about 75 ft and two other sides about 55 ft). Can't get anything close to a square on my place. Any thoughts??

Jim AE7JS

3968. RE: [SkyWires] Nice column in July CQ on building horizontal loop

Yahoo group: SkyWires
Date: 2011-07-11 17:56:04 UTC
From: Richard Schmuke
Topic: 3966 Message: 3968
Attachments: 2 described; binary payloads are missing from this source WARC

FYI, I don't know but I sure would try it. My 80m delta loop has two legs a little longer than the far end but it still has good reading on 40 thru 10 with a 4:1 current balun. I put up the ropes into some trees and pulled it up.

I lowered it for a ice storm during the winter , then pulled it back up reading were a little off so readjusted a support on one side a few feet and all is fine. I don't think you will really know until you try one.

Rich , Kd0zz

From: SkyWires@yahoogroups.com [mailto:SkyWires@yahoogroups.com] On Behalf Of JIM
Sent: Monday, July 11, 2011 12:43 PM
To: SkyWires@yahoogroups.com
Subject: RE: [SkyWires] Nice column in July CQ on building horizontal loop

Shape of loop? Can't figure out anything but a parallelogram (two sides about 75 ft and two other sides about 55 ft). Can't get anything close to a square on my place. Any thoughts??

Jim AE7JS

3969. Re: Nice column in July CQ on building horizontal loop

Yahoo group: SkyWires
Date: 2011-07-12 03:06:12 UTC
From: Mac
Topic: 3966 Message: 3969

Jim,

Shape is really not important - enclosing the max area possible is what you are shooting for. The "best" shape is a circle, but that's just not practical. Square is next, then rectangle, then triangle.

I have a full wave loop cut for 80m strung in trees in my back yard (~285' of 14ga AL electric fence wire - $20 for 1/4 mile roll at Tractor Supply). Due to where my trees are, my loop is a fairly narrow rectangle and is maybe 40' high in one corner and as low as 25' in another corner. I'm impressed with how well it works even with a branch touching it and the occasional gob of Spanish Moss draped over it (I'm in FL). (I do try to fleece the moss off it once a month or so) :)

I'm feeding it via 450 ohm ladder line and use a 4:1 balun to transition to a 3' piece of coax to get it into the shack and to a tuner.

Hope this helps,

Mac / K6OVI

--- In SkyWires@yahoogroups.com, JIM <jjinmt@...> wrote:
>
> Shape of loop? Can't figure out anything but a parallelogram (two sides
> about 75 ft and two other sides about 55 ft). Can't get anything close to a
> square on my place. Any thoughts??
>
> Jim AE7JS
>

3970. RE: [SkyWires] Re: Nice column in July CQ on building horizontal loop

Yahoo group: SkyWires
Date: 2011-07-12 13:37:15 UTC
From: JIM
Topic: 3966 Message: 3970

Thanks,
That does make me feel better....will let everyone know after I get it up
this fall...

Jim AE7JS

3971. Thoughts on the MFJ-912 balun

Yahoo group: SkyWires
Date: 2011-07-16 20:55:44 UTC
From: cernem1alt
Topic: 3971 Message: 3971

Greetings from England.
Anyone got any opinions on the MFJ-912 4:1 balun with a skywire?
Thanks
Mike M1ALT

3972. Re: Thoughts on the MFJ-912 balun

Yahoo group: SkyWires
Date: 2011-07-17 13:49:18 UTC
From: Garry
Topic: 3971 Message: 3972

Hi Mike,

I saw the inside of the MFJ-912 in an article by the late L.B. Cebik, W4RNL. I believe it uses (2) T200-2 iron powered cores with 11 to 12 bifilar turns of wire. This is very similar to the balun that was used in the Heath SA-2060 antenna tuner. The balun used in the Ultimate Transmatch used (3) T200-2 iron powered cores. I am using a T300A-2 iron powered core with 17 bifilar turns of 14 ga wire with teflon insulation of the Ruthroff design in my homebrew T-network tuner. The core is three inches wide by one inch high. Many commercially made 4:1 baluns are using this design now.

A great book on baluns is "Understanding, Building, and Using Baluns and Ununs" by the late Jerry Sevick.

Good luck,
Garry - K4OR

3973. Re: Thoughts on the MFJ-912 balun

Yahoo group: SkyWires
Date: 2011-07-17 16:09:17 UTC
From: Aaron
Topic: 3971 Message: 3973

Well I can't comment on that specific Brand/Model of balun but so far I have found I prefer feeding my loop with about 35' of 450 ladder line and a good 4:1 balun. I'm about to reiterate the antenna at a friends house next week.

Anyways with the 4:1 it will allow for mutliband use as long as you are resonant around 1.8 to 1.9 without a need for a tuner.

Aaron
KV9L

--- In SkyWires@yahoogroups.com, "cernem1alt" <michael.oram@...> wrote:
>
> Greetings from England.
> Anyone got any opinions on the MFJ-912 4:1 balun with a skywire?
> Thanks
> Mike M1ALT
>

3974. Re: Thoughts on the MFJ-912 balun

Yahoo group: SkyWires
Date: 2011-07-17 18:25:41 UTC
From: cernem1alt
Topic: 3971 Message: 3974

--- In SkyWires@yahoogroups.com, "Aaron" <wm.aaron.lamb@...> wrote:
>
> Well I can't comment on that specific Brand/Model of balun but so far I have found I prefer feeding my loop with about 35' of 450 ladder line and a good 4:1 balun. I'm about to reiterate the antenna at a friends house next week.
>
> Anyways with the 4:1 it will allow for mutliband use as long as you are resonant around 1.8 to 1.9 without a need for a tuner.
>
> Aaron
> KV9L
>
> --- In SkyWires@yahoogroups.com, "cernem1alt" <michael.oram@> wrote:
> >
> > Greetings from England.
> > Anyone got any opinions on the MFJ-912 4:1 balun with a skywire?
> > Thanks
> > Mike M1ALT
> >
>
I take it everyone uses a Current Balun? I am a bit confused as to if the MFJ is a current balun I have read differing descriptions and the MFJ site is not clear on that point.

3975. Re: Thoughts on the MFJ-912 balun

Yahoo group: SkyWires
Date: 2011-07-18 03:30:37 UTC
From: Aaron
Topic: 3971 Message: 3975

That is a W9INN design and from what I have read its a voltage balun. Hook it up and try it out, it may work well. If you need to upgrade to something a little better I might suggest a Balun Designs one. I use a #4124 and it works great, about to put a loop up with a #4115 for a friend to see how it works.

http://www.balundesigns.com/servlet/the-4-dsh-1-Baluns/Categories

Aaron
KV9L

--- In SkyWires@yahoogroups.com, "cernem1alt" <michael.oram@...> wrote:
>
>
>
> --- In SkyWires@yahoogroups.com, "Aaron" <wm.aaron.lamb@> wrote:
> >
> > Well I can't comment on that specific Brand/Model of balun but so far I have found I prefer feeding my loop with about 35' of 450 ladder line and a good 4:1 balun. I'm about to reiterate the antenna at a friends house next week.
> >
> > Anyways with the 4:1 it will allow for mutliband use as long as you are resonant around 1.8 to 1.9 without a need for a tuner.
> >
> > Aaron
> > KV9L
> >
> > --- In SkyWires@yahoogroups.com, "cernem1alt" <michael.oram@> wrote:
> > >
> > > Greetings from England.
> > > Anyone got any opinions on the MFJ-912 4:1 balun with a skywire?
> > > Thanks
> > > Mike M1ALT
> > >
> >
> I take it everyone uses a Current Balun? I am a bit confused as to if the MFJ is a current balun I have read differing descriptions and the MFJ site is not clear on that point.
>

3976. Re: Thoughts on the MFJ-912 balun

Yahoo group: SkyWires
Date: 2011-07-18 10:59:45 UTC
From: Gary - K7EK
Topic: 3971 Message: 3976

Another great balun is the Palomar Model BA-4-1500 4:1 Balun Kit. It is a brute, and can handle most anything you can throw at it, even at the highest power levels. Check it out at:

http://www.palomar-engineers.com/4_1_Balun_Kits/4_1_balun_kits.html

I have one here and intend to mount it inside of the high power antenna tuner I am building. Of course you can put it in a weatherproof box and mount this balun anywhere. Although there is no enclosure, this kit is half the price of the MFJ-912 balun. All things considered, the MFJ enclosure must be very expensive :)

Just another option to try, if you'd care to save some money.

Best regards,

Gary, K7EK

--- In SkyWires@yahoogroups.com, "Aaron" <wm.aaron.lamb@...> wrote:
>
> That is a W9INN design and from what I have read its a voltage balun. Hook it up and try it out, it may work well. If you need to upgrade to something a little better I might suggest a Balun Designs one. I use a #4124 and it works great, about to put a loop up with a #4115 for a friend to see how it works.
>
> http://www.balundesigns.com/servlet/the-4-dsh-1-Baluns/Categories
>
> Aaron
> KV9L
>
> --- In SkyWires@yahoogroups.com, "cernem1alt" <michael.oram@> wrote:
> >
> >
> >
> > --- In SkyWires@yahoogroups.com, "Aaron" <wm.aaron.lamb@> wrote:
> > >
> > > Well I can't comment on that specific Brand/Model of balun but so far I have found I prefer feeding my loop with about 35' of 450 ladder line and a good 4:1 balun. I'm about to reiterate the antenna at a friends house next week.
> > >
> > > Anyways with the 4:1 it will allow for mutliband use as long as you are resonant around 1.8 to 1.9 without a need for a tuner.
> > >
> > > Aaron
> > > KV9L
> > >

> > > --- In SkyWires@yahoogroups.com, "cernem1alt" <michael.oram@> wrote:
> > > >
> > > > Greetings from England.
> > > > Anyone got any opinions on the MFJ-912 4:1 balun with a skywire?
> > > > Thanks
> > > > Mike M1ALT
> > > >
> > >
> > I take it everyone uses a Current Balun? I am a bit confused as to if the MFJ is a current balun I have read differing descriptions and the MFJ site is not clear on that point.
> >
>

3977. Re: Thoughts on the MFJ-912 balun

Yahoo group: SkyWires
Date: 2011-07-18 12:46:45 UTC
From: Garry
Topic: 3971 Message: 3977

Mike,

Here is a link to the W4RNL article I mentioned previously.
http://cebik.com/content/a10/trans/41balun-3.pdf.

This shows a picture of the interior of the W9INN balun.

73,
Garry - K4OR

3978. Re: Thoughts on the MFJ-912 balun

Yahoo group: SkyWires
Date: 2011-07-18 13:02:46 UTC
From: Garry
Topic: 3971 Message: 3978

Mike,

Here is another link with a better inside view of the W9INN balun.
http://cebik.com/content/a10/trans/41balun-1.pdf

73,
Garry - K4OR

3979. Re: Antenna question...

Yahoo group: SkyWires
Date: 2011-07-22 01:54:08 UTC
From: kp4md
Topic: 3962 Message: 3979

I modeled the Cushcraft R7 on this page
http://www.qsl.net/kp4md/modeling.htm
<http://www.qsl.net/kp4md/modeling.htm> specifically for comparison
with my 40 meter Loop SkyWire.
Carol, KP4MD/W6
[R7 Model]
--- In SkyWires@yahoogroups.com, "Siegfried Jackstien"
<siegfried.jackstien@...> wrote:
>
>
>
> > -----Ursprüngliche Nachricht-----
> > Von: SkyWires@yahoogroups.com [mailto:SkyWires@yahoogroups.com] Im
Auftrag
> > von kg4coq
> > Gesendet: Mittwoch, 6. Juli 2011 12:30
> > An: SkyWires@yahoogroups.com
> > Betreff: [SkyWires] Antenna question...
> >
> >
> >
> > Hello.
> > Heres what I have for you today.
> >
> > Two antennas,Number one is a Cushcraft R-7 Vertical. On a
tripod,approx.
> > 42 ft to very top to ground. (antenna built is 22 1/2 ft long
itself)
> >
> > Due to location restrictions on property,antenna number 2 (a 3/4
wave,22
> > ft 2 mtr fiberglass repeater antenna) is to be located 11 ft away on
a
> > small tower with total height of approx. 50 ft to very top to
ground.
> >
> > Question is will this setup interact with each other in any way ?
> > Not so worried about the 2 mtr but I am worried about the R-7
vertical. I
> > realise the antennas themselfs will not interact due to freq.
spacing but
> > will the structure locations throw the R-7 pattern off ?
> >
> > Please reply back directly to email address below:
> >

> > Thank you for your thoughts...
> >
> > DON,
> > KG4COQ
> > Tampa Bay
> >
> >
> >
> >
>

3980. 4:1 + 1:1 Balun

Yahoo group: SkyWires
Date: 2011-07-22 12:05:34 UTC
From: Richard Schmuke
Topic: 3980 Message: 3980

The other day I was working on a 450 ladder line set up. I made a indoor 4:1 balun to go between my tuner and window feed thru. Several people had questions or suggestions. The last critique was that sometimes you might need a 4:1 balun to match a doublet or a multi-band loop and other times you might need a 1:1 balun.

So I made a set up with a switchable balun, a 4:1 and 1:1 together. The first two pictures are of my set up. When the days get down below 100 degrees I will change the outside stuff.

http://s1102.photobucket.com/albums/g453/KD0ZZ/

Rich ,KDØZZ , ☺

from the middle of Missouri , out in the sticks with the hicks and the ticks.

3981. AW: [SkyWires] 4:1 + 1:1 Balun

Yahoo group: SkyWires
Date: 2011-07-22 12:46:09 UTC
From: Siegfried Jackstien
Topic: 3980 Message: 3981

I looked the pics ... awesome :-)
If I have seen it right in 1:1 you parallel the 2 baluns and in series ... right??
Dg9bfc
Sigi
Ps what the hell type in "google" to find those nice switches??

> -----Ursprüngliche Nachricht-----
> Von: SkyWires@yahoogroups.com [mailto:SkyWires@yahoogroups.com] Im Auftrag
> von Richard Schmuke
> Gesendet: Freitag, 22. Juli 2011 12:06
> An: Antenna_Builders@yahoogroups.com; ham-antennas@yahoogroups.com;
> SkyWires@yahoogroups.com
> Betreff: [SkyWires] 4:1 + 1:1 Balun
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>
> The other day I was working on a 450 ladder line set up. I made a indoor
> 4:1 balun to go between my tuner and window feed thru. Several people had
> questions or suggestions. The last critique was that sometimes you might
> need a 4:1 balun to match a doublet or a multi-band loop and other times
> you might need a 1:1 balun.
>
> So I made a set up with a switchable balun, a 4:1 and 1:1 together. The
> first two pictures are of my set up. When the days get down below 100
> degrees I will change the outside stuff.
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> http://s1102.photobucket.com/albums/g453/KD0ZZ/
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> Rich ,KDØZZ , ☺
>
>
>
> from the middle of Missouri , out in the sticks with the hicks and the
> ticks.
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3982. AW: [SkyWires] 4:1 + 1:1 Balun

Yahoo group: SkyWires
Date: 2011-07-22 12:52:15 UTC
From: Siegfried Jackstien
Topic: 3980 Message: 3982

After i sent that mail and received it back trough the group i just have seen what a "rubbish" i had written :-)
In 1:1 you parallel the outputs ... and in 1:4 you ad them in series ...
Right?!?
That is what I wanted to write down ... uups
Need some coffee I think
Greetz
Sigi
Dg9bfc

> -----Ursprüngliche Nachricht-----
> Von: SkyWires@yahoogroups.com [mailto:SkyWires@yahoogroups.com] Im Auftrag
> von Siegfried Jackstien
> Gesendet: Freitag, 22. Juli 2011 12:46
> An: SkyWires@yahoogroups.com
> Betreff: AW: [SkyWires] 4:1 + 1:1 Balun
>
>
>
> I looked the pics ... awesome :-)
> If I have seen it right in 1:1 you parallel the 2 baluns and in series ...
> right??
> Dg9bfc
> Sigi
> Ps what the hell type in "google" to find those nice switches??
>
> > -----Ursprüngliche Nachricht-----
> > Von: SkyWires@yahoogroups.com <mailto:SkyWires%40yahoogroups.com>
> [mailto:SkyWires@yahoogroups.com <mailto:SkyWires%40yahoogroups.com>] Im
> Auftrag
> > von Richard Schmuke
> > Gesendet: Freitag, 22. Juli 2011 12:06
> > An: Antenna_Builders@yahoogroups.com
> <mailto:Antenna_Builders%40yahoogroups.com> ; ham-antennas@yahoogroups.com
> <mailto:ham-antennas%40yahoogroups.com> ;
> > SkyWires@yahoogroups.com <mailto:SkyWires%40yahoogroups.com>
> > Betreff: [SkyWires] 4:1 + 1:1 Balun
> >
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> >
> > The other day I was working on a 450 ladder line set up. I made a indoor
> > 4:1 balun to go between my tuner and window feed thru. Several people
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> > questions or suggestions. The last critique was that sometimes you might
> > need a 4:1 balun to match a doublet or a multi-band loop and other times
> > you might need a 1:1 balun.
> >
> > So I made a set up with a switchable balun, a 4:1 and 1:1 together. The
> > first two pictures are of my set up. When the days get down below 100
> > degrees I will change the outside stuff.
> >
> > http://s1102.photobucket.com/albums/g453/KD0ZZ/
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> > Rich ,KDØZZ , ☺
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> >
> > from the middle of Missouri , out in the sticks with the hicks and the
> > ticks.
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3983. RE: [SkyWires] 4:1 + 1:1 Balun

Yahoo group: SkyWires
Date: 2011-07-22 13:12:19 UTC
From: Richard Schmuke
Topic: 3980 Message: 3983
Attachments: 2 described; binary payloads are missing from this source WARC

Switch “google” is switch knife dpdt or http://www.allelectronics.com/make-a-store/item/SWS-13/D.P.D.T.-KNIFE-SWITCH/1.html. or cheaper at

http://www.skycraftsurplus.com/knifeswitchdpst-1.aspx

My switch came from a hamfest junk box.

A very good drawing of my lay out for the switch can be found at

http://www.angelfire.com/electronic2/qrp/balun.html

73. Rich, Kd0zz

From: SkyWires@yahoogroups.com [mailto:SkyWires@yahoogroups.com] On Behalf Of Siegfried Jackstien
Sent: Friday, July 22, 2011 7:46 AM
To: SkyWires@yahoogroups.com
Subject: AW: [SkyWires] 4:1 + 1:1 Balun

I looked the pics ... awesome :-)
If I have seen it right in 1:1 you parallel the 2 baluns and in series ... right??
Dg9bfc
Sigi
Ps what the hell type in "google" to find those nice switches??

> -----Ursprüngliche Nachricht-----
> Von: SkyWires@yahoogroups.com <mailto:SkyWires%40yahoogroups.com> [mailto:SkyWires@yahoogroups.com <mailto:SkyWires%40yahoogroups.com>] Im Auftrag
> von Richard Schmuke
> Gesendet: Freitag, 22. Juli 2011 12:06
> An: Antenna_Builders@yahoogroups.com <mailto:Antenna_Builders%40yahoogroups.com> ; ham-antennas@yahoogroups.com <mailto:ham-antennas%40yahoogroups.com> ;
> SkyWires@yahoogroups.com <mailto:SkyWires%40yahoogroups.com>
> Betreff: [SkyWires] 4:1 + 1:1 Balun
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>
> The other day I was working on a 450 ladder line set up. I made a indoor

> 4:1 balun to go between my tuner and window feed thru. Several people had
> questions or suggestions. The last critique was that sometimes you might
> need a 4:1 balun to match a doublet or a multi-band loop and other times
> you might need a 1:1 balun.
>
> So I made a set up with a switchable balun, a 4:1 and 1:1 together. The
> first two pictures are of my set up. When the days get down below 100
> degrees I will change the outside stuff.
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> http://s1102.photobucket.com/albums/g453/KD0ZZ/
>
> Rich ,KDØZZ , ☺
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> from the middle of Missouri , out in the sticks with the hicks and the
> ticks.
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>

3984. RE: [SkyWires] 4:1 + 1:1 Balun

Yahoo group: SkyWires
Date: 2011-07-22 13:20:39 UTC
From: Richard Schmuke
Topic: 3980 Message: 3984
Attachments: 2 described; binary payloads are missing from this source WARC

Don’t worry about you question , I understand what you mean, the problem is the time lag between your time zone and mine. I looked at the pictures and if you need a better one of the switch wiring I can take one but the link I sent is good for the switch, it just shows a torrid and I used rods.

Rich, Kd0zz

PS: I hope Vettel does good in his home land this weekend.

From: SkyWires@yahoogroups.com [mailto:SkyWires@yahoogroups.com] On Behalf Of Siegfried Jackstien
Sent: Friday, July 22, 2011 7:52 AM
To: SkyWires@yahoogroups.com
Subject: AW: [SkyWires] 4:1 + 1:1 Balun

After i sent that mail and received it back trough the group i just have seen what a "rubbish" i had written :-)
In 1:1 you parallel the outputs ... and in 1:4 you ad them in series ...
Right?!?
That is what I wanted to write down ... uups
Need some coffee I think
Greetz
Sigi
Dg9bfc

> -----Ursprüngliche Nachricht-----
> Von: SkyWires@yahoogroups.com <mailto:SkyWires%40yahoogroups.com> [mailto:SkyWires@yahoogroups.com <mailto:SkyWires%40yahoogroups.com>] Im Auftrag
> von Siegfried Jackstien
> Gesendet: Freitag, 22. Juli 2011 12:46
> An: SkyWires@yahoogroups.com <mailto:SkyWires%40yahoogroups.com>
> Betreff: AW: [SkyWires] 4:1 + 1:1 Balun
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> I looked the pics ... awesome :-)
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> Ps what the hell type in "google" to find those nice switches??
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> > Von: SkyWires@yahoogroups.com <mailto:SkyWires%40yahoogroups.com> <mailto:SkyWires%40yahoogroups.com>

> [mailto:SkyWires@yahoogroups.com <mailto:SkyWires%40yahoogroups.com>
<mailto:SkyWires%40yahoogroups.com>] Im
> Auftrag
> > von Richard Schmuke
> > Gesendet: Freitag, 22. Juli 2011 12:06
> > An: Antenna_Builders@yahoogroups.com <mailto:Antenna_Builders%40yahoogroups.com>
> <mailto:Antenna_Builders%40yahoogroups.com> ; ham-antennas@yahoogroups.com
<mailto:ham-antennas%40yahoogroups.com>
> <mailto:ham-antennas%40yahoogroups.com> ;
> > SkyWires@yahoogroups.com <mailto:SkyWires%40yahoogroups.com> <mailto:SkyWires%40yahoogroups.com>
> > Betreff: [SkyWires] 4:1 + 1:1 Balun
> >
> >
> >
> >
> >
> >
> >
> >
> >
> > The other day I was working on a 450 ladder line set up. I made a indoor
> > 4:1 balun to go between my tuner and window feed thru. Several people
> had
> > questions or suggestions. The last critique was that sometimes you might
> > need a 4:1 balun to match a doublet or a multi-band loop and other times
> > you might need a 1:1 balun.
> >
> > So I made a set up with a switchable balun, a 4:1 and 1:1 together. The
> > first two pictures are of my set up. When the days get down below 100
> > degrees I will change the outside stuff.
> >
> > http://s1102.photobucket.com/albums/g453/KD0ZZ/
> >
> > Rich ,KDØZZ , ☺
> >
> >
> >
> > from the middle of Missouri , out in the sticks with the hicks and the
> > ticks.
> >
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>
>

3985. 4:1 + 1:1 balun

Yahoo group: SkyWires
Date: 2011-07-22 17:06:35 UTC
From: Richard Schmuke
Topic: 3985 Message: 3985

Some people asked about the wiring on my switch so I added a end view of my switchable 4:1x1:1 balun.
http://i1102.photobucket.com/albums/g453/KD0ZZ/EndView-1.jpg

Rich , KdØzz , ☺

My wife complains I mess with stuff too much but I have a "tinkering virus"

3986. Re: [SkyWires] Thoughts on the MFJ-912 balun

Yahoo group: SkyWires
Date: 2011-07-23 17:51:48 UTC
From: Ken Burchfield
Topic: 3971 Message: 3986
Attachments: 1 described; binary payloads are missing from this source WARC

PacketRadio is Still Alive.....Mississippi.....145.010.....Simplex.....1200 Baud
Hi Mike, I have not used that balun.
I have used others and find that I could not tell much difference in using a balun, but did seem? better.
I have attached a write up that pretty much , what I also think.
that is just my opinion.
I do like the Loop and found it to be quieter for me.
If you find any think else please share.
73 Ken

From: cernem1alt <michael.oram@...>
To: SkyWires@yahoogroups.com
Sent: Saturday, July 16, 2011 3:55 PM
Subject: [SkyWires] Thoughts on the MFJ-912 balun

Greetings from England.
Anyone got any opinions on the MFJ-912 4:1 balun with a skywire?
Thanks
Mike M1ALT

Yahoo! Groups Links

    http://docs.yahoo.com/info/terms/

3987. Re: 4:1 + 1:1 balun

Yahoo group: SkyWires
Date: 2011-07-24 07:00:26 UTC
From: kp4md
Topic: 3985 Message: 3987

Rich,
Nice clean construction! N1LO describes the construction of a
switchable balun using toroid cores on
http://www.qsl.net/n1lo/n1lobaln.pdf
<http://www.qsl.net/n1lo/n1lobaln.pdf>
Essentially you are switching the configuration between one 4:1 Guanella
balun <http://qsl.net/kp4md/guanella.pdf> and two 1:1 Guanella baluns
in parallel.Some have voiced concerns that connecting two 1:1 baluns in
parallel compromises the reduction of common mode currents by decreasing
the common mode impedance
http://www.eham.net/ehamforum/smf/index.php/topic,74785.0.html
<http://www.eham.net/ehamforum/smf/index.php/topic,74785.0.html>
http://forums.qrz.com/showthread.php?257424-1-1-BALUN
<http://forums.qrz.com/showthread.php?257424-1-1-BALUN>
http://groups.yahoo.com/group/rsgbtech/message/2986
<http://groups.yahoo.com/group/rsgbtech/message/2986>
Perhaps this compromise is worth the convenience of such a neatly
switchable balun.
Carol, KP4MD/W6
--- In SkyWires@yahoogroups.com, "Richard Schmuke" <rdj@...> wrote:
>
> Some people asked about the wiring on my switch so I added a end view
of my switchable 4:1x1:1 balun.
> http://i1102.photobucket.com/albums/g453/KD0ZZ/EndView-1.jpg
>
> Rich , KdÃ□zz , â□º
>
> My wife complains I mess with stuff too much but I have a "tinkering
virus"
>

3988. RE: [SkyWires] Re: 4:1 + 1:1 balun

Yahoo group: SkyWires
Date: 2011-07-24 11:55:12 UTC
From: Richard Schmuke
Topic: 3985 Message: 3988
Attachments: 2 described; binary payloads are missing from this source WARC

Carol, just a quick note on the two toroid or two rods. With my very limited test equipment, a MFJ-259, I have found that the rods gave me a wider range of low SWR reading into a dummy load.

I have seen the set up by N1LO.

I was looking for the ease of changing for comparison.

Thank you for the information I will look into it.

Rich , KdØzz , ☺

In just two days from now,tomorrow will be yesterday

Subject: [SkyWires] Re: 4:1 + 1:1 balun

Rich,

Nice clean construction! N1LO describes the construction of a switchable balun using toroid cores on

http://www.qsl.net/n1lo/n1lobaln.pdf

Essentially you are switching the configuration between one 4:1 Guanella balun <http://qsl.net/kp4md/guanella.pdf> and two 1:1 Guanella baluns in parallel.

Some have voiced concerns that connecting two 1:1 baluns in parallel compromises the reduction of common mode currents by decreasing the common mode impedance

http://www.eham.net/ehamforum/smf/index.php/topic,74785.0.html

http://forums.qrz.com/showthread.php?257424-1-1-BALUN

http://groups.yahoo.com/group/rsgbtech/message/2986

Perhaps this compromise is worth the convenience of such a neatly switchable balun.

Carol, KP4MD/W6

--- In SkyWires@yahoogroups.com, "Richard Schmuke" <rdj@...> wrote:
>
> Some people asked about the wiring on my switch so I added a end view of my switchable 4:1x1:1 balun.
> http://i1102.photobucket.com/albums/g453/KD0ZZ/EndView-1.jpg
>
> Rich , KdÃ˜zz , â˜º
>
> My wife complains I mess with stuff too much but I have a "tinkering virus"

>

3990. 4:1x1:1 Balun Update

Yahoo group: SkyWires
Date: 2011-07-28 21:22:04 UTC
From: Richard Schmuke
Topic: 3990 Message: 3990

I completed my switchable balun, http://s1102.photobucket.com/albums/g453/KD0ZZ/
and hooked it to a 80M dipole fed by 450 ladder line. 18 inches of coax out of the tuner and then the balun. I was asked what was better the 1:1 or the 4:1. Well I don't know, this is my first ladder line antenna and the points of resonance are all over the place. These reading are direct without the tuner. It is into a 80M length dipole and the SWR is 7:1 at the 1:1 balun and SWR of 4.2:1 with the 4:1 at 3.8 Mhz. The 1:1 balun did have good points at 5.8,15.3 and 24.7 Mhz. The 4:1 was good at 11.6. 20.1 but what I really like is it is great right on 10M phone and with 10 opening up that will be used a lot. 1.1to1 at 28.5, 28.4 and 28.6 at 1.2:1.
With a tuner the bands can be set at for the rig to see 1:1. Are these readings normal for a 80 doublet fed with 450 ohm?

Rich , KDØZZ , ☺

3991. AW: [SkyWires] 4:1x1:1 Balun Update

Yahoo group: SkyWires
Date: 2011-07-29 10:13:00 UTC
From: Siegfried Jackstien
Topic: 3990 Message: 3991

Hi rich
Yes those readings are common
It depends on length of dipole AND length of ladderline
With several try and error you can get those "nice readings" closer or exactly in the bands ....

What you should not do is to have a low impedance point and then use the 1:4

Example halfwave dipole and halfwave ladderline OR fullwave dipole and quarterwave ladderline ... both would give you low impedance at the shack end

And lowering that further via the 1:4 would give you even lower impedance at the tuner end of the balun ... and most tuners have higher losses if tuned to very low impedance (for that you should use the 1:1)

Good setup is halfwave dipole for lowest band and a quarterwave line to the balun ... that would transform the low dipole impedance up to a few hundred ohms and with the 1:4 back down in the tuner range BUT try to avoid to get those resonances and transforming EXACTLY ... cause if the line is exact a quarterwave you can get VERY HIGH impedance (to high for the balun!) and you can have some very nice firework in your shack :-)

I had the same setup (dipole with ladderline) here for a long time and it is a very good multiband setup ... do not worry about the readings of your swr meter ... tune it and use it :-)

With some added knife switches you could even get rid of you tuner completely (with those switches you could ad some ladderline)
See here:
http://www.w5dxp.com/notuner.htm

I grabbed that idea and do nearly the same now with my topband deltaloop
With only 2 different length of ladderline I can work many bands without tuner!!
And on the other bands swr is between 2 and 3 (not in the hundreds) so there the tuner losses are also low ...

Good dxing with your multibander *g*
Greetz
Dg9bfc
Sigi

> -----Ursprüngliche Nachricht-----
> Von: SkyWires@yahoogroups.com [mailto:SkyWires@yahoogroups.com] Im Auftrag
> von Richard Schmuke
> Gesendet: Donnerstag, 28. Juli 2011 21:22
> An: Richard Schmuke
> Betreff: [SkyWires] 4:1x1:1 Balun Update
>

>
>
> I completed my switchable balun,
> http://s1102.photobucket.com/albums/g453/KD0ZZ/
> and hooked it to a 80M dipole fed by 450 ladder line. 18 inches of coax
> out of the tuner and then the balun. I was asked what was better the 1:1
> or the 4:1. Well I don't know, this is my first ladder line antenna and
> the points of resonance are all over the place. These reading are direct
> without the tuner. It is into a 80M length dipole and the SWR is 7:1 at
> the 1:1 balun and SWR of 4.2:1 with the 4:1 at 3.8 Mhz. The 1:1 balun did
> have good points at 5.8,15.3 and 24.7 Mhz. The 4:1 was good at 11.6. 20.1
> but what I really like is it is great right on 10M phone and with 10
> opening up that will be used a lot. 1.1to1 at 28.5, 28.4 and 28.6 at
> 1.2:1.
> With a tuner the bands can be set at for the rig to see 1:1. Are these
> readings normal for a 80 doublet fed with 450 ohm?
>
> Rich , KDØZZ , ☺
>
>
>
>

3992. Re: 4:1x1:1 Balun Update

Yahoo group: SkyWires
Date: 2011-07-29 12:57:11 UTC
From: kp4md
Topic: 3990 Message: 3992

Dear Rich,
Yes, I've observed similar results, explained by the complex impedance transformations that occur. Your "points of resonance" will also shift as you vary the length of ladder line. W5DXP describes a clever way to use this to achieve a low SWR on all frequencies without a tuner at http://www.w5dxp.com/notuner.htm <http://www.w5dxp.com/notuner.htm>

Carol KP4MD/W6

--- In SkyWires@yahoogroups.com, "Richard Schmuke" <rdj@...> wrote:
>
> I completed my switchable balun,
http://s1102.photobucket.com/albums/g453/KD0ZZ/
> and hooked it to a 80M dipole fed by 450 ladder line. 18 inches of
coax out of the tuner and then the balun. I was asked what was better
the 1:1 or the 4:1. Well I donâ□□t know, this is my first ladder
line antenna and the points of resonance are all over the place. These
reading are direct without the tuner. It is into a 80M length dipole and
the SWR is 7:1 at the 1:1 balun and SWR of 4.2:1 with the 4:1 at 3.8
Mhz. The 1:1 balun did have good points at 5.8,15.3 and 24.7 Mhz. The
4:1 was good at 11.6. 20.1 but what I really like is it is great right
on 10M phone and with 10 opening up that will be used a lot. 1.1to1 at
28.5, 28.4 and 28.6 at 1.2:1.
> With a tuner the bands can be set at for the rig to see 1:1. Are these
readings normal for a 80 doublet fed with 450 ohm?
>
>
> Rich , KDÃ□ZZ , â□º
>

3993. Attic Skywire very encouraging

Yahoo group: SkyWires
Date: 2011-07-30 16:39:09 UTC
From: cernem1alt
Topic: 3993 Message: 3993

I have just put a 36ft skywire loop in my attic fed by a random length of about 18ft of 450 ohm ladder feeder into a LDG 4:1 balun into my Yaesu FC20 tuner fired by my Yaesu FT-847 got 40m - through to 6m worked Italy on 6m and Spain on 20m on 5 Watts QRP!!love it!

So it shows even with the most restrictive of situations just what can be achieved and a great deal of the "rubbish" noise is just not there!
I am hooked
73's
Mike M1ALT

3994. Re: MFJ-912 balun considerations

Yahoo group: SkyWires
Date: 2011-08-03 20:18:26 UTC
From: kc5jk
Topic: 3971 Message: 3994

> Anyone got any opinions on the MFJ-912 4:1 balun with a skywire?
> Mike M1ALT
> ----------

There's a good chance it's the same balun that is built into my MFJ-902H tuner, which is as good as any. MFJ has been building tuners with baluns for decades, so they know what they're doing. And baluns are not exactly rocket science in the first place.
That aside, I don't why this is an issue for you. I assume your longwire is non-resonant and requires a tuner. That will match the impedence of the wire, whatever it is, for the frequency you are on.
If the skywire is something other than a longwire, different story.
I have used W2AU and Hy-Gain and Palomar baluns, and those built into MFJ and Dentron tuners, as well as built my own from Amidon kits and from scratch. I have even used television receiver baluns (but they explode at about 35-watts). I cannot say that one is any better than another.
Paul, www.KC5JK.com

PS The Palomar (or any) baluns that have permanent wires coming out the body for the balanced side, and which cannot be opened to replace those wires, should never be cut, unless you first measure their lengths so you can splice same size wires back onto them later.

3995. Re: Balun Designs & Plans

Yahoo group: SkyWires
Date: 2011-08-03 20:35:57 UTC
From: kc5jk
Topic: 3971 Message: 3995

> [This] is a W9INN design >
http://www.balundesigns.com/servlet/the-4-dsh-1-Baluns/Categories >
Aaron> KV9L~~~~~~~~~~~~^V^~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~
The following links to one of mine, the KC5JK true choke balun:
Photo: KC5JK.tripod.com/id2.html <KC5JK.tripod.com/id2.html>
Plans, parts list, instructions:
http://kc5jk.tripod.com/sitebuildercontent/sitebuilderfiles/ant-balun-jk\
.gif
<http://kc5jk.tripod.com/sitebuildercontent/sitebuilderfiles/ant-balun-j\
k.gif>

3996. RE: [SkyWires] Re: MFJ-912 balun considerations

Yahoo group: SkyWires
Date: 2011-08-03 21:04:10 UTC
From: Richard Schmuke
Topic: 3971 Message: 3996
Attachments: 2 described; binary payloads are missing from this source WARC

The MFJ-902 tuner is rated for 150 watts and the MFJ-912 is for 1500 watts.

Note: I have the MFJ-962D tuner and using balanced line with the built in balun I cannot get all bands down to 1:1. I use a foot of coax with my own external 4:1 balun and can tune 1:1. So with a tuner and the 912 should be good for full power.

Rich ,KDØZZ , ☺

from the middle of Missouri , out in the sticks with the hicks and the ticks.

From: SkyWires@yahoogroups.com [mailto:SkyWires@yahoogroups.com] On Behalf Of kc5jk
Sent: Wednesday, August 03, 2011 3:18 PM
To: SkyWires@yahoogroups.com
Subject: [SkyWires] Re: MFJ-912 balun considerations

> Anyone got any opinions on the MFJ-912 4:1 balun with a skywire?
> Mike M1ALT
> ----------

There's a good chance it's the same balun that is built into my MFJ-902H tuner, which is as good as any. MFJ has been building tuners with baluns for decades, so they know what they're doing. And baluns are not exactly rocket science in the first place.
That aside, I don't why this is an issue for you. I assume your longwire is non-resonant and requires a tuner. That will match the impedence of the wire, whatever it is, for the frequency you are on.
If the skywire is something other than a longwire, different story.
I have used W2AU and Hy-Gain and Palomar baluns, and those built into MFJ and Dentron tuners, as well as built my own from Amidon kits and from scratch. I have even used television receiver baluns (but they explode at about 35-watts). I cannot say that one is any better than another.
Paul, www.KC5JK.com

PS The Palomar (or any) baluns that have permanent wires coming out the body for the balanced side, and which cannot be opened to replace those wires, should never be cut, unless you first measure their lengths so you can splice same size wires back onto them later.

3999. (no subject)

Yahoo group: SkyWires
Date: 2011-08-15 10:22:41 UTC
From: Pam
Topic: 3999 Message: 3999

This looks like spam to me

Jerry

4000. Re: [SkyWires] (unknown)

Yahoo group: SkyWires
Date: 2011-08-15 10:25:44 UTC
From: Hans Remeeus
Topic: 3999 Message: 4000

It is...

73,
Hans Remeeus (PA1HR)
http://www.remeeus.eu
http://www.hansremeeus.nl
Communication is about people, the rest is technology.

Op 15-8-2011 12:22, Pam schreef:
>
>
> This looks like spam to me
>
> Jerry
>
>
>
> __.

4001. Re: [SkyWires] (unknown)

Yahoo group: SkyWires
Date: 2011-08-15 21:31:49 UTC
From: Roger H
Topic: 3999 Message: 4001

i think he was trynig to have jerry post thos link to more readio info in the likns seckion becous he had never dun it befor
becous i looked at the likns and to me thear wear trying to give a porson info on ham (amauter)radio

--- In SkyWires@yahoogroups.com, Pam <jmcd904@...> wrote:
>
> This looks like spam to me
>
> Jerry
>

4002. POLICE SCANNERS

Yahoo group: SkyWires
Date: 2011-08-21 07:32:21 UTC
From: Rickey Bucket mouth
Topic: 4002 Message: 4002

I have an older police scanner that still picks up very good in my area, the orher day I had an officer tell me they were fixing to go to all digital radios and freq. Does this mean we can no longer pick them up on our scanners, is there going to be new scanners that will pick them up, if so what afre they? Thank you for your time.

4003. Re: [SkyWires] POLICE SCANNERS

Yahoo group: SkyWires
Date: 2011-08-21 14:49:29 UTC
From: Andy
Topic: 4002 Message: 4003

> I have an older police scanner ...

There are scanner forums and websites that cover this better.

I think there are two or three different digital radio standards, one of them is P25 (Project 25). There are scanners that demodulate these too (even Radio Shack has a couple). But the digital modes allow encryption too, and if that is in use, even the P25-capable scanners would not work to receive those signals.

As for new frequencies, there will always be scanners made to pick up the bands in use. Various VHF and UHF frequency ranges have been used for years by law enforcement. Be aware that some re-banding (in the 700-800 MHz general area) has been taking place over the last couple of years, and some of the bands changed somewhat, yet again. Old scanners (newer than yours) might not work on all the latest bands.

Andy

4004. Re: [SkyWires] POLICE SCANNERS

Yahoo group: SkyWires
Date: 2011-08-22 23:10:14 UTC
From: Dave Fales
Topic: 4002 Message: 4004

there are digital scanners but they are pricey but coming down in price from what they started out at

From: Rickey Bucket mouth
Sent: Sunday, August 21, 2011 1:32 AM
To: SkyWires@yahoogroups.com
Subject: [SkyWires] POLICE SCANNERS

I have an older police scanner that still picks up very good in my area, the orher day I had an officer tell me they were fixing to go to all digital radios and freq. Does this mean we can no longer pick them up on our scanners, is there going to be new scanners that will pick them up, if so what afre they? Thank you for your time.

4005. Golden offer free hosting company

Yahoo group: SkyWires
Date: 2011-09-04 18:16:50 UTC
From: Hosting Company
Topic: 4005 Message: 4005

Don't waste your time and money for paying reseller account

You can get it for free today

Register Now : http://hosting-panels.com

4012. RE: [SkyWires] Cute ... video

Yahoo group: SkyWires
Date: 2011-09-13 20:48:50 UTC
From: David Shrum
Topic: 4006 Message: 4012

If the owner of this group was still here that could be done but he is AWOL and only the moderators are here and he DIDN'T leave them to the ability to change how people join, that's why this group gets spam like this; if you want a group similar to this that IS better run look for LoopSkyWire, that group does require approval to be a member.

Dave N8PU

From: SkyWires@yahoogroups.com [mailto:SkyWires@yahoogroups.com] On Behalf Of Per Bekker-Madsen
Sent: Tuesday, September 13, 2011 4:25 PM
To: SkyWires@yahoogroups.com
Subject: Re: [SkyWires] Cute girl porn casting video

No Andy, that is not a threat. Just a hint to the creator that all other groups on yahoogroups.com can eliminate such spam messages. I want to exchange knowledge and give and get hints on creating and develop antennas. There are hundred thousand web sites with nude girls and porns, which I dont want to visit because I like it better in natura. Thats why Andy.

Have a nice day

Per OV2V

2011/9/13 Andy <ai.egrps@...>

> If the creator of this group cant remove these SPAM mails from the group I will delete my membership.

Is that supposed to be a threat?

Why are you telling us this?

---

avast! Antivirus <http://www.avast.com> : Outbound message clean.

Virus Database (VPS): 9/13/2011
Tested on: 9/13/2011 4:48:50 PM
avast! - copyright (c) 1988-2011 AVAST Software.

4013. RE: [SkyWires] Cute ... video

Yahoo group: SkyWires
Date: 2011-09-13 22:14:26 UTC
From: raymond mitchell
Topic: 4006 Message: 4013

I only open the ones with ham calls or ham related in the subject line. Yes, there is spam I delete and do not open. Yet there is useful info in many of the posts.
Abe K7ABE

--- On Tue, 9/13/11, David Shrum <dave.n8pu@gmail.com> wrote:

From: David Shrum <dave.n8pu@...>
Subject: RE: [SkyWires] Cute ... video
To: SkyWires@yahoogroups.com
Date: Tuesday, September 13, 2011, 1:48 PM

If the owner of this group was still here that could be done but he is AWOL and only the moderators are here and he DIDN'T leave them to the ability to change how people join, that's why this group gets spam like this; if you want a group similar to this that IS better run look for LoopSkyWire, that group does require approval to be a member.Dave N8PU
 From: SkyWires@yahoogroups.com [mailto:SkyWires@yahoogroups.com] On Behalf Of Per Bekker-Madsen
Sent: Tuesday, September 13, 2011 4:25 PM
To: SkyWires@yahoogroups.com
Subject: Re: [SkyWires] Cute girl porn casting video

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Why are you telling us this?

avast! Antivirus: Outbound message clean.
Virus Database (VPS): 9/13/2011
Tested on: 9/13/2011 4:48:50 PM
avast! - copyright (c) 1988-2011 AVAST Software.

4014. Re: [SkyWires] Cute ... video

Yahoo group: SkyWires
Date: 2011-09-14 05:12:14 UTC
From: Per Bekker-Madsen
Topic: 4006 Message: 4014

:-) AWOL :-) a very bad word ;-) found out in Afghanistan what that meant.
Was there 2009/10 and trained ANA. up to 10% AWOL :-(

73 Per OV2V (Sergeant Major RDAF)

2011/9/13 David Shrum <dave.n8pu@...>

> **
>
>
> If the owner of this group was still here that could be done but he is AWOL
> and only the moderators are here and he DIDN'T leave them to the ability to
> change how people join, that's why this group gets spam like this; if you
> want a group similar to this that IS better run look for LoopSkyWire, that
> group does require approval to be a member.****
>
> Dave N8PU****
>
> ** **
>
> *From:* SkyWires@yahoogroups.com [mailto:SkyWires@yahoogroups.com] *On
> Behalf Of *Per Bekker-Madsen
> *Sent:* Tuesday, September 13, 2011 4:25 PM
> *To:* SkyWires@yahoogroups.com
> *Subject:* Re: [SkyWires] Cute girl porn casting video****
>
> ** **
>
>
>
> No Andy, that is not a threat. Just a hint to the creator that all other
> groups on yahoogroups.com can eliminate such spam messages. I want to
> exchange knowledge and give and get hints on creating and develop antennas.
> There are hundred thousand web sites with nude girls and porns, which I dont
> want to visit because I like it better in natura. Thats why Andy.****
>
> ** **
>
> Have a nice day****
>
> ** **
>
> Per OV2V****
>
> 2011/9/13 Andy <ai.egrps@...>****
>

> ****
>
> > If the creator of this group cant remove these SPAM mails from the group
> I will delete my membership.****
>
> Is that supposed to be a threat?
>
> Why are you telling us this?****
>
> ** **
>
>
>
>
> ****
>
> ****
>
>
> ------------------------------
>
> avast! Antivirus <http://www.avast.com>: Outbound message clean.
>
> Virus Database (VPS): 9/13/2011
> Tested on: 9/13/2011 4:48:50 PM
> avast! - copyright (c) 1988-2011 AVAST Software.
>
>
>

4019. 40M Star Horizontal Loop in attic

Yahoo group: SkyWires
Date: 2011-09-21 14:47:42 UTC
From: kj4wrk
Topic: 4019 Message: 4019

Hi all,
Like many, I live in an antenna-restricted area and have issues with XYL impedance as well.

I wanted to put up a multi-band antenna in my attic and had considered a fan dipole as well as a few other designs. A conventional horizontal loop seemed to be a good antenna to try, but the available space was only about 30X30 feet, not enough for 40 meters.

I was curious about distorting the basic shape of the loop and what effect it would have on propagation. After a lot of googling, I stumbled across Cebic's web site and found his article on star horizontal loops (http://www.cebik.com/content/a10/wire/40star.html).

Since I have a two-zone heating and A/C system, I had to contend with the A/C unit in the attic, so a flat star loop wasn't possible. I ended up constructing a version of the star loop with the center sections pulled upwards into more of a pyramid shape. That way, I was able to put about 175 feet of wire into the space instead of 120 feet I could achieve with a regular loop. I'm feeding the loop with a direct-attached Balun Designs 4:1 balun through about 50' of RG-8X to a LDG AT100ProII tuner and my FT-897D.

Performance has been good considering the antenna is about 20 feet off of the ground for the lower portion of the stars. I'm able to make contacts into Eastern Europe, Canary Islands, South America and the Western USA on about 30 watts on 40m - 10m. My only 6m use has been into a local repeater, but when band conditions warrant, I'll try longer distances.

Steve
KJ4WRK

4020. RE: [SkyWires] 40M Star Horizontal Loop in attic

Yahoo group: SkyWires
Date: 2011-09-22 13:54:07 UTC
From: Bob Hardin
Topic: 4019 Message: 4020

Could you please send a link that does not involve logging in?
http://www.cebik.com/content/a10/wire/40star.html

4021. Re: 40M Star Horizontal Loop in attic

Yahoo group: SkyWires
Date: 2011-09-24 00:40:16 UTC
From: w7tea
Topic: 4019 Message: 4021

Steve, sounds very similar to what I installed in our CCnR home 20 years ago. Our attic could take a 40x20' loop. I fed it with ladder line down thru the wall to a 4:1 balun and short run of coax. I found that transmitting on 15m set off the horn on the alarm system but a few chokes in the alarm box took care of that. I later made a delta loop outside of #18 copperweld fed in a lower corner with a 4:1 "remote" balun. The apex of the loop was about 20' at the top of the chimney. The base ran along a wooden fence in the back yard. No one notice or said a thing. It worked as well as the indoor loop and kept the rf further from the family. Finally I enlisted a fir tree on the corner of the lot and strung a similar slanting delta loop around the property. This time it was an 80m loop and was generally 1-2 s units stronger on receive than the indoor 40m loop. Using the #18 wire, no one said a thing. It is hardly visible until an ice storm coats the wires!

73, Gary W7TEA

--- In SkyWires@yahoogroups.com, "kj4wrk" <steve@...> wrote:
>
> Hi all,
> Like many, I live in an antenna-restricted area and have issues with XYL impedance as well.
>
> I wanted to put up a multi-band antenna in my attic and had considered a fan dipole as well as a few other designs. A conventional horizontal loop seemed to be a good antenna to try, but the available space was only about 30X30 feet, not enough for 40 meters.
>
> I was curious about distorting the basic shape of the loop and what effect it would have on propagation. After a lot of googling, I stumbled across Cebic's web site and found his article on star horizontal loops (http://www.cebik.com/content/a10/wire/40star.html).
>
> Since I have a two-zone heating and A/C system, I had to contend with the A/C unit in the attic, so a flat star loop wasn't possible. I ended up constructing a version of the star loop with the center sections pulled upwards into more of a pyramid shape. That way, I was able to put about 175 feet of wire into the space instead of 120 feet I could achieve with a regular loop. I'm feeding the loop with a direct-attached Balun Designs 4:1 balun through about 50' of RG-8X to a LDG AT100ProII tuner and my FT-897D.
>
> Performance has been good considering the antenna is about 20 feet off of the ground for the lower portion of the stars. I'm able to make contacts into Eastern Europe, Canary Islands, South America and the Western USA on about 30 watts on 40m - 10m. My only 6m use has been into a local repeater, but when band conditions warrant, I'll try longer distances.
>
> Steve
> KJ4WRK
>

4022. Telephone "C" wire

Yahoo group: SkyWires
Date: 2011-09-30 05:48:59 UTC
From: Kenneth
Topic: 4022 Message: 4022

I have a large spool of telephone rural "C" wire (that I found in the forest, ahem :P) that I want to use for my 40M horizontal loop. It's 19ga 2-conductor copper-clad steel with nylon insulation and nearly impossible to work with! My question is, even if I short the 2 conductors at both sides of the Ladder-Loc feed point, will I still have a problem with the distributed capacitance affecting my radiation pattern? Am I overthinking this? Thanks!

KB3VNA/Wes

4036. Good Grief, Too much spam in this group

Yahoo group: SkyWires
Date: 2011-10-05 19:51:57 UTC
From: kj4wrk
Topic: 4036 Message: 4036

See you all in the other antenna groups. This one's too full of spam. :/

4038. (no subject)

Yahoo group: SkyWires
Date: 2011-10-06 08:54:49 UTC
From: Pam
Topic: 4038 Message: 4038

TOO MUCH SPAM WOULD HAVE THOUGHT THEY WOULD HAVE GOT A HANDLE OF IT BY NOW I'M LEAVEING TOO

JerryKF5AWP

4040. Re: [SkyWires] (unknown)

Yahoo group: SkyWires
Date: 2011-10-06 12:48:26 UTC
From: Memwl
Topic: 4038 Message: 4040

I have noticed this also, I expect some but this is getting pretty heavy now
Is there something that can be done
Mike-ke7sbe

>_____
>From: Pam <jmcd904@...>
>To: SkyWires@yahoogroups.com
>Sent: Thursday, October 6, 2011 1:54 AM
>Subject: [SkyWires] (unknown)
>
>
>
>TOO MUCH SPAM WOULD HAVE THOUGHT THEY WOULD HAVE GOT A HANDLE OF IT BY NOW I'M LEAVEING TOO
>
>JerryKF5AWP
>
>
>

4041. Re: [SkyWires] (unknown)

Yahoo group: SkyWires
Date: 2011-10-06 13:31:57 UTC
From: Harold Burton
Topic: 4038 Message: 4041

It’s my understanding that the original list owner has long ago bailed out
and no one else has any kind of access or control over group content. All
the old timers in the group just depend on a quick hand with the delete key.

Harold
KD5SAK

From: Memwl
Sent: Thursday, October 06, 2011 7:48 AM
To: SkyWires@yahoogroups.com
Subject: Re: [SkyWires] (unknown)

I have noticed this also, I expect some but this is getting pretty heavy now
Is there something that can be done
Mike-ke7sbe

From: Pam <jmcd904@...>
To: SkyWires@yahoogroups.com
Sent: Thursday, October 6, 2011 1:54 AM
Subject: [SkyWires] (unknown)

TOO MUCH SPAM WOULD HAVE THOUGHT THEY WOULD HAVE GOT A HANDLE OF IT BY NOW I'M LEAVEING TOO

JerryKF5AWP

4042. Re: [SkyWires] (unknown)

Yahoo group: SkyWires
Date: 2011-10-06 13:43:27 UTC
From: Joe
Topic: 4038 Message: 4042

OHH A SINGLE CLICK OF THE MOUSE IS SOOOO HARD TO DO..

On 10/6/2011 3:54 AM, Pam wrote:
>
>
> TOO MUCH SPAM WOULD HAVE THOUGHT THEY WOULD HAVE GOT A HANDLE OF IT
> BY NOW I'M LEAVEING TOO
>
> JerryKF5AWP
>
>
>
>

4043. Re: [SkyWires] (unknown)

Yahoo group: SkyWires
Date: 2011-10-06 14:28:56 UTC
From: David Shrum
Topic: 4038 Message: 4043

To answer your question, no. The original owner of the group left without giving one of the moderators full control of the group. Just as any of us did not have to be approved to become members of this group, the same is also true of the hit and run spammers. The moderators can only react after the fact, as one of the moderators I wish we could change the group to where it would required approval but we can't. I am also a member of another group called Loop Sky Wires, that group DOES required approval to become a member. As you probably might guess, there is almost no spam in that group, and if it happens it is usually dealt with quickly. You are more than welcome to join that group, who knows, I might be one of the moderators that will be approving you there. Hope to see you there.
Dave n8pu

On Thursday, October 6, 2011, Memwl <modkulla@...> wrote:
>
>
> I have noticed this also, I expect some but this is getting pretty heavy
now
> Is there something that can be done
> Mike-ke7sbe
>
> _____
> From: Pam <jmcd904@...>
> To: SkyWires@yahoogroups.com
> Sent: Thursday, October 6, 2011 1:54 AM
> Subject: [SkyWires] (unknown)
>
>
> TOO MUCH SPAM WOULD HAVE THOUGHT THEY WOULD HAVE GOT A HANDLE OF IT BY
NOW I'M LEAVEING TOO
>
> JerryKF5AWP
>
>
>
>

4047. RF InShack with 160m loop fed with ladderline need help

Yahoo group: SkyWires
Date: 2011-10-16 00:44:17 UTC
From: Don
Topic: 4047 Message: 4047

I have built a 160m loop and am feeding it with ladder line.

The ladder line comes in directly thru the window and is connected to my MFJ 962d tuner balanced line. I can tune the antenna with no significant issues at all for SWR.

The rest of the set up is a K3 to an SGC powercube. Power is provided by batteries.

The problem that I am having is I am getting a significant amount of RF problems with a highly distorted TX when I use the loop.

Now there is another thing that needs to be stated about the installation. The loop runs around the house so that the shack is basically in the center of the circle. Also I have a dipole that is close to the loop as well. So I don't know if the RF is coming in thru the dipole. Note if I TX with the dipole there is still RF on my signal but highly reduced. If I disconnect the ladder line from the tuner the RF goes away. (Maybe a tuner problem???)

Right now to be able to use the radio at all I had to remove the ladder line from the shack and I have coiled it up outside at the feed point.

So can this installation be salvaged, as I am thinking my number 1 problem is that I am in the center of the loop. Second I am starting to think from reading on the internet that ladder line should not be run in the shack as any RF can not be choked. Thus I should be using a 1:1 current balun outside of the shack and then run coax between the tuner and balun and I would suspect put some ferrites on the coax.

Anyone who can provide help in figuring out this problem that I am having your feedback will be appreciated.

Thanks
Don
KD8NNU

4048. Re: [SkyWires] RF InShack with 160m loop fed with ladderline need help

Yahoo group: SkyWires
Date: 2011-10-16 03:02:04 UTC
From: Steven Grater
Topic: 4047 Message: 4048

Sounds To Me Like You Have Resident Length Of Ladder line Will Induct From Any Antenna In The Area Need To Change The Length To Something Less Or More Than Hafe Of A Wave On Any Band You Are Using

--- On Sat, 10/15/11, Don <goldtr8@...> wrote:

From: Don <goldtr8@...>
Subject: [SkyWires] RF InShack with 160m loop fed with ladderline need help
To: SkyWires@yahoogroups.com
Date: Saturday, October 15, 2011, 7:44 PM

I have built a 160m loop and am feeding it with ladder line.

The ladder line comes in directly thru the window and is connected to my MFJ 962d tuner balanced line. I can tune the antenna with no significant issues at all for SWR.

The rest of the set up is a K3 to an SGC powercube. Power is provided by batteries.

The problem that I am having is I am getting a significant amount of RF problems with a highly distorted TX when I use the loop.

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Anyone who can provide help in figuring out this problem that I am having your feedback will be appreciated.

Thanks
Don
KD8NNU

4049. Re: RF InShack with 160m loop fed with ladderline need help

Yahoo group: SkyWires
Date: 2011-10-16 03:24:55 UTC
From: Dr Don
Topic: 4047 Message: 4049

Another thing to try is to end the ladder line outside the shack without any coil.
Use two parallel pieces of coax from the ladder line to the tuner.
The center conductors go to the ladder line and the tuner.
The shields are tied together. The ladder line end is floating and the tuner end
is connected to the shack ground.
I would also ground the dipole center and shield to test that it is not affecting the
problem.

Dr. Don HC4/W4BWS

4054. Advice please on 10w tx/rx horizontal loop for HF Amateur use.

Yahoo group: SkyWires
Date: 2011-11-15 14:54:28 UTC
From: dj_philonline
Topic: 4054 Message: 4054

Hi, posted this on another site but received no answers so here goes, I have started using loops since moving into a new qth in a deep valley town
in Northumberland with lots of overhead domestic 240v and telephone cable networks making HF work nearly impossible, my vertical loop which is big enough (6m x 3 in a delta config.) to cause a stir with the elderly locals is great for 20 to 10m bands but with 5w from my FT-817ND the tuner losses are so great on 40m it is hard to get a good swr reading, I have come up with a plan to put a horizontal loop just inside the top lip of my plastic guttering which surrounds my semi-detached house. Looking for 40m and 80m work on this antenna.
Questions
1: would the loop coming through the loft at the house attached end reduce its performance much?
2: would the 4:1 balun be better located in the loft or outside at the unattached end of the house?
3: would I be better having it as a horizontal dipole centre fed at the unattached end of the house and coming back on itself around either side of the building and not feeding into the loft at all?

I hope these questions are understandable or I will have to try and do drawings and that will not be good, I would rather stick to the loop idea if possible as the reduced noise floor level is fantastic compared to all other types of antennas tried at this location.
Hope somebody can advise.
regards
Phil M6MRP

4055. Re: RF InShack with 160m loop fed with ladderline need help

Yahoo group: SkyWires
Date: 2011-11-15 15:12:29 UTC
From: dj_philonline
Topic: 4047 Message: 4055

--- In SkyWires@yahoogroups.com, "Don" <goldtr8@...> wrote:
>
> I have built a 160m loop and am feeding it with ladder line.
>
> The ladder line comes in directly thru the window and is connected to my MFJ 962d tuner balanced line. I can tune the antenna with no significant issues at all for SWR.
>
> The rest of the set up is a K3 to an SGC powercube. Power is provided by batteries.
>
> The problem that I am having is I am getting a significant amount of RF problems with a highly distorted TX when I use the loop.
>
I agree with Dr Don you need to get that ladder line outside the shack away from close objects, I have tried this before as it is easy to feed flat ladder line trough a window but as the ladder line is actualy an active part of the antenna not realy a feeder you are creating a disturbance in its radiaton field by bringing it through the window, I solved the problem by feeding with a short length of RG58 to a 4:1 balun wound on to about 7 inches of white waste water pipe about 2 inches or less in diameter, very easy to build out of scrap stuff and it worked a treat hanging outside the window from a wooden dowling 12 inches long stuffed into a small hole drilled into a brick, there is a very good web posting showing step by step build if you need it give me a shout and I will hunt the link down for you.
Phil

4056. Easy step by step guide for 4:1 Balun Feeder

Yahoo group: SkyWires
Date: 2011-11-15 16:08:54 UTC
From: dj_philonline
Topic: 4056 Message: 4056

http://rogertango.com/articleread.aspx?idnumber=34232411

This is the exact same design I used for 50 ohm coax to ladder line dropper, worked a treat untill I had to move qth into this RF dead hell hole, I did not use any fancy cable clamps or even a socket just the plastic maste pipe from a skip, scrap wire and solder joints well sealed with tape cost nothing.
Hope it helps somebody
Phil

4058. AW: [SkyWires] Advice please on 10w tx/rx horizontal loop for HF Amateur use.

Yahoo group: SkyWires
Date: 2011-11-15 18:30:20 UTC
From: Siegfried Jackstien
Topic: 4054 Message: 4058

Answers below
Dg9bfc
Sigi

> 1: would the loop coming through the loft at the house attached end reduce
> its
> performance much?

NO

> 2: would the 4:1 balun be better located in the loft or outside at the
> unattached end of the house?

Does not matter but will influence lobes on the higher bands
Weatherproofing it is a thing to think about

> 3: would I be better having it as a horizontal dipole centre fed at the
> unattached end of the house and coming back on itself around either side
> of the
> building and not feeding into the loft at all?

See above
...

If you have only room for a small loop and wanna use it on half ist design
qrg
Just open the opposite wire (bridge with banana plugs or similar) and use it
as "bent dipole" on the lowest band
Example : you build a 80m loop
Open it and you have a bent 160m dipole
But then you have to use a length of ladderline for feeding that dipole/loop
combination multiband

4061. RE: [SkyWires] Advice please on 10w tx/rx horizontal loop for HF Amateur use.

Yahoo group: SkyWires
Date: 2011-11-16 01:23:45 UTC
From: Richard Schmuke
Topic: 4054 Message: 4061
Attachments: 2 described; binary payloads are missing from this source WARC

What size is your loop in length? If you want to work 80 and 40 with a 4:1 balun you need a loop 175m in length , with a 87m length loop you can work 80 with a 2:1 balun and 40 with a 4:1 balun.

Rich , Kd0zz

From: SkyWires@yahoogroups.com [mailto:SkyWires@yahoogroups.com] On Behalf Of dj_philonline
Sent: Tuesday, November 15, 2011 8:54 AM
To: SkyWires@yahoogroups.com
Subject: [SkyWires] Advice please on 10w tx/rx horizontal loop for HF Amateur use.

Hi, posted this on another site but received no answers so here goes, I have started using loops since moving into a new qth in a deep valley town in Northumberland with lots of overhead domestic 240v and telephone cable networks making HF work nearly impossible, my vertical loop which is big enough
(6m x 3 in a delta config.) to cause a stir with the elderly locals is great for
20 to 10m bands but with 5w from my FT-817ND the tuner losses are so great on
40m it is hard to get a good swr reading, I have come up with a plan to put a
horizontal loop just inside the top lip of my plastic guttering which surrounds
my semi-detached house. Looking for 40m and 80m work on this antenna.
Questions
1: would the loop coming through the loft at the house attached end reduce its
performance much?
2: would the 4:1 balun be better located in the loft or outside at the unattached end of the house?
3: would I be better having it as a horizontal dipole centre fed at the unattached end of the house and coming back on itself around either side of the
building and not feeding into the loft at all?

I hope these questions are understandable or I will have to try and do drawings
and that will not be good, I would rather stick to the loop idea if possible as
the reduced noise floor level is fantastic compared to all other types of antennas tried at this location.

Hope somebody can advise.
regards
Phil M6MRP

4063. Re: Advice please on 10w tx/rx horizontal loop for HF Amateur use.

Yahoo group: SkyWires
Date: 2011-11-16 16:17:37 UTC
From: Philip Boxx
Topic: 4054 Message: 4063

Thanks for the input Sigi, I did look at the idea of an open loop and even purchased a relay to do this but the use of ladder line at this qth is out of the question so I think the loop fed through the loft will be the way I will try first.
regards
Phil
--- In SkyWires@yahoogroups.com, "Siegfried Jackstien" <siegfried.jackstien@...> wrote:
>
> Answers below
> Dg9bfc
> Sigi
>
>
> > 1: would the loop coming through the loft at the house attached end reduce
> > its
> > performance much?
>
> NO
>
> > 2: would the 4:1 balun be better located in the loft or outside at the
> > unattached end of the house?
>
> Does not matter but will influence lobes on the higher bands
> Weatherproofing it is a thing to think about
>
> > 3: would I be better having it as a horizontal dipole centre fed at the
> > unattached end of the house and coming back on itself around either side
> > of the
> > building and not feeding into the loft at all?
>
> See above
> ...
>
> If you have only room for a small loop and wanna use it on half ist design
> qrg
> Just open the opposite wire (bridge with banana plugs or similar) and use it
> as "bent dipole" on the lowest band
> Example : you build a 80m loop
> Open it and you have a bent 160m dipole
> But then you have to use a length of ladderline for feeding that dipole/loop
> combination multiband
>

4064. Re: Advice please on 10w tx/rx horizontal loop for HF Amateur use.

Yahoo group: SkyWires
Date: 2011-11-16 16:41:14 UTC
From: Philip Boxx
Topic: 4054 Message: 4064

Hi Rich and thanks for the input, I think I am only going to have about 52m max to play with so this could be a non starter, I have seen plans for a switchable 4:1 to 1:1 balun but not a 2:1 so I will have to do some research on that one, putting the balun feedpoint into the loft would also make remote relay switching between balun windings much easier its just a shame I do not have the room for the 87m version, my 18m length vertical loop will tune to the 40m band with my mfj on my FT-840 at a higher power level than the 817ND giving great RX but the TX performance is very poor compared to the 10m to 20m bands.
regards
Phil

--- In SkyWires@yahoogroups.com, "Richard Schmuke" <rdj@...> wrote:
>
> What size is your loop in length? If you want to work 80 and 40 with a 4:1
> balun you need a loop 175m in length , with a 87m length loop you can work
> 80 with a 2:1 balun and 40 with a 4:1 balun.
>
> Rich , Kd0zz
>
>
>
> From: SkyWires@yahoogroups.com [mailto:SkyWires@yahoogroups.com] On Behalf
> Of dj_philonline
> Sent: Tuesday, November 15, 2011 8:54 AM
> To: SkyWires@yahoogroups.com
> Subject: [SkyWires] Advice please on 10w tx/rx horizontal loop for HF
> Amateur use.
>
>
>
>
>
>
> Hi, posted this on another site but received no answers so here goes, I have
> started using loops since moving into a new qth in a deep valley town
> in Northumberland with lots of overhead domestic 240v and telephone cable
> networks making HF work nearly impossible, my vertical loop which is big
> enough
> (6m x 3 in a delta config.) to cause a stir with the elderly locals is great
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> 20 to 10m bands but with 5w from my FT-817ND the tuner losses are so great
> on
> 40m it is hard to get a good swr reading, I have come up with a plan to put
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> horizontal loop just inside the top lip of my plastic guttering which
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> my semi-detached house. Looking for 40m and 80m work on this antenna.

> Questions
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> its
> performance much?
> 2: would the 4:1 balun be better located in the loft or outside at the
> unattached end of the house?
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> unattached end of the house and coming back on itself around either side of
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> building and not feeding into the loft at all?
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> I hope these questions are understandable or I will have to try and do
> drawings
> and that will not be good, I would rather stick to the loop idea if possible
> as
> the reduced noise floor level is fantastic compared to all other types of
> antennas tried at this location.
> Hope somebody can advise.
> regards
> Phil M6MRP
>

4065. RE: [SkyWires] Re: Advice please on 10w tx/rx horizontal loop for HF Amateur use.

Yahoo group: SkyWires
Date: 2011-11-16 18:22:16 UTC
From: Richard Schmuke
Topic: 4054 Message: 4065
Attachments: 2 described; binary payloads are missing from this source WARC

Phil , I built my own switchable balun, 4:1 or 1:1 for coax to 450 ohm line. This is used on a 135 doublet. The design is a current balun, the 2:1 I built is a voltage balun. If you run across a switchable with a 2:1 please let me know, I would like to try it.

Back to the loop, what I did was put up a 80m band size loop then with a 4:1 balun tweaked it to a 1:1 SWR in the middle of the 20M phone band and use it 40 thru 10. It work great 40 thru 10, not good on 80. It is coax fed the balun at the apex.

Rich , Kd0zz

Subject: [SkyWires] Re: Advice please on 10w tx/rx horizontal loop for HF Amateur use.

Hi Rich and thanks for the input, I think I am only going to have about 52m max to play with so this could be a non starter, I have seen plans for a switchable 4:1 to 1:1 balun but not a 2:1 so I will have to do some research on that one, putting the balun feedpoint into the loft would also make remote relay switching between balun windings much easier its just a shame I do not have the room for the 87m version, my 18m length vertical loop will tune to the 40m band with my mfj on my FT-840 at a higher power level than the 817ND giving great RX but the TX performance is very poor compared to the 10m to 20m bands.
regards
Phil

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> 80 with a 2:1 balun and 40 with a 4:1 balun.
>
> Rich , Kd0zz
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>
>
> From: SkyWires@yahoogroups.com <mailto:SkyWires%40yahoogroups.com>
[mailto:SkyWires@yahoogroups.com <mailto:SkyWires%40yahoogroups.com>] On Behalf
> Of dj_philonline
> Sent: Tuesday, November 15, 2011 8:54 AM
> To: SkyWires@yahoogroups.com <mailto:SkyWires%40yahoogroups.com>

> Subject: [SkyWires] Advice please on 10w tx/rx horizontal loop for HF
> Amateur use.
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>
>
> Hi, posted this on another site but received no answers so here goes, I
have
> started using loops since moving into a new qth in a deep valley town
> in Northumberland with lots of overhead domestic 240v and telephone cable
> networks making HF work nearly impossible, my vertical loop which is big
> enough
> (6m x 3 in a delta config.) to cause a stir with the elderly locals is
great
> for
> 20 to 10m bands but with 5w from my FT-817ND the tuner losses are so great
> on
> 40m it is hard to get a good swr reading, I have come up with a plan to
put
> a
> horizontal loop just inside the top lip of my plastic guttering which
> surrounds
> my semi-detached house. Looking for 40m and 80m work on this antenna.
> Questions
> 1: would the loop coming through the loft at the house attached end reduce
> its
> performance much?
> 2: would the 4:1 balun be better located in the loft or outside at the
> unattached end of the house?
> 3: would I be better having it as a horizontal dipole centre fed at the
> unattached end of the house and coming back on itself around either side
of
> the
> building and not feeding into the loft at all?
>
> I hope these questions are understandable or I will have to try and do
> drawings
> and that will not be good, I would rather stick to the loop idea if
possible
> as
> the reduced noise floor level is fantastic compared to all other types of
> antennas tried at this location.
> Hope somebody can advise.
> regards
> Phil M6MRP
>

4066. Greetings

Yahoo group: SkyWires
Date: 2011-11-22 03:35:45 UTC
From: klauber.alex
Topic: 4066 Message: 4066

Greetings! I just wanted to introduce myself to the group. My name is Alex and I live near Syracuse, NY. I have been a shortwave listener for 34 years. My first radio was a Realistic DX 150. That radio opened the door for me to discover shortwave and utility stations. Next came a Realistic DX 302. I loved the frequency counter on that rig. Never again would I use a radio without a digital display.
Currently I am using a Radio Shack DX 398. I'm not partial to Radio Shack receivers, it's that I had a store close to my home and it was convenient. Most of the radios were purchased on a whim.
I use the DX398 with a long wire antenna. Antennas are one of the most enjoyable parts of this hobby, but for me. Experimenting with different lengths of wire, molded into the various shapes to see, hopefully, an improvement in a stations signal.
I have only now begun to collect QSL cards from my contacts. Nothing exotic yet but I'm working on it!

4067. Greatings

Yahoo group: SkyWires
Date: 2011-11-27 00:09:38 UTC
From: Jens
Topic: 4067 Message: 4067

Hi

I just want to introduce myself.
My name is jens / OZ1QSQ I live in Denmark, as the callsign tells, on a small farm in the countryside.
I just went into HAM radio three years ago, so I am no elmer. I have a couple of radios, the jewel piece is my Kenwood 2000.
Last winter I had a experimental hook up 160m loop and now I feel the need to make a permanent solution, as the experiment has dropped to the ground literally! I am so found of this antenna I simply has to erect a new and better version of it ASAP.

73
/jens

4068. 2λ 160m skywire loop?

Yahoo group: SkyWires
Date: 2011-11-27 00:27:15 UTC
From: Jens
Topic: 4068 Message: 4068

Hi

I am all new in this group, so i will plunge into it feet first. I am sorry if this question has been raised a hundred times, but I don't know what to call this antenna - please feel free to point me into the right direction if there are an old thread dealing with this.

I have had a full wave 160m horizontal loop hanging from my garden trees most of a year. But now the sun and wind has all but cut it completely down - time to make a new and improved version.

I have a supply of 50'(15m) wood masts at my disposal and I aim on a new loop antenna with Litze wire and true ladder line feeder.

Two questions for the honored members:
1) Is there any gain in making a double wavelength loop? (pros/cons)...

2) How do I calculate the tension on my antenna wire hanging i a pentagon shape?

73
Jens / OZ1QSQ

4069. RE: [SkyWires] - 160m skywire loop?

Yahoo group: SkyWires
Date: 2011-11-27 19:47:30 UTC
From: Michael Weinstock
Topic: 4069 Message: 4069

Hello Jens,

RE (1), there is advantage in using a 2WL loop over a 1WL in terms of lowering the TO (Take Off) angle of radiation. At 1WL, especially at such a low height in terms of %WL above ground, the antenna will be a very effective NVIS (Near Vertical Incidence Skywave) antenna. Lowering the TO angle of radiation may help to increase the TX range of your antenna.

On the (potential) downside, the 2WL loop as compared to the 1WL loop may not be as effective if used on the upper HF bands due to sharp peaks and nulls in the radiation pattern. This is not a problem if your primary use is the 160Mtr and other lower HF bands.

There are some excellent articles on horizontal loops available at www.cebiksite.com which describes the effect of loop circumference and height above ground on many aspects of loop performance.

There is also an excellent utility I have used "rjeloop4.exe" available from <http://www.smeter.net/antennas/large-transmitting-loop.php> http://www.smeter.net/antennas/large-transmitting-loop.php that helps model many of the parameters involved, without the need to use a heavy duty modelling program.

RE (2), an interesting question. one that I do not know the answer to, but I went looking and found a related article at http://www.idahoforests.org/img/pdf/lessons/calibration.pdf The formula on page 58 might be useful?

Regards,

Michael

VK3EMJ

From: SkyWires@yahoogroups.com [mailto:SkyWires@yahoogroups.com] On Behalf Of Jens
Sent: Sunday, 27 November 2011 11:27 AM
To: SkyWires@yahoogroups.com
Subject: [SkyWires] 2λ 160m skywire loop?

Hi

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73
Jens / OZ1QSQ

4070. Re: - 160m skywire loop?

Yahoo group: SkyWires
Date: 2011-11-28 01:03:50 UTC
From: Jens
Topic: 4069 Message: 4070

Hello Michael

Thank you for your reply. I did know a couple of the links you gave me on question 1, and they are great resources. I will study the rest with great interest.

On the other matter of calculating the tension in the wire, the formula do not produce accurate results.
The load on the wire is not a point load, but a distributed load over the entire length of the wire. And as a result the wire does not hang down in a triangle (obviously). As I recall it it is a shape called a hyperbolic "something"... It gently slopes down.
So the angle of attach on the mounting point is not the same as if it were a straight line down to the load.
Once this angle and force is calculated, you can determine if your wire is strong enough.
Problem is I don't know how to do it :-(

To determine the static mast loading, the trick is to calculate the angle of attack on the mounting point and do a simple enough vector force calculation on the mounting point to get the load on the mast.

To spice it all up, you just add a pinch of wind load and you are cooking :-)

The reason I would like to know these forces, is that I plan to tension the wire by a live mounting point in the top of the masts, and then run a rope down to a counter weight near the ground.
The heavier I can make the weight, the more linear my wire will hang.

Best
Jens / OZ1QSQ

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> Sent: Sunday, 27 November 2011 11:27 AM
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4071. RE: [SkyWires] Re: - 160m skywire loop?

Yahoo group: SkyWires
Date: 2011-11-28 02:13:13 UTC
From: Richard Schmuke
Topic: 4069 Message: 4071
Attachments: 2 described; binary payloads are missing from this source WARC

The shape of a drooping antenna is called a catenary. The load checking formula can be found in this page. http://en.wikipedia.org/wiki/Catenary

Rich , kd0zz

From: SkyWires@yahoogroups.com [mailto:SkyWires@...m] On Behalf Of Jens
Sent: Sunday, November 27, 2011 7:04 PM
To: SkyWires@yahoogroups.com
Subject: [SkyWires] Re: - 160m skywire loop?

Hello Michael

Thank you for your reply. I did know a couple of the links you gave me on question 1, and they are great resources. I will study the rest with great interest.

On the other matter of calculating the tension in the wire, the formula do not produce accurate results.
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To determine the static mast loading, the trick is to calculate the angle of attack on the mounting point and do a simple enough vector force calculation on the mounting point to get the load on the mast.

To spice it all up, you just add a pinch of wind load and you are cooking :-)

The reason I would like to know these forces, is that I plan to tension the wire by a live mounting point in the top of the masts, and then run a rope down to a counter weight near the ground.
The heavier I can make the weight, the more linear my wire will hang.

Best
Jens / OZ1QSQ

--- In SkyWires@yahoogroups.com <mailto:SkyWires%40yahoogroups.com> , "Michael Weinstock" <mweinstock@...> wrote:

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> shape?
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> 73
> Jens / OZ1QSQ
>

4072. Re: Greatings

Yahoo group: SkyWires
Date: 2011-11-28 12:40:22 UTC
From: John Wilson
Topic: 4067 Message: 4072

Welcome Jens

Name here is John qth is West Monroe,La. I to love the loop antenna I have a 80 meter and 40 meter loop.
I would think winter is very hard in Denmark so every thing needs to be heavy duty. I am able to use trees as supports and 14 ga wire here we do not not have vry bad winters. I also feed mine with 450 ohm ladderline to 4:1 balun and abt 20 ft of coax. I plan on next spring putting up a few more. My 80 meter slopes down from abt 80 feet to 20 ft facing northeast I get into Europe very well.

Again nice to meet you good luck with your project.

73 John K5JRW

4073. Re: - 160m skywire loop?

Yahoo group: SkyWires
Date: 2011-11-28 13:24:37 UTC
From: Jens
Topic: 4069 Message: 4073

Hello Rich

Aaaah the power of words :-)
Thus we arrive at http://www.vk1od.net/calc/awcc/awcc.htm where some brilliant HAM spirit, already presents the perfect online calculator.

Thank you
Jens / OZ1QSQ

--- In SkyWires@yahoogroups.com, "Richard Schmuke" <rdj@...> wrote:
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4074. RE: [SkyWires] Re: - 160m skywire loop?

Yahoo group: SkyWires
Date: 2011-11-28 14:33:50 UTC
From: Richard Schmuke
Topic: 4069 Message: 4074
Attachments: 2 described; binary payloads are missing from this source WARC

Good day Sir, thank you for the link. VK1OD has a wonderful assortment of information.

A note about words, around 40 years ago there was some research done on generating a radius when machining metal that would give better fatigue life. It was a catenary shape but at that time is was called a Grazinski radius or fillet. You could have done a search on it up to a couple of years ago. Someone by that same name made a stupid mistake and then won a law suit. Now all you get is information about her law suit.

Rich , KDØZZ , ☺

I know that you believe that you understood what you think I said, but I am not sure you realize that what you heard is not what I meant

Hello Rich

Aaaah the power of words :-)
Thus we arrive at http://www.vk1od.net/calc/awcc/awcc.htm where some brilliant HAM spirit, already presents the perfect online calculator.

Thank you
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> I
> > went looking and found a related article at
> > http://www.idahoforests.org/img/pdf/lessons/calibration.pdf The formula
> > on page 58 might be useful?
> >
> >
> >
> >
> >
> > Regards,
> >
> >
> >
> > Michael
> >
> > VK3EMJ
> >
> >
> >
> >
> >
> > From: SkyWires@yahoogroups.com <mailto:SkyWires%40yahoogroups.com>
<mailto:SkyWires%40yahoogroups.com>
> [mailto:SkyWires@yahoogroups.com <mailto:SkyWires%40yahoogroups.com>
<mailto:SkyWires%40yahoogroups.com>] On
> Behalf
> > Of Jens
> > Sent: Sunday, 27 November 2011 11:27 AM

> > To: SkyWires@yahoogroups.com <mailto:SkyWires%40yahoogroups.com>
<mailto:SkyWires%40yahoogroups.com>
> > Subject: [SkyWires] 2ë 160m skywire loop?
> >
> >
> >
> >
> >
> > Hi
> >
> > I am all new in this group, so i will plunge into it feet first. I am
> sorry
> > if this question has been raised a hundred times, but I don't know what to
> > call this antenna - please feel free to point me into the right direction
> if
> > there are an old thread dealing with this.
> >
> > I have had a full wave 160m horizontal loop hanging from my garden trees
> > most of a year. But now the sun and wind has all but cut it completely
> down
> > - time to make a new and improved version.
> >
> > I have a supply of 50'(15m) wood masts at my disposal and I aim on a new
> > loop antenna with Litze wire and true ladder line feeder.
> >
> > Two questions for the honored members:
> > 1) Is there any gain in making a double wavelength loop? (pros/cons)...
> >
> > 2) How do I calculate the tension on my antenna wire hanging i a pentagon
> > shape?
> >
> > 73
> > Jens / OZ1QSQ
> >
>

4075. Re: Greatings

Yahoo group: SkyWires
Date: 2011-11-28 16:59:13 UTC
From: Alan
Topic: 4067 Message: 4075

--- In SkyWires@yahoogroups.com, "Jens" <zigge.org@...> wrote:
>
> Hi
>
> I just want to introduce myself.
> My name is jens / OZ1QSQ I live in Denmark, as the callsign tells, on a small farm in the countryside.
> I just went into HAM radio three years ago, so I am no elmer. I have a couple of radios, the jewel piece is my Kenwood 2000.
> Last winter I had a experimental hook up 160m loop and now I feel the need to make a permanent solution, as the experiment has dropped to the ground literally! I am so found of this antenna I simply has to erect a new and better version of it ASAP.
>
> 73
> /jens
>
Jen, I run a 160m horizontal loop here in Montana..I use dacron rope and suspend from trees. It varies in height from 30-55 ft. I does really well on 80, 40, 30, and 20 meters. 160 if good up to 400-600 miles. I also feed it with 450 ladderline to a 4 to 1 balun to rg8x to my tuner then to 746pro. It was 80 meter loop for a couple of year but I doubled the size and it helped alot..73, Alan

4076. 80m Skyloop Question

Yahoo group: SkyWires
Date: 2011-12-03 03:59:37 UTC
From: Mac
Topic: 4076 Message: 4076

Hello All,

I have a 80m skyloop strung in the trees in my back yard. It's currently 287' in length as when I built it, I took the recommendation to cut it for the lowest frequency (3.5MHz in this case) and tune up to other freqs with a tuner.

I used the formula 1005/freq (3.5) yielding 287'.

I now find myself working mostly on 3.9MHz SSB. Would I see any appreciable improvement in performance at 3.9 MHZ if I shortened this loop by 30 feet to 257'? (again using the formula 1005/freq (3.9) yielding 257')

I feed this antenna via 450 ohm ladder line into a 4:1 voltage balun, then into the rig via 3' coax. My tuner is a Kenwood AT-200.

Appreciate any advice and comments.

Mac / K6OVI

4077. Re: [SkyWires] 80m Skyloop Question

Yahoo group: SkyWires
Date: 2011-12-03 11:43:09 UTC
From: Don Sanders
Topic: 4076 Message: 4077

The Kenwood tuner will only match up to a 3 to 1`mismatch. So if it matches
now you probably will not see much difference.
Trimmimg to the upper end of 80 meters may effect a match on higher bands.
If you were using coax feedline yoou would ne3wd tio trim it but with 450
ohm lead and balun length is not so critical.
Dr Don HC4/W4BWS

On Fri, Dec 2, 2011 at 10:59 PM, Mac <mac.haszard@...> wrote:

> **
>
>
> Hello All,
>
> I have a 80m skyloop strung in the trees in my back yard. It's currently
> 287' in length as when I built it, I took the recommendation to cut it for
> the lowest frequency (3.5MHz in this case) and tune up to other freqs with
> a tuner.
>
> I used the formula 1005/freq (3.5) yielding 287'.
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> I now find myself working mostly on 3.9MHz SSB. Would I see any
> appreciable improvement in performance at 3.9 MHZ if I shortened this loop
> by 30 feet to 257'? (again using the formula 1005/freq (3.9) yielding 257')
>
> I feed this antenna via 450 ohm ladder line into a 4:1 voltage balun, then
> into the rig via 3' coax. My tuner is a Kenwood AT-200.
>
> Appreciate any advice and comments.
>
> Mac / K6OVI
>
>
>

4078. Re: [SkyWires] 80m Skyloop Question

Yahoo group: SkyWires
Date: 2011-12-03 18:35:38 UTC
From: Andy
Topic: 4076 Message: 4078

Antennas do not need to be resonant to be effective. Non-resonant antennas radiate just as well. The most noticeable effect, is in the impedance/VSWR. The radiation pattern also alters, depending on how far off-resonance one is. 3.9 vs. 3.5 is not enough to make a huge difference in that, I think.

I wonder about the recommendation to cut it for the lowest frequency. What I have seen, is that one wants to cut a loop for the lowest frequency BAND in which you intend to use it, but not for the lowest frequency within that band. For example if you wanted to do 80, 40, and 20 meter bands, cut it for 80m and you can use it on the others. Whereas, if you cut it for 40m, it would not work so well on 80.

It might not hurt to trim it shorter, but I don't think you'd see it performing better. Then again, on harmonics the difference multiplies, so you might see a bigger difference there, not necessarily in your favor, in the SWR if nothing else. And there's also things like the ladder line and balun to consider.

Andy

4080. RE: [SkyWires] 80m Skyloop Question

Yahoo group: SkyWires
Date: 2011-12-03 19:26:11 UTC
From: Richard Schmuke
Topic: 4076 Message: 4080
Attachments: 1 described; binary payloads are missing from this source WARC

Subject: Re: [SkyWires] 80m Skyloop Question

Has anyone ever done radiation patterns made by loops like these? We all have seen the patters of dipoles when used like this, but i do not ever remember seeing what patterns happen with loops.

Joe WB9SBD

Joe, here is a link to some patterns for a delta loop, I put one up just like it in shape but not as high, I love it and don't intend to change until someone installs a 200ft tower for me with a set of mono-band antennas.

http://www.m0mcx.co.uk/?p=138

I have had verticals and dipoles, once I put up the loop I started getting good results in DX pile ups for the first time. I work all bands 40 thru 10 on it.

Rich , Kd0zz

4085. Terminated Long Wire

Yahoo group: SkyWires
Date: 2011-12-17 16:00:24 UTC
From: John
Topic: 4085 Message: 4085

Is there any truth to the rumor that installing a 250-600 Ohm resistor between the far end of a long wire and a ground rod will reduce or eliminate the white noise that makes a longwire/random wire antenna unusable? I have used a counterpoise, and while that makes the wire more tuneable and vastly reduces RF in the shack, the wire is essentially a noise generartor.

John, KGZAN

4086. Re: [SkyWires] Terminated Long Wire

Yahoo group: SkyWires
Date: 2011-12-17 17:28:59 UTC
From: Ken
Topic: 4085 Message: 4086

On Dec 17, 2011, at 11:00 AM, John wrote:

> Is there any truth to the rumor that installing a 250-600 Ohm resistor between the far end of a long wire and a ground rod will reduce or eliminate the white noise that makes a longwire/random wire antenna unusable? I have used a counterpoise, and while that makes the wire more tuneable and vastly reduces RF in the shack, the wire is essentially a noise generartor.

How high above ground is it? My understanding is that Beverages and long wires use far end termination with a resistor in that range to make them unidirectional instead of bidirectional. I don't know about making them lower noise (unless the noise is coming from the backend.)

Ken WA8JXM

4087. Two antenna designs for your comments

Yahoo group: SkyWires
Date: 2011-12-21 19:04:41 UTC
From: erickson.john20
Topic: 4087 Message: 4087

Hello Everyone:

Just received my General license after being away from Ham radio for 45+ years. Setting up a Kenwood TS-520 HF station and want to use a Sky Loop as my only antenna. First design is 350' long about 30' high shaped close to a "square". Will feed with 450 ohm ladder liner to a 4:1 current balun in my attic, then a short 10' piece of RG 58 coax to a MFJ 929 tuner in the shack. I'm concerned that it's not cut to any of the Ham frequencies (don't want to create any weird harmonics). But then there's lots of info saying "Go as Big as you can and let the tuner do the rest". Will only run 90-100 watts max mainly on C/W. I will be using oak trees (will use a tree service to climb the trees and set up the eye bolts and insulators/dacron rope) and 2nd story of the house to support the antenna wire. Want to use this set-upon 80-10 meters. Not planning on 160 meter operation at this time, but any chance of this working at that frequency too?

Second design is a full wave 80 meter Delta Loop, 275' total length, resonant at 3.65 mhz. Close to a triangle in shape, same height and same feed line. I'm pretty sure this would work 80-10 meters as cut.

QTH is at 1900' elevation on a ridge. I would really like to set up the larger loop, but have the concerns noted above.

Any input would be greatly appreciated

John, KJ6TBD

4088. RE: [SkyWires] Two antenna designs for your comments

Yahoo group: SkyWires
Date: 2011-12-21 22:04:53 UTC
From: Scott MacKenzie
Topic: 4087 Message: 4088

Either one will work well - especially if you are working relatively close stuff on 80M - but you can work DX with it on 80M. I use it for FD and always a dynamite antenna capable of holding a frequency all day/night on 40M. Good DX too. The square works best. I don't use a balun, just a tuner. You can shorten up the loop to approximately 250-270 feet.

From: SkyWires@yahoogroups.com [mailto:SkyWires@yahoogroups.com] On Behalf Of erickson.john20
Sent: Wednesday, December 21, 2011 2:05 PM
To: SkyWires@yahoogroups.com
Subject: [SkyWires] Two antenna designs for your comments

Hello Everyone:

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Any input would be greatly appreciated

John, KJ6TBD

No virus found in this message.
Checked by AVG - www.avg.com
Version: 2012.0.1890 / Virus Database: 2109/4694 - Release Date: 12/21/11

4089. Re: Two antenna designs for your comments

Yahoo group: SkyWires
Date: 2011-12-21 22:31:33 UTC
From: erickson.john20
Topic: 4087 Message: 4089

Thanks for your reply Scott. I can't really shorten the 350' loop due to the way my oak trees are situated on the property. That's my concern, in order to create the "square loop" it has to be that length. I don't want to use masts or other supports. So....even though it's not cut right per the formula will I have problems with it? Thanks, John

--- In SkyWires@yahoogroups.com, "Scott MacKenzie" <kb0fhp@...> wrote:
>
> Either one will work well - especially if you are working relatively close
> stuff on 80M - but you can work DX with it on 80M. I use it for FD and
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> tuner. You can shorten up the loop to approximately 250-270 feet.
>
> _____
>
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> Of erickson.john20
> Sent: Wednesday, December 21, 2011 2:05 PM
> To: SkyWires@yahoogroups.com
> Subject: [SkyWires] Two antenna designs for your comments
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>
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> larger loop, but have the concerns noted above.
>
> Any input would be greatly appreciated
>
> John, KJ6TBD
>
>
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>

4090. RE: [SkyWires] Re: Two antenna designs for your comments

Yahoo group: SkyWires
Date: 2011-12-21 23:02:27 UTC
From: Scott MacKenzie
Topic: 4087 Message: 4090

Just might be a bit harder to match. I use trees myself - for FD, we have it in a square - but the distance from a tree and a corner is maybe 50+ fee or so. You might want to consider lofting a line over the tree - that what I have done - a lot cheaper than a tree service.

Have you tried an ELNEC analysis of the desired dimension?

_____

From: SkyWires@yahoogroups.com [mailto:SkyWires@yahoogroups.com] On Behalf Of erickson.john20
Sent: Wednesday, December 21, 2011 5:32 PM
To: SkyWires@yahoogroups.com
Subject: [SkyWires] Re: Two antenna designs for your comments

Thanks for your reply Scott. I can't really shorten the 350' loop due to the way my oak trees are situated on the property. That's my concern, in order to create the "square loop" it has to be that length. I don't want to use masts or other supports. So....even though it's not cut right per the formula will I have problems with it? Thanks, John

--- In SkyWires@yahoogroups.com <mailto:SkyWires%40yahoogroups.com> , "Scott MacKenzie" <kb0fhp@...> wrote:
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>
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>
> From: SkyWires@yahoogroups.com <mailto:SkyWires%40yahoogroups.com>
[mailto:SkyWires@yahoogroups.com <mailto:SkyWires%40yahoogroups.com>] On Behalf
> Of erickson.john20
> Sent: Wednesday, December 21, 2011 2:05 PM
> To: SkyWires@yahoogroups.com <mailto:SkyWires%40yahoogroups.com>
> Subject: [SkyWires] Two antenna designs for your comments
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> John, KJ6TBD
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_____

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4091. Re: Two antenna designs for your comments

Yahoo group: SkyWires
Date: 2011-12-22 04:49:17 UTC
From: erickson.john20
Topic: 4087 Message: 4091

Scott
I'm just getting back into this after a 45 year absence and still have lots to learn and relearn!! I haven't tried any modeling programs for this design. I just posted a drawing in the "Files Section" so everyone can see what it looks like. "350' Loop" is the title. Lots of other factors to consider such as Lightning protection and static build up. Thanks again for your replys
John, KJ6TBD

--- In SkyWires@yahoogroups.com, "Scott MacKenzie" <kb0fhp@...> wrote:
>
> Just might be a bit harder to match. I use trees myself - for FD, we have
> it in a square - but the distance from a tree and a corner is maybe 50+ fee
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> Have you tried an ELNEC analysis of the desired dimension?
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> Of erickson.john20
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>
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>
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> > From: SkyWires@yahoogroups.com <mailto:SkyWires%40yahoogroups.com>
> [mailto:SkyWires@yahoogroups.com <mailto:SkyWires%40yahoogroups.com>] On
> Behalf
> > Of erickson.john20
> > Sent: Wednesday, December 21, 2011 2:05 PM
> > To: SkyWires@yahoogroups.com <mailto:SkyWires%40yahoogroups.com>
> > Subject: [SkyWires] Two antenna designs for your comments
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>

4092. Re: Two antenna designs for your comments

Yahoo group: SkyWires
Date: 2011-12-22 17:49:22 UTC
From: John Wilson
Topic: 4087 Message: 4092

Hello John

Glad to see you are back in the hobby, I had a160 meter zepp up added abt 30 feet of wire to make a loop.
The loop highest point is abt 70 feet and the lowest is abt 20 feet.It is shaped like a sloping delta loop. I love this antenna it works well with my out board tuner it is feed with ladderline to 4 to 1 balun. I worked India first time ever\on 10 meters with my Yaesu ft-450 abt 90 watts. Last night on cw 80 meters worked several Dl and OE stations, getting 579 589 signal rpts. I have never been able to work Europe with that kind of report on 80. Anyway good luck with antenna .

73 K5JRW John

4095. Re: Two antenna designs for your comments

Yahoo group: SkyWires
Date: 2012-01-01 14:38:49 UTC
From: VA1CQ
Topic: 4087 Message: 4095

John,

The day I made my homemade slingshot for antenna hooks changed antenna installation in a profound way for me. Even in my small town, I was able to buy a slingshot from a pawn shop, then I duct taped a fishing reel to it. I tied a light oblong fishing weight to the fishing line. When I pull back moderately on the sling shot, I can place the light weight remarkably accurately into a tree as high as 100 feet. After that you alternately pull up thicker and thicker rope until you have a large enough diameter rope in place, sometimes over the very top of a tree, to hold a loop corner.

That's when I learned how important height can be to make loops work better.

My biggest problem using loop antennas seems to be my tuner. You need a (preferably balanced) tuner that can match a wide range of impedances. If you don't have this, then you may need to try different lengths of ladder line to hopefully change feed impedance for any given frequency so you can tune all ham bands equally well.

Murray
VA1CQ

--- In SkyWires@yahoogroups.com, "Scott MacKenzie" <kb0fhp@...> wrote:
>
... You might want to consider lofting a line over the tree - that what I have done - a lot cheaper than a tree service.

4096. RE: [SkyWires] Re: Two antenna designs for your comments

Yahoo group: SkyWires
Date: 2012-01-01 16:32:16 UTC
From: Bob Hardin
Topic: 4087 Message: 4096

I saw an interesting design using knife switches and different lengths of ladder line to tune for all the bands without a tuner at all.
Can't remember where, might have been the ARRL antenna book?

Idea is you cut different lengths of ladder line to switch in with you feed line that tune it for that band.

FYI

> -----Original Message-----
> From: SkyWires@yahoogroups.com [mailto:SkyWires@yahoogroups.com]
> On Behalf Of VA1CQ
> Sent: Sunday, January 01, 2012 9:39 AM
> To: SkyWires@yahoogroups.com
> Subject: [SkyWires] Re: Two antenna designs for your comments
>
> John,
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> very top of a tree, to hold a loop corner.
>
> That's when I learned how important height can be to make loops work
> better.
>
> My biggest problem using loop antennas seems to be my tuner. You need a
> (preferably balanced) tuner that can match a wide range of impedances. If
> you don't have this, then you may need to try different lengths of ladder
line
> to hopefully change feed impedance for any given frequency so you can
> tune all ham bands equally well.
>
> Murray
> VA1CQ
>
>

>
> --- In SkyWires@yahoogroups.com, "Scott MacKenzie" <kb0fhp@...> wrote:
> >
> ... You might want to consider lofting a line over the tree - that what I
have
> done - a lot cheaper than a tree service.
>
>
>
> ------------------------------------
>
> Yahoo! Groups Links
>
>
>

4097. RE: [SkyWires] Re: Two antenna designs for your comments

Yahoo group: SkyWires
Date: 2012-01-01 18:27:15 UTC
From: Richard Schmuke
Topic: 4087 Message: 4097
Attachments: 2 described; binary payloads are missing from this source WARC

Try http://www.w5dxp.com/notuner.htm

Rich / Kd0zz

Subject: RE: [SkyWires] Re: Two antenna designs for your comments

I saw an interesting design using knife switches and different lengths of
ladder line to tune for all the bands without a tuner at all.
Can't remember where, might have been the ARRL antenna book?

Idea is you cut different lengths of ladder line to switch in with you feed
line that tune it for that band.

FYI

> -----Original Message-----
> From: SkyWires@yahoogroups.com <mailto:SkyWires%40yahoogroups.com>
[mailto:SkyWires@yahoogroups.com <mailto:SkyWires%40yahoogroups.com>]
> On Behalf Of VA1CQ
> Sent: Sunday, January 01, 2012 9:39 AM
> To: SkyWires@yahoogroups.com <mailto:SkyWires%40yahoogroups.com>
> Subject: [SkyWires] Re: Two antenna designs for your comments
>
> John,
>
> The day I made my homemade slingshot for antenna hooks changed antenna
> installation in a profound way for me. Even in my small town, I was able
to
> buy a slingshot from a pawn shop, then I duct taped a fishing reel to it.
I tied a
> light oblong fishing weight to the fishing line. When I pull back
moderately on
> the sling shot, I can place the light weight remarkably accurately into a
tree as
> high as 100 feet. After that you alternately pull up thicker and thicker
rope
> until you have a large enough diameter rope in place, sometimes over the
> very top of a tree, to hold a loop corner.
>
> That's when I learned how important height can be to make loops work
> better.
>
> My biggest problem using loop antennas seems to be my tuner. You need a
> (preferably balanced) tuner that can match a wide range of impedances. If
> you don't have this, then you may need to try different lengths of ladder

line
> to hopefully change feed impedance for any given frequency so you can
> tune all ham bands equally well.
>
> Murray
> VA1CQ
>
>
>
> --- In SkyWires@yahoogroups.com <mailto:SkyWires%40yahoogroups.com> ,
"Scott MacKenzie" <kb0fhp@...> wrote:
> >
> ... You might want to consider lofting a line over the tree - that what I
have
> done - a lot cheaper than a tree service.
>
>
>
> ------------------------------------
>
> Yahoo! Groups Links
>
>
>

4098. G'day New Bloke

Yahoo group: SkyWires
Date: 2012-01-07 07:23:08 UTC
From: vk4oc
Topic: 4098 Message: 4098

G'day I have just joined this group and found some very interesting ideas about our Sky Loops.
I've enjoyed using a loop for quite a few years. My loop is 273 feet long in the config of a square, 4 sides of earth wire.I can only get my antenna up on poles about 10 feet.My feed line is 27.85 metres long of RG6 75 ohms and goes though my AT230 antenna tuner.My VSWR on 40 metres is 1.1 ,80M 1.7, 20m 1.5, 15m 1.7. 10m 2.6.VSWR.

In the Arrl book, I worked my formula 1005/F which was 3.600mhz. works out 279.166 feet.
I've worked a lot DX on my loop.
Cheers
Dennis vk4oc.

4099. Re: Greatings

Yahoo group: SkyWires
Date: 2012-01-16 13:01:08 UTC
From: Ron
Topic: 4067 Message: 4099

Hi Jens,

Is this antenna intended to transmit your signal? If you like to receive 160 meter or higher I can propose a different antenna wich is has a much lower noise level and better S/N and is significant smaller in size. I always use an different antenna for transmit and receive as i found that several types of receive antennas are much more suitable as they are less sensitive to several sources of QRM.

73' Ron
ON2RON

> Hi
>
> I just want to introduce myself.
> My name is jens / OZ1QSQ I live in Denmark, as the callsign tells, on a small farm in the countryside.
> I just went into HAM radio three years ago, so I am no elmer. I have a couple of radios, the jewel piece is my Kenwood 2000.
> Last winter I had a experimental hook up 160m loop and now I feel the need to make a permanent solution, as the experiment has dropped to the ground literally! I am so found of this antenna I simply has to erect a new and better version of it ASAP.
>
> 73
> /jens
>

4102. Re: OMG, we have the same friend!!!!

Yahoo group: SkyWires
Date: 2012-01-18 11:11:32 UTC
From: Pam
Topic: 4102 Message: 4102

SPAMMER

Jerry

4103. Re: You're Invited!

Yahoo group: SkyWires
Date: 2012-01-18 11:12:33 UTC
From: Pam
Topic: 4103 Message: 4103

SPAMMER

Jerry

4104. Save BNR Radio Bulgaria on shortwave and medium wave

Yahoo group: SkyWires
Date: 2012-01-19 03:28:39 UTC
From: Al
Topic: 4104 Message: 4104

Apologies if is a little off-topic, but still related to radio communications. It is just that I would hate this shortwave station to vanish from the air waves like it has happened to others.

Spread the word please.

Alvin Mirabal

Save BNR Radio Bulgaria on shortwave and medium wave

Dear listeners and friends of shortwave and Radio Bulgaria, With a huge regret I'd like to inform you very bad news.
After more than 75 years in the world broadcasting from January 31, 2012 at 2200UT Radio Bulgaria cease broadcasting on shortwave and medium wave.

The shortwave transmitters in Kostinbrod & Padarsko will be destroyed in the next few months.

Radio Bulgaria is not necessary now to its shortwave and medium waves listeners.
The reason

No money for broadcasting on shortwave and medium waves. And who listens to short waves today?
We have internet. Maintaining the shortwave transmitters was "Mission Impossible"! Hope dies last.

As a frequency manager in the last 19 years my main task was to provide best quality signal of Radio Bulgaria in worldwide coverage.
There will be no shortwave, there will be no frequency manager. For all people who work in Radio Bulgaria that bad news is shock and horror. Beginning of the end. But we expect your moral support.

What can you do?

Sign the petition
Contact BNR

http://www.saveradiobulgaria.com/?page=index

4106. now they are posting links to their junk

Yahoo group: SkyWires
Date: 2012-02-05 13:50:18 UTC
From: Don
Topic: 4106 Message: 4106

Is it time to start a new group because of the SPAM junk.

Now they are posting to our links section.

4107. RE: [SkyWires] now they are posting links to their junk

Yahoo group: SkyWires
Date: 2012-02-05 18:15:48 UTC
From: David Shrum
Topic: 4106 Message: 4107

There has already been a new group going because of the spam that CAN'T be stopped in this group,

http://groups.yahoo.com/group/LoopSkyWire/

Mention you are a member of this group and you are tired of the spam, one of the moderators will have to approve you, but that is the way to keep a good handle on the spam that did I say CAN'T be stopped because anyone can join without approval.

Dave N8PU

-----Original Message-----
From: SkyWires@yahoogroups.com [mailto:SkyWires@yahoogroups.com] On Behalf Of Don
Sent: Sunday, February 05, 2012 8:50 AM
To: SkyWires@yahoogroups.com
Subject: [SkyWires] now they are posting links to their junk

Is it time to start a new group because of the SPAM junk.

Now they are posting to our links section.

---

avast! Antivirus <http://www.avast.com> : Outbound message clean.

Virus Database (VPS): 2/5/2012
Tested on: 2/5/2012 1:15:48 PM
avast! - copyright (c) 1988-2012 AVAST Software.

4110. Cancel subscription

Yahoo group: SkyWires
Date: 2012-02-06 15:52:05 UTC
From: My Mail
Topic: 4110 Message: 4110

Due to toooo much Spam, especially "X" rated links

Sent from my NOOK

4111. Re: Cancel subscription

Yahoo group: SkyWires
Date: 2012-02-07 15:01:51 UTC
From: w4ski_1
Topic: 4110 Message: 4111

Look for the "Edit Membership" Link at the top of the page, click it.

On the next screen, look for a "Leave Group" button near the lower right.

Don't thank me... I may not be here to see it! The only reason I'm not leaving the group right now is because I want you to see this message, and think it may disappear before you read it if I leave the group.

73 de W4SKI

--- In SkyWires@yahoogroups.com, My Mail <ae7jstx@...> wrote:
>
> Due to toooo much Spam, especially "X" rated links
>
>
>
>
> Sent from my NOOK
>

4112. bud

Yahoo group: SkyWires
Date: 2012-02-14 00:17:50 UTC
From: Paul xxxxxxxxxx
Topic: 4112 Message: 4112

Hey friend my friend showed me this life changing featured story that I wanted to fill you in about

Im currently earning $8k /every month part time online with a very easy to use program also there were no risks in getting the kit which practically costs nothing

http://fur.ly/71qi

This financial crisis cant affect those with the power of the internet

Your friend
Paul

4114. Re: [SkyWires] You've got a private message!

Yahoo group: SkyWires
Date: 2012-03-11 05:01:20 UTC
From: rod barbe
Topic: 4052 Message: 4114

go away spam

_____
From: hduihdg <hduihdg@yahoo.com>
To: SkyWires@yahoogroups.com
Sent: Sunday, 11 March 2012 12:13 PM
Subject: [SkyWires] You've got a private message!

You've got a private message! Check it here:
http://file1.hpage.com/007659/83/html/hottie.htm

4115. TS-450SAT

Yahoo group: SkyWires
Date: 2012-03-12 14:10:15 UTC
From: Richard Schmuke
Topic: 4115 Message: 4115

I posted a set of pictures if needed on Photobucket. The radio was not in use for about 7 years when I lived in a restricted area. I retired, moved, then in the summer of 2007 I sent the radio to Communications Services and had it gone thru by Cal Fisher NF5P. It was all checked and recalibrated and came back at 105 watt CW.
It has been run on SSB all the time so never at full power CW.
Original book, shipping foam and boxes, power cord, mike plus the computer interface cable.
Built in antenna tuner. S/N 603000xxx I have seen clean rigs like this go as of late for $550. Never been to field day with it , I have a TS-430 for field day. I just ordered a TS-590S and need to room.
I am asking for $500, OBO, plus shipping to you location.

Rich , Kd0zz
Pictures at

Http://s1102.photobucket.com/albums/g453/KD0ZZ/TS-450SAT/

4116. TS-450SAT

Yahoo group: SkyWires
Date: 2012-03-12 15:24:06 UTC
From: Richard Schmuke
Topic: 4115 Message: 4116

Radio is sold. Thanks for looking.

Rich , KDØZZ , ☺

4121. Sad Vacation.....Ken Burchfield

Yahoo group: SkyWires
Date: 2012-05-18 18:09:58 UTC
From: Ken Burchfield
Topic: 4121 Message: 4121

Hi,

  Just writing to let you know our trip to Madrid, Spain has been a mess. We were having a great time until last night when we got mugged and lost all our cash,credit card cell phone. I was hit at the back of my neck with a pistol. We have reported to the local Police and have also contacted the consulate but was told to hang on for some couple of days before this mess can be straightened out Our return flight leaves in few hours from now. It has been a scary experience but thank God they didn't hurt anyone except me or take our passports away from us.

As we speak i need $1,500 USD to add up and sort my bills ,don't worry i will def refund it as soon as we get home,you can have it wired to my name via Western Union I'll have to show my passport as ID to pick it up here and i promise to pay you back as soon as I get back home.Here's my info below:

Name: Ken Burchfield

Location: C/Josefa ValcÃ¡rcel 40, 1a planta 1, 28027

Country: Madrid, Spain

Amount: $1,500

As soon as it is done, kindly get back to me with the confirmation number. Let me know if you are heading to the WU outlet now?

Many Thanks,

Ken.

 PacketRadio is Still Alive.......Mississippi.......145.010.......Simplex.......1200 Baud

4122. Is this group mstill active?

Yahoo group: SkyWires
Date: 2012-05-23 19:55:00 UTC
From: Chris Wilson
Topic: 4122 Message: 4122

New member from the UK here. I have a few questions re using a VNA to tune my horizontal quad loop of circa 490 feet, feeding via a corner and 450 Ohm windowed ladder line. Thanks.

--
Best regards,
Chris Wilson mailto:chris@...

4123. AW: [SkyWires] Is this group mstill active?

Yahoo group: SkyWires
Date: 2012-05-24 10:02:45 UTC
From: siegfried jackstien
Topic: 4122 Message: 4123

Ok ... what questions do you have?

How high is the loop?

What length is ladderline?

Dg9bfc

Sigi

> -----Ursprüngliche Nachricht-----
> Von: SkyWires@yahoogroups.com [mailto:SkyWires@yahoogroups.com] Im Auftrag
> von Chris Wilson
> Gesendet: Mittwoch, 23. Mai 2012 19:55
> An: SkyWires@yahoogroups.com
> Betreff: [SkyWires] Is this group mstill active?
>
>
>
> New member from the UK here. I have a few questions re using a VNA
> to tune my horizontal quad loop of circa 490 feet, feeding via a
> corner and 450 Ohm windowed ladder line. Thanks.
>
> --
> Best regards,
> Chris Wilson mailto:chris@...
>
>
>
> ------------------------------------
>
> Yahoo! Groups Links
>
>
>

4124. RE: [SkyWires] Is this group mstill active?

Yahoo group: SkyWires
Date: 2012-05-24 11:42:18 UTC
From: Jim
Topic: 4122 Message: 4124

Too Much porn/spam!!!

From: SkyWires@yahoogroups.com [mailto:SkyWires@yahoogroups.com] On Behalf
Of siegfried jackstien
Sent: Thursday, May 24, 2012 5:03 AM
To: SkyWires@yahoogroups.com
Subject: AW: [SkyWires] Is this group mstill active?

Ok ... what questions do you have?

How high is the loop?

What length is ladderline?

Dg9bfc

Sigi

> -----Ursprüngliche Nachricht-----
> Von: SkyWires@yahoogroups.com <mailto:SkyWires%40yahoogroups.com>
[mailto:SkyWires@yahoogroups.com <mailto:SkyWires%40yahoogroups.com>] Im
Auftrag
> von Chris Wilson
> Gesendet: Mittwoch, 23. Mai 2012 19:55
> An: SkyWires@yahoogroups.com <mailto:SkyWires%40yahoogroups.com>
> Betreff: [SkyWires] Is this group mstill active?
>
>
>
> New member from the UK here. I have a few questions re using a VNA
> to tune my horizontal quad loop of circa 490 feet, feeding via a
> corner and 450 Ohm windowed ladder line. Thanks.
>
> --
> Best regards,
> Chris Wilson mailto:chris@chriswilson.tv <mailto:chris%40chriswilson.tv>
>
>
>
> ------------------------------------
>
> Yahoo! Groups Links
>
>
>

4125. Re: AW: [SkyWires] Is this group mstill active?

Yahoo group: SkyWires
Date: 2012-05-26 22:14:42 UTC
From: Chris Wilson
Topic: 4122 Message: 4125

Thursday, May 24, 2012, 11:02:45 AM, you wrote:

>
> Ok ... what questions do you have?

> How high is the loop?

> What length is ladderline?

> Dg9bfc

> Sigi

On the recommendation of various people I have bought myself an AIM 4170C antenna analyser. It looks a nice bit of kit, but I am new to amateur radio and have an immediate question. At the moment I have a 25 feet to 35 feet high horizontal quad loop of about 490 feet in length. I have built it so by lengthening or shortening the guy ropes at the corners i can maybe add another 30 feet of wire, or lose as much as i want, with longer guy lines. i cannot get it higher unless i get some super tree fertiliser! It feeds off a corner into my bungalow through an upper window, via 450 ohm (I think...) one inch wide windowed ladder line of about 20 feet in length. probably 12 feet are superfluous, and just hanging in the breeze right now. This goes straight to the two screw terminals on the back of my Yaesu FC-902 ATU, which are designated for a "wire antenna". one of the posts is grounded. The ATU then goes to my old FT-902DM transceiver. The analyser has a SO-239 socket on it for connection to the DTU. How should I be connecting it to my antenna system? I think I may need something like a 4 : 1 balun at the house end of the ladder line, then connect the analyser via a short piece of co-ax to the balun, which in turn is connected to either "side" of the loop antenna ladder line? Or have I got this wrong? Is there an easy way to connect the ladder line so it terminates in a PL-259 plug, or is this an incorrect way of measuring things? I wiah to use the loop on HF multi band and in particular see if it can be optimised for either 160 meters or for PSK31 digi modes on either 20 meters or 15 meters. At the moment the AIM 4170C is probably 100 times more complicated than I am comfortable with, but I thought buying something really basic may be false economy in the longer term, as I feel I could get quite into this hobby. Thanks.

--
Best regards,
Chris Wilson mailto:chris@...

4126. AW: AW: [SkyWires] Is this group mstill active?

Yahoo group: SkyWires
Date: 2012-05-27 08:00:57 UTC
From: siegfried jackstien
Topic: 4122 Message: 4126

Hello chris

You need a balun (either external or built in the tuner)

I have a fc901 tuner (modded by dg9bfc!) ...

I disconnected the one wire terminal in the tuner and also disconnected the ground connection next to it

Then I added a 1:4 at the tuner inside ... connected to that one wire as input ... and the 2 output wires then connected to the 2 terminal posts (red and black) ...

I made another ground connection with a 6mm screw on a different place at the backside ...

When I wanna use the tuner for a longwire (were I would need that one wire terminal) I just use one of the coax outlets and a banana plug

Now I have 3 coax and one balanced output at that fc901

You can also put your balun external ... but there is so much room in the tuner I could not resist to put it in there

My coil-switch once broke and I hade to make a new one in ... a friend gave ma a nice switch with a lot more contacts that I had before

Now I have 16 positions on the coil ... makes tuning fast and easy ... also on the warc bands

That switch has only one row (instead the 3 rows in the yaesu tuner)

But 2 of that rows were only used for the "bridged" position of that tuner (cause you have one you know what I mean!) and that could easy be made with a second switch (dpdt located at backside right above the swr bridge)

No more turning around the whole circle when switching from a coax antenna (tuned for a given band) to the ladderline fed dipole or loop ... just change antenna switch position and grab over the tuner and flip that bridging switch (without turning the coil-switch!)

I have a (tuned) vertical for 20 and my ladderline fed loop

Sometimes during a qso condx change and the signal that was high on the loop is the high on the vertical

Switching from one to the other without turning the coil-switch now goes very fast (and sometimes I find tuning positions were I do not even use the bridging switch and have low swr on both antennas)

I will send you 2 pics of my modded tuner ... maybe then you also will make the balun inside

Greetz

Sigi

> -----Ursprüngliche Nachricht-----
> Von: SkyWires@yahoogroups.com [mailto:SkyWires@yahoogroups.com] Im Auftrag von Chris Wilson
> Gesendet: Samstag, 26. Mai 2012 22:15
> An: siegfried jackstien
> Betreff: Re: AW: [SkyWires] Is this group mstill active?
>
>
>
>
>
> Thursday, May 24, 2012, 11:02:45 AM, you wrote:
>
> >
> > Ok ... what questions do you have?
>
> > How high is the loop?
>
> > What length is ladderline?
>
> > Dg9bfc
>
> > Sigi
>
> On the recommendation of various people I have bought myself an AIM
> 4170C antenna analyser. It looks a nice bit of kit, but I am new to
> amateur radio and have an immediate question. At the moment I have a
> 25 feet to 35 feet high horizontal quad loop of about 490 feet in
> length. I have built it so by lengthening or shortening the guy ropes
> at the corners i can maybe add another 30 feet of wire, or lose as
> much as i want, with longer guy lines. i cannot get it higher unless i
> get some super tree fertiliser! It feeds off a corner into my bungalow
> through an upper window, via 450 ohm (I think...) one inch wide
> windowed ladder line of about 20 feet in length. probably 12 feet are
> superfluous, and just hanging in the breeze right now. This goes
> straight to the two screw terminals on the back of my Yaesu FC-902
> ATU, which are designated for a "wire antenna". one of the posts is
> grounded. The ATU then goes to my old FT-902DM transceiver. The
> analyser has a SO-239 socket on it for connection to the DTU. How
> should I be connecting it to my antenna system? I think I may need
> something like a 4 : 1 balun at the house end of the ladder line, then
> connect the analyser via a short piece of co-ax to the balun, which in
> turn is connected to either "side" of the loop antenna ladder line? Or
> have I got this wrong? Is there an easy way to connect the ladder line
> so it terminates in a PL-259 plug, or is this an incorrect way of

> measuring things? I wiah to use the loop on HF multi band and in
> particular see if it can be optimised for either 160 meters or for
> PSK31 digi modes on either 20 meters or 15 meters. At the moment the
> AIM 4170C is probably 100 times more complicated than I am comfortable
> with, but I thought buying something really basic may be false economy
> in the longer term, as I feel I could get quite into this hobby.
> Thanks.
>
> --
> Best regards,
> Chris Wilson mailto:chris@... <mailto:chris%40chriswilson.tv>
>
>
>
>

4127. Re: AW: AW: [SkyWires] Is this group mstill active?

Yahoo group: SkyWires
Date: 2012-05-31 15:02:03 UTC
From: Chris Wilson
Topic: 4122 Message: 4127

Sunday, May 27, 2012, 9:00:57 AM, you wrote:

>
> Hello chris

> You need a balun (either external or built in the tuner)

> I have a fc901 tuner (modded by dg9bfc!) ...

> I disconnected the one wire terminal in the tuner and also disconnected the
> ground connection next to it

> Then I added a 1:4 at the tuner inside ... connected to that one wire as
> input ... and the 2 output wires then connected to the 2 terminal posts (red
> and black) ...

> I made another ground connection with a 6mm screw on a different place at
> the backside ...

> When I wanna use the tuner for a longwire (were I would need that one wire
> terminal) I just use one of the coax outlets and a banana plug

> Now I have 3 coax and one balanced output at that fc901

> You can also put your balun external ... but there is so much room in the
> tuner I could not resist to put it in there

> My coil-switch once broke and I hade to make a new one in ... a friend gave
> ma a nice switch with a lot more contacts that I had before

> Now I have 16 positions on the coil ... makes tuning fast and easy ... also
> on the warc bands

> That switch has only one row (instead the 3 rows in the yaesu tuner)

> But 2 of that rows were only used for the "bridged" position of that tuner
> (cause you have one you know what I mean!) and that could easy be made with
> a second switch (dpdt located at backside right above the swr bridge)

> No more turning around the whole circle when switching from a coax antenna
> (tuned for a given band) to the ladderline fed dipole or loop ... just
> change antenna switch position and grab over the tuner and flip that
> bridging switch (without turning the coil-switch!)

> I have a (tuned) vertical for 20 and my ladderline fed loop

> Sometimes during a qso condx change and the signal that was high on the loop
> is the high on the vertical

> Switching from one to the other without turning the coil-switch now goes
> very fast (and sometimes I find tuning positions were I do not even use the
> bridging switch and have low swr on both antennas)

> I will send you 2 pics of my modded tuner ... maybe then you also will make
> the balun inside

> Greetz

> Sigi

Sorry for slow reply, my wife's father is poorly so we are a bit
distracted at the moment.

Thanks for the detailed answers, and the photos of how you modded you
ATU. I think I will do a similar modification, thanks for sharing this
excellent idea, I hadn't realized just how much unoccupied space there
was in there! I'll see if I can have a go at this over the weekend,
all the best!

--
Best regards,
Chris Wilson mailto:chris@...

4128. AW: AW: AW: [SkyWires] Is this group mstill active?

Yahoo group: SkyWires
Date: 2012-06-01 12:38:53 UTC
From: siegfried jackstien
Topic: 4122 Message: 4128

> Sorry for slow reply, my wife's father is poorly so we are a bit
> distracted at the moment.
>
> Thanks for the detailed answers, and the photos of how you modded you
> ATU. I think I will do a similar modification, thanks for sharing this
> excellent idea, I hadn't realized just how much unoccupied space there
> was in there! I'll see if I can have a go at this over the weekend,
> all the best!
>
> --

Good that I could help you ...

Yes ... there is much room in the tuner for adding a balun

Good luck and keep me informed about your moddings :-)

Hope that your wifes father is well soon

Greetz

Sigi

Dg9bfc

4129. SWR & the Loop Skywire

Yahoo group: SkyWires
Date: 2012-06-04 17:20:44 UTC
From: Mark
Topic: 4129 Message: 4129

I put up a 40 meter loop over a year ago and for months it was all anyone could ask for in an antenna. I was off the air for about 2 months and when I came back I couldn't seem to make a contact with the thing. My 17 meter vertical is working like a champ. For giggles I connected up an analyzer and got an SWR reading of between 3 & 6 to 1.

Is there something I'm missing/don't know/should look for? Could foliage be causing my issue?

Thanks!

4130. RE: [SkyWires] SWR & the Loop Skywire

Yahoo group: SkyWires
Date: 2012-06-04 17:50:45 UTC
From: Richard Schmuke
Topic: 4129 Message: 4130
Attachments: 2 described; binary payloads are missing from this source WARC

How is it fed, any corrosion, any coax in the system get water in it? I had some twin lead go bad from the wind and on a different antenna had some 9913 get moisture in it. Foliage should not be that big of a problem on 40. Please keep us informed.

Rich , Kd0zz

From: SkyWires@yahoogroups.com [mailto:SkyWires@yahoogroups.com] On Behalf Of Mark
Sent: Monday, June 04, 2012 12:21 PM
To: SkyWires@yahoogroups.com
Subject: [SkyWires] SWR & the Loop Skywire

I put up a 40 meter loop over a year ago and for months it was all anyone could ask for in an antenna. I was off the air for about 2 months and when I came back I couldn't seem to make a contact with the thing. My 17 meter vertical is working like a champ. For giggles I connected up an analyzer and got an SWR reading of between 3 & 6 to 1.

Is there something I'm missing/don't know/should look for? Could foliage be causing my issue?

Thanks!

4131. Phone line antenna

Yahoo group: SkyWires
Date: 2012-06-08 23:11:06 UTC
From: Bob Zimmermann
Topic: 4131 Message: 4131

Hello everyone,

I'm new here so i hope this is the right place to post this.

Has anybody ever used a phone line for an antenna?
I accidentally found a document on the net
(http://www.rdrop.com/users/billmc/phoneline.pdf)about doing this.
I found it interesting becouse when i was in my early teens i on
occasion would use an a/c line cord for an antenna. Yes i know that's
kind of unsafe and you are right.

!!!DON"T TRY THIS YOU COULD GET ELECTROCUTED!!!

but it does work, as long as you use a battery powered radio ,and ONLY ONE of the 2 leads from the a/c outlet AND you are NOT GROUNDED or Touching any metal. In other words if there is no path THRU you to anything else.

So the idea of a phone line is interesting.
Any thoughts?

4132. Re: [SkyWires] Phone line antenna

Yahoo group: SkyWires
Date: 2012-06-09 00:15:04 UTC
From: Memwl
Topic: 4131 Message: 4132

That link is dead, however the idea sounds interesting,
as the power companies are thinking of broad banding the power lines
or I think I saw something to that affect a little while back.
ke7sbe

>_____
> From: Bob Zimmermann <cigarband@...>
>To: SkyWires@yahoogroups.com
>Sent: Friday, June 8, 2012 4:11 PM
>Subject: [SkyWires] Phone line antenna
>
>
>
>Hello everyone,
>
>I'm new here so i hope this is the right place to post this.
>
>Has anybody ever used a phone line for an antenna?
>I accidentally found a document on the net
(http://www.rdrop.com/users/billmc/phoneline.pdf)about doing this.
>I found it interesting becouse when i was in my early teens i on
>occasion would use an a/c line cord for an antenna. Yes i know that's
>kind of unsafe and you are right.
>
>!!!DON"T TRY THIS YOU COULD GET ELECTROCUTED!!!
>
>but it does work, as long as you use a battery powered radio ,and ONLY ONE of the 2 leads from the a/c outlet AND you are NOT GROUNDED or Touching any metal. In other words if there is no path THRU you to anything else.
>
>So the idea of a phone line is interesting.
>Any thoughts?
>
>
>
>
>

4133. Re: [SkyWires] Phone line antenna

Yahoo group: SkyWires
Date: 2012-06-09 02:05:04 UTC
From: Andy
Topic: 4131 Message: 4133

I can't get to the link either, even after removing the ")about" from the end of it. The PDF file isn't there, or is protected.

I assume you mean a receiving antenna ONLY, right? I definitely do NOT recommend sending any amount of RF energy into a phone line. Aside from safety issues, with today's electronic phones that would be just asking for trouble, even at 'QRP' levels.

I had crystal radios as a kid, and they worked like gangbusters when clipped to the finger stop on our dial telephone. It was one of the best antennas I found for those radios. I assume it is electrically connected to the phone chassis, which is probably capacitively coupled to the phone line.

If your utility lines are above ground (as ours are), a phone line might make a pretty effective longwire antenna.

OTOH, if you have DSL in your area, you might want to avoid this.

I also have some experience with the AC line as an antenna. As a teenager I built a zip cord coupler (following a magazine article). You take the zip cord, clip and insulate one wire on one end, and the other wire on the other end. Put an AC plug on one end and your AM or shortwave radio on the other. It is actually safe. There is no direct electrical connection between the radio and the AC line. The zip cord makes a small valued capacitor (a few pF), so it couples RF but the capacitance is too small to pass any significant 60 cycles (er, Hertz). No danger of electrocution ... unless you construct it wrong or forget to insulate one of the cut ends. (Still, I am sure it wouldn't pass muster by modern electrical standards.)

I recall that it worked, but not better than other antennas. If you were stuck in a small apartment and had no means to run any wire, it might suffice; otherwise it wasn't really worth it.

You can also transmit small amounts of power at lower frequencies into the AC power lines. This is known as "carrier current" and has been used for many decades, first by the utility companies, then by college radio stations, and now in modified form for BPL. In principle the power lines conduct the RF to nearby receivers, but are not meant to actually radiate more than a few yards. As a transmitting antenna, this method is very inefficient and you tend to get a lot of hum (60 Hz intermodulation, esp. from nonlinear loads). But it was the mainstay of unlicensed campus radio stations for much of the 20th century.

The RF doesn't get through the utility step-down transformers. For campus radio, you feed the 120V lines. For BPL, they feed the HV distribution lines.

Andy

4134. Re: Phone line antenna

Yahoo group: SkyWires
Date: 2012-06-09 03:35:32 UTC
From: dave
Topic: 4131 Message: 4134

Open the file with Wordpad.

--- In SkyWires@yahoogroups.com, Andy <ai.egrps@...> wrote:
>
> I can't get to the link either, even after removing the ")about" from
> the end of it. The PDF file isn't there, or is protected.
>
> I assume you mean a receiving antenna ONLY, right? I definitely do
> NOT recommend sending any amount of RF energy into a phone line.
> Aside from safety issues, with today's electronic phones that would be
> just asking for trouble, even at 'QRP' levels.
>
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> clipped to the finger stop on our dial telephone. It was one of the
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> connected to the phone chassis, which is probably capacitively coupled
> to the phone line.
>
> If your utility lines are above ground (as ours are), a phone line
> might make a pretty effective longwire antenna.
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> OTOH, if you have DSL in your area, you might want to avoid this.
>
> I also have some experience with the AC line as an antenna. As a
> teenager I built a zip cord coupler (following a magazine article).
> You take the zip cord, clip and insulate one wire on one end, and the
> other wire on the other end. Put an AC plug on one end and your AM or
> shortwave radio on the other. It is actually safe. There is no
> direct electrical connection between the radio and the AC line. The
> zip cord makes a small valued capacitor (a few pF), so it couples RF
> but the capacitance is too small to pass any significant 60 cycles
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> wrong or forget to insulate one of the cut ends. (Still, I am sure it
> wouldn't pass muster by modern electrical standards.)
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> I recall that it worked, but not better than other antennas. If you
> were stuck in a small apartment and had no means to run any wire, it
> might suffice; otherwise it wasn't really worth it.
>
> You can also transmit small amounts of power at lower frequencies into
> the AC power lines. This is known as "carrier current" and has been
> used for many decades, first by the utility companies, then by college
> radio stations, and now in modified form for BPL. In principle the
> power lines conduct the RF to nearby receivers, but are not meant to
> actually radiate more than a few yards. As a transmitting antenna,

> this method is very inefficient and you tend to get a lot of hum (60
> Hz intermodulation, esp. from nonlinear loads). But it was the
> mainstay of unlicensed campus radio stations for much of the 20th
> century.
>
> The RF doesn't get through the utility step-down transformers. For
> campus radio, you feed the 120V lines. For BPL, they feed the HV
> distribution lines.
>
> Andy
>

4136. Re: Phone line antenna

Yahoo group: SkyWires
Date: 2012-06-09 11:14:54 UTC
From: Bob Zimmermann
Topic: 4131 Message: 4136

--- In SkyWires@yahoogroups.com, "dave" <e_trician@...> wrote:
>
> Open the file with Wordpad.
>
> --- In SkyWires@yahoogroups.com, Andy <ai.egrps@> wrote:
> >
> > I can't get to the link either, even after removing the ")about" from
> > the end of it. The PDF file isn't there, or is protected.
> >
> > I assume you mean a receiving antenna ONLY, right? I definitely do
> > NOT recommend sending any amount of RF energy into a phone line.
> > Aside from safety issues, with today's electronic phones that would be
> > just asking for trouble, even at 'QRP' levels.

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> > to the phone line.
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> > If your utility lines are above ground (as ours are), a phone line
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> > You take the zip cord, clip and insulate one wire on one end, and the
> > other wire on the other end. Put an AC plug on one end and your AM or
> > shortwave radio on the other. It is actually safe. There is no
> > direct electrical connection between the radio and the AC line. The
> > zip cord makes a small valued capacitor (a few pF), so it couples RF
> > but the capacitance is too small to pass any significant 60 cycles
> > (er, Hertz). No danger of electrocution ... unless you construct it
> > wrong or forget to insulate one of the cut ends. (Still, I am sure it
> > wouldn't pass muster by modern electrical standards.)
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> > I recall that it worked, but not better than other antennas. If you
> > were stuck in a small apartment and had no means to run any wire, it
> > might suffice; otherwise it wasn't really worth it.
> >
> > You can also transmit small amounts of power at lower frequencies into
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> > power lines conduct the RF to nearby receivers, but are not meant to
> > actually radiate more than a few yards. As a transmitting antenna,
> > this method is very inefficient and you tend to get a lot of hum (60
> > Hz intermodulation, esp. from nonlinear loads). But it was the
> > mainstay of unlicensed campus radio stations for much of the 20th
> > century.
> >
> > The RF doesn't get through the utility step-down transformers. For
> > campus radio, you feed the 120V lines. For BPL, they feed the HV
> > distribution lines.
> >
> > Andy
> >
>

Regarding the broken link , I just tryed it and yes it won't work,
funny it was working last night. I have uploaded a copy to the
files section, this one is an older text file but from the same source.

bz

4137. Re: [SkyWires] Re: Phone line antenna

Yahoo group: SkyWires
Date: 2012-06-09 13:36:03 UTC
From: Andy
Topic: 4131 Message: 4137

> Open the file with Wordpad.

Open WHAT file?

4138. Re: SWR & the Loop Skywire

Yahoo group: SkyWires
Date: 2012-06-10 00:32:13 UTC
From: Mark
Topic: 4129 Message: 4138

The loop is constructed from 12ga Copperweld in one continuous length. The connection is made at a CPVC "T" that I made for the purpose with a SO-239 connector on the lower leg and internal wire going from there to the two arms where brass screws make the connections to the ends of the Copperweld wire. Strain relief is maintained via two small stainless steel eye bolts through the end caps of the arms of the "T". The RG-8X coax terminates with a 259 connector screwed on to its female counterpart and sealed with Coax-Seal. On the underside of the CPVC "T", (in the 'armpit' you might say), is a 3/32nd weep hole. The connections to the Copperweld are heavily doped with clear silicone.

We are in a heavy storm cycle down here in Mobile, AL at the moment, complete with serious flooding & frequent lightning. As soon as the weather breaks I'll drop the antenna and give it a good once-over. For my edification, about what SWR should I see on the analyzer?

Thanks!

Bull*, KK4AXX
(Grid EM50vo)

--- In SkyWires@yahoogroups.com, "Richard Schmuke" <rdj@...> wrote:
>
> How is it fed, any corrosion, any coax in the system get water in it? I had
> some twin lead go bad from the wind and on a different antenna had some 9913
> get moisture in it. Foliage should not be that big of a problem on 40.
> Please keep us informed.
>
>
>
> Rich , Kd0zz

4139. RE: [SkyWires] Re: SWR & the Loop Skywire

Yahoo group: SkyWires
Date: 2012-06-10 01:25:08 UTC
From: Richard Schmuke
Topic: 4129 Message: 4139
Attachments: 2 described; binary payloads are missing from this source WARC

OK , if I understand the antenna you have a 40M loop , coax fed. If it is fed direct with RG-8X the best you can get is 1.5:1 SWR. A 40M loop to be coax fed needs a 1/4wl electrical length matching section of 72 ohm coax , like RG-59, RG-6 or RG-11 to get a 1.0 to 1 SWR, or you can make a 2:1 balun. If you have a analyzer it is simple to make a matching section, if you don't have one on hand you need to know the velocity factor of you matching section coax to figure the length. A dipole can be close to a 50 ohm antenna, a loop is closer to a 100 ohm antenna so you need the 2:1 balun or a coax matching section.

Rich , Kd0zz

Subject: [SkyWires] Re: SWR & the Loop Skywire

The loop is constructed from 12ga Copperweld in one continuous length. The connection is made at a CPVC "T" that I made for the purpose with a SO-239 connector on the lower leg and internal wire going from there to the two arms where brass screws make the connections to the ends of the Copperweld wire. Strain relief is maintained via two small stainless steel eye bolts through the end caps of the arms of the "T". The RG-8X coax terminates with a 259 connector screwed on to its female counterpart and sealed with Coax-Seal. On the underside of the CPVC "T", (in the 'armpit' you might say), is a 3/32nd weep hole. The connections to the Copperweld are heavily doped with clear silicone.

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Thanks!

Bull*, KK4AXX
(Grid EM50vo)

--- In SkyWires@yahoogroups.com <mailto:SkyWires%40yahoogroups.com> , "Richard Schmuke" <rdj@...> wrote:
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> How is it fed, any corrosion, any coax in the system get water in it? I had
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> get moisture in it. Foliage should not be that big of a problem on 40.
> Please keep us informed.
>
>

>
> Rich , Kd0zz

4140. Re: SWR & the Loop Skywire

Yahoo group: SkyWires
Date: 2012-06-12 05:09:43 UTC
From: Mark
Topic: 4129 Message: 4140

As it happens, I do have access to an analyzer through my father-in-law. What is the process?

Thx!

--- In SkyWires@yahoogroups.com, "Richard Schmuke" <rdj@...> wrote:
>
> OK , if I understand the antenna you have a 40M loop , coax fed. If it is
> fed direct with RG-8X the best you can get is 1.5:1 SWR. A 40M loop to be
> coax fed needs a 1/4wl electrical length matching section of 72 ohm coax ,
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> you don't have one on hand you need to know the velocity factor of you
> matching section coax to figure the length. A dipole can be close to a 50
> ohm antenna, a loop is closer to a 100 ohm antenna so you need the 2:1 balun
> or a coax matching section.
>
>
>
> Rich , Kd0zz

4141. RE: [SkyWires] Re: SWR & the Loop Skywire

Yahoo group: SkyWires
Date: 2012-06-12 13:02:04 UTC
From: Richard Schmuke
Topic: 4129 Message: 4141
Attachments: 2 described; binary payloads are missing from this source WARC

If you know the type of coax you are going to use I can tell you how long to cut the coax with a tape measure.

If the coax type is unknown cut a section about 20% longer than you think is needed , one end of coax install a PL-259 and attach to your analyzer. Adjust your analyzer until the "X" reading is at zero, the frequency should be about 20% low. Reset your analyzer to the frequency you want and trim your coax to get the "X" back to zero.

Rich , Kd0zz

From: SkyWires@yahoogroups.com [mailto:SkyWires@yahoogroups.com] On Behalf Of Mark
Sent: Tuesday, June 12, 2012 12:10 AM
To: SkyWires@yahoogroups.com
Subject: [SkyWires] Re: SWR & the Loop Skywire

As it happens, I do have access to an analyzer through my father-in-law. What is the process?

Thx!

--- In SkyWires@yahoogroups.com <mailto:SkyWires%40yahoogroups.com> , "Richard Schmuke" <rdj@...> wrote:
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> ohm antenna, a loop is closer to a 100 ohm antenna so you need the 2:1 balun
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>
>
>
> Rich , Kd0zz

4142. RE: [SkyWires] Re: SWR & the Loop Skywire

Yahoo group: SkyWires
Date: 2012-06-12 13:22:59 UTC
From: Richard Schmuke
Topic: 4129 Message: 4142

Mark, if you know your coax type and you need a quarter wave section the length is like cutting one side of a dipole except you use 246/ F in MHz times the velocity factor. Radio waves travel slower in the coax dielectric so you multiply your first answer by the number below to get the actual length.

RG213, RG8 solid, RG58 VF is .66
RG6 is .75
RG8X, RG8 foam is .78

Let's say you want 7.2 MHz and have RG-8X, 246/7.2= 34.1666,
34.166/.78=26.650
So your quarter wave is 26.65 feet or 26 ft 8 inches

I hope this helps.

Rich , Kd0zz

4143. Re: SWR & the Loop Skywire

Yahoo group: SkyWires
Date: 2012-06-12 13:55:39 UTC
From: Alan
Topic: 4129 Message: 4143

Mark, I've been following this thread for a few posts. I built a 40 meter loop the other day to use for field day. Its in a square and I'm feeding it at the top with rg8x. I pulled it up to about 40 feet off the side of my tower for testing. Its swr is great on 40 and 20 meters and fair on 10. It will load and talk on 15 also. So, if your antenna did work, then it can work again. I'd check the connectors and try a different run of coax. If you use the 1/4 matching stub as proposed it pretty much limits that antenna to your band of choice so I'd fix the current problem before complicating it more. Also, a 1.5 swr is fine hardly any loss @ all (check the line loss tables). As the swr approaches 2to1 some solid state radios start to fold back the output power so I'd watch for that..73 es hope this helps..Alan

4144. RE: [SkyWires] Re: SWR & the Loop Skywire

Yahoo group: SkyWires
Date: 2012-06-12 14:35:44 UTC
From: Richard Schmuke
Topic: 4129 Message: 4144
Attachments: 2 described; binary payloads are missing from this source WARC

Mark , Alan brought up a good point about a matching stub. I also use my loop as multi band, I adjusted the size of my 80M loop for best SWR on 20M. I was just giving you the information on how to build a coax transformer.

Alan, good luck with the loop on field day , it should be a great antenna. I just completed a portable full size 40M vert for field day might even use it on 15 if the band is open.

Rich , ZZ

Subject: [SkyWires] Re: SWR & the Loop Skywire

Mark, I've been following this thread for a few posts. I built a 40 meter loop the other day to use for field day. Its in a square and I'm feeding it at the top with rg8x. I pulled it up to about 40 feet off the side of my tower for testing. Its swr is great on 40 and 20 meters and fair on 10. It will load and talk on 15 also. So, if your antenna did work, then it can work again. I'd check the connectors and try a different run of coax. If you use the 1/4 matching stub as proposed it pretty much limits that antenna to your band of choice so I'd fix the current problem before complicating it more. Also, a 1.5 swr is fine hardly any loss @ all (check the line loss tables). As the swr approaches 2to1 some solid state radios start to fold back the output power so I'd watch for that..73 es hope this helps..Alan

4145. Re: SWR & the Loop Skywire

Yahoo group: SkyWires
Date: 2012-06-12 17:54:19 UTC
From: Alan
Topic: 4129 Message: 4145

Thanks, that semi vertical loop worked real well when I tested it..Need more vertical here to work back east where there are more hams..not many here in montana...Yes, the article called for ladderline, but I tried the coax feed and was really surprised...Mark, hope you figure that loop problem out..just use process of elimination and should find it...73, alan

--- In SkyWires@yahoogroups.com, "Richard Schmuke" <rdj@...> wrote:
>
> Mark , Alan brought up a good point about a matching stub. I also use my
> loop as multi band, I adjusted the size of my 80M loop for best SWR on 20M.
> I was just giving you the information on how to build a coax transformer.
>
>
>
> Alan, good luck with the loop on field day , it should be a great antenna. I
> just completed a portable full size 40M vert for field day might even use it
> on 15 if the band is open.
>
>
>
> Rich , ZZ
>
>
>
> Subject: [SkyWires] Re: SWR & the Loop Skywire
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>
> Mark, I've been following this thread for a few posts. I built a 40 meter
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> more. Also, a 1.5 swr is fine hardly any loss @ all (check the line loss
> tables). As the swr approaches 2to1 some solid state radios start to fold
> back the output power so I'd watch for that..73 es hope this helps..Alan
>

4147. Re: SWR & the Loop Skywire

Yahoo group: SkyWires
Date: 2012-06-24 21:31:02 UTC
From: Mark
Topic: 4129 Message: 4147

Problem Solved!

Once the weather cleared & I had the time, I dropped the wire and checked every foot. Then I disassembled the feed point.

BINGO!

One connection was corroded completely through! Looked fine coved in the sealant, but somehow our tropical climate got to it despite my efforts. Guess I'll have to set up semi-annual inspections!

Once repaired and hauled into position it ran like a top.

Thanks, guys!

4148. Re: [SkyWires] Re: SWR & the Loop Skywire

Yahoo group: SkyWires
Date: 2012-06-24 23:41:53 UTC
From: Chris Wilson
Topic: 4129 Message: 4148

>
> Problem Solved!

> Once the weather cleared & I had the time, I dropped the wire and
> checked every foot. Then I disassembled the feed point.

> BINGO!

> One connection was corroded completely through! Looked fine coved
> in the sealant, but somehow our tropical climate got to it despite
> my efforts. Guess I'll have to set up semi-annual inspections!

> Once repaired and hauled into position it ran like a top.

> Thanks, guys!

>

25/06/2012 00:38

I am a race car engineer, and I can say for sure that if the silicone sealant you used smelled of vinegar (acetic acid) it's terrible stuff around electronics. the acetic acid starts a corrosion process off like crazy from the moment it's applied. In automotive usage it has another further nasty side effect, and used in quantity it can "kill" O2 sensors. If you use a silicone type sealant be SURE it is suitable for use on bare electronic connections. VERY generally speaking if it does NOT smell of vinegar you are in with a chance. if it DOES smell of vinegar.... well you know what can happen perhaps? Good luck 2E0ILY England.

--
Best Regards,
Chris Wilson.

4149. AW: [SkyWires] Re: SWR & the Loop Skywire

Yahoo group: SkyWires
Date: 2012-06-25 11:11:24 UTC
From: siegfried jackstien
Topic: 4129 Message: 4149

Go in a "pet shop" and ask for aquarium sealant

That is neutral (does not smell like vinegar)

Dg9bfc

Sigi

Ps if you have a ladderline fed loop you can easy check weekly if everything
is ok with an ohm-metre (dvm)

> -----Ursprüngliche Nachricht-----
> Von: SkyWires@yahoogroups.com [mailto:SkyWires@yahoogroups.com] Im Auftrag
> von Chris Wilson
> Gesendet: Sonntag, 24. Juni 2012 23:42
> An: Mark
> Betreff: Re: [SkyWires] Re: SWR & the Loop Skywire
>
>
>
> >
> > Problem Solved!
>
> > Once the weather cleared & I had the time, I dropped the wire and
> > checked every foot. Then I disassembled the feed point.
>
> > BINGO!
>
> > One connection was corroded completely through! Looked fine coved
> > in the sealant, but somehow our tropical climate got to it despite
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> > Once repaired and hauled into position it ran like a top.
>
> > Thanks, guys!
>
> >
>
>
> 25/06/2012 00:38
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> around electronics. the acetic acid starts a corrosion process off
> like crazy from the moment it's applied. In automotive usage it has
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> O2 sensors. If you use a silicone type sealant be SURE it is suitable
> for use on bare electronic connections. VERY generally speaking if it
> does NOT smell of vinegar you are in with a chance. if it DOES smell
> of vinegar.... well you know what can happen perhaps? Good luck 2E0ILY
> England.
>
> --
> Best Regards,
> Chris Wilson.
>
>
>
> ------------------------------------
>
> Yahoo! Groups Links
>
>
>

4151. Re: SWR & the Loop Skywire

Yahoo group: SkyWires
Date: 2012-07-10 01:56:06 UTC
From: eudamac3
Topic: 4129 Message: 4151

Silicone sealants don't belong around technology.

For sealing outdoor connections, find some self-vulcanizing tape. This is offered in Big Box Home supply stores as "rubber splicing tape". Typically UL listed for 600 volts outdoors and underground.

There's no adhesive to this tape. You stretch it out to about double its relaxed length, then wrap over and over. The stuff sticks to itself, and after a few days of hot/cold, it "melts" into itself, forming an amorphous, and VERY well sealed rubber mass. It is under a lot of tension, even once "set", so you want to protect it with ordinary vinyl electrical tape.

To remove it, unwrap the vinyl electrical tape, then make just one knife cut on the rubber, and it snaps off, because it's still under tension.

Friend of mine on the Georgia coast says his connections, 15 years later, looked like new when he exposed them.

FM

--- In SkyWires@yahoogroups.com, "siegfried jackstien" <siegfried.jackstien@...> wrote:
>
> Go in a "pet shop" and ask for aquarium sealant
>
> That is neutral (does not smell like vinegar)
>
> Dg9bfc
>
> Sigi
>
> Ps if you have a ladderline fed loop you can easy check weekly if everything
> is ok with an ohm-metre (dvm)
>
>
> > -----Ursprüngliche Nachricht-----
> > Von: SkyWires@yahoogroups.com [mailto:SkyWires@yahoogroups.com] Im Auftrag
> > von Chris Wilson
> > Gesendet: Sonntag, 24. Juni 2012 23:42
> > An: Mark
> > Betreff: Re: [SkyWires] Re: SWR & the Loop Skywire
> >
> >
> >
> > >
> > > Problem Solved!
> >

> > > Once the weather cleared & I had the time, I dropped the wire and
> > > checked every foot. Then I disassembled the feed point.
> >
> > > BINGO!
> >
> > > One connection was corroded completely through! Looked fine coved
> > > in the sealant, but somehow our tropical climate got to it despite
> > > my efforts. Guess I'll have to set up semi-annual inspections!
> >
> > > Once repaired and hauled into position it ran like a top.
> >
> > > Thanks, guys!
> >
> > >
> >
> >
> > 25/06/2012 00:38
> >
> > I am a race car engineer, and I can say for sure that if the silicone
> > sealant you used smelled of vinegar (acetic acid) it's terrible stuff
> > around electronics. the acetic acid starts a corrosion process off
> > like crazy from the moment it's applied. In automotive usage it has
> > another further nasty side effect, and used in quantity it can "kill"
> > O2 sensors. If you use a silicone type sealant be SURE it is suitable
> > for use on bare electronic connections. VERY generally speaking if it
> > does NOT smell of vinegar you are in with a chance. if it DOES smell
> > of vinegar.... well you know what can happen perhaps? Good luck 2E0ILY
> > England.
> >
> > --
> > Best Regards,
> > Chris Wilson.
> >
> >
> >
> > ------------------------------------
> >
> > Yahoo! Groups Links
> >
> >
> >
>

4152. RE: [SkyWires] Re: SWR & the Loop Skywire

Yahoo group: SkyWires
Date: 2012-07-10 12:31:56 UTC
From: Michael Weinstock
Topic: 4129 Message: 4152

Hi All,

The self vulcanizing tape is by far preferable to silicone sealants.

That said, if you have to use silicone, the ones to go for are marketed as
☐neutral cure☐ sealants and to not have the vinegar smell as they cure.

73

Michael

VK3EMJ

From: SkyWires@yahoogroups.com [mailto:SkyWires@yahoogroups.com] On Behalf Of eudamac3
Sent: Tuesday, 10 July 2012 11:56 AM
To: SkyWires@yahoogroups.com
Subject: [SkyWires] Re: SWR & the Loop Skywire

Silicone sealants don't belong around technology.

For sealing outdoor connections, find some self-vulcanizing tape. This is offered in Big Box Home supply stores as "rubber splicing tape". Typically UL listed for 600 volts outdoors and underground.

There's no adhesive to this tape. You stretch it out to about double its relaxed length, then wrap over and over. The stuff sticks to itself, and after a few days of hot/cold, it "melts" into itself, forming an amorphous, and VERY well sealed rubber mass. It is under a lot of tension, even once "set", so you want to protect it with ordinary vinyl electrical tape.

To remove it, unwrap the vinyl electrical tape, then make just one knife cut on the rubber, and it snaps off, because it's still under tension.

Friend of mine on the Georgia coast says his connections, 15 years later, looked like new when he exposed them.

FM

--- In SkyWires@yahoogroups.com <mailto:SkyWires%40yahoogroups.com> , "siegfried jackstien" <siegfried.jackstien@...> wrote:
>
> Go in a "pet shop" and ask for aquarium sealant
>
> That is neutral (does not smell like vinegar)
>
> Dg9bfc
>

> Sigi
>
> Ps if you have a ladderline fed loop you can easy check weekly if
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> is ok with an ohm-metre (dvm)
>
>
> > -----Ursprüngliche Nachricht-----
> > Von: SkyWires@...m <mailto:SkyWires%40yahoogroups.com>
[mailto:SkyWires@yahoogroups.com <mailto:SkyWires%40yahoogroups.com>] Im
Auftrag
> > von Chris Wilson
> > Gesendet: Sonntag, 24. Juni 2012 23:42
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> > Betreff: Re: [SkyWires] Re: SWR & the Loop Skywire
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> > > Thanks, guys!
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> > sealant you used smelled of vinegar (acetic acid) it's terrible stuff
> > around electronics. the acetic acid starts a corrosion process off
> > like crazy from the moment it's applied. In automotive usage it has
> > another further nasty side effect, and used in quantity it can "kill"
> > O2 sensors. If you use a silicone type sealant be SURE it is suitable
> > for use on bare electronic connections. VERY generally speaking if it
> > does NOT smell of vinegar you are in with a chance. if it DOES smell
> > of vinegar.... well you know what can happen perhaps? Good luck 2E0ILY
> > England.
> >

> > --
> > Best Regards,
> > Chris Wilson.
> >
> >
> >
> > ------------------------------------
> >
> > Yahoo! Groups Links
> >
> >
> >
>

4156. Voltage breakdown

Yahoo group: SkyWires
Date: 2012-09-20 17:38:17 UTC
From: Richard Schmuke
Topic: 4156 Message: 4156

Ok I gots a question for all you educated people out there. I am curious on the voltage is required to jump a .090 gap in about 50% humidity. The reason I ask is because last night my balun was arcing onto the top of my tuner. It would fire about every 5 to 7 seconds. My balun is mounted on a Lexan sheet and the 5 way binding post at the antenna end has a .090 gap above the surface it is sitting on. I don't need the capacitor plate numbers from the ARRL handbook because that is for a tank circuit that has a flywheel effect. The coax from the balun to the tuner was disconcerted but the doublet antenna was connected. I plugged a test lead into the 5 way post and the other end to my ground run to stop the arcing but I am wondering how high the voltage was.

Here is a picture of the balun and 5-way post,

http://i1102.photobucket.com/albums/g453/KD0ZZ/EndView-1.jpg

Rich , Kd0zz

Looking at charts too long and you will get analysis paralysis

4157. Re: [SkyWires] Voltage breakdown

Yahoo group: SkyWires
Date: 2012-09-21 22:44:53 UTC
From: Ken
Topic: 4156 Message: 4157

I assume you are talking about static discharge?

I would go with the Handbook figures. .090 isn't much gap, I've seen quarter inch arcs at a big knife switch just from snow flakes landing on the antenna.

Ken WA8JXM

On Sep 20, 2012, at 1:38 PM, Richard Schmuke wrote:

> Ok I gots a question for all you educated people out there. I am curious on the voltage is required to jump a .090 gap in about 50% humidity. The reason I ask is because last night my balun was arcing onto the top of my tuner. It would fire about every 5 to 7 seconds.

4158. RE: [SkyWires] Re: Super loop

Yahoo group: SkyWires
Date: 2011-03-17 21:12:21 UTC
From: kb9yku
Topic: 3875 Message: 4158
Attachments: 1 described; binary payloads are missing from this source WARC

i hope this helps
kb9yku
At 01:57 PM 3/17/2011, you wrote:
>
>
>Sorry Doc. That link is not working.
>
>
>
>Cheers,
>
>
>
>Brian Burns
>
>
>
>From:
>SkyWires@yahoogroups.com
>[mailto:SkyWires@yahoogroups.com] On Behalf Of Dr.Ace Ratliff
>Sent: Wednesday, March 16, 2011 7:03 PM
>To: SkyWires@yahoogroups.com
>Subject: [SkyWires] Re: Super loop
>
>
>
>
>
>See
>
><http://replay.waybackmachine.org/20090222232502/http:/www.bloomington.in.us/~wh2t/Super%20Loop%20Antenna.htm>http://replay.waybackmachine.org/20090222232502/http://www.bloomington.in.us/~wh2t/Super%20Loop%20Antenna.htm
>
>--
>Dr.Ace Ratliff
><http://www.WH2T.com>www.WH2T.com
>
>
>

4159. RE: [SkyWires] Re: Super loop [1 Attachment]

Yahoo group: SkyWires
Date: 2012-09-23 02:05:26 UTC
From: Richard Schmuke
Topic: 4159 Message: 4159
Attachments: 3 described; binary payloads are missing from this source WARC

Works for me.

Rich , Kd0zz

kb9yku
At 01:57 PM 3/17/2011, you wrote:

Sorry Doc. That link is not working.

Cheers,

Brian Burns

From: SkyWires@yahoogroups.com [mailto:SkyWires@yahoogroups.com
<mailto:SkyWires@yahoogroups.com>] On Behalf Of Dr.Ace Ratliff
Sent: Wednesday, March 16, 2011 7:03 PM
To: SkyWires@yahoogroups.com
Subject: [SkyWires] Re: Super loop

See

http://replay.waybackmachine.org/20090222232502/http://www.bloomington.in.us
/~wh2t/Super%20Loop%20Antenna.htm
<http://replay.waybackmachine.org/20090222232502/http:/www.bloomington.in.us
/~wh2t/Super%20Loop%20Antenna.htm>

--
Dr.Ace Ratliff
www.WH2T.com

4160. Re: [SkyWires] Re: Super loop [1 Attachment]

Yahoo group: SkyWires
Date: 2012-09-23 03:05:21 UTC
From: Dr.Ace Ratliff
Topic: 4159 Message: 4160

http://web.archive.org/web/20090222232502/http://www.bloomington.in.us/~wh2t/Super%20Loop%20Antenna.htm

On Thu, Mar 17, 2011 at 5:12 PM, kb9yku <kb9yku@...> wrote:

> **
>
> [Attachment(s) <#139f093fec7b5a96_TopText> from kb9yku included below]
>
>
> i hope this helps
> kb9yku
> At 01:57 PM 3/17/2011, you wrote:
>
>
>
> Sorry Doc. That link is not working.
>
>
>
> Cheers,
>
>
>
> Brian Burns
>
>
>
> *From:* SkyWires@yahoogroups.com [mailto:SkyWires@yahoogroups.com<SkyWires@yahoogroups.com>]
> *On Behalf Of *Dr.Ace Ratliff
> *Sent:* Wednesday, March 16, 2011 7:03 PM
> *To:* SkyWires@yahoogroups.com
> *Subject:* [SkyWires] Re: Super loop
>
>
>
>
>
>
> See
>
> http://replay.waybackmachine.org/20090222232502/http://www.bloomington.in.us/~wh2t/Super%20Loop%20Antenna.htm<http://replay.waybackmachine.org/20090222232502/http:/www.bloomington.in.us/~wh2t/Super%20Loop%20Antenna.htm>
>

> --
> Dr.Ace Ratliff
> www.WH2T.com
>
>
>
>
>

--
Dr.Ace Ratliff
www.WH2T.com

4161. Re: [SkyWires] Re: Super loop

Yahoo group: SkyWires
Date: 2012-09-23 03:06:02 UTC
From: Dr.Ace Ratliff
Topic: 4159 Message: 4161

http://web.archive.org/web/20090222232502/http://www.bloomington.in.us/~wh2t/Super%20Loop%20Antenna.htm

On Sat, Sep 22, 2012 at 10:05 PM, Richard Schmuke <rdj@...> wrote:

> **
>
>
> Works for me.****
>
> Rich , Kd0zz****
>
> kb9yku
> At 01:57 PM 3/17/2011, you wrote:****
>
>
>
> Sorry Doc. That link is not working.
>
>
>
> Cheers,
>
>
>
> Brian Burns
>
>
>
> *From:* SkyWires@yahoogroups.com [
mailto:SkyWires@yahoogroups.com<SkyWires@yahoogroups.com>]
> *On Behalf Of *Dr.Ace Ratliff
> *Sent:* Wednesday, March 16, 2011 7:03 PM
> *To:* SkyWires@yahoogroups.com
> *Subject:* [SkyWires] Re: Super loop
>
>
>
>
>
>
> See
>
>
> http://replay.waybackmachine.org/20090222232502/http://www.bloomington.in.us/~wh2t/Super%20Loop%20Antenna.htm<http://replay.waybackmachine.org/20090222232502/http:/www.bloomingto

n.in.us/~wh2t/Super%20Loop%20Antenna.htm>
>
> --
> Dr.Ace Ratliff
> www.WH2T.com
>
>
> ****
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> ****
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>

--
Dr.Ace Ratliff
www.WH2T.com

4162. log of 10/4

Yahoo group: SkyWires
Date: 2012-10-05 05:14:10 UTC
From: klauber.alex
Topic: 4162 Message: 4162

Australia ☐ Radio Australia on 9580 in English at 0115.Male announcer hosting a magazine show. (Klauber,NY)

Thailand- Radio Liberty on 15530 inTelugu. Male announcer with regional music. (Klauber,NY)

Singapore ☐ BBC on 11945 in Burmese at 0147. Male host conducting telephone interviews. (Klauber,NY)

Saudi Arabia ☐ Radio Riyadh in Arabic on 15435 at 1619. Male host conducting phone interviews. (Klauber,NY)

India ☐ All India Radio in Arabic on 13640.Male announcer at 1758. (Klauber,NY)
AIR on 13695 in English to Africa at 1804. Female announcer with the news. Indigenous music at 1820. (Klauber,NY)
AIR on 11670 with a musical program at 1915 in English. (Klauber, NY)

Iran ☐ V.O. Islamic Republic of Iran on 11980 to Europe in German at 1813. Female announcer with what appears to be the news. (Klauber, NY)
V.O. Islamic Republic of Iran on 12080 in Arabic with musical program at 2312. (Klauber, NY)

Madagascar ☐ Radio Japan on 15720 in English at 1820. Male and female hosts with a musical broadcast. (Klauber, NY)

Moldova ☐ Radio Pridnestrovye in English at 1840 on 9665. Male announcer. (Klauber, NY)

Germany ☐ Family Radio on 1375 at 1846 in English. Male host, however there is much noise and low audio. (Klauber,NY)

Angola ☐ Voice of America English on 12015 with an editorial on the Presidential debate of 10/03/2012 read by a female announcer. Signed off at 1900. (Klauber, NY)

Botswana ☐ Voice of America on15580 in English. Editorial at 1856 read by a female announcer. English service continued after 1900 with the news. (Klauber, NY)

Russia- Voice of Russia on 12040 in English at 2045. Male and female announcers with Russian sports. (Klauber, NY)

Romania ☐ Radio Romania in English on 11880 at 2052 with details about their "Salt Mines" contest. End of English service at 2055. Male host. (Klauber, NY)

Nigeria ☐ Voice of Nigeria with singing on 7255 at 2155 in Fulfulde. Sounds like tribal singing. Very strong signal and audio with modest fading. Station ID at 2200. (Klauber,NY)

China ☐ CRI on 11620 at 2338 in Vietnamese with a musical program hosted by a female announcer. (Klauber, NY)

Albania - CRI on 9570 and 6020 in English at 0150. Female interviewing a male about religious faith in China. (Klauber, NY)

Spain - Radio Espania De Exterior on 9535 at 0205 with the news read by a male announcer in Spanish. (Klauber, NY)

Alex Klauber
Receiver: Sangean 909
MFJ 1045C Preselector
Antenna: 200' long wire antenna

4163. log of 10/4

Yahoo group: SkyWires
Date: 2012-10-05 05:15:44 UTC
From: klauber.alex
Topic: 4162 Message: 4163

Australia ☐ Radio Australia on 9580 in English at 0115.Male announcer hosting a magazine show. (Klauber,NY)

Thailand- Radio Liberty on 15530 inTelugu. Male announcer with regional music. (Klauber,NY)

Singapore ☐ BBC on 11945 in Burmese at 0147. Male host conducting telephone interviews. (Klauber,NY)

Saudi Arabia ☐ Radio Riyadh in Arabic on 15435 at 1619. Male host conducting phone interviews. (Klauber,NY)

India ☐ All India Radio in Arabic on 13640.Male announcer at 1758. (Klauber,NY)
AIR on 13695 in English to Africa at 1804. Female announcer with the news. Indigenous music at 1820. (Klauber,NY)
AIR on 11670 with a musical program at 1915 in English. (Klauber, NY)

Iran ☐ V.O. Islamic Republic of Iran on 11980 to Europe in German at 1813. Female announcer with what appears to be the news. (Klauber, NY)
V.O. Islamic Republic of Iran on 12080 in Arabic with musical program at 2312. (Klauber, NY)

Madagascar ☐ Radio Japan on 15720 in English at 1820. Male and female hosts with a musical broadcast. (Klauber, NY)

Moldova ☐ Radio Pridnestrovye in English at 1840 on 9665. Male announcer. (Klauber, NY)

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Angola ☐ Voice of America English on 12015 with an editorial on the Presidential debate of 10/03/2012 read by a female announcer. Signed off at 1900. (Klauber, NY)

Botswana ☐ Voice of America on15580 in English. Editorial at 1856 read by a female announcer. English service continued after 1900 with the news. (Klauber, NY)

Russia- Voice of Russia on 12040 in English at 2045. Male and female announcers with Russian sports. (Klauber, NY)

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Spain - Radio Espania De Exterior on 9535 at 0205 with the news read by a male announcer in Spanish. (Klauber, NY)

Alex Klauber
Receiver: Sangean 909
MFJ 1045C Preselector
Antenna: 200' long wire antenna

4164. Re: [SkyWires] log of 10/4

Yahoo group: SkyWires
Date: 2012-10-05 13:52:56 UTC
From: Don Sanders
Topic: 4162 Message: 4164

On Fri, Oct 5, 2012 at 12:15 AM, klauber.alex <no_reply@yahoogroups.com>wrote:

> **
>
>
> Australia – Radio Australia on 9580 in English at 0115.Male announcer
> hosting a magazine show. (Klauber,NY)
>
> Thailand- Radio Liberty on 15530 inTelugu. Male announcer with regional
> music. (Klauber,NY)
>
> Singapore – BBC on 11945 in Burmese at 0147. Male host conducting
> telephone interviews. (Klauber,NY)
>
> Saudi Arabia – Radio Riyadh in Arabic on 15435 at 1619. Male host
> conducting phone interviews. (Klauber,NY)
>
> India – All India Radio in Arabic on 13640.Male announcer at 1758.
> (Klauber,NY)
> AIR on 13695 in English to Africa at 1804. Female announcer with the news.
> Indigenous music at 1820. (Klauber,NY)
> AIR on 11670 with a musical program at 1915 in English. (Klauber, NY)
>
> Iran – V.O. Islamic Republic of Iran on 11980 to Europe in German at 1813.
> Female announcer with what appears to be the news. (Klauber, NY)
> V.O. Islamic Republic of Iran on 12080 in Arabic with musical program at
> 2312. (Klauber, NY)
>
> Madagascar – Radio Japan on 15720 in English at 1820. Male and female
> hosts with a musical broadcast. (Klauber, NY)
>
> Moldova – Radio Pridnestrovye in English at 1840 on 9665. Male announcer.
> (Klauber, NY)
>
> Germany – Family Radio on 1375 at 1846 in English. Male host, however
> there is much noise and low audio. (Klauber,NY)
>
> Angola – Voice of America English on 12015 with an editorial on the
> Presidential debate of 10/03/2012 read by a female announcer. Signed off at
> 1900. (Klauber, NY)
>
> Botswana – Voice of America on15580 in English. Editorial at 1856 read by
> a female announcer. English service continued after 1900 with the news.
> (Klauber, NY)
>

> Russia- Voice of Russia on 12040 in English at 2045. Male and female
> announcers with Russian sports. (Klauber, NY)
>
> Romania – Radio Romania in English on 11880 at 2052 with details about
> their "Salt Mines" contest. End of English service at 2055. Male host.
> (Klauber, NY)
>
> Nigeria – Voice of Nigeria with singing on 7255 at 2155 in Fulfulde.
> Sounds like tribal singing. Very strong signal and audio with modest
> fading. Station ID at 2200. (Klauber,NY)
>
> China – CRI on 11620 at 2338 in Vietnamese with a musical program hosted
> by a female announcer. (Klauber, NY)
>
> Albania - CRI on 9570 and 6020 in English at 0150. Female interviewing a
> male about religious faith in China. (Klauber, NY)
>
> Spain - Radio Espania De Exterior on 9535 at 0205 with the news read by a
> male announcer in Spanish. (Klauber, NY)
>
> Alex Klauber
> Receiver: Sangean 909
> MFJ 1045C Preselector
> Antenna: 200' long wire antenna
>
>
>

4165. Re: [SkyWires] log of 10/4

Yahoo group: SkyWires
Date: 2012-10-05 17:42:49 UTC
From: Marian Anghel
Topic: 4162 Message: 4165

Excellent job Alex I'm using 83 m if I have place i use 160m fed end longwire
marian anghel
73 yo2mbu

Sent from my iPad

On 05.10.2012, at 08:14, klauber.alex <no_reply@yahoogroups.com> wrote:

> Australia – Radio Australia on 9580 in English at 0115.Male announcer hosting a magazine show. (Klauber,NY)
>
> Thailand- Radio Liberty on 15530 inTelugu. Male announcer with regional music. (Klauber,NY)
>
> Singapore – BBC on 11945 in Burmese at 0147. Male host conducting telephone interviews. (Klauber,NY)
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> India – All India Radio in Arabic on 13640.Male announcer at 1758. (Klauber,NY)
> AIR on 13695 in English to Africa at 1804. Female announcer with the news. Indigenous music at 1820. (Klauber,NY)
> AIR on 11670 with a musical program at 1915 in English. (Klauber, NY)
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> Iran – V.O. Islamic Republic of Iran on 11980 to Europe in German at 1813. Female announcer with what appears to be the news. (Klauber, NY)
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> Botswana – Voice of America on15580 in English. Editorial at 1856 read by a female announcer. English service continued after 1900 with the news. (Klauber, NY)
>
> Russia- Voice of Russia on 12040 in English at 2045. Male and female announcers with Russian sports. (Klauber, NY)

>
> Romania – Radio Romania in English on 11880 at 2052 with details about their "Salt Mines" contest. End of English service at 2055. Male host. (Klauber, NY)
>
> Nigeria – Voice of Nigeria with singing on 7255 at 2155 in Fulfulde. Sounds like tribal singing. Very strong signal and audio with modest fading. Station ID at 2200. (Klauber,NY)
>
> China – CRI on 11620 at 2338 in Vietnamese with a musical program hosted by a female announcer. (Klauber, NY)
>
> Albania - CRI on 9570 and 6020 in English at 0150. Female interviewing a male about religious faith in China. (Klauber, NY)
>
> Spain - Radio Espania De Exterior on 9535 at 0205 with the news read by a male announcer in Spanish. (Klauber, NY)
>
> Alex Klauber
> Receiver: Sangean 909
> MFJ 1045C Preselector
> Antenna: 200' long wire antenna
>
>

4168. Lineman Pliers

Yahoo group: SkyWires
Date: 2012-10-24 17:26:28 UTC
From: iono
Topic: 4168 Message: 4168

Hi,

I need to invest in a pair of Lineman Pliers to make wire antenna work easier. What do you recommend? I'm looking at Klein brand tools.

Tnx,

Mike KA2FIR

4169. Re: [SkyWires] Lineman Pliers

Yahoo group: SkyWires
Date: 2012-10-24 18:56:57 UTC
From: Ken
Topic: 4168 Message: 4169

On Oct 24, 2012, at 1:26 PM, iono wrote:

> I need to invest in a pair of Lineman Pliers to make wire antenna work easier. What do you recommend? I'm looking at Klein brand tools.

It all depends on what the wire is you are working with.

I always thought Klein and "lineman's pliers" were synonymous, I always called them "Klein pliers" ;-)

As for suitability, that depends on what you are using for antenna wire. I have some antenna wire here that need more than lineman's pliers (three strand #12 copperweld). Farm fence pliers work better for heavy gage wire and are inexpensive. OTOH, for typical antenna wire, any good pair of cutters will do fine.

Ken WA8JXM

4170. RE: [SkyWires] Lineman Pliers

Yahoo group: SkyWires
Date: 2012-10-24 19:34:06 UTC
From: Richard Schmuke
Topic: 4168 Message: 4170
Attachments: 2 described; binary payloads are missing from this source WARC

Klein is very good brand and you cant go wrong with them. There are many other brands also but stay away from some that are "too good" of a price. I would also look at craftsman. Remember you are coming up on black Friday. I got a auto ranging DMV that covers caps and frequency for half price two years ago at the sale.
http://community.craftsman.com/Craftsman-Digital-Mini-Multimeter-reviews?tab=details

At $15.95 I could not say no., normal price $31.99

Also note, if you get into copperweld antenna wire be careful of using tools made to cut copper wire. I use a pair of pliers for safety wire when cutting copperweld antenna wire. I got a roll of RG-11 size CCTV cable and it has 14ga coperweld in the center. Makes great long antennas but can nick a copper cutting tool.

Rich , Kd0zz

From: SkyWires@yahoogroups.com [mailto:SkyWires@yahoogroups.com] On Behalf Of iono
Sent: Wednesday, October 24, 2012 12:26 PM
To: SkyWires@yahoogroups.com
Subject: [SkyWires] Lineman Pliers

Hi,

I need to invest in a pair of Lineman Pliers to make wire antenna work easier. What do you recommend? I'm looking at Klein brand tools.

Tnx,

Mike KA2FIR

4171. Re: Lineman Pliers

Yahoo group: SkyWires
Date: 2012-10-24 19:59:48 UTC
From: iono
Topic: 4168 Message: 4171

Hi,

I'm looking for pliers for cutting and making splices. I usually work with 14ga stranded bare or insulated but I do have some scraps fo 12ga solid insulated that I'd like to try splicing together and I think I'll need a good pair to do that.

Tnx,

Mike

--- In SkyWires@yahoogroups.com, Ken <wa8jxm@...> wrote:
>
>
> On Oct 24, 2012, at 1:26 PM, iono wrote:
>
> > I need to invest in a pair of Lineman Pliers to make wire antenna work easier. What do you recommend? I'm looking at Klein brand tools.
>
> It all depends on what the wire is you are working with.
>
> I always thought Klein and "lineman's pliers" were synonymous, I always called them "Klein pliers" ;-)
>
> As for suitability, that depends on what you are using for antenna wire. I have some antenna wire here that need more than lineman's pliers (three strand #12 copperweld). Farm fence pliers work better for heavy gage wire and are inexpensive. OTOH, for typical antenna wire, any good pair of cutters will do fine.
>
> Ken WA8JXM
>

4172. RE: [SkyWires] Lineman Pliers

Yahoo group: SkyWires
Date: 2012-10-24 22:14:08 UTC
From: Abe
Topic: 4168 Message: 4172

I have a very old pair of Klein's still in good shape. Also a couple pair of Craftsman and several cheap China ones, I don't mind nicking the China ones.
K7ABE

Richard Schmuke <rdj@wildblue.net> wrote:

>Klein is very good brand and you cant go wrong with them. There are many
>other brands also but stay away from some that are "too good" of a price. I
>would also look at craftsman. Remember you are coming up on black Friday. I
>got a auto ranging DMV that covers caps and frequency for half price two
>years ago at the sale.
>http://community.craftsman.com/Craftsman-Digital-Mini-Multimeter-reviews?tab
>=details
>
>At $15.95 I could not say no., normal price $31.99
>
>Also note, if you get into copperweld antenna wire be careful of using tools
>made to cut copper wire. I use a pair of pliers for safety wire when cutting
>copperweld antenna wire. I got a roll of RG-11 size CCTV cable and it has
>14ga coperweld in the center. Makes great long antennas but can nick a
>copper cutting tool.
>
>
>
>Rich , Kd0zz
>
>
>
>From: SkyWires@yahoogroups.com [mailto:SkyWires@yahoogroups.com] On Behalf
>Of iono
>Sent: Wednesday, October 24, 2012 12:26 PM
>To: SkyWires@yahoogroups.com
>Subject: [SkyWires] Lineman Pliers
>
>
>
>
>
>Hi,
>
>I need to invest in a pair of Lineman Pliers to make wire antenna work
>easier. What do you recommend? I'm looking at Klein brand tools.
>
>Tnx,
>

>Mike KA2FIR
>
>
>

4174. Tuner question

Yahoo group: SkyWires
Date: 2012-11-20 23:26:34 UTC
From: Jerry Allen
Topic: 4174 Message: 4174

I am new to the group and am happy to see that such a group exists. I have homebrewed many different wire antennas, but never before have I built a Loop Skywire. I am putting up an 80M version (68 ft. to each of 4 sides) at 40 ft. up, and I will be feeding it with 450 Ohm ladder line and using it as a multibander. My tuner will be my trusty MFG 941E aka Versa Tuner II which has the built in 4 to 1 balun for using balanced line. My question is, is this tuner adequate for tuning the Skywire? I don't plan on exceeding the tuner's 300 Watt limit. I just want to know if this tuner will help the Skywire live up to it's fine reputation.
AK4FC

4175. Re: Tuner question

Yahoo group: SkyWires
Date: 2012-11-21 00:29:00 UTC
From: Alan
Topic: 4174 Message: 4175

Should work good ! have fun with it..73 Alan

--- In SkyWires@yahoogroups.com, Jerry Allen <jkells@...> wrote:
>
> I am new to the group and am happy to see that such a group exists. I have homebrewed many different wire antennas, but never before have I built a Loop Skywire. I am putting up an 80M version (68 ft. to each of 4 sides) at 40 ft. up, and I will be feeding it with 450 Ohm ladder line and using it as a multibander. My tuner will be my trusty MFG 941E aka Versa Tuner II which has the built in 4 to 1 balun for using balanced line. My question is, is this tuner adequate for tuning the Skywire? I don't plan on exceeding the tuner's 300 Watt limit. I just want to know if this tuner will help the Skywire live up to it's fine reputation.
> AK4FC
>

4176. Re: [SkyWires] Tuner question

Yahoo group: SkyWires
Date: 2012-11-21 01:08:07 UTC
From: Mark Graybill
Topic: 4174 Message: 4176

As I recall, one of the fellows near me uses one of the models of the MFJ Versatuner with his 75/80m loop and 450ohm window line. He swears by it.

I'll be using a the MFJ-941C I've got with mine, once I get it up.

-Mark
W8BIT

On Tue, Nov 20, 2012 at 3:26 PM, Jerry Allen <jkells@...> wrote:

> **
>
>
> I am new to the group and am happy to see that such a group exists. I
> have homebrewed many different wire antennas, but never before have I built
> a Loop Skywire. I am putting up an 80M version (68 ft. to each of 4 sides)
> at 40 ft. up, and I will be feeding it with 450 Ohm ladder line and using
> it as a multibander. My tuner will be my trusty MFG 941E aka Versa Tuner
> II which has the built in 4 to 1 balun for using balanced line. My
> question is, is this tuner adequate for tuning the Skywire? I don't plan
> on exceeding the tuner's 300 Watt limit. I just want to know if this tuner
> will help the Skywire live up to it's fine reputation.
> AK4FC
>
>
>

4177. RE: [SkyWires] Tuner question

Yahoo group: SkyWires
Date: 2012-11-21 01:22:38 UTC
From: Richard Schmuke
Topic: 4174 Message: 4177
Attachments: 2 described; binary payloads are missing from this source WARC

The loop and tuner will work and do a job good enough for the radio to work . I later moved up from a MFJ-941E to a 962D. It has a roller inductor but I could not get the SWR all the way to 1:1. I had to remake the balun to get the SWR perfect. I do love my loop it is my main antenna for most bands, even up to 6M.

Rich , Kd0zz

From: SkyWires@yahoogroups.com [mailto:SkyWires@yahoogroups.com] On Behalf Of Mark Graybill
Sent: Tuesday, November 20, 2012 7:08 PM
To: SkyWires@yahoogroups.com
Subject: Re: [SkyWires] Tuner question

As I recall, one of the fellows near me uses one of the models of the MFJ Versatuner with his 75/80m loop and 450ohm window line. He swears by it.

I'll be using a the MFJ-941C I've got with mine, once I get it up.

-Mark
W8BIT

On Tue, Nov 20, 2012 at 3:26 PM, Jerry Allen <jkells@...> wrote:

I am new to the group and am happy to see that such a group exists. I have homebrewed many different wire antennas, but never before have I built a Loop Skywire. I am putting up an 80M version (68 ft. to each of 4 sides) at 40 ft. up, and I will be feeding it with 450 Ohm ladder line and using it as a multibander. My tuner will be my trusty MFG 941E aka Versa Tuner II which has the built in 4 to 1 balun for using balanced line. My question is, is this tuner adequate for tuning the Skywire? I don't plan on exceeding the tuner's 300 Watt limit. I just want to know if this tuner will help the Skywire live up to it's fine reputation.

AK4FC

4178. (no subject)

Yahoo group: SkyWires
Date: 2012-11-26 04:05:24 UTC
From: CHARLES COTTRELL
Topic: 4178 Message: 4178

How much 450 lsdder line should I use for a 80 meter loop for all bands? My turner will be mannual.
I also want to go from barefoot to 1000 watts what guage wire is recommended?

KC4EY

4179. Re: [SkyWires] (unknown)

Yahoo group: SkyWires
Date: 2012-11-26 18:50:01 UTC
From: Dr.Ace Ratliff
Topic: 4178 Message: 4179

Hello,

Keep the feedline around these lengths.

[The WORST POSSIBLE line lengths are shown in brackets]

160 meter antenna 35-60, 170-195 or 210-235 feet
[Avoid 130, 260 ft]

80 meter antenna 34-40, 90-102 or 160-172 feet
[Avoid 66, 135, 190 ft]

40 meter antenna 42-52, 73-83, 112-123 or 145-155 feet
[Avoid 32, 64, 96, 128 ft]

Some slight trimming or adding of feedline may be necessary to accommodate
the higher frequency bands.

I use 14 guage wire but 16 guage should be fine too.

73, Ace

http://web.archive.org/web/20090222233017/http://www.bloomington.in.us/~wh2t/ant.htm

On Sun, Nov 25, 2012 at 11:05 PM, CHARLES COTTRELL <cottrell.c@...
> wrote:

> **
>
>
> How much 450 lsdder line should I use for a 80 meter loop for all bands?
> My turner will be mannual.
> I also want to go from barefoot to 1000 watts what guage wire is
> recommended?
>
> KC4EY
>
>
>

--
Dr.Ace Ratliff
www.WH2T.com

4180. Re: [SkyWires] (unknown)

Yahoo group: SkyWires
Date: 2012-11-26 20:04:40 UTC
From: Andy
Topic: 4178 Message: 4180

Why would the "Avoid" lengths be bad?

On Mon, Nov 26, 2012 at 1:50 PM, Dr.Ace Ratliff <Ace@...> wrote:

>
>
> Hello,
>
> Keep the feedline around these lengths.
>
> [The WORST POSSIBLE line lengths are shown in brackets]
>
> 160 meter antenna 35-60, 170-195 or 210-235 feet
> [Avoid 130, 260 ft]
>
> 80 meter antenna 34-40, 90-102 or 160-172 feet
> [Avoid 66, 135, 190 ft]
>
> 40 meter antenna 42-52, 73-83, 112-123 or 145-155 feet
> [Avoid 32, 64, 96, 128 ft]
>
> Some slight trimming or adding of feedline may be necessary to accommodate
> the higher frequency bands.
>
> I use 14 guage wire but 16 guage should be fine too.
>
> 73, Ace
>
>
>
> http://web.archive.org/web/20090222233017/http://www.bloomington.in.us/~wh2t/ant.htm
>
>
>
For that matter, why would any lengths be bad?

4181. Re: [SkyWires] (unknown)

Yahoo group: SkyWires
Date: 2012-11-26 22:24:08 UTC
From: raymond mitchell
Topic: 4178 Message: 4181

There is an interaction with the feed line when the feed line is close to resonance (this happens at several lengths for the same frequency). So we try to avoid these lengths. To work most bands 110ft seems to work well for me.
Abe K7ABE

--- On Mon, 11/26/12, Andy <ai.egrps@...> wrote:

From: Andy <ai.egrps@...>
Subject: Re: [SkyWires] (unknown)
To: SkyWires@yahoogroups.com
Date: Monday, November 26, 2012, 12:04 PM

Why would the "Avoid" lengths be bad?
On Mon, Nov 26, 2012 at 1:50 PM, Dr.Ace Ratliff <Ace@...> wrote:

Hello,

Keep the feedline around these lengths.[The WORST POSSIBLE line lengths are shown in brackets]160 meter antenna 35-60, 170-195 or 210-235 feet
[Avoid 130, 260 ft]80 meter antenna 34-40, 90-102 or 160-172 feet

[Avoid 66, 135, 190 ft]40 meter antenna 42-52, 73-83, 112-123 or 145-155 feet
[Avoid 32, 64, 96, 128 ft]Some slight trimming or adding of feedline may be necessary to accommodate the higher frequency bands.

I use 14 guage wire but 16 guage should be fine too. 73,
Ace http://web.archive.org/web/20090222233017/http://www.bloomington.in.us/~wh2t/ant.htm

For that matter, why would any lengths be bad?

4183. Re: [SkyWires] (unknown)

Yahoo group: SkyWires
Date: 2012-11-27 04:10:26 UTC
From: Andy
Topic: 4178 Message: 4183

> There is an interaction with the feed line when the feed line is close to
> resonance (this happens at several lengths for the same frequency).

What exactly interacts with what??

Blindly avoiding several lengths (perhaps because there might be
issues, say with guy wires or in certain specific situations) seems
silly if you don't understand why they are being avoided.

Where exactly is the problem with those lengths of feedline?

Is it the feedline interacting with the near-field and acting as a
reflector to the radiator? Easy to avoid ... run the feedline away
from the antenna, not parallel to it.

Is it because the impedance on the feedline goes to a funny value? It
can't be that. Whole multiples of a half wavelength are being
discarded as unsuitable ... when those are perhaps some of the more
desirable choices to use (they reflect the antenna's impedance at the
tuner's end, rather than transforming it into something off the charts
with an impossible-to-match SWR).

Andy

4185. RE: [SkyWires] Why do we avoid certain lengths of transmission line with closed loop skywires?

Yahoo group: SkyWires
Date: 2012-11-27 04:23:57 UTC
From: Michael Weinstock
Topic: 4185 Message: 4185

Hi Andy,

These lengths to be avoided are to do with the impedance they would present at the tuner/rig side of the transmission line versus the impedance the antenna presents to the transmission line at the antenna end. When there is a mismatch between the antenna impedance and that of the transmission line, the impedance along the line varies considerably as a function of the length of the transmission line in terms of wavelength and the velocity factor of the transmission line.

For your purposes, the velocity factor of 450 Ohm transmission line is essentially 1, so we can leave this variable out of the explanation.

For example, a 1 wavelength 80mtr resonant loop in a real world installation might present an impedance of say 110 Ohms which you are then feeding with 450 Ohm balanced line. The issue of transmission line lengths is not a problem from an impedance matching perspective when there is an exact match between the antenna feedpoint and the impedance of the transmission line. In that case, we just consider the line loss as a function of length of the transmission line. (example ¼ wavelength elevated vertical with sloping radials fed with a random length of 50Ohm coax).

So because we have a mismatch between the loop□s feedpoint impedance and the impedance of our feedline, we need to factor in the length of feedline (as explained below) to avoid impedance matching issues at the tuner/rig side of the feedline.

ANTENNA FEEDPOINT IMPEDANCE FOR A CLOSED LOOP (SKYWIRE) :

- Low(ish) - When antenna is an even multiple of ½ wavelength at operating frequency. (ie Full wavelength loops)

- High - When antenna is an odd multiple of ½ wavelength at operating frequency (ie .5 , 1.5 , 2.5 wavelength loops)

The impedance presented to the rig/tuner is a function of both the antenna feedpoint impedance and the length of transmission line used.

TRANSMISSION LINE LENGTHS :

There are 2 special case lengths re transmission lines:

- ½ wavelength (or multiples of) at frequency of operation. These lengths will present to the tuner/rig the same impedance that was present at the antenna feedpoint.

- ¼ wavelength (odd multiples of) at frequency of operation. These lengths will at as □impedance transformers□. If there is a high impedance at the antenna feedpoint, a ¼ wavelength transmission line will present a much lower impedance to the tuner/rig. If there is a low impedance at the antenna feedpoint, a ¼ wavelength transmission line will present a much higher impedance to the tuner/rig.

The lengths to be avoided as I understand it are odd ¼ wavelength multiples at the frequency of operation as these lengths will convert the low(ish) impedance at the closed loop antenna feedpoint to much higher impedance at the tuner/rig side. Higher impedances are harder to match at the tuner/rig side and hence we try to avoid creating situations with certain lengths of transmission lines that are very likely to present difficult to match impedances.

I□m sure there is a better technical explanation than this, but hopefully, this will get the concepts across.

73,

Michael

VK3EMJ

From: SkyWires@yahoogroups.com [mailto:SkyWires@yahoogroups.com] On Behalf Of Andy
Sent: Tuesday, 27 November 2012 7:05 AM
To: SkyWires@yahoogroups.com
Subject: Re: [SkyWires] (unknown)

Why would the "Avoid" lengths be bad?

On Mon, Nov 26, 2012 at 1:50 PM, Dr.Ace Ratliff <Ace@...> wrote:

Hello,

Keep the feedline around these lengths.

[The WORST POSSIBLE line lengths are shown in brackets]

160 meter antenna 35-60, 170-195 or 210-235 feet
[Avoid 130, 260 ft]

80 meter antenna 34-40, 90-102 or 160-172 feet
[Avoid 66, 135, 190 ft]

40 meter antenna 42-52, 73-83, 112-123 or 145-155 feet
[Avoid 32, 64, 96, 128 ft]

Some slight trimming or adding of feedline may be necessary to accommodate the higher frequency bands.

I use 14 guage wire but 16 guage should be fine too.

73, Ace

http://web.archive.org/web/20090222233017/http://www.bloomington.in.us/~wh2t
/ant.htm
<http://web.archive.org/web/20090222233017/http:/www.bloomington.in.us/~wh2t
/ant.htm>

For that matter, why would any lengths be bad?

4186. AW: [SkyWires] (unknown)

Yahoo group: SkyWires
Date: 2012-11-27 14:42:40 UTC
From: siegfried jackstien
Topic: 4178 Message: 4186

Answers in your text below

> -----Ursprüngliche Nachricht-----
> Von: SkyWires@yahoogroups.com [mailto:SkyWires@yahoogroups.com] Im Auftrag
> von Andy
> Gesendet: Dienstag, 27. November 2012 04:10
> An: SkyWires@yahoogroups.com
> Betreff: Re: [SkyWires] (unknown)
>
>
>
> > There is an interaction with the feed line when the feed line is close
> to
> > resonance (this happens at several lengths for the same frequency).
>
> What exactly interacts with what??

A current fed antenna (halfwave dipole or 3/2 waves etc) and a quarterwave
line .... or a fullwave antenna and a quarterwave line

Both will produce a very high impedance on the shack end

>
> Blindly avoiding several lengths (perhaps because there might be
> issues, say with guy wires or in certain specific situations) seems
> silly if you don't understand why they are being avoided.
>
> Where exactly is the problem with those lengths of feedline?
>
> Is it the feedline interacting with the near-field and acting as a
> reflector to the radiator? Easy to avoid ... run the feedline away
> from the antenna, not parallel to it.
>
> Is it because the impedance on the feedline goes to a funny value? It
> can't be that. Whole multiples of a half wavelength are being
> discarded as unsuitable ... when those are perhaps some of the more
> desirable choices to use (they reflect the antenna's impedance at the
> tuner's end, rather than transforming it into something off the charts
> with an impossible-to-match SWR).

For a multiband use (and that is the reason to use ladderline) and for easy
matching and low losses we try to avoid very high and very low impedances

Very low impedance means high currents (so maybe higher loss)

Very high impedance means high voltage (and maybe tuner would arc over)

Hope now it is clear why in different setups different length of dipole or loop and length of ladderline interact ...

Dg9bfc

Sigi

4187. Re: [SkyWires] (unknown)

Yahoo group: SkyWires
Date: 2012-11-27 16:10:19 UTC
From: Andy
Topic: 4178 Message: 4187

> A current fed antenna (halfwave dipole or 3/2 waves etc) and a quarterwave
> line .... or a fullwave antenna and a quarterwave line
>
> Both will produce a very high impedance on the shack end

Yup, I got that one.

But this was a loop (OK, not a huge difference, though depending on its size), and the whole multiples of 1/2-wavelength feedline were discarded as unsuitable! Those are the lengths that nearly exactly reflect the antenna feedpoint impedance at the shack end. If the antenna's feedpoint impedance was workable, then that length of feedline ought to be just fine. In fact, perfect.

So why avoid it? Just because someone says the length is "resonant"?

It reminds me of the saying ... the blind leading the blind.

I would probably want to avoid using odd multiples of a quarter-wavelength, given that the feedline's characteristic impedance is probably several times that of the loop being fed. That would transform the impedance into something high ... in the kilohms.

But a half-wavelength, and whole multiples? No.

> Hope now it is clear why in different setups different length of dipole or
> loop and length of ladderline interact ...

No, I'm afraid it is not.

Regards anyway,
Andy

4188. Re: [SkyWires] Why do we avoid certain lengths of transmission line with closed loop skywires?

Yahoo group: SkyWires
Date: 2012-11-27 20:56:01 UTC
From: Andy
Topic: 4185 Message: 4188

Michael Weinstock wrote:

These lengths to be avoided are to do with the impedance they would
> present at the tuner/rig side of the transmission line versus the impedance
> the antenna presents to the transmission line at the antenna end*. When
> there is a mismatch between the antenna impedance and that of the
> transmission line, the impedance along the line varies considerably as a
> function of the length of the transmission line in terms of wavelength*and the velocity factor of the transmission line.
>

Michael,

I get what you're saying, and I knew the explanation you gave. It's
something I learned oh, some 40 years ago, in precise mathematical detail,
later followed by the graphical shortcuts (Smith charts).

However, why do we want to *avoid* using half-wavelength long pieces of
feedline??? That's my real question.

*160 meter antenna 35-60, 170-195 or 210-235 feet
> [Avoid 130, 260 ft]*
>
>
But 260 feet is 1/2 wavelength. Why avoid it?

> **
>
> *80 meter antenna 34-40, 90-102 or 160-172 feet
> [Avoid 66, 135, 190 ft]*
>
>
But 130 feet is 1/2 wavelength.

**
>
> *40 meter antenna 42-52, 73-83, 112-123 or 145-155 feet
> [Avoid 32, 64, 96, 128 ft]*
>
>
But 64 feet is 1/2 wavelength, and 128 feet is a whole multiple of 1/2
wavelength.

I understand perhaps avoiding the 1/4 wavelength (and odd whole multiples)
when using ladderline, because it will tend to transform the impedance to

something on the other side of 450 ohms such that the geometric mean of it and the antenna impedance works out to 450. What I don't understand is why avoid using the even multiples of 1/4 wavelength too, = 1/2 wavelength and whole multiples thereof?

In fact the target ("desirable") lengths are pretty much guaranteed to put you about a quarter way around on the Smith chart, to where the impedance is significantly reactive, and significantly greater than it is at the antenna (assuming that the antenna itself was close to resonant as cut). Not as large perhaps as it would be if you had gone the full half way around on the Smith chart (i.e., with a 1/4 wavelength piece of feedline), but still significantly greater than the impedance was at the antenna itself. And it gives you a large reactive component that the tuner needs to handle.

Wouldn't it be better to aim for 1/2 wavelength and multiples? I understand that it might be difficult to accomplish on all bands.

Regards,
Andy

4189. RE: [SkyWires] Why do we avoid certain lengths of transmission line with closed loop skywires?

Yahoo group: SkyWires
Date: 2012-11-28 02:46:20 UTC
From: Michael Weinstock
Topic: 4185 Message: 4189

Hi Andy,

I understand your specific question now.

I plugged the numbers into a simple spreadsheet and I believe they are telling me that 260ft would present a high impedance match on 20metres as at 14.2Mhz, this amount of feedline is ~3.75 wavelengths. with the .75 (and .25) being the impedance transformation lengths we want to avoid. 17metres would also not be desirable in terms of impedance transformation with this length.

Wavelength of 260ft of Open Wire Feeder on each band

Frequency (MHZ)

1.8

0.475488

3.6

0.950976

7.2

1.901952

10.1

2.668016

14.2

3.751072

18.1

4.781296

21.2

5.600192

24.95

6.590792

28.3

7.475728

29

7.66064

29.7

7.845552

52

13.73632

If you are interested, there is free and easy to use loop modelling program called rjeloop4.exe available at the following URL:

http://www.smeter.net/antennas/large-transmitting-loop.php

The link to the program is towards the bottom of the page. NOTE: It runs on WinXP.. will not run on Win7. Not sure about Vista.

The program includes the ability to add the characteristics of the transmission line including its impedance and the length to the model so show you the sort of impedances that will be presented at the tuner/rig side for a specified loop setup.

If you plug the numbers into it for any given loop, you can change the frequency of operation and immediately get a feel for what the impedance matching situation will present for any given frequency of operation.

I think the answers it would give you would be of interest given your question.

73,

Michael

VK3EMJ

From: SkyWires@yahoogroups.com [mailto:SkyWires@yahoogroups.com] On Behalf Of Andy
Sent: Wednesday, 28 November 2012 7:56 AM
To: SkyWires@yahoogroups.com
Subject: Re: [SkyWires] Why do we avoid certain lengths of transmission line with closed loop skywires?

Michael Weinstock wrote:

These lengths to be avoided are to do with the impedance they would present at the tuner/rig side of the transmission line versus the impedance the antenna presents to the transmission line at the antenna end. When there is a mismatch between the antenna impedance and that of the transmission line, the impedance along the line varies considerably as a function of the length of the transmission line in terms of wavelength and the velocity

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Michael,

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However, why do we want to avoid using half-wavelength long pieces of feedline??? That's my real question.

160 meter antenna 35-60, 170-195 or 210-235 feet
[Avoid 130, 260 ft]

But 260 feet is 1/2 wavelength. Why avoid it?

80 meter antenna 34-40, 90-102 or 160-172 feet
[Avoid 66, 135, 190 ft]

But 130 feet is 1/2 wavelength.

40 meter antenna 42-52, 73-83, 112-123 or 145-155 feet
[Avoid 32, 64, 96, 128 ft]

But 64 feet is 1/2 wavelength, and 128 feet is a whole multiple of 1/2 wavelength.

I understand perhaps avoiding the 1/4 wavelength (and odd whole multiples) when using ladderline, because it will tend to transform the impedance to something on the other side of 450 ohms such that the geometric mean of it and the antenna impedance works out to 450. What I don't understand is why avoid using the even multiples of 1/4 wavelength too, = 1/2 wavelength and whole multiples thereof?

In fact the target ("desirable") lengths are pretty much guaranteed to put you about a quarter way around on the Smith chart, to where the impedance is significantly reactive, and significantly greater than it is at the antenna (assuming that the antenna itself was close to resonant as cut). Not as large perhaps as it would be if you had gone the full half way around on the Smith chart (i.e., with a 1/4 wavelength piece of feedline), but still significantly greater than the impedance was at the antenna itself. And it gives you a large reactive component that the tuner needs to handle.

Wouldn't it be better to aim for 1/2 wavelength and multiples? I understand that it might be difficult to accomplish on all bands.

Regards,

Andy

4190. Re: [SkyWires] Why do we avoid certain lengths of transmission line with closed loop skywires?

Yahoo group: SkyWires
Date: 2012-11-28 13:50:21 UTC
From: Ken
Topic: 4185 Message: 4190

I think some of the issues reflect the limitations of certain tuners. IIRC, Icom says to avoid certain lengths with their AH-4 tuner. OTOH, I'll bet that other, bigger tuners will tune the antenna/feedline without problem. I know my Elecraft K3 internal tuner won't tune my antenna/feedline on a couple of bands but my Palstar AT2K handles it just fine.

73,
Ken WA8JXM

4191. Re: [SkyWires] (unknown)

Yahoo group: SkyWires
Date: 2012-11-28 23:32:08 UTC
From: Dr.Ace Ratliff
Topic: 4178 Message: 4191

The avoid lengths are 1/4 or multiples of a 1/4 wavelength. They will present a very high impedance to the tuner.

On Mon, Nov 26, 2012 at 3:04 PM, Andy <ai.egrps@...> wrote:

> **
>
>
> Why would the "Avoid" lengths be bad?
>
> On Mon, Nov 26, 2012 at 1:50 PM, Dr.Ace Ratliff <Ace@...> wrote:
>
>>
>>
>> Hello,
>>
>> Keep the feedline around these lengths.
>>
>> [The WORST POSSIBLE line lengths are shown in brackets]
>>
>> 160 meter antenna 35-60, 170-195 or 210-235 feet
>> [Avoid 130, 260 ft]
>>
>> 80 meter antenna 34-40, 90-102 or 160-172 feet
>> [Avoid 66, 135, 190 ft]
>>
>> 40 meter antenna 42-52, 73-83, 112-123 or 145-155 feet
>> [Avoid 32, 64, 96, 128 ft]
>>
>> Some slight trimming or adding of feedline may be necessary to
>> accommodate the higher frequency bands.
>>
>> I use 14 guage wire but 16 guage should be fine too.
>>
>> 73, Ace
>>
>>
>>
>> http://web.archive.org/web/20090222233017/http://www.bloomington.in.us/~wh2t/ant.htm
>>
>>
>>
> For that matter, why would any lengths be bad?
>
>

>
>

--
Dr.Ace Ratliff
www.WH2T.com

4192. Re: [SkyWires] (unknown)

Yahoo group: SkyWires
Date: 2012-11-28 23:37:26 UTC
From: Andy
Topic: 4178 Message: 4192

> The avoid lengths are 1/4 or multiples of a 1/4 wavelength. They will
> present a very high impedance to the tuner.
>

Only the odd ones will.

Even multiples are FB.

Andy

4193. Re: [SkyWires] (unknown)

Yahoo group: SkyWires
Date: 2012-11-30 16:25:27 UTC
From: Ken
Topic: 4178 Message: 4193

A quarter wave section is a transformer. A quarter wave (or odd multiple) can present a low impedance if the antenna is a high impedance. For example, a center fed full wave antenna will have a high impedance but when fed with a quarter wave feedline, it will present a lower impedance at the shack end.

Ken WA8JXM

On Nov 28, 2012, at 6:37 PM, Andy wrote:

> The avoid lengths are 1/4 or multiples of a 1/4 wavelength. They will present a very high impedance to the tuner.
>
> Only the odd ones will.
>
> Even multiples are FB.
>

4194. how close to utility power wires?

Yahoo group: SkyWires
Date: 2012-12-10 03:29:57 UTC
From: kc4ey
Topic: 4194 Message: 4194

For safety how far from utility power lines can loop come?

If part of the loop runs along side the utility what is the effect to the antenna. How far away to eliminate any issues?

Antenna will be a 80 meter loop.

Thanks,
KC4EY
Charley

4195. AW: [SkyWires] how close to utility power wires?

Yahoo group: SkyWires
Date: 2012-12-10 08:36:39 UTC
From: siegfried jackstien
Topic: 4194 Message: 4195

For safety? I would go far far away ... what if the other supports break (insulator or rope)??? And when the wind then blows your antenna on the power lines??? .. you will get a massive fire in your shack ...

What you can do is add additional safety lines that holds the wire up (with some sag) after the normal support came loose

Effect on the antenna (patterns on different bands) ... sure you will have some influence ... but not worth worrying about it I think

I would more worry about NOISE ... and the above safety rules

Dg9bfc

sigi

> -----Ursprüngliche Nachricht-----
> Von: SkyWires@yahoogroups.com [mailto:SkyWires@yahoogroups.com] Im Auftrag
> von kc4ey
> Gesendet: Montag, 10. Dezember 2012 03:30
> An: SkyWires@yahoogroups.com
> Betreff: [SkyWires] how close to utility power wires?
>
>
>
> For safety how far from utility power lines can loop come?
>
> If part of the loop runs along side the utility what is the effect to the
> antenna. How far away to eliminate any issues?
>
> Antenna will be a 80 meter loop.
>
> Thanks,
> KC4EY
> Charley
>
>
>
>

4196. MBU Cluster app for Android.

Yahoo group: SkyWires
Date: 2012-12-19 08:58:33 UTC
From: Marian Anghel
Topic: 4196 Message: 4196

Hello friends,

Today I finised the simple live view cluster for android with 60 sec refresh,
please give feedback to know what to improve. Or if you have another sugestion.

https://play.google.com/store/apps/details?id=com.wMBUCluster&feature=search_result#?t=W25
1bGwsMSwyLDEsImNvbS53TUJVQ2x1c3RlciJd

I will build also the app for IOS users.

73 Marian YO2MBU

http://yo2mbu.blogspot.ro/

4197. Terminated Long Wire

Yahoo group: SkyWires
Date: 2012-12-24 23:50:22 UTC
From: John
Topic: 4085 Message: 4197

Okay, I have a 276 foot loop in the backyard. When I feed it as a longwire I can actually manually tune to 160m down to about 2:1. Just for kicks, I terminated the free end directly to ground and was able to tune it down all the way flat 1:1 and boy, does that thing get out!

What did I do to make it suddenly work so well? What's the science behind it?

4198. Re: Terminated Long Wire

Yahoo group: SkyWires
Date: 2012-12-25 16:45:27 UTC
From: dentonsp
Topic: 4085 Message: 4198

Just for kicks, put the antenna tuner between the free end of the loop and ground. Let us know what happens.

--- In SkyWires@yahoogroups.com, "John" <johnorzel@...> wrote:
>
> Okay, I have a 276 foot loop in the backyard. When I feed it as a longwire I can actually manually tune to 160m down to about 2:1. Just for kicks, I terminated the free end directly to ground and was able to tune it down all the way flat 1:1 and boy, does that thing get out!
>
> What did I do to make it suddenly work so well? What's the science behind it?
>

4199. New file uploaded to SkyWires

Yahoo group: SkyWires
Date: 2012-12-27 21:48:23 UTC
From: SkyWires@yahoogroups.com
Topic: 434 Message: 4199

Hello,

This email message is a notification to let you know that
a file has been uploaded to the Files area of the SkyWires
group.

File : /kg6zan_loop.nec
Uploaded by : kp4md <kp4md@...>
Description : KG6ZAN 276 Foot horizontal loop antenna NEC model

You can access this file at the URL:
http://groups.yahoo.com/group/SkyWires/files/kg6zan_loop.nec

To learn more about file sharing for your group, please visit:
http://help.yahoo.com/l/us/yahoo/groups/original/members/web/index.html
Regards,

kp4md <kp4md@...>

4200. Re: Terminated Long Wire

Yahoo group: SkyWires
Date: 2012-12-27 22:06:27 UTC
From: kp4md
Topic: 4085 Message: 4200

Antenna modeling can help understand how antennas work.Here is a model of a perfect square 276 foot loop at 15 feet height over moderate ground.It is calculated resonant at 3.594 MHz with 107 ohm impedance.Your difference in measured resonant frequency is due to variations in loop geometry and objects in the near field as well and impedance transformation effects of your transmission line.
[kg6zan_loop_current_ at_resonance] [kg6zan_loop_at_resonance]
Here is the vertical radiation pattern at resonance, the main lobe directed straight up
[kg6zan_loop_pattern_ at_resonance]
At 7 MHz the pattern is still omnidirectional, with a null straight up
[kg6zan_loop_pattern_ at_07MHz]
At 28 MHz the pattern shows many lobes and nulls. It may be deaf for stations in the nulls, but very good for stations just a few degrees away in the lobes.
[kg6zan_loop_pattern_ at_28MHz]
With the free 4nec2 modeling program you can change any of the parameters, terminations, etc. and observe the expected effect on performance.
CM KG6ZAN Loop NEC model by Carol F. Milazzo, KP4MDCM Frequency = 3.59 MHzCM Height 15 feetCM Perimeter 276 feetCM Moderate groundCESY h=15 'height feetSY len=276 'perimeter feetSY s=len/4 'side length feetSY f=3.5944 'frequency MHzGW 1 20 0 0 h s 0 h 1.67928e-3GW 2 20 s 0 h s s h 1.67928e-3GW 3 20 s s h 0 s h 1.67928e-3GW 4 20 0 s h 0 0 h 1.67928e-3GS 0 0 0.3048GE -1LD 5 0 0 0 58000000GN 2 0 0 0 4 0.003EKEX 0 1 1 0 1 0 0FR 0 0 0 0 f 0EN
The uploaded NEC model file is at
http://groups.yahoo.com/group/SkyWires/files/kg6zan_loop.nec
<http://groups.yahoo.com/group/SkyWires/files/kg6zan_loop.nec> and the photos are in the album at
http://groups.yahoo.com/group/SkyWires/photos/album/1821330021/pic/list

--- In SkyWires@yahoogroups.com, "John" wrote:
>
> Okay, I have a 276 foot loop in the backyard. When I feed it as a longwire I can actually manually tune to 160m down to about 2:1. Just for kicks, I terminated the free end directly to ground and was able to tune it down all the way flat 1:1 and boy, does that thing get out!
>
> What did I do to make it suddenly work so well? What's the science behind it?
>

4201. Re: Terminated Long Wire

Yahoo group: SkyWires
Date: 2012-12-28 20:29:02 UTC
From: kp4md
Topic: 4085 Message: 4201

Here is an SWR chart from 3-30 MHz
[kg6zan_loop_SWR_sweep]
And and impedance chart
[kg6zan_loop_impedance_sweep]
And the radiation pattern at 14 MHz (note the sharp nulls and lobes)
[kg6zan_loop_pattern_ at_14MHz]

4202. Backyard Wire Loop Antenna, Baluns and Tuning

Yahoo group: SkyWires
Date: 2013-02-07 03:00:53 UTC
From: Noodle10536
Topic: 4202 Message: 4202

Hello evryone, I have installed a 545' wire loop antenna. It is in a diamond shape due to available trees to support it. I would describe the shape similar to the ARRL symbol (diamond). It is fed off one of the ends to about 40' of 16ga 450 ohm ladder line into the shack. The loop varies in height from about 25' at the low point to about 38' at the high point. I have experimented with many baluns but thus far have not gottne it to tune easily and difficult to tune on 160m. I have tried two 4:1 baluns, a 9:1 balun and a 1:1 balun. I have tested it with an MFJ analyzer and have gotten about 7 ohms at 1.900 with the 9:1 and 4:1 and about 200 ohms with the 1:1. Any suggestions to improve ease of tuning welcome.

Thanks, Peter.
KC2RBX

4204. AW: [SkyWires] Backyard Wire Loop Antenna, Baluns and Tuning

Yahoo group: SkyWires
Date: 2013-02-07 10:49:13 UTC
From: siegfried jackstien
Topic: 4202 Message: 4204

On my topband loop i also changed the feeder length to have a low swr

Now the end result is that on some bands I use the short feeder (from antenna to shack) and on some bands I add another length (plugged in between with banana plugs)

Dg9bfc

Sigi

> -----Ursprüngliche Nachricht-----
> Von: SkyWires@yahoogroups.com [mailto:SkyWires@yahoogroups.com] Im Auftrag
> von Noodle10536
> Gesendet: Donnerstag, 7. Februar 2013 03:01
> An: SkyWires@yahoogroups.com
> Betreff: [SkyWires] Backyard Wire Loop Antenna, Baluns and Tuning
>
>
>
> Hello evryone, I have installed a 545' wire loop antenna. It is in a
> diamond shape due to available trees to support it. I would describe the
> shape similar to the ARRL symbol (diamond). It is fed off one of the ends
> to about 40' of 16ga 450 ohm ladder line into the shack. The loop varies
> in height from about 25' at the low point to about 38' at the high point.
> I have experimented with many baluns but thus far have not gottne it to
> tune easily and difficult to tune on 160m. I have tried two 4:1 baluns, a
> 9:1 balun and a 1:1 balun. I have tested it with an MFJ analyzer and have
> gotten about 7 ohms at 1.900 with the 9:1 and 4:1 and about 200 ohms with
> the 1:1. Any suggestions to improve ease of tuning welcome.
>
> Thanks, Peter.
> KC2RBX
>
>
>
>

4205. RE: [SkyWires] Backyard Wire Loop Antenna, Baluns and Tuning

Yahoo group: SkyWires
Date: 2013-02-07 13:26:40 UTC
From: Richard Schmuke
Topic: 4202 Message: 4205
Attachments: 2 described; binary payloads are missing from this source WARC

I made it easier to tune on one of my antenna set ups by adding switchable balun, I use 1:1 on 160 and 4:1 on other bands. Here is the schematic http://www.angelfire.com/electronic2/qrp/balun.html ,it is for QRP, I just used larger components for a KW size.
http://i1102.photobucket.com/albums/g453/KD0ZZ/4to11to12.jpg

Kd0zz , Rich

I used to think I was indecisive, but now I'm not so sure.

From: SkyWires@yahoogroups.com [mailto:SkyWires@yahoogroups.com] On Behalf Of siegfried jackstien
Sent: Thursday, February 07, 2013 4:49 AM
To: SkyWires@yahoogroups.com
Subject: AW: [SkyWires] Backyard Wire Loop Antenna, Baluns and Tuning

On my topband loop i also changed the feeder length to have a low swr

Now the end result is that on some bands I use the short feeder (from antenna to shack) and on some bands I add another length (plugged in between with banana plugs)

Dg9bfc

Sigi

> -----Ursprüngliche Nachricht-----
> Von: SkyWires@yahoogroups.com <mailto:SkyWires%40yahoogroups.com>
[mailto:SkyWires@yahoogroups.com <mailto:SkyWires%40yahoogroups.com>] Im Auftrag
> von Noodle10536
> Gesendet: Donnerstag, 7. Februar 2013 03:01
> An: SkyWires@yahoogroups.com <mailto:SkyWires%40yahoogroups.com>
> Betreff: [SkyWires] Backyard Wire Loop Antenna, Baluns and Tuning
>
>
>
> Hello evryone, I have installed a 545' wire loop antenna. It is in a
> diamond shape due to available trees to support it. I would describe the
> shape similar to the ARRL symbol (diamond). It is fed off one of the ends
> to about 40' of 16ga 450 ohm ladder line into the shack. The loop varies
> in height from about 25' at the low point to about 38' at the high point.
> I have experimented with many baluns but thus far have not gottne it to
> tune easily and difficult to tune on 160m. I have tried two 4:1 baluns, a
> 9:1 balun and a 1:1 balun. I have tested it with an MFJ analyzer and have
> gotten about 7 ohms at 1.900 with the 9:1 and 4:1 and about 200 ohms with

> the 1:1. Any suggestions to improve ease of tuning welcome.
>
> Thanks, Peter.
> KC2RBX
>
>
>
>

4209. Large vertical loops

Yahoo group: SkyWires
Date: 2013-03-18 00:23:44 UTC
From: Brian Burns
Topic: 4209 Message: 4209

Hello All,

I've got space to put up a vertical skywire, but not a horizontal one. I'm thinking of a vertical rectangle that is 140 feet long by 34 feet high with the top horizontal at 43 feet and the bottom one at 9 feet. Unfortunately my interests include the WARC bands, 30m, 17m, and 12m, as well as the usual harmonically related ones, 80m through 10m.

It would seem that a long enough matching stub, with shorting bar, attached to the loop at some point would allow it to be adjusted to a reasonable SWR on any band. I don't mind going outside to move the shorting bar when I want to change bands.

Another possibility would be to put up two concentric loops of quite different sizes, but I can't find any info on the web by anyone who has done that except in cubical quads.

I'm thinking of feeding with 600 ohm ladder line, but am open to suggestion on that, as well as the best feed point. I have an old Harvey Wells Z-Match antenna tuner that likes to work with open wire feedline, and a Kenwood that wants to look at coax.

Whaddya think?

Cheers,

Brian Burns Ex: W5BRO, K6UCD

Intelligence is common--wisdom is rare. Thomas Sowell is a wise man:

http://www.youtube.com/watch?v=5KHdhrNhh88
<http://www.youtube.com/watch?v=5KHdhrNhh88&NR=1> &NR=1

4210. Re: [SkyWires] Large vertical loops

Yahoo group: SkyWires
Date: 2013-03-18 13:10:36 UTC
From: Dave Leisman
Topic: 4209 Message: 4210

Use 450 ohm twin lead to feed the loop and a tuner on the transmitter end and I guarantee you'll work the world. I have done the same thing between two towers and in the first year I worked more than 70 countries on 80 meters, and a bunch more on the est of the bands, including the WAC bands. The direction of radiation will be at right angles to the loop. You'll have great success.

Good luck!!

Dave, W8QW

On Sun 03/17/13 8:23 PM , "Brian Burns" brian@... sent:
>
>
> Hello All,
>
>
>
> I’ve got space to put up a vertical skywire, but not a horizontal one.
> I’m thinking of a vertical rectangle that is 140 feet long by 34 feet
> high with the top horizontal at 43 feet and the bottom one at 9 feet.
> Unfortunately my interests include the WARC bands, 30m, 17m, and 12m, as
> well as the usual harmonically related ones, 80m through 10m.
>
>
>
> It would seem that a long enough matching stub, with shorting bar,
> attached to the loop at some point would allow it to be adjusted to a
> reasonable SWR on any band. I don’t mind going outside to move the
> shorting bar when I want to change bands.
>
>
>
> Another possibility would be to put up two concentric loops of quite
> different sizes, but I can’t find any info on the web by anyone who has
> done that except in cubical quads.
>
>
>
> I’m thinking of feeding with 600 ohm ladder line, but am open to
> suggestion on that, as well as the best feed point. I have an old Harvey
> Wells Z-Match antenna tuner that likes to work with open wire feedline,
> and a Kenwood that wants to look at coax.
>
>
>
> Whaddya think?

>
>
>
> Cheers,
>
>
>
> Brian Burns Ex: W5BRO, K6UCD
>
>
>
>
>
> Intelligence is common--wisdom is rare. Thomas Sowell is a wise man:
>
>
>
> http://www.youtube.com/watch?v=5KHdhrNhh88font-family:"Times New
> Roman","serif";color:black;letter-spacing:1.0pt;">
>
>
>
>
>
>
>
>
> Links:
> ------
> [1]
> http://groups.yahoo.com/group/SkyWires/post;_ylc=X3oDMTJxYWJjb3RwBF9TAzk3Mz
> U5NzE0BGdycElkAzEwOTQ2MTE5BGdycHNwSWQDMTcwNTA2MzEwOARtc2dJZAM0MjA5BHNlYwNmd
> HIEc2xrA3JwbHkEc3RpbWUDMTM2MzU2NjIzOQ--?act=replycolor: #2D50FD;
> [2]
> http://groups.yahoo.com/group/SkyWires/post;_ylc=X3oDMTJmcWtlN2g1BF9TAzk3Mz
> U5NzE0BGdycElkAzEwOTQ2MTE5BGdycHNwSWQDMTcwNTA2MzEwOARzZWMDZnRyBHNsawNudHBjB
> HN0aW1lAzEzNjM1NjYyMzk-[3]
> http://groups.yahoo.com/group/SkyWires/message/4209;_ylc=X3oDMTM1amNxdGhzBF
> 9TAzk3MzU5NzE0BGdycElkAzEwOTQ2MTE5BGdycHNwSWQDMTcwNTA2MzEwOARtc2dJZAM0MjA5B
> HNlYwNmdHIEc2xrA3Z0cGMEc3RpbWUDMTM2MzU2NjIzOQR0cGNJZAM0MjA5[4]
> http://groups.yahoo.com/group/SkyWires/members;_ylc=X3oDMTJncG00NmJlBF9TAzk
> 3MzU5NzE0BGdycElkAzEwOTQ2MTE5BGdycHNwSWQDMTcwNTA2MzEwOARzZWMDdnRsBHNsawN2bW
> JycwRzdGltZQMxMzYzNTY2MjM5?o=6[5]
> http://groups.yahoo.com/group/SkyWires;_ylc=X3oDMTJmdGU4YnExBF9TAzk3MzU5NzE
> 0BGdycElkAzEwOTQ2MTE5BGdycHNwSWQDMTcwNTA2MzEwOARzZWMDdnRsBHNsawN2Z2hwBHN0aW
> 1lAzEzNjM1NjYyMzk-[6]
> http://groups.yahoo.com/;_ylc=X3oDMTJlaGw5cGhnBF9TAzk3NDc2NTkwBGdycElkAzEwO
> TQ2MTE5BGdycHNwSWQDMTcwNTA2MzEwOARzZWMDZnRyBHNsawNnZnAEc3RpbWUDMTM2MzU2NjIz
> OQ--[7] http://docs.yahoo.com/info/terms/
>
>

4211. RE: [SkyWires] Large vertical loops

Yahoo group: SkyWires
Date: 2013-03-18 15:11:44 UTC
From: Brian Burns
Topic: 4209 Message: 4211
Attachments: 1 described; binary payloads are missing from this source WARC

Hello Dave,

Thanks very much for the encouragement! I didn’t mention that I’m interested in QRP, so running only 5 watts, I can’t afford to have much in the way of losses in the system. My antenna tuner will certainly do a good job of matching my transmitter to the feedline—they ought to be called feedline tuners (;->)…

It’s matching the feedline impedance to the antenna impedance at the antenna’s feedpoint on all these oddball frequencies that concerns me.

So, I’m still wondering whether it would work to put up concentric loops of different sizes to get better matches of the feedline to the antenna on the different bands. Or, whether adjustable length matching stubs could be used to change the electrical size of the loop to bring it to resonance on the various bands.

Cheers,

Brian Burns

.

Image removed by sender.

4212. Re: (unknown)

Yahoo group: SkyWires
Date: 2013-03-20 02:48:44 UTC
From: allenbh57
Topic: 4178 Message: 4212

I want to build a loop - 80M or 160. For multi-band. I can run ladder line most of the way, but have about 20 feet inside the house. I'd like to run dual-coax from next to the house to the operating position and tuner. What do you recommend between the "balanced" coax (dual), or just a balun and coax to the ladder line? Maybe a 1:9?

Always had dipoles but this lot is not set up for those. The feedpoint will be in the middle of the yard and as of now, no towers :-(

I also have an Alinco Auto tuner for random wire that I can use. Ground the control line and it will tune. I could locate it outside, maybe with a balun. I'll check the "tuning range".

Thanks,
Bill
AJ4TX

--- In SkyWires@yahoogroups.com, "Dr.Ace Ratliff" <Ace@...> wrote:
>
> Hello,
>
> Keep the feedline around these lengths.
>
> [The WORST POSSIBLE line lengths are shown in brackets]
>
> 160 meter antenna 35-60, 170-195 or 210-235 feet
> [Avoid 130, 260 ft]
>
> 80 meter antenna 34-40, 90-102 or 160-172 feet
> [Avoid 66, 135, 190 ft]
>
> 40 meter antenna 42-52, 73-83, 112-123 or 145-155 feet
> [Avoid 32, 64, 96, 128 ft]
>
> Some slight trimming or adding of feedline may be necessary to accommodate
> the higher frequency bands.
>
> I use 14 guage wire but 16 guage should be fine too.
>
> 73, Ace
>
>
> http://web.archive.org/web/20090222233017/http://www.bloomington.in.us/~wh2t/ant.htm
>
>
>
> On Sun, Nov 25, 2012 at 11:05 PM, CHARLES COTTRELL <cottrell.c@...

> > wrote:
>
> > **
> >
> >
> > How much 450 lsdder line should I use for a 80 meter loop for all bands?
> > My turner will be mannual.
> > I also want to go from barefoot to 1000 watts what guage wire is
> > recommended?
> >
> > KC4EY
> >
> >
> >
>
>
>
> --
> Dr.Ace Ratliff
> www.WH2T.com
>

4213. superloop 40m aerial

Yahoo group: SkyWires
Date: 2013-04-24 13:58:56 UTC
From: stevenfleming16
Topic: 4213 Message: 4213

Hello
I wonder if anyone has built this aerial and has the correct dimensions for this project...any comments welcomed...
Many thanks
Steve

4214. Re: superloop 40m aerial

Yahoo group: SkyWires
Date: 2013-04-25 12:23:42 UTC
From: goroberts
Topic: 4213 Message: 4214

I'm not sure what a "superloop" is unless the inference is that loops are "super" in general, but I've used a full wave loop for years and am very pleased with it. Mine is an 80m loop but the principles are the same. If you intend to use it as a mono band antenna the you can feed it with coax directly, but if you plan on using it as a multi band antenna make it a little shorter, use a good quality 4:1 balun and your internal tuner will be able to match it as expected. The reason it needs to be a bit shorter on the lowest band is the impeadance needs to NOT be right at 50ohms since you're using it on other bands where the impeadance will surely be different. This way the balun and the tuner do the heavy lifting. Open ladder line can be used instead of the above but refer to the ARRL Antenna books or other sources. There's a lot of incomplete and just wrong information on ths web so stick with good sources. I use a DX Egineering "tuner" balun after many orher failed methods. They have an EXCELLENT faq page that hits this nail on the head.

Good luck,
Glen -KE7FD

--- In SkyWires@yahoogroups.com, "stevenfleming16" <stevenfleming16@...> wrote:
>
> Hello
> I wonder if anyone has built this aerial and has the correct dimensions for this project...any comments welcomed...
> Many thanks
> Steve
>

4215. RE: [SkyWires] Re: superloop 40m aerial

Yahoo group: SkyWires
Date: 2013-04-25 13:36:03 UTC
From: Richard Schmuke
Topic: 4213 Message: 4215
Attachments: 2 described; binary payloads are missing from this source WARC

I think they added the wording "super" for the same reason you said Glen, mine also worked super. I put one up with a coax transformer section and it worked fine. I wanted a little more and other bands so now use a 80M delta loop with a homemade 4:1 balun at the feed point and work all bands 40 thru 6 with it. It is my main antenna.

Drawing at http://s1102.photobucket.com/user/KD0ZZ/media/80MDelta.jpg.html

Rich , Kd0zz

From: SkyWires@yahoogroups.com [mailto:SkyWires@yahoogroups.com] On Behalf Of goroberts
Sent: Thursday, April 25, 2013 7:24 AM
To: SkyWires@yahoogroups.com
Subject: [SkyWires] Re: superloop 40m aerial

I'm not sure what a "superloop" is unless the inference is that loops are "super" in general, but I've used a full wave loop for years and am very pleased with it. Mine is an 80m loop but the principles are the same. If you intend to use it as a mono band antenna the you can feed it with coax directly, but if you plan on using it as a multi band antenna make it a little shorter, use a good quality 4:1 balun and your internal tuner will be able to match it as expected. The reason it needs to be a bit shorter on the lowest band is the impeadance needs to NOT be right at 50ohms since you're using it on other bands where the impeadance will surely be different. This way the balun and the tuner do the heavy lifting. Open ladder line can be used instead of the above but refer to the ARRL Antenna books or other sources. There's a lot of incomplete and just wrong information on ths web so stick with good sources. I use a DX Egineering "tuner" balun after many orher failed methods. They have an EXCELLENT faq page that hits this nail on the head.

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> Steve
>

4216. Re: [SkyWires] Re: superloop 40m aerial

Yahoo group: SkyWires
Date: 2013-04-25 13:46:11 UTC
From: Andy
Topic: 4213 Message: 4216

> I'm not sure what a "superloop" is ...

Here: http://www.radioworks.com/csl40.html

Or the 80m version: http://www.radioworks.com/csuperlo.html

There are plans all over the Internet for building your own.

Even W8JI has something to say about it:
http://www.w8ji.com/super%20miniloop.htm

Not really a Skywire because they usually hang vertically.

Andy

4217. Re: superloop 40m aerial

Yahoo group: SkyWires
Date: 2013-04-25 13:47:47 UTC
From: goroberts
Topic: 4213 Message: 4217

Interesting. Not tried a delta as I need 80m.

Glen

--- In SkyWires@yahoogroups.com, "Richard Schmuke" <rdj@...> wrote:
>
> I think they added the wording "super" for the same reason you said Glen,
> mine also worked super. I put one up with a coax transformer section and it
> worked fine. I wanted a little more and other bands so now use a 80M delta
> loop with a homemade 4:1 balun at the feed point and work all bands 40 thru
> 6 with it. It is my main antenna.
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> Drawing at http://s1102.photobucket.com/user/KD0ZZ/media/80MDelta.jpg.html
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> Rich , Kd0zz
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> From: SkyWires@yahoogroups.com [mailto:SkyWires@yahoogroups.com] On Behalf
> Of goroberts
> Sent: Thursday, April 25, 2013 7:24 AM
> To: SkyWires@yahoogroups.com
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> Good luck,
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> > Many thanks
> > Steve
> >
>

4218. Re: superloop 40m aerial

Yahoo group: SkyWires
Date: 2013-04-25 20:58:11 UTC
From: dj_philonline
Topic: 4213 Message: 4218

--- In SkyWires@yahoogroups.com, "stevenfleming16" <stevenfleming16@...> wrote:
>
> Hello
> I wonder if anyone has built this aerial and has the correct dimensions for this project...any comments welcomed...
> Many thanks
> Steve
>
Here is a nice pdf with build plans and it covers 80m aswell
http://countryhamsnet.com/documents/MiniSuperLoop.pdf
73
Phil M6MRP

4219. Re: superloop 40m aerial

Yahoo group: SkyWires
Date: 2013-04-25 23:27:39 UTC
From: allenbh57
Topic: 4213 Message: 4219

Hello Rich,
The length on the drawing comes out to 3.55 MHz if you use the formula. I am interested in a couple of things about this antenna:

1. Where is it directional? I'm thinking out of the V at the feedpoint. Mine would be looking out to the North.

2. How high did you have it? I could put the feedpoint at about 20 to 25 feet, higher on the "back".

3. Is it a close match on any bands?

(Have not plugged it into EXNEC but if I get a chance I want to). Will share the results.

Tnx and 73,
Bill AJ4TX

--- In SkyWires@yahoogroups.com, "Richard Schmuke" <rdj@...> wrote:
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> I think they added the wording "super" for the same reason you said Glen,
> mine also worked super. I put one up with a coax transformer section and it
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> Rich , Kd0zz
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> Sent: Thursday, April 25, 2013 7:24 AM
> To: SkyWires@yahoogroups.com
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> Good luck,
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4220. RE: [SkyWires] Re: superloop 40m aerial

Yahoo group: SkyWires
Date: 2013-04-26 00:34:00 UTC
From: Richard Schmuke
Topic: 4213 Message: 4220
Attachments: 2 described; binary payloads are missing from this source WARC

When I build something I build per SWAG on most things. This is my main antenna. I put up a 80M size delta loop, installed split bolt and adjusted.

Feed point about 35 to 40ft the other two about 25 to 30ft.

Feed point on the south because that is where the support is.

I cut it approximately, I put stakes in the ground, layout the wire and hoisted it up

Hooked up the analyzer and tweaked it for the middle of the 20M phone band, The theory for size is as follows and you can see my SWR readings are at my bucket.

http://s1102.photobucket.com/user/KD0ZZ/media/80MLoop_zpsa6e4cfe7.jpeg.html

All my main bands are good but 17M comes in a little low on phone but with a any type of tuner you have a all band antenna, I even work 6M on it

Loop Dimensions

14.2 Loop

X

10m

12M

15M

17M

20M

40M 80M

1005/F MHz

70.770

2

141.540

4

3.5

3

2.5

2

1

0.5

70.770

3

212.310

6

5.3

4.5

3.8

3

1.5

0.8

70.770

4

283.080

8X

7X

6X

5X

4X

2X

1X

70.770

5

353.850

10

8.8

7.5

6.4

5

2.5

1.3

70.770

6

424.620

12

10.6

9

7.6

6

3

1.6

70.770

7

495.390

14

12.3

11

8.9

7

3.5

1.8

70.770

8

566.160

16X

14X

12X

10X

8X

4X

2X

1X loop is a 100 Ohm antenna , a 2X loop and larger close to 200 Ohm

2X in length loop, or greater can be matched with 50 Ohm coax and a 4:1 Balun if

the overall length of the loop is a multiple of the length at that frequency

Even Multipliers will make it a resonate antenna, A 4X and 8X loop will match

the most bands when used with a 4:1 Balun

With the correct resonate length of the antenna no tuner adjustment is needed

on the 7 bands shown

Rich , Kd0zz

From: SkyWires@yahoogroups.com [mailto:SkyWires@yahoogroups.com] On Behalf Of allenbh57
Sent: Thursday, April 25, 2013 6:28 PM
To: SkyWires@yahoogroups.com
Subject: [SkyWires] Re: superloop 40m aerial

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(Have not plugged it into EXNEC but if I get a chance I want to). Will share the results.

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> Of goroberts
> Sent: Thursday, April 25, 2013 7:24 AM
> To: SkyWires@yahoogroups.com <mailto:SkyWires%40yahoogroups.com>
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4221. RE: [SkyWires] Re: superloop 40m aerial

Yahoo group: SkyWires
Date: 2013-04-26 01:13:08 UTC
From: Bill Allen
Topic: 4213 Message: 4221

Richard,

Wow - that sounds great!

I probably just have room to put up a shape like this and this size. While I will use a tuner when necessary, I want to get away from it for "all" the time. My youngest is 12, with his General. We need more antennas!

Thanks,
Bill
AJ4TX

-----Original Message-----
From: SkyWires@yahoogroups.com [mailto:SkyWires@yahoogroups.com]On Behalf Of Richard Schmuke
Sent: Thursday, April 25, 2013 8:34 PM
To: SkyWires@yahoogroups.com
Subject: RE: [SkyWires] Re: superloop 40m aerial

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10m
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17M
20M

40M 80M

1005/F MHz
70.770
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141.540
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3.5
3
2.5
2
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3
212.310
6
5.3
4.5
3.8
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0.8

70.770
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283.080
8X
7X
6X
5X
4X
2X
1X

70.770
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353.850
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Rich , Kd0zz

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Sent: Thursday, April 25, 2013 6:28 PM
To: SkyWires@yahoogroups.com

Subject: [SkyWires] Re: superloop 40m aerial

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>

4222. RE: [SkyWires] Re: superloop 40m aerial

Yahoo group: SkyWires
Date: 2013-04-26 02:14:26 UTC
From: Richard Schmuke
Topic: 4213 Message: 4222

Bill when you sent a copy my email back it did not have the size chart, because I can't see my email thru yahoo I have to ask did the chart showing the 2x,3x.4x and so forth come thru????

For more antennas I have a 160 doublet with a 80M fan element that is a killer on 10M to the east and west, the loop is better north and south. I also have a 40M thru 6M all band vertical in work.

Rich , Kd0zz

From: SkyWires@yahoogroups.com [mailto:SkyWires@yahoogroups.com] On Behalf Of Bill Allen
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To: SkyWires@yahoogroups.com
Subject: RE: [SkyWires] Re: superloop 40m aerial

Richard,

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(Have not plugged it into EXNEC but if I get a chance I want to). Will share the results.

Tnx and 73,
Bill AJ4TX

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> Drawing at http://s1102.photobucket.com/user/KD0ZZ/media/80MDelta.jpg.html
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> Rich , Kd0zz
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> From: SkyWires@yahoogroups.com <mailto:SkyWires%40yahoogroups.com>
[mailto:SkyWires@yahoogroups.com <mailto:SkyWires%40yahoogroups.com>] On
Behalf
> Of goroberts
> Sent: Thursday, April 25, 2013 7:24 AM
> To: SkyWires@yahoogroups.com <mailto:SkyWires%40yahoogroups.com>
> Subject: [SkyWires] Re: superloop 40m aerial
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4223. RE: [SkyWires] Re: superloop 40m aerial

Yahoo group: SkyWires
Date: 2013-04-26 08:37:24 UTC
From: Bill Allen
Topic: 4213 Message: 4223

Thank You Richard!

Yes - it did. I have been looking at that chart. I do not think I have room for the 566' loop - even if I squiggle it around... Too bad because they are all even multipliers. I see how the chart works. Sure would be nice if they all fell into evens, at least 40, 20 and 15M.

That it is resonant at the even multiples is interesting. From your SWR table the readings aren't too bad on the odd multiples. I will look at our mounting options. I have a LOT of wire - probably about 16 AWG with insulation. Tinned wire, makes great antennas. Since it is insulated I wonder what effect would be from running it through the Leyand Cyprus branches? That would be a great way to string it up on 1 side... Wishing I had planted some of those on the other side of the yard, now!

I want a good NVIS antanna for 80 and maybe 60 and 40M. Also want one for lower angle for DX. Cannot use the front yard, unfortunately.

Your projects look very nicely done.

Thanks,
Bill

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From: SkyWires@yahoogroups.com [mailto:SkyWires@yahoogroups.com]On Behalf Of Richard Schmuke
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Rich , Kd0zz

From: SkyWires@yahoogroups.com [mailto:SkyWires@yahoogroups.com] On Behalf Of Bill Allen
Sent: Thursday, April 25, 2013 8:13 PM
To: SkyWires@yahoogroups.com
Subject: RE: [SkyWires] Re: superloop 40m aerial

Richard,

Wow - that sounds great!

I probably just have room to put up a shape like this and this size. While I will use a tuner when necessary, I want to get away from it for "all" the time. My youngest is 12, with his General. We need more antennas!

Thanks,

Bill

AJ4TX

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All my main bands are good but 17M comes in a little low on phone but with a any type of tuner you have a all band antenna, I even work 6M on it

Loop Dimensions

14.2 Loop
X
10m
12M
15M
17M
20M
40M 80M

1005/F MHz
70.770
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141.540
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6X
5X
4X
2X
1X

70.770
5
353.850
10
8.8
7.5
6.4
5
2.5
1.3

70.770
6
424.620
12
10.6
9
7.6
6
3
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Rich , Kd0zz

From: SkyWires@yahoogroups.com [mailto:SkyWires@yahoogroups.com] On Behalf Of allenbh57
Sent: Thursday, April 25, 2013 6:28 PM
To: SkyWires@yahoogroups.com
Subject: [SkyWires] Re: superloop 40m aerial

Hello Rich,
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1. Where is it directional? I'm thinking out of the V at the feedpoint. Mine would be looking out to the North.

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4224. RE: [SkyWires] Re: superloop 40m aerial

Yahoo group: SkyWires
Date: 2013-04-26 13:14:37 UTC
From: Richard Schmuke
Topic: 4213 Message: 4224

OK Bill now the rest of the story. I told you the good here is the bad. A couple of years ago we were going to have a bad snow/ice storm so being a good keeper of antennas I went out and dropped mine to the ground. The ice broke a lot of tree limbs a few days later I pulled the wires out of 18" of snow and ice back up, I no longer had a good triangle due to down supports but what the heck. I no longer had good SWR, went back out and reset to a eyeball triangle, back to good SWR. My 80M size delta worked great so why not double it. I made sort of a out of shape rectangle, I could not get the bands to come it with my supports without going into the scrub oak trees. I went back to my 80M delta shape , adjusted to a multiple of the 20M band and still there.

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From: SkyWires@yahoogroups.com [mailto:SkyWires@yahoogroups.com] On Behalf Of Bill Allen
Sent: Friday, April 26, 2013 3:37 AM
To: SkyWires@yahoogroups.com
Subject: RE: [SkyWires] Re: superloop 40m aerial

Thank You Richard!

Yes - it did. I have been looking at that chart. I do not think I have room for the 566' loop - even if I squiggle it around... Too bad because they are all even multipliers. I see how the chart works. Sure would be nice if they all fell into evens, at least 40, 20 and 15M.

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6X

5X

4X

2X

1X

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353.850

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8.8

7.5

6.4

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424.620

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4225. RE: [SkyWires] Re: superloop 40m aerial

Yahoo group: SkyWires
Date: 2013-04-26 13:28:40 UTC
From: Bill Allen
Topic: 4213 Message: 4225

Uh-oh - the rest of the story!
(now old Paul Harvey stories are flashing through my head!).

Hmmm - sounds like the shape has a lot to do with the performance. Not surprising. Actually this loop is the first time I have heard of resonance on multiples like that (at least that good!). After this information, it would be interesting to model - see if it follows life, so to speak. I expected resonance where cut, and maybe tuner-friendly harmonics. Al, N4ALO talks about his loop - I think he used a 4/3 or 5/4 loop at 80M. Cut for ~2.5 MHz or something like that. I'll have to review. But still using a tuner, as I recall. (He is on 40M a lot, and I generally have 40M going in the car.

Well, again the good: I have a feedpoint location in back of the house and can get a pretty good triangle out the back. Favoring North is OK - if it is low enough it'll go over the pole and I love talking to Eastern Europe, and if not, it will probably talk to Tennessee where I have other friends.

Other antennas are a longwire that needs to be replaced (with a loop?) and a Cushcraft that I inherited and am in the middle of cleaning up the connections on the matching network.I may stick it out back in the back, and feed it with ladder line and a couple of baluns, or something. Depends on resonance, if it even works, etc. Not going to bury a lot of radials, but they say to put it 8' above the ground. It came off the top of an 80' tower. Sorry, I don't get a tower :-(even though i have 3 sections sitting on the ground.

-Bill

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From: SkyWires@yahoogroups.com [mailto:SkyWires@yahoogroups.com]On Behalf Of Richard Schmuke
Sent: Friday, April 26, 2013 9:15 AM
To: SkyWires@yahoogroups.com
Subject: RE: [SkyWires] Re: superloop 40m aerial

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Thank You Richard!

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16X
14X
12X
10X
8X
4X
2X

1X loop is a 100 Ohm antenna , a 2X loop and larger close to 200 Ohm

2X in length loop, or greater can be matched with 50 Ohm coax and a 4:1 Balun if

the overall length of the loop is a multiple of the length at that frequency

Even Multipliers will make it a resonate antenna, A 4X and 8X loop will match

the most bands when used with a 4:1 Balun

With the correct resonate length of the antenna no tuner adjustment is needed

on the 7 bands shown

Rich , Kd0zz

From: SkyWires@yahoogroups.com [mailto:SkyWires@yahoogroups.com] On Behalf Of allenbh57
Sent: Thursday, April 25, 2013 6:28 PM

To: SkyWires@yahoogroups.com
Subject: [SkyWires] Re: superloop 40m aerial

Hello Rich,
The length on the drawing comes out to 3.55 MHz if you use the formula. I am interested in a couple of things about this antenna:

1. Where is it directional? I'm thinking out of the V at the feedpoint. Mine would be looking out to the North.

2. How high did you have it? I could put the feedpoint at about 20 to 25 feet, higher on the "back".

3. Is it a close match on any bands?

(Have not plugged it into EXNEC but if I get a chance I want to). Will share the results.

Tnx and 73,
Bill AJ4TX

--- In SkyWires@yahoogroups.com, "Richard Schmuke" <rdj@...> wrote:
>
> I think they added the wording "super" for the same reason you said Glen,
> mine also worked super. I put one up with a coax transformer section and it
> worked fine. I wanted a little more and other bands so now use a 80M delta
> loop with a homemade 4:1 balun at the feed point and work all bands 40 thru
> 6 with it. It is my main antenna.
>
> Drawing at http://s1102.photobucket.com/user/KD0ZZ/media/80MDelta.jpg.html
>
>
>
> Rich , Kd0zz
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> From: SkyWires@yahoogroups.com [mailto:SkyWires@yahoogroups.com] On Behalf
> Of goroberts
> Sent: Thursday, April 25, 2013 7:24 AM
> To: SkyWires@yahoogroups.com
> Subject: [SkyWires] Re: superloop 40m aerial
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> I'm not sure what a "superloop" is unless the inference is that
loops are
> "super" in general, but I've used a full wave loop for years and am
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> pleased with it. Mine is an 80m loop but the principles are the
same. If you
> intend to use it as a mono band antenna the you can feed it with
coax
> directly, but if you plan on using it as a multi band antenna make
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> little shorter, use a good quality 4:1 balun and your internal tuner
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> able to match it as expected. The reason it needs to be a bit
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> lowest band is the impeadance needs to NOT be right at 50ohms since
you're
> using it on other bands where the impeadance will surely be
different. This
> way the balun and the tuner do the heavy lifting. Open ladder line
can be
> used instead of the above but refer to the ARRL Antenna books or
other
> sources. There's a lot of incomplete and just wrong information on
ths web
> so stick with good sources. I use a DX Egineering "tuner" balun
after many
> orher failed methods. They have an EXCELLENT faq page that hits this
nail on
> the head.
>
> Good luck,
> Glen -KE7FD
>
> --- In SkyWires@yahoogroups.com <mailto:SkyWires%40yahoogroups.com>
,
> "stevenfleming16" <stevenfleming16@> wrote:
> >
> > Hello
> > I wonder if anyone has built this aerial and has the correct
dimensions
> for this project...any comments welcomed...
> > Many thanks
> > Steve
> >
>

4226. Introducing me to the group

Yahoo group: SkyWires
Date: 2013-04-26 15:19:27 UTC
From: pu2clr
Topic: 4226 Message: 4226

Hello everybody,

My name is Ricardo, PU2CLR, and I am new as amateur.
I have interesting in Loop Antenna and I am looking for a way to work on 80 meters with a kind of loop.

For while I have a Yaesu Ft817-ND and I have had more success working on 10 meters with a homebrew magnetic loop antenna.

I have experimented some approach to control my Loop Magnetic Antenna remotely with Android device, IR and Arduino.

If anyone has interest in this kind of control, I posted some videos on YouTube (see links below). Also, these projects are available on Github repository (https://github.com/pu2clr).

Automatic Antenna Tuner for QRP controlled by Android and Arduino - Part 2:
https://www.youtube.com/watch?v=cZjbZRGTyVc
Arduino, IR and Encoder controlling Magnetic Loop Antenna Tuner:
https://www.youtube.com/watch?v=zD-wKD19_8U
QSO with Magnetic Loop Antenna: https://www.youtube.com/edit?video_id=ylhLfB0XhZU&ns=1
Automatic Antenna Tuner for QRP with Android and Arduino - Part 1:
https://www.youtube.com/watch?v=55bQ9xVWzuM

I posted others videos showing QSO and tests on my youtube channel.

Thanks for the welcome to the group.

73.
PU2CLR,
Ricardo.

4227. Support for 160m loop?

Yahoo group: SkyWires
Date: 2013-04-26 15:58:40 UTC
From: O-B-1
Topic: 4227 Message: 4227

What is an economical way to support the loop?

My property is 150x704 feet, has a flat area about 100 feet from house 150x500 feet that has no trees whatsoever.

It appears wood utility poles are fairly expensive.

The width of the property at 150' leaves hardly any room for guy wires if the sides of the loop are 143.5 feet.

Ideal height is 40 feet I understand.

Any ideas?

4228. RE: [SkyWires] Introducing me to the group

Yahoo group: SkyWires
Date: 2013-04-26 16:08:21 UTC
From: yo2mbu@...
Topic: 4226 Message: 4228

Hi Ricardo,
I have seen you performing excellent , very nice idea.
I would like to build also for my SOTA mag loop.
73 de YO2MBU Marian

Sent from Yahoo! Mail for iPhone

4229. RE: [SkyWires] Support for 160m loop?

Yahoo group: SkyWires
Date: 2013-04-26 19:39:44 UTC
From: Richard Schmuke
Topic: 4227 Message: 4229
Attachments: 2 described; binary payloads are missing from this source WARC

Here is a simple tilt mast I use as a support for my loop. I does not have to be made as strong as the drawing, mine also supports a beam and rotor.

http://s1102.photobucket.com/user/KD0ZZ/media/TiltOverB-1.jpg.html

Rich, Kd0zz

From: SkyWires@yahoogroups.com [mailto:SkyWires@yahoogroups.com] On Behalf Of O-B-1
Sent: Friday, April 26, 2013 10:59 AM
To: SkyWires@yahoogroups.com
Subject: [SkyWires] Support for 160m loop?

What is an economical way to support the loop?

My property is 150x704 feet, has a flat area about 100 feet from house 150x500 feet that has no trees whatsoever.

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The width of the property at 150' leaves hardly any room for guy wires if the sides of the loop are 143.5 feet.

Ideal height is 40 feet I understand.

Any ideas?

4230. Re: Introducing me to the group

Yahoo group: SkyWires
Date: 2013-04-26 20:45:03 UTC
From: pu2clr
Topic: 4226 Message: 4230

Hi, Marian I have seen your G5RV 160-10 meters on your QRZ page. Have you used it with Softrock Kit 40/80? What about it? Thanks for the comments. 73, PU2CLR, Ricardo. --- In SkyWires@yahoogroups.com, yo2mbu@... wrote: > > Hi Ricardo,
I have seen you performing excellent , very nice idea.
I would like to build also for my SOTA mag loop.
73 de YO2MBU Marian

Sent from Yahoo! Mail for iPhone >

4231. RE: [SkyWires] Re: superloop 40m aerial

Yahoo group: SkyWires
Date: 2013-04-26 23:27:48 UTC
From: Richard Schmuke
Topic: 4213 Message: 4231

Well Bill here is the last of the story, I did not invent this or anything else. All the research credit goes to Callum McCormick M0MCX. Check out his short video on this antenna at

http://www.youtube.com/watch?v=SOvhetU1_ps

or do a search on and see his other videos on it -- Mega Loop Antenna - I do love this antenna.

Rich , Kd0zz

From: SkyWires@yahoogroups.com [mailto:SkyWires@yahoogroups.com] On Behalf Of Bill Allen
Sent: Friday, April 26, 2013 8:29 AM
To: SkyWires@yahoogroups.com
Subject: RE: [SkyWires] Re: superloop 40m aerial

Uh-oh - the rest of the story!

(now old Paul Harvey stories are flashing through my head!).

Hmmm - sounds like the shape has a lot to do with the performance. Not surprising. Actually this loop is the first time I have heard of resonance on multiples like that (at least that good!). After this information, it would be interesting to model - see if it follows life, so to speak. I expected resonance where cut, and maybe tuner-friendly harmonics. Al, N4ALO talks about his loop - I think he used a 4/3 or 5/4 loop at 80M. Cut for ~2.5 MHz or something like that. I'll have to review. But still using a tuner, as I recall. (He is on 40M a lot, and I generally have 40M going in the car.

Well, again the good: I have a feedpoint location in back of the house and can get a pretty good triangle out the back. Favoring North is OK - if it is low enough it'll go over the pole and I love talking to Eastern Europe, and if not, it will probably talk to Tennessee where I have other friends.

Other antennas are a longwire that needs to be replaced (with a loop?) and a Cushcraft that I inherited and am in the middle of cleaning up the connections on the matching network.I may stick it out back in the back, and feed it with ladder line and a couple of baluns, or something. Depends on resonance, if it even works, etc. Not going to bury a lot of radials, but they say to put it 8' above the ground. It came off the top of an 80' tower. Sorry, I don't get a tower :-(even though i have 3 sections sitting on the ground.

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Rich , Kd0zz

From: SkyWires@yahoogroups.com [mailto:SkyWires@yahoogroups.com] On Behalf Of Bill Allen
Sent: Friday, April 26, 2013 3:37 AM
To: SkyWires@yahoogroups.com
Subject: RE: [SkyWires] Re: superloop 40m aerial

Thank You Richard!

Yes - it did. I have been looking at that chart. I do not think I have room for the 566' loop - even if I squiggle it around... Too bad because they are all even multipliers. I see how the chart works. Sure would be nice if they all fell into evens, at least 40, 20 and 15M.

That it is resonant at the even multiples is interesting. From your SWR table the readings aren't too bad on the odd multiples. I will look at our mounting options. I have a LOT of wire - probably about 16 AWG with insulation. Tinned wire, makes great antennas. Since it is insulated I wonder what effect would be from running it through the Leyand Cyprus branches? That would be a great way to string it up on 1 side... Wishing I had planted some of those on the other side of the yard, now!

I want a good NVIS antanna for 80 and maybe 60 and 40M. Also want one for lower angle for DX. Cannot use the front yard, unfortunately.

Your projects look very nicely done.

Thanks,

Bill

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Sent: Thursday, April 25, 2013 10:14 PM
To: SkyWires@yahoogroups.com
Subject: RE: [SkyWires] Re: superloop 40m aerial

Bill when you sent a copy my email back it did not have the size chart, because I can't see my email thru yahoo I have to ask did the chart showing the 2x,3x.4x and so forth come thru????

For more antennas I have a 160 doublet with a 80M fan element that is a killer on 10M to the east and west, the loop is better north and south. I also have a 40M thru 6M all band vertical in work.

Rich , Kd0zz

From: SkyWires@yahoogroups.com [mailto:SkyWires@yahoogroups.com] On Behalf Of Bill Allen
Sent: Thursday, April 25, 2013 8:13 PM
To: SkyWires@yahoogroups.com
Subject: RE: [SkyWires] Re: superloop 40m aerial

Richard,

Wow - that sounds great!

I probably just have room to put up a shape like this and this size. While I will use a tuner when necessary, I want to get away from it for "all" the time. My youngest is 12, with his General. We need more antennas!

Thanks,

Bill

AJ4TX

-----Original Message-----
From: SkyWires@yahoogroups.com [mailto:SkyWires@yahoogroups.com]On Behalf Of Richard Schmuke
Sent: Thursday, April 25, 2013 8:34 PM
To: SkyWires@yahoogroups.com
Subject: RE: [SkyWires] Re: superloop 40m aerial

When I build something I build per SWAG on most things. This is my main antenna. I put up a 80M size delta loop, installed split bolt and adjusted.

Feed point about 35 to 40ft the other two about 25 to 30ft.

Feed point on the south because that is where the support is.

I cut it approximately, I put stakes in the ground, layout the wire and hoisted it up

Hooked up the analyzer and tweaked it for the middle of the 20M phone band, The theory for size is as follows and you can see my SWR readings are at my bucket.

http://s1102.photobucket.com/user/KD0ZZ/media/80MLoop_zpsa6e4cfe7.jpeg.html

All my main bands are good but 17M comes in a little low on phone but with a any type of tuner you have a all band antenna, I even work 6M on it

Loop Dimensions

14.2 Loop

X

10m

12M

15M

17M

20M

40M 80M

1005/F MHz

70.770

2

141.540

4

3.5

3

2.5

2

1

0.5

70.770

3

212.310

6

5.3

4.5

3.8

3

1.5

0.8

70.770

4

283.080

8X

7X

6X

5X

4X

2X

1X

70.770

5

353.850

10

8.8

7.5

6.4

5

2.5

1.3

70.770

6

424.620

12

10.6

9

7.6

6

3

1.6

70.770

7

495.390

14

12.3

11

8.9

7

3.5

1.8

70.770

8

566.160

16X

14X

12X

10X

8X

4X

2X

1X loop is a 100 Ohm antenna , a 2X loop and larger close to 200 Ohm

2X in length loop, or greater can be matched with 50 Ohm coax and a 4:1 Balun if

the overall length of the loop is a multiple of the length at that frequency

Even Multipliers will make it a resonate antenna, A 4X and 8X loop will match

the most bands when used with a 4:1 Balun

With the correct resonate length of the antenna no tuner adjustment is
needed

on the 7 bands shown

Rich , Kd0zz

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Of allenbh57
Sent: Thursday, April 25, 2013 6:28 PM
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Subject: [SkyWires] Re: superloop 40m aerial

Hello Rich,
The length on the drawing comes out to 3.55 MHz if you use the formula. I am
interested in a couple of things about this antenna:

1. Where is it directional? I'm thinking out of the V at the feedpoint. Mine
would be looking out to the North.

2. How high did you have it? I could put the feedpoint at about 20 to 25
feet, higher on the "back".

3. Is it a close match on any bands?

(Have not plugged it into EXNEC but if I get a chance I want to). Will share
the results.

Tnx and 73,
Bill AJ4TX

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> I think they added the wording "super" for the same reason you said Glen,
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> worked fine. I wanted a little more and other bands so now use a 80M delta
> loop with a homemade 4:1 balun at the feed point and work all bands 40
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> 6 with it. It is my main antenna.
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> Drawing at http://s1102.photobucket.com/user/KD0ZZ/media/80MDelta.jpg.html
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> "super" in general, but I've used a full wave loop for years and am very
> pleased with it. Mine is an 80m loop but the principles are the same. If
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> intend to use it as a mono band antenna the you can feed it with coax
> directly, but if you plan on using it as a multi band antenna make it a
> little shorter, use a good quality 4:1 balun and your internal tuner will
be
> able to match it as expected. The reason it needs to be a bit shorter on
the
> lowest band is the impeadance needs to NOT be right at 50ohms since you're
> using it on other bands where the impeadance will surely be different.
This
> way the balun and the tuner do the heavy lifting. Open ladder line can be
> used instead of the above but refer to the ARRL Antenna books or other
> sources. There's a lot of incomplete and just wrong information on ths web
> so stick with good sources. I use a DX Egineering "tuner" balun after many
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on
> the head.
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> Good luck,
> Glen -KE7FD
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> --- In SkyWires@yahoogroups.com <mailto:SkyWires%40yahoogroups.com>
<mailto:SkyWires%40yahoogroups.com> ,
> "stevenfleming16" <stevenfleming16@> wrote:
> >
> > Hello
> > I wonder if anyone has built this aerial and has the correct dimensions
> for this project...any comments welcomed...
> > Many thanks
> > Steve
> >
>

4232. AW: [SkyWires] Support for 160m loop?

Yahoo group: SkyWires
Date: 2013-04-27 00:15:37 UTC
From: siegfried jackstien
Topic: 4227 Message: 4232

No need for a special shape of a loop ... so no need to have equal lengths
on each sides ... (quad works, delta works, hexagon or circle ....) ...

What about fibre glass tent poles (cheap but need some guy lines)

Or wodden "a frame" ???

40feet should be quite easy to erect a loop to (even without trees)

If you use very lightweight wire then also the support can be lighter

My favourite wire for that would be aluminium electric fence wire

VERY light :-)

So with just a slight pull on the ends you have almost no sag even on longer
runs

Dg9bfc

Sigi

> -----Ursprüngliche Nachricht-----
> Von: SkyWires@yahoogroups.com [mailto:SkyWires@yahoogroups.com] Im Auftrag
> von O-B-1
> Gesendet: Freitag, 26. April 2013 15:59
> An: SkyWires@yahoogroups.com
> Betreff: [SkyWires] Support for 160m loop?
>
>
>
> What is an economical way to support the loop?
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> My property is 150x704 feet, has a flat area about 100 feet from house
> 150x500 feet that has no trees whatsoever.
>
> It appears wood utility poles are fairly expensive.
>
> The width of the property at 150' leaves hardly any room for guy wires if
> the sides of the loop are 143.5 feet.
>
> Ideal height is 40 feet I understand.
>
> Any ideas?
>
>
>

>

4233. RE: [SkyWires] Re: Megaloop

Yahoo group: SkyWires
Date: 2013-04-27 03:33:25 UTC
From: Brian Burns
Topic: 4213 Message: 4233

Hello Rich and Bill,

Am I missing something here? I went to the link below, and watched as Callum McCormick drew and analyzed his "megaloop" design. He was being quite enthusiastic about the gain shown by various lobes, but what about all the radiated energy going in other directions? Doesn't that have to be subtracted from the lobe that you happen to be using? I don't doubt that it is an effective antenna, but it seems to me that the gain figures he is quoting would need to be adjusted way down to get a "net gain" figure that is meaningful.

Cheers,

Brian Burns

From: SkyWires@yahoogroups.com [mailto:SkyWires@yahoogroups.com] On Behalf Of Richard Schmuke
Sent: Friday, April 26, 2013 4:28 PM
To: SkyWires@yahoogroups.com
Subject: RE: [SkyWires] Re: superloop 40m aerial

Well Bill here is the last of the story, I did not invent this or anything else. All the research credit goes to Callum McCormick M0MCX. Check out his short video on this antenna at

http://www.youtube.com/watch?v=SOvhetU1_ps

or do a search on and see his other videos on it -- Mega Loop Antenna - I do love this antenna.

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(now old Paul Harvey stories are flashing through my head!).

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~2.5 MHz or something like that. I'll have to review. But still using a tuner, as I recall. (He is on 40M a lot, and I generally have 40M going in the car.

Well, again the good: I have a feedpoint location in back of the house and can get a pretty good triangle out the back. Favoring North is OK - if it is low enough it'll go over the pole and I love talking to Eastern Europe, and if not, it will probably talk to Tennessee where I have other friends.

Other antennas are a longwire that needs to be replaced (with a loop?) and a Cushcraft that I inherited and am in the middle of cleaning up the connections on the matching network.I may stick it out back in the back, and feed it with ladder line and a couple of baluns, or something. Depends on resonance, if it even works, etc. Not going to bury a lot of radials, but they say to put it 8' above the ground. It came off the top of an 80' tower. Sorry, I don't get a tower :-(even though i have 3 sections sitting on the ground.

-Bill

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Sent: Thursday, April 25, 2013 8:34 PM
To: SkyWires@yahoogroups.com
Subject: RE: [SkyWires] Re: superloop 40m aerial

When I build something I build per SWAG on most things. This is my main antenna. I put up a 80M size delta loop, installed split bolt and adjusted.

Feed point about 35 to 40ft the other two about 25 to 30ft.

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http://s1102.photobucket.com/user/KD0ZZ/media/80MLoop_zpsa6e4cfe7.jpeg.html

All my main bands are good but 17M comes in a little low on phone but with a any type of tuner you have a all band antenna, I even work 6M on it

Loop Dimensions

14.2 Loop

X

10m

12M

15M

17M

20M

40M 80M

1005/F MHz

70.770

2

141.540

4

3.5

3

2.5

2

1

0.5

70.770

3

212.310

6

5.3

4.5

3.8

3

1.5

0.8

70.770

4

283.080

8X

7X

6X

5X

4X

2X

1X

70.770

5

353.850

10

8.8

7.5

6.4

5

2.5

1.3

70.770

6

424.620

12

10.6

9

7.6

6

3

1.6

70.770

7

495.390

14

12.3

11

8.9

7

3.5

1.8

70.770

8

566.160

16X

14X

12X

10X

8X

4X

2X

1X loop is a 100 Ohm antenna , a 2X loop and larger close to 200 Ohm

2X in length loop, or greater can be matched with 50 Ohm coax and a 4:1 Balun if

the overall length of the loop is a multiple of the length at that frequency

Even Multipliers will make it a resonate antenna, A 4X and 8X loop will match

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With the correct resonate length of the antenna no tuner adjustment is needed

on the 7 bands shown

Rich , Kd0zz

From: SkyWires@yahoogroups.com [mailto:SkyWires@yahoogroups.com] On Behalf Of allenbh57
Sent: Thursday, April 25, 2013 6:28 PM
To: SkyWires@yahoogroups.com
Subject: [SkyWires] Re: superloop 40m aerial

Hello Rich,
The length on the drawing comes out to 3.55 MHz if you use the formula. I am interested in a couple of things about this antenna:

1. Where is it directional? I'm thinking out of the V at the feedpoint. Mine would be looking out to the North.

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3. Is it a close match on any bands?

(Have not plugged it into EXNEC but if I get a chance I want to). Will share the results.

Tnx and 73,
Bill AJ4TX

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4234. Re: [SkyWires] Re: Megaloop

Yahoo group: SkyWires
Date: 2013-04-27 05:11:54 UTC
From: Andy
Topic: 4213 Message: 4234

You don't need to subtract anything. The gain it calculates is the gain of the antenna in that direction.

Every antenna radiates some energy in EVERY direction (except for deep nulls). In each direction there is an energy density, given the power you feed into the antenna. That is what the program calculates.

The total energy density, going out on all the lobes, and all the spaces between the lobes, adds up to no more than the total power you feed into the antenna. It all works out. Really.

Andy

4235. Re: [SkyWires] Re: Introducing me to the group

Yahoo group: SkyWires
Date: 2013-04-27 06:02:40 UTC
From: Marian Anghel
Topic: 4226 Message: 4235

Hi Ricardo, I have tested the softrock, but now i have in use the soft66add http://zao.jp/radio/soft66ad/ 73, YO2MBU Marian _____ From: pu2clr To: SkyWires@yahoogroups.com Sent: Friday, April 26, 2013 11:45 PM Subject: [SkyWires] Re: Introducing me to the group Hi, Marian I have seen your G5RV 160-10 meters on your QRZ page. Have you used it with Softrock Kit 40/80? What about it? Thanks for the comments. 73, PU2CLR, Ricardo. --- In SkyWires@yahoogroups.com, yo2mbu@... wrote: > > Hi Ricardo,
I have seen you performing excellent , very nice idea.
I would like to build also for my SOTA mag loop.
73 de YO2MBU Marian

Sent from Yahoo! Mail for iPhone >

4236. RE: [SkyWires] Re: Megaloop

Yahoo group: SkyWires
Date: 2013-04-27 12:16:35 UTC
From: Richard Schmuke
Topic: 4213 Message: 4236

Brian, I do understand you question, I do not understand the computer program well enough to give you an exact answer. I will say it is a good performing wire antenna. It does not out perform my 3 element 15M beam but is much better than any dipoles I have tried at the same time. I have had many types of wire antennas up, and when I extend a wire to get greater gain it will greater nulls. My ladder line fed 160M dipole is great into the far east and Europe on 10M off the ends, dead to Canada and South America but the loop is almost as good on ten to Europe and JA land but also great north and south also. I don't analyze a antenna with a computer but on the air and it works for me.

Rich , Kd0zz

Looking at charts too long and you will get analysis paralysis

Subject: RE: [SkyWires] Re: Megaloop

Hello Rich and Bill,

Am I missing something here? I went to the link below, and watched as Callum McCormick drew and analyzed his "megaloop" design. He was being quite enthusiastic about the gain shown by various lobes, but what about all the radiated energy going in other directions? Doesn't that have to be subtracted from the lobe that you happen to be using? I don't doubt that it is an effective antenna, but it seems to me that the gain figures he is quoting would need to be adjusted way down to get a "net gain" figure that is meaningful.

Cheers,

Brian Burns

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To: SkyWires@yahoogroups.com
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Well Bill here is the last of the story, I did not invent this or anything else. All the research credit goes to Callum McCormick M0MCX. Check out his short video on this antenna at

http://www.youtube.com/watch?v=SOvhetU1_ps

or do a search on and see his other videos on it -- Mega Loop Antenna - I do love this antenna.

Rich , Kd0zz

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To: SkyWires@yahoogroups.com
Subject: RE: [SkyWires] Re: superloop 40m aerial

Uh-oh - the rest of the story!

(now old Paul Harvey stories are flashing through my head!).

Hmmm - sounds like the shape has a lot to do with the performance. Not surprising. Actually this loop is the first time I have heard of resonance on multiples like that (at least that good!). After this information, it would be interesting to model - see if it follows life, so to speak. I expected resonance where cut, and maybe tuner-friendly harmonics. Al, N4ALO talks about his loop - I think he used a 4/3 or 5/4 loop at 80M. Cut for ~2.5 MHz or something like that. I'll have to review. But still using a tuner, as I recall. (He is on 40M a lot, and I generally have 40M going in the car.

Well, again the good: I have a feedpoint location in back of the house and can get a pretty good triangle out the back. Favoring North is OK - if it is low enough it'll go over the pole and I love talking to Eastern Europe, and if not, it will probably talk to Tennessee where I have other friends.

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-Bill

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Sent: Friday, April 26, 2013 9:15 AM
To: SkyWires@yahoogroups.com
Subject: RE: [SkyWires] Re: superloop 40m aerial

OK Bill now the rest of the story. I told you the good here is the bad. A couple of years ago we were going to have a bad snow/ice storm so being a good keeper of antennas I went out and dropped mine to the ground. The ice broke a lot of tree limbs a few days later I pulled the wires out of 18" of snow and ice back up, I no longer had a good triangle due to down supports but what the heck. I no longer had good SWR, went back out and reset to a eyeball triangle, back to good SWR. My 80M size delta worked great so why not double it. I made sort of a out of shape rectangle, I could not get the bands to come it with my supports without going into the scrub oak trees. I went back to my 80M delta shape , adjusted to a multiple of the 20M band and

still there.

Rich , Kd0zz

From: SkyWires@yahoogroups.com [mailto:SkyWires@yahoogroups.com] On Behalf Of Bill Allen
Sent: Friday, April 26, 2013 3:37 AM
To: SkyWires@yahoogroups.com
Subject: RE: [SkyWires] Re: superloop 40m aerial

Thank You Richard!

Yes - it did. I have been looking at that chart. I do not think I have room for the 566' loop - even if I squiggle it around... Too bad because they are all even multipliers. I see how the chart works. Sure would be nice if they all fell into evens, at least 40, 20 and 15M.

That it is resonant at the even multiples is interesting. From your SWR table the readings aren't too bad on the odd multiples. I will look at our mounting options. I have a LOT of wire - probably about 16 AWG with insulation. Tinned wire, makes great antennas. Since it is insulated I wonder what effect would be from running it through the Leyand Cyprus branches? That would be a great way to string it up on 1 side... Wishing I had planted some of those on the other side of the yard, now!

I want a good NVIS antanna for 80 and maybe 60 and 40M. Also want one for lower angle for DX. Cannot use the front yard, unfortunately.

Your projects look very nicely done.

Thanks,

Bill

-----Original Message-----
From: SkyWires@yahoogroups.com [mailto:SkyWires@yahoogroups.com]On Behalf Of Richard Schmuke
Sent: Thursday, April 25, 2013 10:14 PM
To: SkyWires@yahoogroups.com
Subject: RE: [SkyWires] Re: superloop 40m aerial

Bill when you sent a copy my email back it did not have the size chart, because I can't see my email thru yahoo I have to ask did the chart showing the 2x,3x.4x and so forth come thru????

For more antennas I have a 160 doublet with a 80M fan element that is a killer on 10M to the east and west, the loop is better north and south. I also have a 40M thru 6M all band vertical in work.

Rich , Kd0zz

From: SkyWires@yahoogroups.com [mailto:SkyWires@yahoogroups.com] On Behalf Of Bill Allen
Sent: Thursday, April 25, 2013 8:13 PM

To: SkyWires@yahoogroups.com
Subject: RE: [SkyWires] Re: superloop 40m aerial

Richard,

Wow - that sounds great!

I probably just have room to put up a shape like this and this size. While I will use a tuner when necessary, I want to get away from it for "all" the time. My youngest is 12, with his General. We need more antennas!

Thanks,

Bill

AJ4TX

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Loop Dimensions

14.2 Loop

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10m

12M

15M

17M

20M

40M 80M

1005/F MHz

70.770

2

141.540

4

3.5

3

2.5

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1

0.5

70.770

3

212.310

6

5.3

4.5

3.8

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1.5

0.8

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4

283.080

8X

7X

6X

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4X

2X

1X

70.770

5

353.850

10

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(Have not plugged it into EXNEC but if I get a chance I want to). Will share the results.

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>

4237. Re: Megaloop

Yahoo group: SkyWires
Date: 2013-04-27 21:41:57 UTC
From: allenbh57
Topic: 4213 Message: 4237

Brian,
I see the issue - and actually kind of like the multi-lobed pattern. The main "gain" - pun intended - may be because of the lower angle of radiation. It is shooting out in a saucer-shape with different little nulls, and very attenuated in the azimuth, except for 80 or 160M.

So it does not have the great F/B ratios but makes up for it in simplicity and angle of radiation.

That's my $0.02 until I build it! Or model it in EZNEC.
Let's build them - too simple NOT to!
73,
Bill AJ4TX

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> or do a search on and see his other videos on it -- Mega Loop Antenna - I do
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> Rich , Kd0zz
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> Yes - it did. I have been looking at that chart. I do not think I have room
> for the 566' loop - even if I squiggle it around... Too bad because they are
> all even multipliers. I see how the chart works. Sure would be nice if they
> all fell into evens, at least 40, 20 and 15M.
>
> That it is resonant at the even multiples is interesting. From your SWR
> table the readings aren't too bad on the odd multiples. I will look at our
> mounting options. I have a LOT of wire - probably about 16 AWG with
> insulation. Tinned wire, makes great antennas. Since it is insulated I
> wonder what effect would be from running it through the Leyand Cyprus
> branches? That would be a great way to string it up on 1 side... Wishing I
> had planted some of those on the other side of the yard, now!

>
> I want a good NVIS antanna for 80 and maybe 60 and 40M. Also want one for
> lower angle for DX. Cannot use the front yard, unfortunately.
>
> Your projects look very nicely done.
>
> Thanks,
>
> Bill
>
> -----Original Message-----
> From: SkyWires@yahoogroups.com [mailto:SkyWires@yahoogroups.com]On Behalf Of
> Richard Schmuke
> Sent: Thursday, April 25, 2013 10:14 PM
> To: SkyWires@yahoogroups.com
> Subject: RE: [SkyWires] Re: superloop 40m aerial
>
>
>
> Bill when you sent a copy my email back it did not have the size chart,
> because I can't see my email thru yahoo I have to ask did the chart showing
> the 2x,3x.4x and so forth come thru????
>
> For more antennas I have a 160 doublet with a 80M fan element that is a
> killer on 10M to the east and west, the loop is better north and south. I
> also have a 40M thru 6M all band vertical in work.
>
> Rich , Kd0zz
>
> From: SkyWires@yahoogroups.com [mailto:SkyWires@yahoogroups.com] On Behalf
> Of Bill Allen
> Sent: Thursday, April 25, 2013 8:13 PM
> To: SkyWires@yahoogroups.com
> Subject: RE: [SkyWires] Re: superloop 40m aerial
>
>
>
> Richard,
>
> Wow - that sounds great!
>
> I probably just have room to put up a shape like this and this size. While I
> will use a tuner when necessary, I want to get away from it for "all" the
> time. My youngest is 12, with his General. We need more antennas!
>
> Thanks,
>
> Bill
>
> AJ4TX

>
> -----Original Message-----
> From: SkyWires@yahoogroups.com [mailto:SkyWires@yahoogroups.com]On Behalf Of
> Richard Schmuke
> Sent: Thursday, April 25, 2013 8:34 PM
> To: SkyWires@yahoogroups.com
> Subject: RE: [SkyWires] Re: superloop 40m aerial
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> When I build something I build per SWAG on most things. This is my main
> antenna. I put up a 80M size delta loop, installed split bolt and adjusted.
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> Feed point about 35 to 40ft the other two about 25 to 30ft.
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> Feed point on the south because that is where the support is.
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> I cut it approximately, I put stakes in the ground, layout the wire and
> hoisted it up
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> Hooked up the analyzer and tweaked it for the middle of the 20M phone band,
> The theory for size is as follows and you can see my SWR readings are at my
> bucket.
>
> http://s1102.photobucket.com/user/KD0ZZ/media/80MLoop_zpsa6e4cfe7.jpeg.html
>
> All my main bands are good but 17M comes in a little low on phone but with
> a any type of tuner you have a all band antenna, I even work 6M on it
>
>
> Loop Dimensions
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>
> 14.2 Loop
>
> X
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> 10m
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> 12M
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> 15M
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> 17M
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> 20M
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> 40M 80M
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>
> 1005/F MHz
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> 141.540
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> 3.5
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> the overall length of the loop is a multiple of the length at that
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>
> Even Multipliers will make it a resonate antenna, A 4X and 8X loop will
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> the most bands when used with a 4:1 Balun
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> With the correct resonate length of the antenna no tuner adjustment is
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>
> on the 7 bands shown
>
> Rich , Kd0zz
>
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>
> From: SkyWires@yahoogroups.com [mailto:SkyWires@yahoogroups.com] On Behalf
> Of allenbh57
> Sent: Thursday, April 25, 2013 6:28 PM
> To: SkyWires@yahoogroups.com
> Subject: [SkyWires] Re: superloop 40m aerial
>
>
>
> Hello Rich,
> The length on the drawing comes out to 3.55 MHz if you use the formula. I am
> interested in a couple of things about this antenna:
>
> 1. Where is it directional? I'm thinking out of the V at the feedpoint. Mine
> would be looking out to the North.
>
> 2. How high did you have it? I could put the feedpoint at about 20 to 25
> feet, higher on the "back".
>
> 3. Is it a close match on any bands?
>
> (Have not plugged it into EXNEC but if I get a chance I want to). Will share
> the results.
>
> Tnx and 73,
> Bill AJ4TX
>
> --- In SkyWires@yahoogroups.com <mailto:SkyWires%40yahoogroups.com> ,
> "Richard Schmuke" <rdj@> wrote:
> >
> > I think they added the wording "super" for the same reason you said Glen,
> > mine also worked super. I put one up with a coax transformer section and
> it
> > worked fine. I wanted a little more and other bands so now use a 80M delta
> > loop with a homemade 4:1 balun at the feed point and work all bands 40
> thru
> > 6 with it. It is my main antenna.
> > >
> > Drawing at http://s1102.photobucket.com/user/KD0ZZ/media/80MDelta.jpg.html
> > >
> > >
> > >
> > Rich , Kd0zz
> > >
> > >
> > >
> > From: SkyWires@yahoogroups.com <mailto:SkyWires%40yahoogroups.com>
> [mailto:SkyWires@yahoogroups.com <mailto:SkyWires%40yahoogroups.com>] On

> Behalf
> > Of goroberts
> > Sent: Thursday, April 25, 2013 7:24 AM
> > To: SkyWires@yahoogroups.com <mailto:SkyWires%40yahoogroups.com>
> > Subject: [SkyWires] Re: superloop 40m aerial
> >
> >
> >
> >
> >
> > I'm not sure what a "superloop" is unless the inference is that loops are
> > "super" in general, but I've used a full wave loop for years and am very
> > pleased with it. Mine is an 80m loop but the principles are the same. If
> you
> > intend to use it as a mono band antenna the you can feed it with coax
> > directly, but if you plan on using it as a multi band antenna make it a
> > little shorter, use a good quality 4:1 balun and your internal tuner will
> be
> > able to match it as expected. The reason it needs to be a bit shorter on
> the
> > lowest band is the impeadance needs to NOT be right at 50ohms since you're
> > using it on other bands where the impeadance will surely be different.
> This
> > way the balun and the tuner do the heavy lifting. Open ladder line can be
> > used instead of the above but refer to the ARRL Antenna books or other
> > sources. There's a lot of incomplete and just wrong information on ths web
> > so stick with good sources. I use a DX Egineering "tuner" balun after many
> > orher failed methods. They have an EXCELLENT faq page that hits this nail
> on
> > the head.
> >
> > Good luck,
> > Glen -KE7FD
> >
> > --- In SkyWires@yahoogroups.com <mailto:SkyWires%40yahoogroups.com>
> <mailto:SkyWires%40yahoogroups.com> ,
> > "stevenfleming16" <stevenfleming16@> wrote:
> > >
> > > Hello
> > > I wonder if anyone has built this aerial and has the correct dimensions
> > for this project...any comments welcomed...
> > > Many thanks
> > > Steve
> > >
> >
>

4238. Re: Megaloop

Yahoo group: SkyWires
Date: 2013-04-29 00:23:34 UTC
From: B
Topic: 4213 Message: 4238

Ya know, I read these posts about all the extravagant antenna arrays that everyone is building and think back to when I was small and my Dad was a Ham Radio operator who just loved QRP. I remember I helped him string an 80' long wire from the corner of the roof to a telephone pole in the neighbors yard. He fed it to the "shack" with some RG58 with the shield to a ground rod next to the house. He would be in the "shack" all night long on Friday and Saturday nights working 40 and 80 meters , CW ALL OVER THE WORLD. The only tuning he did was the tank circuit in the homebrew transmitter he used. A homemade antenna switch between the transmitter and the old Hallicrafters receiver he used. No more than 3 or 4 watts input.

Now that was Ham Radio at it's best. I still have some of his cards that he received from his "accomplishments"!!! I was 6 at the time so that made it 54 years ago.

--- In SkyWires@yahoogroups.com, "allenbh57" <allenbh@...> wrote:
>
> Brian,
> I see the issue - and actually kind of like the multi-lobed pattern. The main "gain" - pun intended - may be because of the lower angle of radiation. It is shooting out in a saucer-shape with different little nulls, and very attenuated in the azimuth, except for 80 or 160M.
>
> So it does not have the great F/B ratios but makes up for it in simplicity and angle of radiation.
>
> That's my $0.02 until I build it! Or model it in EZNEC.
> Let's build them - too simple NOT to!
> 73,
> Bill AJ4TX
>
> --- In SkyWires@yahoogroups.com, "Richard Schmuke" <rdj@> wrote:
> >
> > Brian, I do understand you question, I do not understand the computer
> > program well enough to give you an exact answer. I will say it is a good
> > performing wire antenna. It does not out perform my 3 element 15M beam but
> > is much better than any dipoles I have tried at the same time. I have had
> > many types of wire antennas up, and when I extend a wire to get greater gain
> > it will greater nulls. My ladder line fed 160M dipole is great into the far
> > east and Europe on 10M off the ends, dead to Canada and South America but
> > the loop is almost as good on ten to Europe and JA land but also great north
> > and south also. I don't analyze a antenna with a computer but on the air and
> > it works for me.
> >
> >
> >
> >

> >
> > Rich , Kd0zz
> >
> > Looking at charts too long and you will get analysis paralysis
> >
> >
> >
> >
> >
> > Subject: RE: [SkyWires] Re: Megaloop
> >
> >
> >
> >
> >
> > Hello Rich and Bill,
> >
> >
> >
> > Am I missing something here? I went to the link below, and watched as Callum
> > McCormick drew and analyzed his "megaloop" design. He was being quite
> > enthusiastic about the gain shown by various lobes, but what about all the
> > radiated energy going in other directions? Doesn't that have to be
> > subtracted from the lobe that you happen to be using? I don't doubt that it
> > is an effective antenna, but it seems to me that the gain figures he is
> > quoting would need to be adjusted way down to get a "net gain" figure that
> > is meaningful.
> >
> >
> >
> > Cheers,
> >
> >
> >
> > Brian Burns
> >
> >
> >
> > From: SkyWires@yahoogroups.com [mailto:SkyWires@yahoogroups.com] On Behalf
> > Of Richard Schmuke
> > Sent: Friday, April 26, 2013 4:28 PM
> > To: SkyWires@yahoogroups.com
> > Subject: RE: [SkyWires] Re: superloop 40m aerial
> >
> >
> >
> >
> >
> > Well Bill here is the last of the story, I did not invent this or anything
> > else. All the research credit goes to Callum McCormick M0MCX. Check out his

> > short video on this antenna at
> >
> > http://www.youtube.com/watch?v=SOvhetU1_ps
> >
> >
> >
> > or do a search on and see his other videos on it -- Mega Loop Antenna - I do
> > love this antenna.
> >
> >
> >
> > Rich , Kd0zz
> >
> >
> >
> > From: SkyWires@yahoogroups.com [mailto:SkyWires@yahoogroups.com] On Behalf
> > Of Bill Allen
> > Sent: Friday, April 26, 2013 8:29 AM
> > To: SkyWires@yahoogroups.com
> > Subject: RE: [SkyWires] Re: superloop 40m aerial
> >
> >
> >
> >
> >
> > Uh-oh - the rest of the story!
> >
> > (now old Paul Harvey stories are flashing through my head!).
> >
> >
> >
> > Hmmm - sounds like the shape has a lot to do with the performance. Not
> > surprising. Actually this loop is the first time I have heard of resonance
> > on multiples like that (at least that good!). After this information, it
> > would be interesting to model - see if it follows life, so to speak. I
> > expected resonance where cut, and maybe tuner-friendly harmonics. Al, N4ALO
> > talks about his loop - I think he used a 4/3 or 5/4 loop at 80M. Cut for
> > ~2.5 MHz or something like that. I'll have to review. But still using a
> > tuner, as I recall. (He is on 40M a lot, and I generally have 40M going in
> > the car.
> >
> >
> >
> > Well, again the good: I have a feedpoint location in back of the house and
> > can get a pretty good triangle out the back. Favoring North is OK - if it is
> > low enough it'll go over the pole and I love talking to Eastern Europe, and
> > if not, it will probably talk to Tennessee where I have other friends.
> >
> >
> >

> > Other antennas are a longwire that needs to be replaced (with a loop?) and a
> > Cushcraft that I inherited and am in the middle of cleaning up the
> > connections on the matching network.I may stick it out back in the back, and
> > feed it with ladder line and a couple of baluns, or something. Depends on
> > resonance, if it even works, etc. Not going to bury a lot of radials, but
> > they say to put it 8' above the ground. It came off the top of an 80' tower.
> > Sorry, I don't get a tower :-(even though i have 3 sections sitting on the
> > ground.
> >
> >
> >
> > -Bill
> >
> >
> >
> >
> >
> >
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> >
> > -----Original Message-----
> > From: SkyWires@yahoogroups.com [mailto:SkyWires@yahoogroups.com]On Behalf Of
> > Richard Schmuke
> > Sent: Friday, April 26, 2013 9:15 AM
> > To: SkyWires@yahoogroups.com
> > Subject: RE: [SkyWires] Re: superloop 40m aerial
> >
> >
> >
> > OK Bill now the rest of the story. I told you the good here is the bad. A
> > couple of years ago we were going to have a bad snow/ice storm so being a
> > good keeper of antennas I went out and dropped mine to the ground. The ice
> > broke a lot of tree limbs a few days later I pulled the wires out of 18" of
> > snow and ice back up, I no longer had a good triangle due to down supports
> > but what the heck. I no longer had good SWR, went back out and reset to a
> > eyeball triangle, back to good SWR. My 80M size delta worked great so why
> > not double it. I made sort of a out of shape rectangle, I could not get the
> > bands to come it with my supports without going into the scrub oak trees. I
> > went back to my 80M delta shape , adjusted to a multiple of the 20M band and
> > still there.
> >
> > Rich , Kd0zz
> >
> > From: SkyWires@yahoogroups.com [mailto:SkyWires@yahoogroups.com] On Behalf
> > Of Bill Allen
> > Sent: Friday, April 26, 2013 3:37 AM
> > To: SkyWires@yahoogroups.com
> > Subject: RE: [SkyWires] Re: superloop 40m aerial
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> > Thank You Richard!
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> > Yes - it did. I have been looking at that chart. I do not think I have room
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> > all even multipliers. I see how the chart works. Sure would be nice if they
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> > Sent: Thursday, April 25, 2013 8:34 PM
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> > From: SkyWires@...m [mailto:SkyWires@yahoogroups.com] On Behalf
> > Of allenbh57
> > Sent: Thursday, April 25, 2013 6:28 PM
> > To: SkyWires@yahoogroups.com
> > Subject: [SkyWires] Re: superloop 40m aerial
> >
> >
> >
> > Hello Rich,
> > The length on the drawing comes out to 3.55 MHz if you use the formula. I am
> > interested in a couple of things about this antenna:
> >
> > 1. Where is it directional? I'm thinking out of the V at the feedpoint. Mine
> > would be looking out to the North.
> >
> > 2. How high did you have it? I could put the feedpoint at about 20 to 25
> > feet, higher on the "back".
> >
> > 3. Is it a close match on any bands?
> >
> > (Have not plugged it into EXNEC but if I get a chance I want to). Will share
> > the results.
> >
> > Tnx and 73,
> > Bill AJ4TX
> >
> > --- In SkyWires@yahoogroups.com <mailto:SkyWires%40yahoogroups.com> ,
> > "Richard Schmuke" <rdj@> wrote:
> > >
> > > I think they added the wording "super" for the same reason you said Glen,
> > > mine also worked super. I put one up with a coax transformer section and

> > it
> > > worked fine. I wanted a little more and other bands so now use a 80M delta
> > > loop with a homemade 4:1 balun at the feed point and work all bands 40
> > thru
> > > 6 with it. It is my main antenna.
> > >
> > > Drawing at http://s1102.photobucket.com/user/KD0ZZ/media/80MDelta.jpg.html
> > >
> > >
> > >
> > > Rich , Kd0zz
> > >
> > >
> > >
> > > From: SkyWires@yahoogroups.com <mailto:SkyWires%40yahoogroups.com>
> > [mailto:SkyWires@yahoogroups.com <mailto:SkyWires%40yahoogroups.com>] On
> > Behalf
> > > Of goroberts
> > > Sent: Thursday, April 25, 2013 7:24 AM
> > > To: SkyWires@yahoogroups.com <mailto:SkyWires%40yahoogroups.com>
> > > Subject: [SkyWires] Re: superloop 40m aerial
> > >
> > >
> > >
> > >
> > >
> > > I'm not sure what a "superloop" is unless the inference is that loops are
> > > "super" in general, but I've used a full wave loop for years and am very
> > > pleased with it. Mine is an 80m loop but the principles are the same. If
> > you
> > > intend to use it as a mono band antenna the you can feed it with coax
> > > directly, but if you plan on using it as a multi band antenna make it a
> > > little shorter, use a good quality 4:1 balun and your internal tuner will
> > be
> > > able to match it as expected. The reason it needs to be a bit shorter on
> > the
> > > lowest band is the impeadance needs to NOT be right at 50ohms since you're
> > > using it on other bands where the impeadance will surely be different.
> > This
> > > way the balun and the tuner do the heavy lifting. Open ladder line can be
> > > used instead of the above but refer to the ARRL Antenna books or other
> > > sources. There's a lot of incomplete and just wrong information on ths web
> > > so stick with good sources. I use a DX Egineering "tuner" balun after many
> > > orher failed methods. They have an EXCELLENT faq page that hits this nail
> > on
> > > the head.
> > >
> > > Good luck,
> > > Glen -KE7FD
> > >

> > > --- In SkyWires@yahoogroups.com <mailto:SkyWires%40yahoogroups.com>
> > <mailto:SkyWires%40yahoogroups.com> ,
> > > "stevenfleming16" <stevenfleming16@> wrote:
> > > >
> > > > Hello
> > > > I wonder if anyone has built this aerial and has the correct dimensions
> > > for this project...any comments welcomed...
> > > > Many thanks
> > > > Steve
> > > >
> > >
> >
>

4239. Re: [SkyWires] Re: Megaloop

Yahoo group: SkyWires
Date: 2013-04-29 00:31:06 UTC
From: Dave Leisman
Topic: 4213 Message: 4239

Ya know you are absolutely right. With all the amplifiers and sophisticated micro processor circuitry I wonder if we have lost the "ham" in amateur radio. How many can put together or even draw a Colpits oscillator anymore? Not to indict because I know everything has to move forward, but at what expense?

I'll take a qrp rig and wire antenna who works 100 countries over the spohisticated transceover, a "megawatt" amplifier with stacked arrays who works 150 countries in a year, any day.

On Sun 04/28/13 8:23 PM , "B" bctillson@... sent:
>
>
> Ya know, I read these posts about all the extravagant antenna arrays that
> everyone is building and think back to when I was small and my Dad was a
> Ham Radio operator who just loved QRP. I remember I helped him string an
> 80' long wire from the corner of the roof to a telephone pole in the
> neighbors yard. He fed it to the "shack" with some RG58 with the shield to
> a ground rod next to the house. He would be in the "shack" all night long
> on Friday and Saturday nights working 40 and 80 meters , CW ALL OVER THE
> WORLD. The only tuning he did was the tank circuit in the homebrew
> transmitter he used. A homemade antenna switch between the transmitter and
> the old Hallicrafters receiver he used. No more than 3 or 4 watts input.
>
> Now that was Ham Radio at it's best. I still have some of his cards that
> he received from his "accomplishments"!!! I was 6 at the time so that made
> it 54 years ago.
>
> --- In SkyWires@yahoogroups.com, "allenbh57" wrote:
> >
> > Brian,
> > I see the issue - and actually kind of like the multi-lobed pattern.
> The main "gain" - pun intended - may be because of the lower angle of
> radiation. It is shooting out in a saucer-shape with different little
> nulls, and very attenuated in the azimuth, except for 80 or 160M.
> >
> > So it does not have the great F/B ratios but makes up for it in
> simplicity and angle of radiation.
> >
> > That's my $0.02 until I build it! Or model it in EZNEC.
> > Let's build them - too simple NOT to!
> > 73,
> > Bill AJ4TX
> >
> > --- In SkyWires@yahoogroups.com, "Richard Schmuke" wrote:
> > >

> > > Brian, I do understand you question, I do not understand the computer
> > > program well enough to give you an exact answer. I will say it is a
> good
> > > performing wire antenna. It does not out perform my 3 element 15M
> beam but
> > > is much better than any dipoles I have tried at the same time. I have
> had
> > > many types of wire antennas up, and when I extend a wire to get
> greater gain
> > > it will greater nulls. My ladder line fed 160M dipole is great into
> the far
> > > east and Europe on 10M off the ends, dead to Canada and South America
> but
> > > the loop is almost as good on ten to Europe and JA land but also
> great north
> > > and south also. I don't analyze a antenna with a computer but on the
> air and
> > > it works for me.
> > >
> > >
> > >
> > >
> > >
> > > Rich , Kd0zz
> > >
> > > Looking at charts too long and you will get analysis paralysis
> > >
> > >
> > >
> > >
> > >
> > > Subject: RE: [SkyWires] Re: Megaloop
> > >
> > >
> > >
> > >
> > >
> > > Hello Rich and Bill,
> > >
> > >
> > >
> > > Am I missing something here? I went to the link below, and watched as
> Callum
> > > McCormick drew and analyzed his "megaloop" design. He was being quite
> > > enthusiastic about the gain shown by various lobes, but what about
> all the
> > > radiated energy going in other directions? Doesn't that have to be
> > > subtracted from the lobe that you happen to be using? I don't doubt
> that it
> > > is an effective antenna, but it seems to me that the gain figures he

> is
> > > quoting would need to be adjusted way down to get a "net gain" figure
> that
> > > is meaningful.
> > >
> > >
> > >
> > > Cheers,
> > >
> > >
> > >
> > > Brian Burns
> > >
> > >
> > >
> > > From: SkyWires@yahoogroups.com [mailto:SkyWires@yahoogroups.com] On
> Behalf
> > > Of Richard Schmuke
> > > Sent: Friday, April 26, 2013 4:28 PM
> > > To: SkyWires@yahoogroups.com
> > > Subject: RE: [SkyWires] Re: superloop 40m aerial
> > >
> > >
> > >
> > >
> > >
> > > Well Bill here is the last of the story, I did not invent this or
> anything
> > > else. All the research credit goes to Callum McCormick M0MCX. Check
> out his
> > > short video on this antenna at
> > >
> > > http://www.youtube.com/watch?v=SOvhetU1_ps [1]
> > >
> > >
> > >
> > > or do a search on and see his other videos on it -- Mega Loop Antenna
> - I do
> > > love this antenna.
> > >
> > >
> > >
> > > Rich , Kd0zz
> > >
> > >
> > >
> > > From: SkyWires@yahoogroups.com [mailto:SkyWires@yahoogroups.com] On
> Behalf
> > > Of Bill Allen
> > > Sent: Friday, April 26, 2013 8:29 AM

> > > To: SkyWires@yahoogroups.com
> > > Subject: RE: [SkyWires] Re: superloop 40m aerial
> > >
> > >
> > >
> > >
> > >
> > > Uh-oh - the rest of the story!
> > >
> > > (now old Paul Harvey stories are flashing through my head!).
> > >
> > >
> > >
> > > Hmmm - sounds like the shape has a lot to do with the performance.
> Not
> > > surprising. Actually this loop is the first time I have heard of
> resonance
> > > on multiples like that (at least that good!). After this information,
> it
> > > would be interesting to model - see if it follows life, so to speak.
> I
> > > expected resonance where cut, and maybe tuner-friendly harmonics. Al,
> N4ALO
> > > talks about his loop - I think he used a 4/3 or 5/4 loop at 80M. Cut
> for
> > > ~2.5 MHz or something like that. I'll have to review. But still using
> a
> > > tuner, as I recall. (He is on 40M a lot, and I generally have 40M
> going in
> > > the car.
> > >
> > >
> > >
> > > Well, again the good: I have a feedpoint location in back of the
> house and
> > > can get a pretty good triangle out the back. Favoring North is OK -
> if it is
> > > low enough it'll go over the pole and I love talking to Eastern
> Europe, and
> > > if not, it will probably talk to Tennessee where I have other
> friends.
> > >
> > >
> > >
> > > Other antennas are a longwire that needs to be replaced (with a
> loop?) and a
> > > Cushcraft that I inherited and am in the middle of cleaning up the
> > > connections on the matching network.I may stick it out back in the
> back, and
> > > feed it with ladder line and a couple of baluns, or something.

> Depends on
> > > resonance, if it even works, etc. Not going to bury a lot of radials,
> but
> > > they say to put it 8' above the ground. It came off the top of an 80'
> tower.
> > > Sorry, I don't get a tower :-(even though i have 3 sections sitting
> on the
> > > ground.
> > >
> > >
> > >
> > > -Bill
> > >
> > >
> > >
> > >
> > >
> > >
> > >
> > >
> > >
> > > -----Original Message-----
> > > From: SkyWires@yahoogroups.com [mailto:SkyWires@yahoogroups.com]On
> Behalf Of
> > > Richard Schmuke
> > > Sent: Friday, April 26, 2013 9:15 AM
> > > To: SkyWires@yahoogroups.com
> > > Subject: RE: [SkyWires] Re: superloop 40m aerial
> > >
> > >
> > >
> > > OK Bill now the rest of the story. I told you the good here is the
> bad. A
> > > couple of years ago we were going to have a bad snow/ice storm so
> being a
> > > good keeper of antennas I went out and dropped mine to the ground.
> The ice
> > > broke a lot of tree limbs a few days later I pulled the wires out of
> 18" of
> > > snow and ice back up, I no longer had a good triangle due to down
> supports
> > > but what the heck. I no longer had good SWR, went back out and reset
> to a
> > > eyeball triangle, back to good SWR. My 80M size delta worked great so
> why
> > > not double it. I made sort of a out of shape rectangle, I could not
> get the
> > > bands to come it with my supports without going into the scrub oak
> trees. I
> > > went back to my 80M delta shape , adjusted to a multiple of the 20M

> band and
> > > still there.
> > >
> > > Rich , Kd0zz
> > >
> > > From: SkyWires@yahoogroups.com [mailto:SkyWires@yahoogroups.com] On
> Behalf
> > > Of Bill Allen
> > > Sent: Friday, April 26, 2013 3:37 AM
> > > To: SkyWires@yahoogroups.com
> > > Subject: RE: [SkyWires] Re: superloop 40m aerial
> > >
> > >
> > >
> > > Thank You Richard!
> > >
> > > Yes - it did. I have been looking at that chart. I do not think I
> have room
> > > for the 566' loop - even if I squiggle it around... Too bad because
> they are
> > > all even multipliers. I see how the chart works. Sure would be nice
> if they
> > > all fell into evens, at least 40, 20 and 15M.
> > >
> > > That it is resonant at the even multiples is interesting. From your
> SWR
> > > table the readings aren't too bad on the odd multiples. I will look
> at our
> > > mounting options. I have a LOT of wire - probably about 16 AWG with
> > > insulation. Tinned wire, makes great antennas. Since it is insulated
> I
> > > wonder what effect would be from running it through the Leyand Cyprus
> > > branches? That would be a great way to string it up on 1 side...
> Wishing I
> > > had planted some of those on the other side of the yard, now!
> > >
> > > I want a good NVIS antanna for 80 and maybe 60 and 40M. Also want one
> for
> > > lower angle for DX. Cannot use the front yard, unfortunately.
> > >
> > > Your projects look very nicely done.
> > >
> > > Thanks,
> > >
> > > Bill
> > >
> > > -----Original Message-----
> > > From: SkyWires@yahoogroups.com [mailto:SkyWires@yahoogroups.com]On
> Behalf Of
> > > Richard Schmuke

> > > Sent: Thursday, April 25, 2013 10:14 PM
> > > To: SkyWires@yahoogroups.com
> > > Subject: RE: [SkyWires] Re: superloop 40m aerial
> > >
> > >
> > >
> > > Bill when you sent a copy my email back it did not have the size
> chart,
> > > because I can't see my email thru yahoo I have to ask did the chart
> showing
> > > the 2x,3x.4x and so forth come thru????
> > >
> > > For more antennas I have a 160 doublet with a 80M fan element that is
> a
> > > killer on 10M to the east and west, the loop is better north and
> south. I
> > > also have a 40M thru 6M all band vertical in work.
> > >
> > > Rich , Kd0zz
> > >
> > > From: SkyWires@yahoogroups.com [mailto:SkyWires@yahoogroups.com] On
> Behalf
> > > Of Bill Allen
> > > Sent: Thursday, April 25, 2013 8:13 PM
> > > To: SkyWires@yahoogroups.com
> > > Subject: RE: [SkyWires] Re: superloop 40m aerial
> > >
> > >
> > >
> > > Richard,
> > >
> > > Wow - that sounds great!
> > >
> > > I probably just have room to put up a shape like this and this size.
> While I
> > > will use a tuner when necessary, I want to get away from it for "all"
> the
> > > time. My youngest is 12, with his General. We need more antennas!
> > >
> > > Thanks,
> > >
> > > Bill
> > >
> > > AJ4TX
> > >
> > > -----Original Message-----
> > > From: SkyWires@yahoogroups.com [mailto:SkyWires@yahoogroups.com]On
> Behalf Of
> > > Richard Schmuke
> > > Sent: Thursday, April 25, 2013 8:34 PM

> > > To: SkyWires@yahoogroups.com
> > > Subject: RE: [SkyWires] Re: superloop 40m aerial
> > >
> > >
> > >
> > > When I build something I build per SWAG on most things. This is my
> main
> > > antenna. I put up a 80M size delta loop, installed split bolt and
> adjusted.
> > >
> > > Feed point about 35 to 40ft the other two about 25 to 30ft.
> > >
> > > Feed point on the south because that is where the support is.
> > >
> > > I cut it approximately, I put stakes in the ground, layout the wire
> and
> > > hoisted it up
> > >
> > > Hooked up the analyzer and tweaked it for the middle of the 20M phone
> band,
> > > The theory for size is as follows and you can see my SWR readings are
> at my
> > > bucket.
> > >
> > >
> http://s1102.photobucket.com/user/KD0ZZ/media/80MLoop_zpsa6e4cfe7.jpeg.html
> [2]
> > >
> > > All my main bands are good but 17M comes in a little low on phone but
> with
> > > a any type of tuner you have a all band antenna, I even work 6M on it
> > >
> > >
> > > Loop Dimensions
> > >
> > >
> > >
> > >
> > >
> > > 14.2 Loop
> > >
> > > X
> > >
> > > 10m
> > >
> > > 12M
> > >
> > > 15M
> > >
> > > 17M

> > >
> > > 20M
> > >
> > > 40M 80M
> > >
> > >
> > >
> > > 1005/F MHz
> > >
> > > 70.770
> > >
> > > 2
> > >
> > > 141.540
> > >
> > > 4
> > >
> > > 3.5
> > >
> > > 3
> > >
> > > 2.5
> > >
> > > 2
> > >
> > > 1
> > >
> > > 0.5
> > >
> > >
> > >
> > > 70.770
> > >
> > > 3
> > >
> > > 212.310
> > >
> > > 6
> > >
> > > 5.3
> > >
> > > 4.5
> > >
> > > 3.8
> > >
> > > 3
> > >
> > > 1.5
> > >
> > > 0.8

> > >
> > >
> > >
> > > 70.770
> > >
> > > 4
> > >
> > > 283.080
> > >
> > > 8X
> > >
> > > 7X
> > >
> > > 6X
> > >
> > > 5X
> > >
> > > 4X
> > >
> > > 2X
> > >
> > > 1X
> > >
> > >
> > >
> > > 70.770
> > >
> > > 5
> > >
> > > 353.850
> > >
> > > 10
> > >
> > > 8.8
> > >
> > > 7.5
> > >
> > > 6.4
> > >
> > > 5
> > >
> > > 2.5
> > >
> > > 1.3
> > >
> > >
> > >
> > > 70.770
> > >
> > > 6

> > >
> > > 424.620
> > >
> > > 12
> > >
> > > 10.6
> > >
> > > 9
> > >
> > > 7.6
> > >
> > > 6
> > >
> > > 3
> > >
> > > 1.6
> > >
> > >
> > >
> > > 70.770
> > >
> > > 7
> > >
> > > 495.390
> > >
> > > 14
> > >
> > > 12.3
> > >
> > > 11
> > >
> > > 8.9
> > >
> > > 7
> > >
> > > 3.5
> > >
> > > 1.8
> > >
> > >
> > >
> > > 70.770
> > >
> > > 8
> > >
> > > 566.160
> > >
> > > 16X
> > >
> > > 14X

> > >
> > > 12X
> > >
> > > 10X
> > >
> > > 8X
> > >
> > > 4X
> > >
> > > 2X
> > >
> > >
> > >
> > > 1X loop is a 100 Ohm antenna , a 2X loop and larger close to 200 Ohm
> > >
> > >
> > >
> > >
> > > 2X in length loop, or greater can be matched with 50 Ohm coax and a
> 4:1
> > > Balun if
> > >
> > >
> > >
> > >
> > > the overall length of the loop is a multiple of the length at that
> > > frequency
> > >
> > >
> > >
> > >
> > > Even Multipliers will make it a resonate antenna, A 4X and 8X loop
> will
> > > match
> > >
> > >
> > >
> > >
> > > the most bands when used with a 4:1 Balun
> > >
> > >
> > >
> > >
> > > With the correct resonate length of the antenna no tuner adjustment
> is
> > > needed
> > >
> > >
> > >
> > >

> > > on the 7 bands shown
> > >
> > > Rich , Kd0zz
> > >
> > >
> > >
> > >
> > >
> > >
> > > From: SkyWires@yahoogroups.com [mailto:SkyWires@yahoogroups.com] On
> Behalf
> > > Of allenbh57
> > > Sent: Thursday, April 25, 2013 6:28 PM
> > > To: SkyWires@yahoogroups.com
> > > Subject: [SkyWires] Re: superloop 40m aerial
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> > > Hello Rich,
> > > The length on the drawing comes out to 3.55 MHz if you use the
> formula. I am
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> > >
> > > 1. Where is it directional? I'm thinking out of the V at the
> feedpoint. Mine
> > > would be looking out to the North.
> > >
> > > 2. How high did you have it? I could put the feedpoint at about 20 to
> 25
> > > feet, higher on the "back".
> > >
> > > 3. Is it a close match on any bands?
> > >
> > > (Have not plugged it into EXNEC but if I get a chance I want to).
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> > > > loop with a homemade 4:1 balun at the feed point and work all bands
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> > > > Drawing at
> http://s1102.photobucket.com/user/KD0ZZ/media/80MDelta.jpg.html [3]
> > > >
> > > >
> > > >
> > > > Rich , Kd0zz
> > > >
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> > > [mailto:SkyWires@yahoogroups.com] On
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> > > >
> > > >
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> after many
> > > > orher failed methods. They have an EXCELLENT faq page that hits
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> > > on
> > > > the head.
> > > >
> > > > Good luck,
> > > > Glen -KE7FD
> > > >
> > > > --- In SkyWires@yahoogroups.com
> > > ,
> > > > "stevenfleming16" wrote:
> > > > >
> > > > > Hello
> > > > > I wonder if anyone has built this aerial and has the correct
> dimensions
> > > > for this project...any comments welcomed...
> > > > > Many thanks
> > > > > Steve
> > > > >
> > > >
> > >
> >
>
>
>
> Links:
> ------
> [1] http://www.youtube.com/watch?v=SOvhetU1_ps
> [2]
> http://s1102.photobucket.com/user/KD0ZZ/media/80MLoop_zpsa6e4cfe7.jpeg.html
> [3] http://s1102.photobucket.com/user/KD0ZZ/media/80MDelta.jpg.html
> [4]
> http://groups.yahoo.com/group/SkyWires/post;_ylc=X3oDMTJxb2ZpMnZ0BF9TAzk3Mz
> U5NzE0BGdycElkAzEwOTQ2MTE5BGdycHNwSWQDMTcwNTA2MzEwOARtc2dJZAM0MjM4BHNlYwNmd
> HIEc2xrA3JwbHkEc3RpbWUDMTM2NzE5NTAxNw--?act=replycolor: #2D50FD;
> [5]
> http://groups.yahoo.com/group/SkyWires/post;_ylc=X3oDMTJmMWVkM2JlBF9TAzk3Mz
> U5NzE0BGdycElkAzEwOTQ2MTE5BGdycHNwSWQDMTcwNTA2MzEwOARzZWMDZnRyBHNsawNudHBjB
> HN0aW1lAzEzNjcxOTUwMTc-[6]
> http://groups.yahoo.com/group/SkyWires/message/4213;_ylc=X3oDMTM1bThyMGc2BF
> 9TAzk3MzU5NzE0BGdycElkAzEwOTQ2MTE5BGdycHNwSWQDMTcwNTA2MzEwOARtc2dJZAM0MjM4B
> HNlYwNmdHIEc2xrA3Z0cGMEc3RpbWUDMTM2NzE5NTAxNwR0cGNJZAM0MjEz[7]
> http://groups.yahoo.com/group/SkyWires/members;_ylc=X3oDMTJnMDRyNzU1BF9TAzk
> 3MzU5NzE0BGdycElkAzEwOTQ2MTE5BGdycHNwSWQDMTcwNTA2MzEwOARzZWMDdnRsBHNsawN2bW

> JycwRzdGltZQMxMzY3MTk1MDE3?o=6[8]
> http://groups.yahoo.com/group/SkyWires;_ylc=X3oDMTJmc2x0bGFxBF9TAzk3MzU5NzE
> 0BGdycElkAzEwOTQ2MTE5BGdycHNwSWQDMTcwNTA2MzEwOARzZWMDdnRsBHNsawN2Z2hwBHN0aW
> 1lAzEzNjcxOTUwMTc-[9]
> http://groups.yahoo.com/;_ylc=X3oDMTJlcGlkNmlwBF9TAzk3MzU5NzE0BGdycElkAzEwO
> TQ2MTE5BGdycHNwSWQDMTcwNTA2MzEwOARzZWMDZnRyBHNsawNnZnAEc3RpbWUDMTM2NzE5NTAx
> Nw--[10] http://docs.yahoo.com/info/terms/
>
>

4240. Re: Megaloop

Yahoo group: SkyWires
Date: 2013-04-30 01:24:18 UTC
From: B
Topic: 4213 Message: 4240

Anyone can go out and buy $4000 worth of equipment ,and get all over the universe but to build a 3 or 4 watt transmitter yourself and making that first contact is the real thrill of Ham Radio. I know guys that have built their way up to a 100 watts over years of hamming. But it was always the thrill of doing it oneself that made it wotrh while. I have been a guitar player for over 40 years, The absolutely best amplifier is the 40 watt tube type that I built myself--35 years ago and still using it.!!!!

--- In SkyWires@yahoogroups.com, Dave Leisman <w8qwdave@...> wrote:
>
> Ya know you are absolutely right. With all the amplifiers and sophisticated micro processor circuitry I wonder if we have lost the "ham" in amateur radio. How many can put together or even draw a Colpits oscillator anymore? Not to indict because I know everything has to move forward, but at what expense?
>
> I'll take a qrp rig and wire antenna who works 100 countries over the spohisticated transceover, a "megawatt" amplifier with stacked arrays who works 150 countries in a year, any day.
>
>
> On Sun 04/28/13 8:23 PM , "B" bctillson@... sent:
> > Â
> >
> > Ya know, I read these posts about all the extravagant antenna arrays that
> > everyone is building and think back to when I was small and my Dad was a
> > Ham Radio operator who just loved QRP. I remember I helped him string an
> > 80' long wire from the corner of the roof to a telephone pole in the
> > neighbors yard. He fed it to the "shack" with some RG58 with the shield to
> > a ground rod next to the house. He would be in the "shack" all night long
> > on Friday and Saturday nights working 40 and 80 meters , CW ALL OVER THE
> > WORLD. The only tuning he did was the tank circuit in the homebrew
> > transmitter he used. A homemade antenna switch between the transmitter and
> > the old Hallicrafters receiver he used. No more than 3 or 4 watts input.
> >
> > Now that was Ham Radio at it's best. I still have some of his cards that
> > he received from his "accomplishments"!!! I was 6 at the time so that made
> > it 54 years ago.
> >
> > --- In SkyWires@yahoogroups.com, "allenbh57" wrote:
> > >
> > > Brian,
> > > I see the issue - and actually kind of like the multi-lobed pattern.
> > The main "gain" - pun intended - may be because of the lower angle of
> > radiation. It is shooting out in a saucer-shape with different little
> > nulls, and very attenuated in the azimuth, except for 80 or 160M.
> > >

> > > So it does not have the great F/B ratios but makes up for it in
> > simplicity and angle of radiation.
> > >
> > > That's my $0.02 until I build it! Or model it in EZNEC.
> > > Let's build them - too simple NOT to!
> > > 73,
> > > Bill AJ4TX
> > >
> > > --- In SkyWires@yahoogroups.com, "Richard Schmuke" wrote:
> > > >
> > > > Brian, I do understand you question, I do not understand the computer
> > > > program well enough to give you an exact answer. I will say it is a
> > good
> > > > performing wire antenna. It does not out perform my 3 element 15M
> > beam but
> > > > is much better than any dipoles I have tried at the same time. I have
> > had
> > > > many types of wire antennas up, and when I extend a wire to get
> > greater gain
> > > > it will greater nulls. My ladder line fed 160M dipole is great into
> > the far
> > > > east and Europe on 10M off the ends, dead to Canada and South America
> > but
> > > > the loop is almost as good on ten to Europe and JA land but also
> > great north
> > > > and south also. I don't analyze a antenna with a computer but on the
> > air and
> > > > it works for me.
> > > >
> > > >
> > > >
> > > >
> > > >
> > > > Rich , Kd0zz
> > > >
> > > > Looking at charts too long and you will get analysis paralysis
> > > >
> > > >
> > > >
> > > >
> > > >
> > > > Subject: RE: [SkyWires] Re: Megaloop
> > > >
> > > >
> > > >
> > > >
> > > >
> > > > Hello Rich and Bill,
> > > >
> > > >

> > > >
> > > > Am I missing something here? I went to the link below, and watched as
> > Callum
> > > > McCormick drew and analyzed his "megaloop" design. He was being quite
> > > > enthusiastic about the gain shown by various lobes, but what about
> > all the
> > > > radiated energy going in other directions? Doesn't that have to be
> > > > subtracted from the lobe that you happen to be using? I don't doubt
> > that it
> > > > is an effective antenna, but it seems to me that the gain figures he
> > is
> > > > quoting would need to be adjusted way down to get a "net gain" figure
> > that
> > > > is meaningful.
> > > >
> > > >
> > > >
> > > > Cheers,
> > > >
> > > >
> > > >
> > > > Brian Burns
> > > >
> > > >
> > > >
> > > > From: SkyWires@yahoogroups.com [mailto:SkyWires@yahoogroups.com] On
> > Behalf
> > > > Of Richard Schmuke
> > > > Sent: Friday, April 26, 2013 4:28 PM
> > > > To: SkyWires@yahoogroups.com
> > > > Subject: RE: [SkyWires] Re: superloop 40m aerial
> > > >
> > > >
> > > >
> > > >
> > > >
> > > > Well Bill here is the last of the story, I did not invent this or
> > anything
> > > > else. All the research credit goes to Callum McCormick M0MCX. Check
> > out his
> > > > short video on this antenna at
> > > >
> > > > http://www.youtube.com/watch?v=SOvhetU1_ps [1]
> > > >
> > > >
> > > >
> > > > or do a search on and see his other videos on it -- Mega Loop Antenna
> > - I do
> > > > love this antenna.
> > > >

> > > >
> > > >
> > > > Rich , Kd0zz
> > > >
> > > >
> > > >
> > > > From: SkyWires@yahoogroups.com [mailto:SkyWires@yahoogroups.com] On
> > Behalf
> > > > Of Bill Allen
> > > > Sent: Friday, April 26, 2013 8:29 AM
> > > > To: SkyWires@yahoogroups.com
> > > > Subject: RE: [SkyWires] Re: superloop 40m aerial
> > > >
> > > >
> > > >
> > > >
> > > >
> > > > Uh-oh - the rest of the story!
> > > >
> > > > (now old Paul Harvey stories are flashing through my head!).
> > > >
> > > >
> > > >
> > > > Hmmm - sounds like the shape has a lot to do with the performance.
> > Not
> > > > surprising. Actually this loop is the first time I have heard of
> > resonance
> > > > on multiples like that (at least that good!). After this information,
> > it
> > > > would be interesting to model - see if it follows life, so to speak.
> > I
> > > > expected resonance where cut, and maybe tuner-friendly harmonics. Al,
> > N4ALO
> > > > talks about his loop - I think he used a 4/3 or 5/4 loop at 80M. Cut
> > for
> > > > ~2.5 MHz or something like that. I'll have to review. But still using
> > a
> > > > tuner, as I recall. (He is on 40M a lot, and I generally have 40M
> > going in
> > > > the car.
> > > >
> > > >
> > > >
> > > > Well, again the good: I have a feedpoint location in back of the
> > house and
> > > > can get a pretty good triangle out the back. Favoring North is OK -
> > if it is
> > > > low enough it'll go over the pole and I love talking to Eastern
> > Europe, and
> > > > if not, it will probably talk to Tennessee where I have other

> > friends.
> > > >
> > > >
> > > >
> > > > Other antennas are a longwire that needs to be replaced (with a
> > loop?) and a
> > > > Cushcraft that I inherited and am in the middle of cleaning up the
> > > > connections on the matching network.I may stick it out back in the
> > back, and
> > > > feed it with ladder line and a couple of baluns, or something.
> > Depends on
> > > > resonance, if it even works, etc. Not going to bury a lot of radials,
> > but
> > > > they say to put it 8' above the ground. It came off the top of an 80'
> > tower.
> > > > Sorry, I don't get a tower :-(even though i have 3 sections sitting
> > on the
> > > > ground.
> > > >
> > > >
> > > >
> > > > -Bill
> > > >
> > > >
> > > >
> > > >
> > > >
> > > >
> > > >
> > > >
> > > > -----Original Message-----
> > > > From: SkyWires@yahoogroups.com [mailto:SkyWires@yahoogroups.com]On
> > Behalf Of
> > > > Richard Schmuke
> > > > Sent: Friday, April 26, 2013 9:15 AM
> > > > To: SkyWires@yahoogroups.com
> > > > Subject: RE: [SkyWires] Re: superloop 40m aerial
> > > >
> > > >
> > > >
> > > > OK Bill now the rest of the story. I told you the good here is the
> > bad. A
> > > > couple of years ago we were going to have a bad snow/ice storm so
> > being a
> > > > good keeper of antennas I went out and dropped mine to the ground.
> > The ice
> > > > broke a lot of tree limbs a few days later I pulled the wires out of
> > 18" of
> > > > snow and ice back up, I no longer had a good triangle due to down

> > supports
> > > > but what the heck. I no longer had good SWR, went back out and reset
> > to a
> > > > eyeball triangle, back to good SWR. My 80M size delta worked great so
> > why
> > > > not double it. I made sort of a out of shape rectangle, I could not
> > get the
> > > > bands to come it with my supports without going into the scrub oak
> > trees. I
> > > > went back to my 80M delta shape , adjusted to a multiple of the 20M
> > band and
> > > > still there.
> > > >
> > > > Rich , Kd0zz
> > > >
> > > > From: SkyWires@yahoogroups.com [mailto:SkyWires@yahoogroups.com] On
> > Behalf
> > > > Of Bill Allen
> > > > Sent: Friday, April 26, 2013 3:37 AM
> > > > To: SkyWires@yahoogroups.com
> > > > Subject: RE: [SkyWires] Re: superloop 40m aerial
> > > >
> > > >
> > > >
> > > > Thank You Richard!
> > > >
> > > > Yes - it did. I have been looking at that chart. I do not think I
> > have room
> > > > for the 566' loop - even if I squiggle it around... Too bad because
> > they are
> > > > all even multipliers. I see how the chart works. Sure would be nice
> > if they
> > > > all fell into evens, at least 40, 20 and 15M.
> > > >
> > > > That it is resonant at the even multiples is interesting. From your
> > SWR
> > > > table the readings aren't too bad on the odd multiples. I will look
> > at our
> > > > mounting options. I have a LOT of wire - probably about 16 AWG with
> > > > insulation. Tinned wire, makes great antennas. Since it is insulated
> > I
> > > > wonder what effect would be from running it through the Leyand Cyprus
> > > > branches? That would be a great way to string it up on 1 side...
> > Wishing I
> > > > had planted some of those on the other side of the yard, now!
> > > >
> > > > I want a good NVIS antanna for 80 and maybe 60 and 40M. Also want one
> > for
> > > > lower angle for DX. Cannot use the front yard, unfortunately.
> > > >

> > > > Your projects look very nicely done.
> > > >
> > > > Thanks,
> > > >
> > > > Bill
> > > >
> > > > -----Original Message-----
> > > > From: SkyWires@yahoogroups.com [mailto:SkyWires@yahoogroups.com]On
> > Behalf Of
> > > > Richard Schmuke
> > > > Sent: Thursday, April 25, 2013 10:14 PM
> > > > To: SkyWires@yahoogroups.com
> > > > Subject: RE: [SkyWires] Re: superloop 40m aerial
> > > >
> > > >
> > > >
> > > > Bill when you sent a copy my email back it did not have the size
> > chart,
> > > > because I can't see my email thru yahoo I have to ask did the chart
> > showing
> > > > the 2x,3x.4x and so forth come thru????
> > > >
> > > > For more antennas I have a 160 doublet with a 80M fan element that is
> > a
> > > > killer on 10M to the east and west, the loop is better north and
> > south. I
> > > > also have a 40M thru 6M all band vertical in work.
> > > >
> > > > Rich , Kd0zz
> > > >
> > > > From: SkyWires@yahoogroups.com [mailto:SkyWires@yahoogroups.com] On
> > Behalf
> > > > Of Bill Allen
> > > > Sent: Thursday, April 25, 2013 8:13 PM
> > > > To: SkyWires@yahoogroups.com
> > > > Subject: RE: [SkyWires] Re: superloop 40m aerial
> > > >
> > > >
> > > >
> > > > Richard,
> > > >
> > > > Wow - that sounds great!
> > > >
> > > > I probably just have room to put up a shape like this and this size.
> > While I
> > > > will use a tuner when necessary, I want to get away from it for "all"
> > the
> > > > time. My youngest is 12, with his General. We need more antennas!
> > > >
> > > > Thanks,

> > > >
> > > > Bill
> > > >
> > > > AJ4TX
> > > >
> > > > -----Original Message-----
> > > > From: SkyWires@yahoogroups.com [mailto:SkyWires@yahoogroups.com]On
> > Behalf Of
> > > > Richard Schmuke
> > > > Sent: Thursday, April 25, 2013 8:34 PM
> > > > To: SkyWires@yahoogroups.com
> > > > Subject: RE: [SkyWires] Re: superloop 40m aerial
> > > >
> > > >
> > > >
> > > > When I build something I build per SWAG on most things. This is my
> > main
> > > > antenna. I put up a 80M size delta loop, installed split bolt and
> > adjusted.
> > > >
> > > > Feed point about 35 to 40ft the other two about 25 to 30ft.
> > > >
> > > > Feed point on the south because that is where the support is.
> > > >
> > > > I cut it approximately, I put stakes in the ground, layout the wire
> > and
> > > > hoisted it up
> > > >
> > > > Hooked up the analyzer and tweaked it for the middle of the 20M phone
> > band,
> > > > The theory for size is as follows and you can see my SWR readings are
> > at my
> > > > bucket.
> > > >
> > > >
> > http://s1102.photobucket.com/user/KD0ZZ/media/80MLoop_zpsa6e4cfe7.jpeg.html
> > [2]
> > > >
> > > > All my main bands are good but 17M comes in a little low on phone but
> > with
> > > > a any type of tuner you have a all band antenna, I even work 6M on it
> > > >
> > > >
> > > > Loop Dimensions
> > > >
> > > >
> > > >
> > > >
> > > >
> > > > 14.2 Loop

> > > >
> > > > X
> > > >
> > > > 10m
> > > >
> > > > 12M
> > > >
> > > > 15M
> > > >
> > > > 17M
> > > >
> > > > 20M
> > > >
> > > > 40M 80M
> > > >
> > > >
> > > >
> > > > 1005/F MHz
> > > >
> > > > 70.770
> > > >
> > > > 2
> > > >
> > > > 141.540
> > > >
> > > > 4
> > > >
> > > > 3.5
> > > >
> > > > 3
> > > >
> > > > 2.5
> > > >
> > > > 2
> > > >
> > > > 1
> > > >
> > > > 0.5
> > > >
> > > >
> > > >
> > > > 70.770
> > > >
> > > > 3
> > > >
> > > > 212.310
> > > >
> > > > 6
> > > >
> > > > 5.3

> > > >
> > > > 4.5
> > > >
> > > > 3.8
> > > >
> > > > 3
> > > >
> > > > 1.5
> > > >
> > > > 0.8
> > > >
> > > >
> > > >
> > > > 70.770
> > > >
> > > > 4
> > > >
> > > > 283.080
> > > >
> > > > 8X
> > > >
> > > > 7X
> > > >
> > > > 6X
> > > >
> > > > 5X
> > > >
> > > > 4X
> > > >
> > > > 2X
> > > >
> > > > 1X
> > > >
> > > >
> > > >
> > > > 70.770
> > > >
> > > > 5
> > > >
> > > > 353.850
> > > >
> > > > 10
> > > >
> > > > 8.8
> > > >
> > > > 7.5
> > > >
> > > > 6.4
> > > >
> > > > 5

> > > >
> > > > 2.5
> > > >
> > > > 1.3
> > > >
> > > >
> > > >
> > > > 70.770
> > > >
> > > > 6
> > > >
> > > > 424.620
> > > >
> > > > 12
> > > >
> > > > 10.6
> > > >
> > > > 9
> > > >
> > > > 7.6
> > > >
> > > > 6
> > > >
> > > > 3
> > > >
> > > > 1.6
> > > >
> > > >
> > > >
> > > > 70.770
> > > >
> > > > 7
> > > >
> > > > 495.390
> > > >
> > > > 14
> > > >
> > > > 12.3
> > > >
> > > > 11
> > > >
> > > > 8.9
> > > >
> > > > 7
> > > >
> > > > 3.5
> > > >
> > > > 1.8
> > > >
> > > >

> > > >
> > > > 70.770
> > > >
> > > > 8
> > > >
> > > > 566.160
> > > >
> > > > 16X
> > > >
> > > > 14X
> > > >
> > > > 12X
> > > >
> > > > 10X
> > > >
> > > > 8X
> > > >
> > > > 4X
> > > >
> > > > 2X
> > > >
> > > >
> > > >
> > > > 1X loop is a 100 Ohm antenna , a 2X loop and larger close to 200 Ohm
> > > >
> > > >
> > > >
> > > >
> > > > 2X in length loop, or greater can be matched with 50 Ohm coax and a
> > 4:1
> > > > Balun if
> > > >
> > > >
> > > >
> > > >
> > > > the overall length of the loop is a multiple of the length at that
> > > > frequency
> > > >
> > > >
> > > >
> > > >
> > > > Even Multipliers will make it a resonate antenna, A 4X and 8X loop
> > will
> > > > match
> > > >
> > > >
> > > >
> > > >
> > > > the most bands when used with a 4:1 Balun
> > > >

> > > >
> > > >
> > > >
> > > > With the correct resonate length of the antenna no tuner adjustment
> > is
> > > > needed
> > > >
> > > >
> > > >
> > > >
> > > > on the 7 bands shown
> > > >
> > > > Rich , Kd0zz
> > > >
> > > >
> > > >
> > > >
> > > >
> > > >
> > > > From: SkyWires@yahoogroups.com [mailto:SkyWires@yahoogroups.com] On
> > Behalf
> > > > Of allenbh57
> > > > Sent: Thursday, April 25, 2013 6:28 PM
> > > > To: SkyWires@yahoogroups.com
> > > > Subject: [SkyWires] Re: superloop 40m aerial
> > > >
> > > >
> > > >
> > > > Hello Rich,
> > > > The length on the drawing comes out to 3.55 MHz if you use the
> > formula. I am
> > > > interested in a couple of things about this antenna:
> > > >
> > > > 1. Where is it directional? I'm thinking out of the V at the
> > feedpoint. Mine
> > > > would be looking out to the North.
> > > >
> > > > 2. How high did you have it? I could put the feedpoint at about 20 to
> > 25
> > > > feet, higher on the "back".
> > > >
> > > > 3. Is it a close match on any bands?
> > > >
> > > > (Have not plugged it into EXNEC but if I get a chance I want to).
> > Will share
> > > > the results.
> > > >
> > > > Tnx and 73,
> > > > Bill AJ4TX
> > > >

> > > > --- In SkyWires@yahoogroups.com ,
> > > > "Richard Schmuke" wrote:
> > > > >
> > > > > I think they added the wording "super" for the same reason you said
> > Glen,
> > > > > mine also worked super. I put one up with a coax transformer
> > section and
> > > > > it
> > > > > worked fine. I wanted a little more and other bands so now use a
> > 80M delta
> > > > > loop with a homemade 4:1 balun at the feed point and work all bands
> > 40
> > > > > thru
> > > > > 6 with it. It is my main antenna.
> > > > > >
> > > > > Drawing at
> > http://s1102.photobucket.com/user/KD0ZZ/media/80MDelta.jpg.html [3]
> > > > > >
> > > > > >
> > > > > >
> > > > > Rich , Kd0zz
> > > > > >
> > > > > >
> > > > > >
> > > > > From: SkyWires@yahoogroups.com
> > > > > [mailto:SkyWires@...m] On
> > > > > Behalf
> > > > > Of goroberts
> > > > > Sent: Thursday, April 25, 2013 7:24 AM
> > > > > To: SkyWires@yahoogroups.com
> > > > > Subject: [SkyWires] Re: superloop 40m aerial
> > > > > >
> > > > > >
> > > > > >
> > > > > >
> > > > > >
> > > > > I'm not sure what a "superloop" is unless the inference is that
> > loops are
> > > > > > "super" in general, but I've used a full wave loop for years and am
> > very
> > > > > > pleased with it. Mine is an 80m loop but the principles are the
> > same. If
> > > > > you
> > > > > > intend to use it as a mono band antenna the you can feed it with
> > coax
> > > > > > directly, but if you plan on using it as a multi band antenna make
> > it a
> > > > > > little shorter, use a good quality 4:1 balun and your internal
> > tuner will
> > > > > be

> > > > > able to match it as expected. The reason it needs to be a bit
> > shorter on
> > > > > the
> > > > > > lowest band is the impeadance needs to NOT be right at 50ohms since
> > you're
> > > > > > using it on other bands where the impeadance will surely be
> > different.
> > > > > This
> > > > > > way the balun and the tuner do the heavy lifting. Open ladder line
> > can be
> > > > > > used instead of the above but refer to the ARRL Antenna books or
> > other
> > > > > > sources. There's a lot of incomplete and just wrong information on
> > ths web
> > > > > > so stick with good sources. I use a DX Egineering "tuner" balun
> > after many
> > > > > > orher failed methods. They have an EXCELLENT faq page that hits
> > this nail
> > > > > on
> > > > > > the head.
> > > > > >
> > > > > > Good luck,
> > > > > > Glen -KE7FD
> > > > > >
> > > > > > --- In SkyWires@...m
> > > > > ,
> > > > > > "stevenfleming16" wrote:
> > > > > > >
> > > > > > > Hello
> > > > > > > I wonder if anyone has built this aerial and has the correct
> > dimensions
> > > > > > for this project...any comments welcomed...
> > > > > > > Many thanks
> > > > > > > Steve
> > > > > > >
> > > > > >
> > > > > >
> > > > >
> > > >
> > > >
> > > >
> > > > Links:
> > > > ------
> > > > [1] http://www.youtube.com/watch?v=SOvhetU1_ps
> > > > [2]
> > > > http://s1102.photobucket.com/user/KD0ZZ/media/80MLoop_zpsa6e4cfe7.jpeg.html
> > > > [3] http://s1102.photobucket.com/user/KD0ZZ/media/80MDelta.jpg.html
> > > > [4]
> > > > http://groups.yahoo.com/group/SkyWires/post;_ylc=X3oDMTJxb2ZpMnZ0BF9TAzk3Mz
> > > > U5NzE0BGdycElkAzEwOTQ2MTE5BGdycHNwSWQDMTcwNTA2MzEwOARtc2dJZAM0MjM4BHNlYwNmd

> > HIEc2xrA3JwbHkEc3RpbWUDMTM2NzE5NTAxNw--?act=replycolor: #2D50FD;
> > [5]
> > http://groups.yahoo.com/group/SkyWires/post;_ylc=X3oDMTJmMWVkM2JlBF9TAzk3Mz
> > U5NzE0BGdycElkAzEwOTQ2MTE5BGdycHNwSWQDMTcwNTA2MzEwOARzZWMDZnRyBHNsawNudHBjB
> > HN0aW1lAzEzNjcxOTUwMTc-[6]
> > http://groups.yahoo.com/group/SkyWires/message/4213;_ylc=X3oDMTM1bThyMGc2BF
> > 9TAzk3MzU5NzE0BGdycElkAzEwOTQ2MTE5BGdycHNwSWQDMTcwNTA2MzEwOARtc2dJZAM0MjM4B
> > HNlYwNmdHIEc2xrA3Z0cGMEc3RpbWUDMTM2NzE5NTAxNwR0cGNJZAM0MjEz[7]
> > http://groups.yahoo.com/group/SkyWires/members;_ylc=X3oDMTJnMDRyNzU1BF9TAzk
> > 3MzU5NzE0BGdycElkAzEwOTQ2MTE5BGdycHNwSWQDMTcwNTA2MzEwOARzZWMDdnRsBHNsawN2bW
> > JycwRzdGltZQMxMzY3MTk1MDE3?o=6[8]
> > http://groups.yahoo.com/group/SkyWires;_ylc=X3oDMTJmc2x0bGFxBF9TAzk3MzU5NzE
> > 0BGdycElkAzEwOTQ2MTE5BGdycHNwSWQDMTcwNTA2MzEwOARzZWMDdnRsBHNsawN2Z2hwBHN0aW
> > 1lAzEzNjcxOTUwMTc-[9]
> > http://groups.yahoo.com/;_ylc=X3oDMTJlcGlkNmlwBF9TAzk3MzU5NzE0BGdycElkAzEwO
> > TQ2MTE5BGdycHNwSWQDMTcwNTA2MzEwOARzZWMDZnRyBHNsawNnZnAEc3RpbWUDMTM2NzE5NTAx
> > Nw--[10] http://docs.yahoo.com/info/terms/
> >
> >
>

4241. Re: [SkyWires] Re: Megaloop

Yahoo group: SkyWires
Date: 2013-04-30 20:47:49 UTC
From: raymond mitchell
Topic: 4213 Message: 4241

A full size ant helps ya keep in touch with friends and family. Sometimes 10W to 40W will do fine, many times it will not. Other times when folks say the band is dead ya need 1000W or better for reliable communications. During Ike and Catrina the radio provided the only reliable communications. Many times 100W was fine, most of the time 500W or so was fine, but it was rare when 1000W+ could not get through. The antenna is the most important part of our system. Still a good cloudburner, while hooked to that antenna, has proved useful.
Abe K7ABE

--- On Mon, 4/29/13, B <bctillson@...> wrote:

From: B <bctillson@...>
Subject: [SkyWires] Re: Megaloop
To: SkyWires@yahoogroups.com
Date: Monday, April 29, 2013, 6:24 PM

Anyone can go out and buy $4000 worth of equipment ,and get all over the universe but to build a 3 or 4 watt transmitter yourself and making that first contact is the real thrill of Ham Radio. I know guys that have built their way up to a 100 watts over years of hamming. But it was always the thrill of doing it oneself that made it wotrh while. I have been a guitar player for over 40 years, The absolutely best amplifier is the 40 watt tube type that I built myself--35 years ago and still using it.!!!!

--- In SkyWires@yahoogroups.com, Dave Leisman <w8qwdave@...> wrote:

>

> Ya know you are absolutely right. With all the amplifiers and sophisticated micro processor circuitry I wonder if we have lost the "ham" in amateur radio. How many can put together or even draw a Colpits oscillator anymore? Not to indict because I know everything has to move forward, but at what expense?

>

> I'll take a qrp rig and wire antenna who works 100 countries over the spohisticated transceover, a "megawatt" amplifier with stacked arrays who works 150 countries in a year, any day.

>

>

> On Sun 04/28/13 8:23 PM , "B" bctillson@... sent:

> > Â

> >

> > Ya know, I read these posts about all the extravagant antenna arrays that

> > everyone is building and think back to when I was small and my Dad was a
> > Ham Radio operator who just loved QRP. I remember I helped him string an
> > 80' long wire from the corner of the roof to a telephone pole in the
> > neighbors yard. He fed it to the "shack" with some RG58 with the shield to
> > a ground rod next to the house. He would be in the "shack" all night long
> > on Friday and Saturday nights working 40 and 80 meters , CW ALL OVER THE
> > WORLD. The only tuning he did was the tank circuit in the homebrew
> > transmitter he used. A homemade antenna switch between the transmitter and
> > the old Hallicrafters receiver he used. No more than 3 or 4 watts input.
> >
> > Now that was Ham Radio at it's best. I still have some of his cards that
> > he received from his "accomplishments"!!! I was 6 at the time so that made
> > it 54 years ago.
> >
> > --- In SkyWires@yahoogroups.com, "allenbh57" wrote:
> > >
> > > Brian,
> > > I see the issue - and actually kind of like the multi-lobed pattern.
> > The main "gain" - pun intended - may be because of the lower angle of
> > radiation. It is shooting out in a saucer-shape with different little
> > nulls, and very attenuated in the azimuth, except for 80 or 160M.
> > >
> > > So it does not have the great F/B ratios but makes up for it in
> > simplicity and angle of radiation.
> > >
> > > That's my $0.02 until I build it! Or model it in EZNEC.
> > > Let's build them - too simple NOT to!
> > > 73,
> > > Bill AJ4TX

> > >

> > > --- In SkyWires@yahoogroups.com, "Richard Schmuke" wrote:

> > > >

> > > > Brian, I do understand you question, I do not understand the computer

> > > > program well enough to give you an exact answer. I will say it is a

> > good

> > > > performing wire antenna. It does not out perform my 3 element 15M

> > beam but

> > > > is much better than any dipoles I have tried at the same time. I have

> > had

> > > > many types of wire antennas up, and when I extend a wire to get

> > greater gain

> > > > it will greater nulls. My ladder line fed 160M dipole is great into

> > the far

> > > > east and Europe on 10M off the ends, dead to Canada and South America

> > but

> > > > the loop is almost as good on ten to Europe and JA land but also

> > great north

> > > > and south also. I don't analyze a antenna with a computer but on the

> > air and

> > > > it works for me.

> > > >

> > > >

> > > >

> > > >

> > > >

> > > > Rich , Kd0zz

> > > >

> > > > Looking at charts too long and you will get analysis paralysis

> > > >

> > > >

> > > >

> > > >

> > > >

> > > > Subject: RE: [SkyWires] Re: Megaloop

> > > >

> > > >

> > > >

> > > >

> > > >

> > > > Hello Rich and Bill,

> > > >

> > > >

> > > >

> > > > Am I missing something here? I went to the link below, and watched as

> > Callum

> > > > McCormick drew and analyzed his "megaloop" design. He was being quite

> > > > enthusiastic about the gain shown by various lobes, but what about

> > all the

> > > > radiated energy going in other directions? Doesn't that have to be

> > > > subtracted from the lobe that you happen to be using? I don't doubt

> > that it

> > > > is an effective antenna, but it seems to me that the gain figures he

> > is

> > > > quoting would need to be adjusted way down to get a "net gain" figure

> > that

> > > > is meaningful.

> > > >

> > > >

> > > >

> > > > Cheers,

> > > >

> > > >

> > > >

> > > > Brian Burns

> > > >

> > > >

> > > >

> > > > From: SkyWires@yahoogroups.com [mailto:SkyWires@yahoogroups.com] On

> > Behalf

> > > > Of Richard Schmuke

> > > > Sent: Friday, April 26, 2013 4:28 PM

> > > > To: SkyWires@yahoogroups.com

> > > > Subject: RE: [SkyWires] Re: superloop 40m aerial

> > > >

> > > >

> > > >

> > > >

> > > >

> > > > Well Bill here is the last of the story, I did not invent this or

> > anything

> > > > else. All the research credit goes to Callum McCormick M0MCX. Check

> > out his

> > > > short video on this antenna at

> > > >

> > > > http://www.youtube.com/watch?v=SOvhetU1_ps [1]

> > > >

> > > >

> > > >

> > > > or do a search on and see his other videos on it -- Mega Loop Antenna

> > - I do

> > > > love this antenna.

> > > >

> > > >

> > > >

> > > > Rich , Kd0zz

> > > >

> > > >

> > > >

> > > > From: SkyWires@yahoogroups.com [mailto:SkyWires@yahoogroups.com] On

> > Behalf

> > > > Of Bill Allen

> > > > Sent: Friday, April 26, 2013 8:29 AM

> > > > To: SkyWires@yahoogroups.com

> > > > Subject: RE: [SkyWires] Re: superloop 40m aerial

> > > >

> > > >

> > > >

> > > >

> > > >

> > > > Uh-oh - the rest of the story!

> > > >

> > > > (now old Paul Harvey stories are flashing through my head!).

> > > >

> > > >

> > > >

> > > > Hmmm - sounds like the shape has a lot to do with the performance.

> > Not

> > > > surprising. Actually this loop is the first time I have heard of

> > resonance

> > > > on multiples like that (at least that good!). After this information,

> > it

> > > > would be interesting to model - see if it follows life, so to speak.

> > I

> > > > expected resonance where cut, and maybe tuner-friendly harmonics. Al,

> > N4ALO

> > > > talks about his loop - I think he used a 4/3 or 5/4 loop at 80M. Cut

> > for

> > > > ~2.5 MHz or something like that. I'll have to review. But still using

> > a

> > > > tuner, as I recall. (He is on 40M a lot, and I generally have 40M

> > going in

> > > > the car.

> > > >

> > > >

> > > >

> > > > Well, again the good: I have a feedpoint location in back of the

> > house and

> > > > can get a pretty good triangle out the back. Favoring North is OK -

> > if it is

> > > > low enough it'll go over the pole and I love talking to Eastern

> > Europe, and

> > > > if not, it will probably talk to Tennessee where I have other

> > friends.

> > > >

> > > >

> > > >

> > > > Other antennas are a longwire that needs to be replaced (with a

> > loop?) and a

> > > > Cushcraft that I inherited and am in the middle of cleaning up the

> > > > connections on the matching network.I may stick it out back in the

> > back, and

> > > > feed it with ladder line and a couple of baluns, or something.

> > Depends on

> > > > resonance, if it even works, etc. Not going to bury a lot of radials,

> > but

> > > > they say to put it 8' above the ground. It came off the top of an 80'

> > tower.

> > > > Sorry, I don't get a tower :-(even though i have 3 sections sitting

> > on the

> > > > ground.

> > > >

> > > >

> > > >

> > > > -Bill

> > > >

> > > >

> > > >

> > > >

> > > >

> > > >

> > > >

> > > >

> > > > -----Original Message-----

> > > > From: SkyWires@yahoogroups.com [mailto:SkyWires@yahoogroups.com]On

> > Behalf Of

> > > > Richard Schmuke

> > > > Sent: Friday, April 26, 2013 9:15 AM

> > > > To: SkyWires@yahoogroups.com

> > > > Subject: RE: [SkyWires] Re: superloop 40m aerial

> > > >

> > > >

> > > >

> > > > OK Bill now the rest of the story. I told you the good here is the

> > bad. A

> > > > couple of years ago we were going to have a bad snow/ice storm so

> > being a

> > > > good keeper of antennas I went out and dropped mine to the ground.

> > The ice

> > > > broke a lot of tree limbs a few days later I pulled the wires out of

> > 18" of

> > > > snow and ice back up, I no longer had a good triangle due to down

> > supports

> > > > but what the heck. I no longer had good SWR, went back out and reset

> > to a

> > > > eyeball triangle, back to good SWR. My 80M size delta worked great so

> > why

> > > > not double it. I made sort of a out of shape rectangle, I could not

> > get the

> > > > bands to come it with my supports without going into the scrub oak

> > trees. I

> > > > went back to my 80M delta shape , adjusted to a multiple of the 20M

> > band and

> > > > still there.

> > > >

> > > > Rich , Kd0zz

> > > >

> > > > From: SkyWires@yahoogroups.com [mailto:SkyWires@yahoogroups.com] On

> > Behalf

> > > > Of Bill Allen

> > > > Sent: Friday, April 26, 2013 3:37 AM

> > > > To: SkyWires@yahoogroups.com

> > > > Subject: RE: [SkyWires] Re: superloop 40m aerial

> > > >

> > > >

> > > >

> > > > Thank You Richard!

> > > >

> > > > Yes - it did. I have been looking at that chart. I do not think I

> > have room

> > > > for the 566' loop - even if I squiggle it around... Too bad because

> > they are

> > > > all even multipliers. I see how the chart works. Sure would be nice

> > if they

> > > > all fell into evens, at least 40, 20 and 15M.

> > > >

> > > > That it is resonant at the even multiples is interesting. From your

> > SWR

> > > > table the readings aren't too bad on the odd multiples. I will look

> > at our

> > > > mounting options. I have a LOT of wire - probably about 16 AWG with

> > > > insulation. Tinned wire, makes great antennas. Since it is insulated

> > I

> > > > wonder what effect would be from running it through the Leyand Cyprus

> > > > branches? That would be a great way to string it up on 1 side...

> > Wishing I

> > > > had planted some of those on the other side of the yard, now!

> > > >

> > > > I want a good NVIS antanna for 80 and maybe 60 and 40M. Also want one

> > for

> > > > lower angle for DX. Cannot use the front yard, unfortunately.

> > > >

> > > > Your projects look very nicely done.

> > > >

> > > > Thanks,

> > > >

> > > > Bill

> > > >

> > > > -----Original Message-----

> > > > From: SkyWires@yahoogroups.com [mailto:SkyWires@yahoogroups.com]On

> > Behalf Of

> > > > Richard Schmuke

> > > > Sent: Thursday, April 25, 2013 10:14 PM

> > > > To: SkyWires@yahoogroups.com

> > > > Subject: RE: [SkyWires] Re: superloop 40m aerial

> > > >

> > > >

> > > >

> > > > Bill when you sent a copy my email back it did not have the size

> > chart,

> > > > because I can't see my email thru yahoo I have to ask did the chart

> > showing

> > > > the 2x,3x.4x and so forth come thru????

> > > >

> > > > For more antennas I have a 160 doublet with a 80M fan element that is

> > a

> > > > killer on 10M to the east and west, the loop is better north and

> > south. I

> > > > also have a 40M thru 6M all band vertical in work.

> > > >

> > > > Rich , Kd0zz

> > > >

> > > > From: SkyWires@yahoogroups.com [mailto:SkyWires@yahoogroups.com] On

> > Behalf

> > > > Of Bill Allen

> > > > Sent: Thursday, April 25, 2013 8:13 PM

> > > > To: SkyWires@yahoogroups.com

> > > > Subject: RE: [SkyWires] Re: superloop 40m aerial

> > > >

> > > >

> > > >

> > > > Richard,

> > > >

> > > > Wow - that sounds great!

> > > >

> > > > I probably just have room to put up a shape like this and this size.

> > While I

> > > > will use a tuner when necessary, I want to get away from it for "all"

> > the

> > > > time. My youngest is 12, with his General. We need more antennas!

> > > >

> > > > Thanks,

> > > >

> > > > Bill

> > > >

> > > > AJ4TX

> > > >

> > > > -----Original Message-----

> > > > From: SkyWires@yahoogroups.com [mailto:SkyWires@yahoogroups.com]On

> > Behalf Of

> > > > Richard Schmuke

> > > > Sent: Thursday, April 25, 2013 8:34 PM

> > > > To: SkyWires@yahoogroups.com

> > > > Subject: RE: [SkyWires] Re: superloop 40m aerial

> > > >

> > > >

> > > >

> > > > When I build something I build per SWAG on most things. This is my

> > main

> > > > antenna. I put up a 80M size delta loop, installed split bolt and

> > adjusted.

> > > >

> > > > Feed point about 35 to 40ft the other two about 25 to 30ft.

> > > >

> > > > Feed point on the south because that is where the support is.

> > > >

> > > > I cut it approximately, I put stakes in the ground, layout the wire

> > and

> > > > hoisted it up

> > > >

> > > > Hooked up the analyzer and tweaked it for the middle of the 20M phone

> > band,

> > > > The theory for size is as follows and you can see my SWR readings are

> > at my

> > > > bucket.

> > > >

> > > >

> > http://s1102.photobucket.com/user/KD0ZZ/media/80MLoop_zpsa6e4cfe7.jpeg.html

> > [2]

> > > >

> > > > All my main bands are good but 17M comes in a little low on phone but

> > with

> > > > a any type of tuner you have a all band antenna, I even work 6M on it

> > > >

> > > >

> > > > Loop Dimensions

> > > >

> > > >

> > > >

> > > >

> > > >

> > > > 14.2 Loop

> > > >

> > > > X

> > > >

> > > > 10m

> > > >

> > > > 12M

> > > >

> > > > 15M

> > > >

> > > > 17M

> > > >

> > > > 20M

> > > >

> > > > 40M 80M

> > > >

> > > >

> > > >

> > > > 1005/F MHz

> > > >

> > > > 70.770

> > > >

> > > > 2

> > > >

> > > > 141.540

> > > >

> > > > 4

> > > >

> > > > 3.5

> > > >

> > > > 3

> > > >

> > > > 2.5

> > > >

> > > > 2

> > > >

> > > > 1

> > > >

> > > > 0.5

> > > >

> > > >

> > > >

> > > > 70.770

> > > >

> > > > 3

> > > >

> > > > 212.310

> > > >

> > > > 6

> > > >

> > > > 5.3

> > > >

> > > > 4.5

> > > >

> > > > 3.8

> > > >

> > > > 3

> > > >

> > > > 1.5

> > > >

> > > > 0.8

> > > >

> > > >

> > > >

> > > > 70.770

> > > >

> > > > 4

> > > >

> > > > 283.080

> > > >

> > > > 8X

> > > >

> > > > 7X

> > > >

> > > > 6X

> > > >

> > > > 5X

> > > >

> > > > 4X

> > > >

> > > > 2X

> > > >

> > > > 1X

> > > >

> > > >

> > > >

> > > > 70.770

> > > >

> > > > 5

> > > >

> > > > 353.850

> > > >

> > > > 10

> > > >

> > > > 8.8

> > > >

> > > > 7.5

> > > >

> > > > 6.4

> > > >

> > > > 5

> > > >

> > > > 2.5

> > > >

> > > > 1.3

> > > >

> > > >

> > > >

> > > > 70.770

> > > >

> > > > 6

> > > >

> > > > 424.620

> > > >

> > > > 12

> > > >

> > > > 10.6

> > > >

> > > > 9

> > > >

> > > > 7.6

> > > >

> > > > 6

> > > >

> > > > 3

> > > >

> > > > 1.6

> > > >

> > > >

> > > >

> > > > 70.770

> > > >

> > > > 7

> > > >

> > > > 495.390

> > > >

> > > > 14

> > > >

> > > > 12.3

> > > >

> > > > 11

> > > >

> > > > 8.9

> > > >

> > > > 7

> > > >

> > > > 3.5

> > > >

> > > > 1.8

> > > >

> > > >

> > > >

> > > > 70.770

> > > >

> > > > 8

> > > >

> > > > 566.160

> > > >

> > > > 16X

> > > >

> > > > 14X

> > > >

> > > > 12X

> > > >

> > > > 10X

> > > >

> > > > 8X

> > > >

> > > > 4X

> > > >

> > > > 2X

> > > >

> > > >

> > > >

> > > > 1X loop is a 100 Ohm antenna , a 2X loop and larger close to 200 Ohm

> > > >

> > > >

> > > >

> > > >

> > > > 2X in length loop, or greater can be matched with 50 Ohm coax and a

> > 4:1

> > > > Balun if

> > > >

> > > >

> > > >

> > > >

> > > > the overall length of the loop is a multiple of the length at that

> > > > frequency

> > > >

> > > >

> > > >

> > > >

> > > > Even Multipliers will make it a resonate antenna, A 4X and 8X loop

> > will

> > > > match

> > > >

> > > >

> > > >

> > > >

> > > > the most bands when used with a 4:1 Balun

> > > >

> > > >

> > > >

> > > >

> > > > With the correct resonate length of the antenna no tuner adjustment

> > is

> > > > needed

> > > >

> > > >

> > > >

> > > >

> > > > on the 7 bands shown

> > > >

> > > > Rich , Kd0zz

> > > >

> > > >

> > > >

> > > >

> > > >

> > > >

> > > > From: SkyWires@yahoogroups.com [mailto:SkyWires@yahoogroups.com] On

> > Behalf

> > > > Of allenbh57

> > > > Sent: Thursday, April 25, 2013 6:28 PM

> > > > To: SkyWires@yahoogroups.com

> > > > Subject: [SkyWires] Re: superloop 40m aerial

> > > >

> > > >

> > > >

> > > > Hello Rich,

> > > > The length on the drawing comes out to 3.55 MHz if you use the

> > formula. I am

> > > > interested in a couple of things about this antenna:

> > > >

> > > > 1. Where is it directional? I'm thinking out of the V at the

> > feedpoint. Mine

> > > > would be looking out to the North.

> > > >

> > > > 2. How high did you have it? I could put the feedpoint at about 20 to

> > 25

> > > > feet, higher on the "back".

> > > >

> > > > 3. Is it a close match on any bands?

> > > >

> > > > (Have not plugged it into EXNEC but if I get a chance I want to).

> > Will share

> > > > the results.

> > > >

> > > > Tnx and 73,

> > > > Bill AJ4TX

> > > >

> > > > --- In SkyWires@yahoogroups.com ,

> > > > "Richard Schmuke" wrote:

> > > > >

> > > > > I think they added the wording "super" for the same reason you said

> > Glen,

> > > > > mine also worked super. I put one up with a coax transformer

> > section and

> > > > it

> > > > > worked fine. I wanted a little more and other bands so now use a

> > 80M delta

> > > > > loop with a homemade 4:1 balun at the feed point and work all bands

> > 40

> > > > thru

> > > > > 6 with it. It is my main antenna.

> > > > >

> > > > > Drawing at

> > http://s1102.photobucket.com/user/KD0ZZ/media/80MDelta.jpg.html [3]

> > > > >

> > > > >

> > > > >

> > > > > Rich , Kd0zz

> > > > >

> > > > >

> > > > >

> > > > > From: SkyWires@yahoogroups.com

> > > > [mailto:SkyWires@yahoogroups.com] On

> > > > Behalf

> > > > Of goroberts

> > > > Sent: Thursday, April 25, 2013 7:24 AM

> > > > To: SkyWires@yahoogroups.com

> > > > Subject: [SkyWires] Re: superloop 40m aerial

> > > > >

> > > > >

> > > > >

> > > > >

> > > > >

> > > > > I'm not sure what a "superloop" is unless the inference is that

> > loops are

> > > > > "super" in general, but I've used a full wave loop for years and am

> > very

> > > > > pleased with it. Mine is an 80m loop but the principles are the

> > same. If

> > > > > you

> > > > > intend to use it as a mono band antenna the you can feed it with

> > coax

> > > > > directly, but if you plan on using it as a multi band antenna make

> > it a

> > > > > little shorter, use a good quality 4:1 balun and your internal

> > tuner will

> > > > be

> > > > > able to match it as expected. The reason it needs to be a bit

> > shorter on

> > > > the

> > > > > lowest band is the impeadance needs to NOT be right at 50ohms since

> > you're

> > > > > using it on other bands where the impeadance will surely be

> > different.

> > > > This

> > > > > way the balun and the tuner do the heavy lifting. Open ladder line

> > can be

> > > > > used instead of the above but refer to the ARRL Antenna books or

> > other

> > > > > sources. There's a lot of incomplete and just wrong information on

> > ths web

> > > > > so stick with good sources. I use a DX Egineering "tuner" balun

> > after many

> > > > > orher failed methods. They have an EXCELLENT faq page that hits

> > this nail

> > > > on

> > > > > the head.

> > > > >

> > > > > Good luck,

> > > > > Glen -KE7FD

> > > > >

> > > > > --- In SkyWires@yahoogroups.com

> > > > ,

> > > > > "stevenfleming16" wrote:

> > > > > > >

> > > > > > > Hello

> > > > > > > I wonder if anyone has built this aerial and has the correct

> > dimensions

> > > > > > for this project...any comments welcomed...

> > > > > > > Many thanks

> > > > > > > Steve

> > > > > > >

> > > > > >

> > > > >

> > > >

> > >

> > >

> > Links:

> > ------

> > [1] http://www.youtube.com/watch?v=SOvhetU1_ps

> > [2]

> > http://s1102.photobucket.com/user/KD0ZZ/media/80MLoop_zpsa6e4cfe7.jpeg.html

> > [3] http://s1102.photobucket.com/user/KD0ZZ/media/80MDelta.jpg.html

> > [4]

> > http://groups.yahoo.com/group/SkyWires/post;_ylc=X3oDMTJxb2ZpMnZ0BF9TAzk3Mz

> > U5NzE0BGdycElkAzEwOTQ2MTE5BGdycHNwSWQDMTcwNTA2MzEwOARtc2dJZAM0MjM4BHNlYwNmd

> > HIEc2xrA3JwbHkEc3RpbWUDMTM2NzE5NTAxNw--?act=replycolor: #2D50FD;

> > [5]

> > http://groups.yahoo.com/group/SkyWires/post;_ylc=X3oDMTJmMWVkM2JlBF9TAzk3Mz

> > U5NzE0BGdycElkAzEwOTQ2MTE5BGdycHNwSWQDMTcwNTA2MzEwOARzZWMDZnRyBHNsawNudHBjB

> > HN0aW1lAzEzNjcxOTUwMTc-[6]

> > http://groups.yahoo.com/group/SkyWires/message/4213;_ylc=X3oDMTM1bThyMGc2BF

> > 9TAzk3MzU5NzE0BGdycElkAzEwOTQ2MTE5BGdycHNwSWQDMTcwNTA2MzEwOARtc2dJZAM0MjM4B

> > HNlYwNmdHIEc2xrA3Z0cGMEc3RpbWUDMTM2NzE5NTAxNwR0cGNJZAM0MjEz[7]

> > http://groups.yahoo.com/group/SkyWires/members;_ylc=X3oDMTJnMDRyNzU1BF9TAzk

> > 3MzU5NzE0BGdycElkAzEwOTQ2MTE5BGdycHNwSWQDMTcwNTA2MzEwOARzZWMDdnRsBHNsawN2bW

> > JycwRzdGltZQMxMzY3MTk1MDE3?o=6[8]

> > http://groups.yahoo.com/group/SkyWires;_ylc=X3oDMTJmc2x0bGFxBF9TAzk3MzU5NzE

> > 0BGdycElkAzEwOTQ2MTE5BGdycHNwSWQDMTcwNTA2MzEwOARzZWMDdnRsBHNsawN2Z2hwBHN0aW

> > 1lAzEzNjcxOTUwMTc-[9]

> > http://groups.yahoo.com/;_ylc=X3oDMTJlcGlkNmlwBF9TAzk3MzU5NzE0BGdycElkAzEwO

> > TQ2MTE5BGdycHNwSWQDMTcwNTA2MzEwOARzZWMDZnRyBHNsawNnZnAEc3RpbWUDMTM2NzE5NTAx

> > Nw--[10] http://docs.yahoo.com/info/terms/

> >

> >

>

4242. Re: Megaloop

Yahoo group: SkyWires
Date: 2013-04-30 23:26:48 UTC
From: B
Topic: 4213 Message: 4242

There really is not such a thing as a "full size" antenna. The efficiency of an antenna and paying attention to wave propagation and atmospheric conditions is. And I am also not referring to ham radio operators that are gearing themselves for emergency communications. Cb Radio has proven itself to be reliable local emergency communications. I am referring to the purebred"Ham" that is interested in the hobby aspects of Amateur Radio. Myself and myself were never into "pegging" someone meter. We were interested in making contact using homebrew and very low power transmitters. Dad used a "Goonie Bird" for years on 2 Meters and we had some impressive contacts using a simple beam with 7 watts input. And we were also part of the Local ARRL Air Force Civil Defense network here in lower NY State. If anyone reads the ARRL Ham Radio handbook, it suggests to start out small.

--- In SkyWires@yahoogroups.com, raymond mitchell <ramitchell777@...> wrote:
>
> A full size ant helps ya keep in touch with friends and family. Sometimes 10W to 40W will do fine, many times it will not. Other times when folks say the band is dead ya need 1000W or better for reliable communications. During Ike and Catrina the radio provided the only reliable communications. Many times 100W was fine, most of the time 500W or so was fine, but it was rare when 1000W+ could not get through. The antenna is the most important part of our system. Still a good cloudburner, while hooked to that antenna, has proved useful.
> Abe K7ABE
>
> --- On Mon, 4/29/13, B <bctillson@...> wrote:
>
> From: B <bctillson@...>
> Subject: [SkyWires] Re: Megaloop
> To: SkyWires@yahoogroups.com
> Date: Monday, April 29, 2013, 6:24 PM
>
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>
> Anyone can go out and buy $4000 worth of equipment ,and get all over the universe but to build a 3 or 4 watt transmitter yourself and making that first contact is the real thrill of Ham Radio. I know guys that have built their way up to a 100 watts over years of hamming. But it was always the thrill of doing it oneself that made it wotrh while. I have been a guitar player for over 40 years, The absolutely best amplifier is the 40 watt tube type that I built myself--35 years ago and still using it.!!!!
>
>
>
> --- In SkyWires@yahoogroups.com, Dave Leisman <w8qwdave@> wrote:
>
> >
>
> > Ya know you are absolutely right. With all the amplifiers and sophisticated micro processor circuitry I wonder if we have lost the "ham" in amateur radio. How many can put together or even draw a Colpits oscillator anymore? Not to indict because I know everything has to move forward, but at what expense?
>
> >
>
> > I'll take a qrp rig and wire antenna who works 100 countries over the spohisticated transceover, a "megawatt" amplifier with stacked arrays who works 150 countries in a year, any day.
>
> >
>
> >
>
> > On Sun 04/28/13 8:23 PM , "B" bctillson@ sent:
>
> > > ÃÂ
>
> > >
>
> > > Ya know, I read these posts about all the extravagant antenna arrays that
>
> > > everyone is building and think back to when I was small and my Dad was a
>
> > > Ham Radio operator who just loved QRP. I remember I helped him string an
>
> > > 80' long wire from the corner of the roof to a telephone pole in the
>
> > > neighbors yard. He fed it to the "shack" with some RG58 with the shield to
>

> > > a ground rod next to the house. He would be in the "shack" all night long
>
> > > on Friday and Saturday nights working 40 and 80 meters , CW ALL OVER THE
>
> > > WORLD. The only tuning he did was the tank circuit in the homebrew
>
> > > transmitter he used. A homemade antenna switch between the transmitter and
>
> > > the old Hallicrafters receiver he used. No more than 3 or 4 watts input.
>
> > >
>
> > > Now that was Ham Radio at it's best. I still have some of his cards that
>
> > > he received from his "accomplishments"!!! I was 6 at the time so that made
>
> > > it 54 years ago.
>
> > >
>
> > > --- In SkyWires@yahoogroups.com, "allenbh57" wrote:
>
> > > >
>
> > > > Brian,
>
> > > > I see the issue - and actually kind of like the multi-lobed pattern.
>
> > > The main "gain" - pun intended - may be because of the lower angle of
>
> > > radiation. It is shooting out in a saucer-shape with different little
>
> > > nulls, and very attenuated in the azimuth, except for 80 or 160M.
>
> > > >
>
> > > > So it does not have the great F/B ratios but makes up for it in
>
> > > simplicity and angle of radiation.
>
> > > >
>
> > > > That's my $0.02 until I build it! Or model it in EZNEC.
>
> > > > Let's build them - too simple NOT to!
>
> > > > 73,
>
> > > > Bill AJ4TX

>
> > > >
>
> > > > --- In SkyWires@yahoogroups.com, "Richard Schmuke" wrote:
>
> > > > >
>
> > > > > Brian, I do understand you question, I do not understand the computer
>
> > > > > program well enough to give you an exact answer. I will say it is a
>
> > > good
>
> > > > > performing wire antenna. It does not out perform my 3 element 15M
>
> > > beam but
>
> > > > > is much better than any dipoles I have tried at the same time. I have
>
> > > had
>
> > > > > many types of wire antennas up, and when I extend a wire to get
>
> > > greater gain
>
> > > > > it will greater nulls. My ladder line fed 160M dipole is great into
>
> > > the far
>
> > > > > east and Europe on 10M off the ends, dead to Canada and South America
>
> > > but
>
> > > > > the loop is almost as good on ten to Europe and JA land but also
>
> > > great north
>
> > > > > and south also. I don't analyze a antenna with a computer but on the
>
> > > air and
>
> > > > > it works for me.
>
> > > > >
>
> > > > >
>
> > > > >
>

> > > > >
>
> > > > >
>
> > > > > Rich , Kd0zz
>
> > > > >
>
> > > > > Looking at charts too long and you will get analysis paralysis
>
> > > > >
>
> > > > >
>
> > > > >
>
> > > > >
>
> > > > >
>
> > > > > Subject: RE: [SkyWires] Re: Megaloop
>
> > > > >
>
> > > > >
>
> > > > >
>
> > > > >
>
> > > > >
>
> > > > > Hello Rich and Bill,
>
> > > > >
>
> > > > >
>
> > > > >
>
> > > > >
>
> > > > > Am I missing something here? I went to the link below, and watched as
>
> > > Callum
>
> > > > > McCormick drew and analyzed his "megaloop" design. He was being quite
>
> > > > > enthusiastic about the gain shown by various lobes, but what about
>
> > > all the

>
> > > > > radiated energy going in other directions? Doesn't that have to be
>
> > > > > subtracted from the lobe that you happen to be using? I don't doubt
>
> > > that it
>
> > > > > is an effective antenna, but it seems to me that the gain figures he
>
> > > is
>
> > > > > quoting would need to be adjusted way down to get a "net gain" figure
>
> > > that
>
> > > > > is meaningful.
>
> > > > >
>
> > > > >
>
> > > > >
>
> > > > > Cheers,
>
> > > > >
>
> > > > >
>
> > > > >
>
> > > > > Brian Burns
>
> > > > >
>
> > > > >
>
> > > > >
>
> > > > > From: SkyWires@yahoogroups.com [mailto:SkyWires@yahoogroups.com] On
>
> > > Behalf
>
> > > > > Of Richard Schmuke
>
> > > > > Sent: Friday, April 26, 2013 4:28 PM
>
> > > > > To: SkyWires@yahoogroups.com
>

> > > > > Subject: RE: [SkyWires] Re: superloop 40m aerial
>
> > > > >
>
> > > > >
>
> > > > >
>
> > > > >
>
> > > > >
>
> > > > > Well Bill here is the last of the story, I did not invent this or
>
> > > anything
>
> > > > > else. All the research credit goes to Callum McCormick M0MCX. Check
>
> > > out his
>
> > > > > short video on this antenna at
>
> > > > >
>
> > > > > http://www.youtube.com/watch?v=SOvhetU1_ps [1]
>
> > > > >
>
> > > > >
>
> > > > >
>
> > > > > or do a search on and see his other videos on it -- Mega Loop Antenna
>
> > > - I do
>
> > > > > love this antenna.
>
> > > > >
>
> > > > >
>
> > > > >
>
> > > > > Rich , Kd0zz
>
> > > > >
>
> > > > >

>
> > > > >
>
> > > > > From: SkyWires@yahoogroups.com [mailto:SkyWires@yahoogroups.com] On
>
> > > Behalf
>
> > > > > Of Bill Allen
>
> > > > > Sent: Friday, April 26, 2013 8:29 AM
>
> > > > > To: SkyWires@yahoogroups.com
>
> > > > > Subject: RE: [SkyWires] Re: superloop 40m aerial
>
> > > > >
>
> > > > >
>
> > > > >
>
> > > > >
>
> > > > >
>
> > > > > Uh-oh - the rest of the story!
>
> > > > >
>
> > > > > (now old Paul Harvey stories are flashing through my head!).
>
> > > > >
>
> > > > >
>
> > > > >
>
> > > > > Hmmm - sounds like the shape has a lot to do with the performance.
>
> > > Not
>
> > > > > surprising. Actually this loop is the first time I have heard of
>
> > > resonance
>
> > > > > on multiples like that (at least that good!). After this information,
>
> > > it
>

> > > > > would be interesting to model - see if it follows life, so to speak.
>
> > > I
>
> > > > > expected resonance where cut, and maybe tuner-friendly harmonics. Al,
>
> > > N4ALO
>
> > > > > talks about his loop - I think he used a 4/3 or 5/4 loop at 80M. Cut
>
> > > for
>
> > > > > ~2.5 MHz or something like that. I'll have to review. But still using
>
> > > a
>
> > > > > tuner, as I recall. (He is on 40M a lot, and I generally have 40M
>
> > > going in
>
> > > > > the car.
>
> > > > >
>
> > > > >
>
> > > > >
>
> > > > > Well, again the good: I have a feedpoint location in back of the
>
> > > house and
>
> > > > > can get a pretty good triangle out the back. Favoring North is OK -
>
> > > if it is
>
> > > > > low enough it'll go over the pole and I love talking to Eastern
>
> > > Europe, and
>
> > > > > if not, it will probably talk to Tennessee where I have other
>
> > > friends.
>
> > > > >
>
> > > > >
>
> > > > >

>
> > > > > Other antennas are a longwire that needs to be replaced (with a
>
> > > loop?) and a
>
> > > > > Cushcraft that I inherited and am in the middle of cleaning up the
>
> > > > > connections on the matching network.I may stick it out back in the
>
> > > back, and
>
> > > > > feed it with ladder line and a couple of baluns, or something.
>
> > > Depends on
>
> > > > > resonance, if it even works, etc. Not going to bury a lot of radials,
>
> > > but
>
> > > > > they say to put it 8' above the ground. It came off the top of an 80'
>
> > > tower.
>
> > > > > Sorry, I don't get a tower :-(even though i have 3 sections sitting
>
> > > on the
>
> > > > > ground.
>
> > > > >
>
> > > > >
>
> > > > >
>
> > > > > -Bill
>
> > > > >
>
> > > > >
>
> > > > >
>
> > > > >
>
> > > > >
>
> > > > >
>

> > > > >
>
> > > > >
>
> > > > >
>
> > > > > -----Original Message-----
>
> > > > > From: SkyWires@yahoogroups.com [mailto:SkyWires@yahoogroups.com]On
>
> > > Behalf Of
>
> > > > > Richard Schmuke
>
> > > > > Sent: Friday, April 26, 2013 9:15 AM
>
> > > > > To: SkyWires@yahoogroups.com
>
> > > > > Subject: RE: [SkyWires] Re: superloop 40m aerial
>
> > > > >
>
> > > > >
>
> > > > >
>
> > > > > OK Bill now the rest of the story. I told you the good here is the
>
> > > bad. A
>
> > > > > couple of years ago we were going to have a bad snow/ice storm so
>
> > > being a
>
> > > > > good keeper of antennas I went out and dropped mine to the ground.
>
> > > The ice
>
> > > > > broke a lot of tree limbs a few days later I pulled the wires out of
>
> > > 18" of
>
> > > > > snow and ice back up, I no longer had a good triangle due to down
>
> > > supports
>
> > > > > but what the heck. I no longer had good SWR, went back out and reset
>
> > > to a

>
> > > > > eyeball triangle, back to good SWR. My 80M size delta worked great so
>
> > > why
>
> > > > > not double it. I made sort of a out of shape rectangle, I could not
>
> > > get the
>
> > > > > bands to come it with my supports without going into the scrub oak
>
> > > trees. I
>
> > > > > went back to my 80M delta shape , adjusted to a multiple of the 20M
>
> > > band and
>
> > > > > still there.
>
> > > > >
>
> > > > > Rich , Kd0zz
>
> > > > >
>
> > > > > From: SkyWires@yahoogroups.com [mailto:SkyWires@yahoogroups.com] On
>
> > > Behalf
>
> > > > > Of Bill Allen
>
> > > > > Sent: Friday, April 26, 2013 3:37 AM
>
> > > > > To: SkyWires@yahoogroups.com
>
> > > > > Subject: RE: [SkyWires] Re: superloop 40m aerial
>
> > > > >
>
> > > > >
>
> > > > >
>
> > > > > Thank You Richard!
>
> > > > >
>
> > > > > Yes - it did. I have been looking at that chart. I do not think I
>

> > > have room
>
> > > > > for the 566' loop - even if I squiggle it around... Too bad because
>
> > > they are
>
> > > > > all even multipliers. I see how the chart works. Sure would be nice
>
> > > if they
>
> > > > > all fell into evens, at least 40, 20 and 15M.
>
> > > > >
>
> > > > > That it is resonant at the even multiples is interesting. From your
>
> > > SWR
>
> > > > > table the readings aren't too bad on the odd multiples. I will look
>
> > > at our
>
> > > > > mounting options. I have a LOT of wire - probably about 16 AWG with
>
> > > > > insulation. Tinned wire, makes great antennas. Since it is insulated
>
> > > I
>
> > > > > wonder what effect would be from running it through the Leyand Cyprus
>
> > > > > branches? That would be a great way to string it up on 1 side...
>
> > > Wishing I
>
> > > > > had planted some of those on the other side of the yard, now!
>
> > > > >
>
> > > > > I want a good NVIS antanna for 80 and maybe 60 and 40M. Also want one
>
> > > for
>
> > > > > lower angle for DX. Cannot use the front yard, unfortunately.
>
> > > > >
>
> > > > > Your projects look very nicely done.
>
> > > > >

>
> > > > > Thanks,
>
> > > > >
>
> > > > > Bill
>
> > > > >
>
> > > > > -----Original Message-----
>
> > > > > From: SkyWires@yahoogroups.com [mailto:SkyWires@yahoogroups.com]On
>
> > > Behalf Of
>
> > > > > Richard Schmuke
>
> > > > > Sent: Thursday, April 25, 2013 10:14 PM
>
> > > > > To: SkyWires@yahoogroups.com
>
> > > > > Subject: RE: [SkyWires] Re: superloop 40m aerial
>
> > > > > >
>
> > > > > >
>
> > > > > >
>
> > > > > Bill when you sent a copy my email back it did not have the size
>
> > > chart,
>
> > > > > because I can't see my email thru yahoo I have to ask did the chart
>
> > > showing
>
> > > > > the 2x,3x.4x and so forth come thru????
>
> > > > > >
>
> > > > > For more antennas I have a 160 doublet with a 80M fan element that is
>
> > > a
>
> > > > > killer on 10M to the east and west, the loop is better north and
>
> > > south. I
>

> > > > > also have a 40M thru 6M all band vertical in work.
>
> > > > >
>
> > > > > Rich , Kd0zz
>
> > > > >
>
> > > > > From: SkyWires@yahoogroups.com [mailto:SkyWires@yahoogroups.com] On
>
> > > Behalf
>
> > > > > Of Bill Allen
>
> > > > > Sent: Thursday, April 25, 2013 8:13 PM
>
> > > > > To: SkyWires@yahoogroups.com
>
> > > > > Subject: RE: [SkyWires] Re: superloop 40m aerial
>
> > > > >
>
> > > > >
>
> > > > >
>
> > > > > Richard,
>
> > > > >
>
> > > > > Wow - that sounds great!
>
> > > > >
>
> > > > > I probably just have room to put up a shape like this and this size.
>
> > > While I
>
> > > > > will use a tuner when necessary, I want to get away from it for "all"
>
> > > the
>
> > > > > time. My youngest is 12, with his General. We need more antennas!
>
> > > > >
>
> > > > > Thanks,
>
> > > > >

>
> > > > > Bill
>
> > > > >
>
> > > > > AJ4TX
>
> > > > >
>
> > > > > -----Original Message-----
>
> > > > > From: SkyWires@yahoogroups.com [mailto:SkyWires@yahoogroups.com]On
>
> > > Behalf Of
>
> > > > > Richard Schmuke
>
> > > > > Sent: Thursday, April 25, 2013 8:34 PM
>
> > > > > To: SkyWires@yahoogroups.com
>
> > > > > Subject: RE: [SkyWires] Re: superloop 40m aerial
>
> > > > >
>
> > > > >
>
> > > > >
>
> > > > > When I build something I build per SWAG on most things. This is my
>
> > > main
>
> > > > > antenna. I put up a 80M size delta loop, installed split bolt and
>
> > > adjusted.
>
> > > > >
>
> > > > > Feed point about 35 to 40ft the other two about 25 to 30ft.
>
> > > > >
>
> > > > > Feed point on the south because that is where the support is.
>
> > > > >
>
> > > > > I cut it approximately, I put stakes in the ground, layout the wire
>

> > > and
>
> > > > > hoisted it up
>
> > > > >
>
> > > > > Hooked up the analyzer and tweaked it for the middle of the 20M phone
>
> > > band,
>
> > > > > The theory for size is as follows and you can see my SWR readings are
>
> > > at my
>
> > > > > bucket.
>
> > > > >
>
> > > > >
>
> > > http://s1102.photobucket.com/user/KD0ZZ/media/80MLoop_zpsa6e4cfe7.jpeg.html
>
> > > [2]
>
> > > > >
>
> > > > > All my main bands are good but 17M comes in a little low on phone but
>
> > > with
>
> > > > > a any type of tuner you have a all band antenna, I even work 6M on it
>
> > > > >
>
> > > > >
>
> > > > > Loop Dimensions
>
> > > > >
>
> > > > >
>
> > > > >
>
> > > > >
>
> > > > >
>
> > > > > 14.2 Loop

>
> > > > >
>
> > > > > X
>
> > > > >
>
> > > > > 10m
>
> > > > >
>
> > > > > 12M
>
> > > > >
>
> > > > > 15M
>
> > > > >
>
> > > > > 17M
>
> > > > >
>
> > > > > 20M
>
> > > > >
>
> > > > > 40M 80M
>
> > > > >
>
> > > > >
>
> > > > >
>
> > > > > 1005/F MHz
>
> > > > >
>
> > > > > 70.770
>
> > > > >
>
> > > > > 2
>
> > > > >
>
> > > > > 141.540
>

> > > > >
>
> > > > > 4
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> > > > >
>
> > > > > 3.5
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> > > > >
>
> > > > > 3
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> > > > >
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> > > > > 2.5
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> > > > >
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> > > > > 2
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> > > > >
>
> > > > > 1
>
> > > > >
>
> > > > > 0.5
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> > > > >
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> > > > >
>
> > > > >
>
> > > > > 70.770
>
> > > > >
>
> > > > > 3
>
> > > > >
>
> > > > > 212.310
>
> > > > >
>
> > > > > 6
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> > > > >

>
> > > > > 5.3
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> > > > >
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> > > > > 4.5
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> > > > >
>
> > > > > 3.8
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> > > > >
>
> > > > > 3
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> > > > >
>
> > > > > 1.5
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> > > > >
>
> > > > > 0.8
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> > > > >
>
> > > > >
>
> > > > >
>
> > > > > 70.770
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> > > > >
>
> > > > > 4
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> > > > >
>
> > > > > 283.080
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> > > > >
>
> > > > > 8X
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> > > > >
>
> > > > > 7X
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> > > > >
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> > > > > 6X
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> > > > >
>
> > > > > 5X
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> > > > >
>
> > > > > 4X
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> > > > >
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> > > > > 2X
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> > > > >
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> > > > > 1X
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> > > > > 70.770
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> > > > > 5
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> > > > >
>
> > > > > 353.850
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> > > > >
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> > > > > 10
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> > > > >
>
> > > > > 8.8
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> > > > >
>
> > > > > 7.5
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> > > > >
>
> > > > > 6.4

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> > > > >
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> > > > > 5
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> > > > > 2.5
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> > > > > 1.3
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> > > > >
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> > > > >
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> > > > > 70.770
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> > > > >
>
> > > > > 6
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> > > > >
>
> > > > > 424.620
>
> > > > >
>
> > > > > 12
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> > > > >
>
> > > > > 10.6
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>
> > > > > 9
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> > > > >
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> > > > > 7.6
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> > > > >
>
> > > > > 6
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> > > > > 3
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> > > > > 1.6
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> > > > >
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> > > > > 70.770
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> > > > >
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> > > > > 7
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> > > > >
>
> > > > > 495.390
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> > > > >
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> > > > > 14
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> > > > >
>
> > > > > 12.3
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> > > > >
>
> > > > > 11
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> > > > >
>
> > > > > 8.9
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> > > > >
>
> > > > > 7
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> > > > >
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> > > > > 3.5
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> > > > >

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> > > > > 1.8
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> > > > >
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> > > > >
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> > > > >
>
> > > > > 70.770
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> > > > >
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> > > > > 8
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> > > > >
>
> > > > > 566.160
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> > > > >
>
> > > > > 16X
>
> > > > >
>
> > > > > 14X
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> > > > >
>
> > > > > 12X
>
> > > > >
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> > > > > 10X
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> > > > >
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> > > > > 8X
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> > > > >
>
> > > > > 4X
>
> > > > >
>
> > > > > 2X
>
> > > > >
>

> > > > >
>
> > > > >
>
> > > > > 1X loop is a 100 Ohm antenna , a 2X loop and larger close to 200 Ohm
>
> > > > >
>
> > > > >
>
> > > > >
>
> > > > >
>
> > > > > 2X in length loop, or greater can be matched with 50 Ohm coax and a
>
> > > 4:1
>
> > > > > Balun if
>
> > > > >
>
> > > > >
>
> > > > >
>
> > > > >
>
> > > > > the overall length of the loop is a multiple of the length at that
>
> > > > > frequency
>
> > > > >
>
> > > > >
>
> > > > >
>
> > > > >
>
> > > > > Even Multipliers will make it a resonate antenna, A 4X and 8X loop
>
> > > will
>
> > > > > match
>
> > > > >
>
> > > > >

>
> > > > >
>
> > > > >
>
> > > > > the most bands when used with a 4:1 Balun
>
> > > > >
>
> > > > >
>
> > > > >
>
> > > > >
>
> > > > > With the correct resonate length of the antenna no tuner adjustment
>
> > > is
>
> > > > > needed
>
> > > > >
>
> > > > >
>
> > > > >
>
> > > > >
>
> > > > > on the 7 bands shown
>
> > > > >
>
> > > > > Rich , Kd0zz
>
> > > > >
>
> > > > >
>
> > > > >
>
> > > > >
>
> > > > >
>
> > > > >
>
> > > > > From: SkyWires@yahoogroups.com [mailto:SkyWires@yahoogroups.com] On
>

> > > Behalf
>
> > > > > Of allenbh57
>
> > > > > Sent: Thursday, April 25, 2013 6:28 PM
>
> > > > > To: SkyWires@yahoogroups.com
>
> > > > > Subject: [SkyWires] Re: superloop 40m aerial
>
> > > > >
>
> > > > >
>
> > > > >
>
> > > > > Hello Rich,
>
> > > > > The length on the drawing comes out to 3.55 MHz if you use the
>
> > > formula. I am
>
> > > > > interested in a couple of things about this antenna:
>
> > > > >
>
> > > > > 1. Where is it directional? I'm thinking out of the V at the
>
> > > feedpoint. Mine
>
> > > > > would be looking out to the North.
>
> > > > >
>
> > > > > 2. How high did you have it? I could put the feedpoint at about 20 to
>
> > > 25
>
> > > > > feet, higher on the "back".
>
> > > > >
>
> > > > > 3. Is it a close match on any bands?
>
> > > > >
>
> > > > > (Have not plugged it into EXNEC but if I get a chance I want to).
>
> > > Will share

>
> > > > > the results.
>
> > > > >
>
> > > > > Tnx and 73,
>
> > > > > Bill AJ4TX
>
> > > > >
>
> > > > > --- In SkyWires@yahoogroups.com ,
>
> > > > > "Richard Schmuke" wrote:
>
> > > > > >
>
> > > > > > I think they added the wording "super" for the same reason you said
>
> > > Glen,
>
> > > > > > mine also worked super. I put one up with a coax transformer
>
> > > section and
>
> > > > > it
>
> > > > > > worked fine. I wanted a little more and other bands so now use a
>
> > > 80M delta
>
> > > > > > loop with a homemade 4:1 balun at the feed point and work all bands
>
> > > 40
>
> > > > > thru
>
> > > > > > 6 with it. It is my main antenna.
>
> > > > > >
>
> > > > > > Drawing at
>
> > > http://s1102.photobucket.com/user/KD0ZZ/media/80MDelta.jpg.html [3]
>
> > > > > >
>
> > > > > >
>

> > > > > >
>
> > > > > > Rich , Kd0zz
>
> > > > > > >
>
> > > > > > >
>
> > > > > > >
>
> > > > > > From: SkyWires@yahoogroups.com
>
> > > > > [mailto:SkyWires@yahoogroups.com] On
>
> > > > > Behalf
>
> > > > > > Of goroberts
>
> > > > > > Sent: Thursday, April 25, 2013 7:24 AM
>
> > > > > > To: SkyWires@yahoogroups.com
>
> > > > > > Subject: [SkyWires] Re: superloop 40m aerial
>
> > > > > > >
>
> > > > > > >
>
> > > > > > >
>
> > > > > > >
>
> > > > > > >
>
> > > > > > I'm not sure what a "superloop" is unless the inference is that
>
> > > loops are
>
> > > > > > "super" in general, but I've used a full wave loop for years and am
>
> > > very
>
> > > > > > pleased with it. Mine is an 80m loop but the principles are the
>
> > > same. If
>
> > > > > you
>
> > > > > > intend to use it as a mono band antenna the you can feed it with

>
> > > coax
>
> > > > > > directly, but if you plan on using it as a multi band antenna make
>
> > > it a
>
> > > > > > little shorter, use a good quality 4:1 balun and your internal
>
> > > tuner will
>
> > > > > be
>
> > > > > > able to match it as expected. The reason it needs to be a bit
>
> > > shorter on
>
> > > > > the
>
> > > > > > lowest band is the impeadance needs to NOT be right at 50ohms since
>
> > > you're
>
> > > > > > using it on other bands where the impeadance will surely be
>
> > > different.
>
> > > > > This
>
> > > > > > way the balun and the tuner do the heavy lifting. Open ladder line
>
> > > can be
>
> > > > > > used instead of the above but refer to the ARRL Antenna books or
>
> > > other
>
> > > > > > sources. There's a lot of incomplete and just wrong information on
>
> > > ths web
>
> > > > > > so stick with good sources. I use a DX Egineering "tuner" balun
>
> > > after many
>
> > > > > > orher failed methods. They have an EXCELLENT faq page that hits
>
> > > this nail
>

> > > > > on
>
> > > > > > the head.
>
> > > > > >
>
> > > > > > Good luck,
>
> > > > > > Glen -KE7FD
>
> > > > > >
>
> > > > > > --- In SkyWires@yahoogroups.com
>
> > > > > ,
>
> > > > > > "stevenfleming16" wrote:
>
> > > > > > >
>
> > > > > > > Hello
>
> > > > > > > I wonder if anyone has built this aerial and has the correct
>
> > > dimensions
>
> > > > > > for this project...any comments welcomed...
>
> > > > > > > Many thanks
>
> > > > > > > Steve
>
> > > > > > >
>
> > > > > >
>
> > > > > >
>
> > > > >
>
> > > >
>
> > > Links:
>
> > > ------

>
> > > [1] http://www.youtube.com/watch?v=SOvhetU1_ps
>
> > > [2]
>
> > > http://s1102.photobucket.com/user/KD0ZZ/media/80MLoop_zpsa6e4cfe7.jpeg.html
>
> > > [3] http://s1102.photobucket.com/user/KD0ZZ/media/80MDelta.jpg.html
>
> > > [4]
>
> > > http://groups.yahoo.com/group/SkyWires/post;_ylc=X3oDMTJxb2ZpMnZ0BF9TAzk3Mz
>
> > > U5NzE0BGdycElkAzEwOTQ2MTE5BGdycHNwSWQDMTcwNTA2MzEwOARtc2dJZAM0MjM4BHNlYwNmd
>
> > > HIEc2xrA3JwbHkEc3RpbWUDMTM2NzE5NTAxNw--?act=replycolor: #2D50FD;
>
> > > [5]
>
> > > http://groups.yahoo.com/group/SkyWires/post;_ylc=X3oDMTJmMWVkM2JlBF9TAzk3Mz
>
> > > U5NzE0BGdycElkAzEwOTQ2MTE5BGdycHNwSWQDMTcwNTA2MzEwOARzZWMDZnRyBHNsawNudHBjB
>
> > > HN0aW1lAzEzNjcxOTUwMTc-[6]
>
> > > http://groups.yahoo.com/group/SkyWires/message/4213;_ylc=X3oDMTM1bThyMGc2BF
>
> > > 9TAzk3MzU5NzE0BGdycElkAzEwOTQ2MTE5BGdycHNwSWQDMTcwNTA2MzEwOARtc2dJZAM0MjM4B
>
> > > HNlYwNmdHIEc2xrA3Z0cGMEc3RpbWUDMTM2NzE5NTAxNwR0cGNJZAM0MjEz[7]
>
> > > http://groups.yahoo.com/group/SkyWires/members;_ylc=X3oDMTJnMDRyNzU1BF9TAzk
>
> > > 3MzU5NzE0BGdycElkAzEwOTQ2MTE5BGdycHNwSWQDMTcwNTA2MzEwOARzZWMDdnRsBHNsawN2bW
>
> > > JycwRzdGltZQMxMzY3MTk1MDE3?o=6[8]
>
> > > http://groups.yahoo.com/group/SkyWires;_ylc=X3oDMTJmc2x0bGFxBF9TAzk3MzU5NzE
>
> > > 0BGdycElkAzEwOTQ2MTE5BGdycHNwSWQDMTcwNTA2MzEwOARzZWMDdnRsBHNsawN2Z2hwBHN0aW
>
> > > 1lAzEzNjcxOTUwMTc-[9]
>
> > > http://groups.yahoo.com/;_ylc=X3oDMTJlcGlkNmlwBF9TAzk3MzU5NzE0BGdycElkAzEwO
>
> > > TQ2MTE5BGdycHNwSWQDMTcwNTA2MzEwOARzZWMDZnRyBHNsawNnZnAEc3RpbWUDMTM2NzE5NTAx
>
> > > Nw--[10] http://docs.yahoo.com/info/terms/
>

> > >
>
> > >
>
> >
>

4243. Re: [SkyWires] Re: Megaloop

Yahoo group: SkyWires
Date: 2013-05-02 09:20:19 UTC
From: raymond mitchell
Topic: 4213 Message: 4243

On 80m NVIS from Oregon to East Texas 100W or less cotact may be 5% to 15% of the time. When the noise floor is S9 (mine is S7 to S9 and I do not get to choose what it will be at any given time) with 1000W+ my brother can tell me if dad has fuel for the generator, both in East Texas, and when they expect power and phone service to resume. Some times it is over 6 weeks (after Ike) before their phone & power returns. If they need emergency services I can make the call into a nearby city (Houston) where phone service is not off as long.

My QRP rig in 1968 was 75W to 125W. I used the Horizontal tube, transformer, HV deck (rearanged), a hand wrapped loading coil, and the UHF tuner with some fins missing to make a sweep tube final for my QRP rig. There is an art to pulling weak signals from the static and as a net control I get to practice that art. But if given a choice I will take and give a 5/9 communication every time. And a good antenna is the best place to start. And a cloud burner can turn sporadic contacts into regular dependable communications with friends and family.

--- On Tue, 4/30/13, B <bctillson@yahoo.com> wrote:

From: B <bctillson@...>
Subject: [SkyWires] Re: Megaloop
To: SkyWires@yahoogroups.com
Date: Tuesday, April 30, 2013, 4:26 PM

There really is not such a thing as a "full size" antenna. The efficiency of an antenna and paying attention to wave propagation and atmospheric conditions is. And I am also not referring to ham radio operators that are gearing themselves for emergency communications.

Cb Radio has proven itself to be reliable local emergency communications. I am referring to the purebred"Ham" that is interested in the hobby aspects of Amateur Radio. Myself and myself were never into "pegging" someone meter. We were interested in making contact using homebrew and very low power transmitters. Dad used a "Goonie Bird" for years on 2 Meters and we had some impressive contacts using a simple beam with 7 watts input. And we were also part of the Local ARRL Air Force Civil Defense network here in lower NY State. If anyone reads the ARRL Ham Radio handbook, it suggests to start out small.

--- In SkyWires@yahoogroups.com, raymond mitchell <ramitchell777@...> wrote:

>

> A full size ant helps ya keep in touch with friends and family. Sometimes 10W to 40W will do fine, many times it will not. Other times when folks say the band is dead ya need 1000W or better for reliable communications. During Ike and Catrina the radio provided the only reliable communications. Many times 100W was fine, most of the time 500W or so was fine, but it was rare when 1000W+ could not get through. The antenna is the most important part of our system. Still a good cloudburner, while hooked to that antenna, has proved useful.

> Abe K7ABE

>

> --- On Mon, 4/29/13, B <bctillson@...> wrote:

>

> From: B <bctillson@...>

> Subject: [SkyWires] Re: Megaloop

> To: SkyWires@yahoogroups.com

> Date: Monday, April 29, 2013, 6:24 PM

>

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> Anyone can go out and buy $4000 worth of equipment ,and get all over the universe but to build a 3 or 4 watt transmitter yourself and making that first contact is the real thrill of Ham Radio. I know guys that have built their way up to a 100 watts over years of hamming. But it was always the thrill of doing it oneself that made it wotrh while. I have been a guitar player for over 40 years, The absolutely best amplifier is the 40 watt tube type that I built myself--35 years ago and still using it.!!!!

>

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>

> --- In SkyWires@yahoogroups.com, Dave Leisman <w8qwdave@> wrote:

>

> >

>

> > Ya know you are absolutely right. With all the amplifiers and sophisticated micro processor circuitry I wonder if we have lost the "ham" in amateur radio. How many can put together or even draw a Colpits oscillator anymore? Not to indict because I know everything has to move forward, but at what expense?

>

> >

>

> > I'll take a qrp rig and wire antenna who works 100 countries over the spohisticated transceover, a "megawatt" amplifier with stacked arrays who works 150 countries in a year, any day.

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> > On Sun 04/28/13 8:23 PM , "B" bctillson@ sent:

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> > > Ã‚Â

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> > >

>

> > > Ya know, I read these posts about all the extravagant antenna arrays that

>

> > > everyone is building and think back to when I was small and my Dad was a

>

> > > Ham Radio operator who just loved QRP. I remember I helped him string an

>

> > > 80' long wire from the corner of the roof to a telephone pole in the

>

> > > neighbors yard. He fed it to the "shack" with some RG58 with the shield to

>

> > > a ground rod next to the house. He would be in the "shack" all night long

>

> > > on Friday and Saturday nights working 40 and 80 meters , CW ALL OVER THE

>

> > > WORLD. The only tuning he did was the tank circuit in the homebrew

>

> > > transmitter he used. A homemade antenna switch between the transmitter and

>

> > > the old Hallicrafters receiver he used. No more than 3 or 4 watts input.

>

> > >

>

> > > Now that was Ham Radio at it's best. I still have some of his cards that

>

> > > he received from his "accomplishments"!!! I was 6 at the time so that made

>

> > > it 54 years ago.

>

> > >

>

> > > --- In SkyWires@yahoogroups.com, "allenbh57" wrote:

>

> > > > >

>

> > > > > Brian,

>

> > > > > I see the issue - and actually kind of like the multi-lobed pattern.

>

> > > > The main "gain" - pun intended - may be because of the lower angle of

>

> > > radiation. It is shooting out in a saucer-shape with different little

>

> > > nulls, and very attenuated in the azimuth, except for 80 or 160M.

>

> > > > >

>

> > > > > So it does not have the great F/B ratios but makes up for it in

>

> > > simplicity and angle of radiation.

>

> > > > >

>

> > > > > That's my $0.02 until I build it! Or model it in EZNEC.

>

> > > > Let's build them - too simple NOT to!

>

> > > > 73,

>

> > > > Bill AJ4TX

>

> > > >

>

> > > > --- In SkyWires@yahoogroups.com, "Richard Schmuke" wrote:

>

> > > > > >

>

> > > > > Brian, I do understand you question, I do not understand the computer

>

> > > > > program well enough to give you an exact answer. I will say it is a

>

> > > good

>

> > > > > performing wire antenna. It does not out perform my 3 element 15M

>

> > > beam but

>

> > > > > is much better than any dipoles I have tried at the same time. I have

>

> > > had

>

> > > > > many types of wire antennas up, and when I extend a wire to get

>

> > > greater gain

>

> > > > > it will greater nulls. My ladder line fed 160M dipole is great into

>

> > > the far

>

> > > > > east and Europe on 10M off the ends, dead to Canada and South America

>

> > > but

>

> > > > > the loop is almost as good on ten to Europe and JA land but also

>

> > > great north

>

> > > > > and south also. I don't analyze a antenna with a computer but on the

>

> > > air and

>

> > > > > it works for me.

>

> > > > >

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> > > > >

>

> > > > > Rich , Kd0zz

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> > > > > Looking at charts too long and you will get analysis paralysis

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> > > > > Subject: RE: [SkyWires] Re: Megaloop

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> > > > > Hello Rich and Bill,

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>

> > > > > Am I missing something here? I went to the link below, and watched as

>

> > > Callum

>

> > > > > McCormick drew and analyzed his "megaloop" design. He was being quite

>

> > > > > enthusiastic about the gain shown by various lobes, but what about

>

> > > all the

>

> > > > > radiated energy going in other directions? Doesn't that have to be

>

> > > > > subtracted from the lobe that you happen to be using? I don't doubt

>

> > > that it

>

> > > > > is an effective antenna, but it seems to me that the gain figures he

>

> > > is

>

> > > > > quoting would need to be adjusted way down to get a "net gain" figure

>

> > > that

>

> > > > > is meaningful.

>

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> > > > > Cheers,

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> > > > >

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> > > > >

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> > > > >

>

> > > > > Brian Burns

>

> > > > >

>

> > > > >

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> > > > >

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> > > > >

>

> > > > > From: SkyWires@yahoogroups.com [mailto:SkyWires@yahoogroups.com] On

>

> > > Behalf

>

> > > > > Of Richard Schmuke

>

> > > > > Sent: Friday, April 26, 2013 4:28 PM

>

> > > > > To: SkyWires@yahoogroups.com

>

> > > > > Subject: RE: [SkyWires] Re: superloop 40m aerial

>

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>

> > > > > Well Bill here is the last of the story, I did not invent this or

>

> > > anything

>

> > > > > else. All the research credit goes to Callum McCormick M0MCX. Check

>

> > > out his

>

> > > > > short video on this antenna at

>

> > > > >

>

> > > > > http://www.youtube.com/watch?v=SOvhetU1_ps [1]

>

> > > > >

>

> > > > >

>

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>

> > > > > or do a search on and see his other videos on it -- Mega Loop Antenna

>

> > > - I do

>

> > > > > love this antenna.

>

> > > > >

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> > > > >

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> > > > >

>

> > > > > Rich , Kd0zz

>

> > > > >

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> > > > >

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>

> > > > > From: SkyWires@yahoogroups.com [mailto:SkyWires@yahoogroups.com] On

>

> > > Behalf

>

> > > > > Of Bill Allen

>

> > > > > Sent: Friday, April 26, 2013 8:29 AM

>

> > > > > To: SkyWires@yahoogroups.com

>

> > > > > Subject: RE: [SkyWires] Re: superloop 40m aerial

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> > > > > Uh-oh - the rest of the story!

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> > > > > >

>

> > > > > (now old Paul Harvey stories are flashing through my head!).

>

> > > > >

>

> > > > >

>

> > > > >

>

> > > > > Hmmm - sounds like the shape has a lot to do with the performance.

>

> > > Not

>

> > > > > surprising. Actually this loop is the first time I have heard of

>

> > > resonance

>

> > > > > on multiples like that (at least that good!). After this information,

>

> > > it

>

> > > > > would be interesting to model - see if it follows life, so to speak.

>

> > > I

>

> > > > > expected resonance where cut, and maybe tuner-friendly harmonics. Al,

>

> > > N4ALO

>

> > > > > talks about his loop - I think he used a 4/3 or 5/4 loop at 80M. Cut

>

> > > for

>

> > > > > ~2.5 MHz or something like that. I'll have to review. But still using

>

> > > a

>

> > > > > tuner, as I recall. (He is on 40M a lot, and I generally have 40M

>

> > > going in

>

> > > > > the car.

>

> > > > >

>

> > > > >

>

> > > > >

>

> > > > > Well, again the good: I have a feedpoint location in back of the

>

> > > house and

>

> > > > > can get a pretty good triangle out the back. Favoring North is OK -

>

> > > if it is

>

> > > > > low enough it'll go over the pole and I love talking to Eastern

>

> > > Europe, and

>

> > > > > if not, it will probably talk to Tennessee where I have other

>

> > > friends.

>

> > > > >

>

> > > > >

>

> > > > >

>

> > > > > Other antennas are a longwire that needs to be replaced (with a

>

> > > loop?) and a

>

> > > > > Cushcraft that I inherited and am in the middle of cleaning up the

>

> > > > > connections on the matching network.I may stick it out back in the

>

> > > back, and

>

> > > > > feed it with ladder line and a couple of baluns, or something.

>

> > > Depends on

>

> > > > > resonance, if it even works, etc. Not going to bury a lot of radials,

>

> > > but

>

> > > > > they say to put it 8' above the ground. It came off the top of an 80'

>

> > > tower.

>

> > > > > Sorry, I don't get a tower :-(even though i have 3 sections sitting

>

> > > on the

>

> > > > > ground.

>

> > > > >

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> > > > >

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> > > > >

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> > > > > -Bill

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> > > > >

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> > > > > -----Original Message-----

>

> > > > > From: SkyWires@yahoogroups.com [mailto:SkyWires@yahoogroups.com]On

>

> > > Behalf Of

>

> > > > > Richard Schmuke

>

> > > > > Sent: Friday, April 26, 2013 9:15 AM

>

> > > > > To: SkyWires@yahoogroups.com

>

> > > > > Subject: RE: [SkyWires] Re: superloop 40m aerial

>

> > > > >

>

> > > > >

>

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>

> > > > > OK Bill now the rest of the story. I told you the good here is the

>

> > > bad. A

>

> > > > > couple of years ago we were going to have a bad snow/ice storm so

>

> > > being a

>

> > > > > good keeper of antennas I went out and dropped mine to the ground.

>

> > > The ice

>

> > > > > broke a lot of tree limbs a few days later I pulled the wires out of

>

> > > 18" of

>

> > > > > snow and ice back up, I no longer had a good triangle due to down

>

> > > supports

>

> > > > > but what the heck. I no longer had good SWR, went back out and reset

>

> > > to a

>

> > > > > eyeball triangle, back to good SWR. My 80M size delta worked great so

>

> > > why

>

> > > > > not double it. I made sort of a out of shape rectangle, I could not

>

> > > get the

>

> > > > > bands to come it with my supports without going into the scrub oak

>

> > > trees. I

>

> > > > > went back to my 80M delta shape , adjusted to a multiple of the 20M

>

> > > band and

>

> > > > > still there.

>

> > > > >

>

> > > > > Rich , Kd0zz

>

> > > > >

>

> > > > > From: SkyWires@yahoogroups.com [mailto:SkyWires@yahoogroups.com] On

>

> > > Behalf

>

> > > > > Of Bill Allen

>

> > > > > Sent: Friday, April 26, 2013 3:37 AM

>

> > > > > To: SkyWires@yahoogroups.com

>

> > > > > Subject: RE: [SkyWires] Re: superloop 40m aerial

>

> > > > >

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> > > > >

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>

> > > > > Thank You Richard!

>

> > > > >

>

> > > > > Yes - it did. I have been looking at that chart. I do not think I

>

> > > have room

>

> > > > > for the 566' loop - even if I squiggle it around... Too bad because

>

> > > they are

>

> > > > > all even multipliers. I see how the chart works. Sure would be nice

>

> > > if they

>

> > > > > all fell into evens, at least 40, 20 and 15M.

>

> > > > >

>

> > > > > That it is resonant at the even multiples is interesting. From your

>

> > > SWR

>

> > > > > table the readings aren't too bad on the odd multiples. I will look

>

> > > at our

>

> > > > > mounting options. I have a LOT of wire - probably about 16 AWG with

>

> > > > > insulation. Tinned wire, makes great antennas. Since it is insulated

>

> > > I

>

> > > > > wonder what effect would be from running it through the Leyand Cyprus

>

> > > > > branches? That would be a great way to string it up on 1 side...

>

> > > Wishing I

>

> > > > > had planted some of those on the other side of the yard, now!

>

> > > > >

>

> > > > > I want a good NVIS antanna for 80 and maybe 60 and 40M. Also want one

>

> > > for

>

> > > > > lower angle for DX. Cannot use the front yard, unfortunately.

>

> > > > >

>

> > > > > Your projects look very nicely done.

>

> > > > >

>

> > > > > Thanks,

>

> > > > >

>

> > > > > Bill

>

> > > > >

>

> > > > > -----Original Message-----

>

> > > > > From: SkyWires@yahoogroups.com [mailto:SkyWires@yahoogroups.com]On

>

> > > Behalf Of

>

> > > > > Richard Schmuke

>

> > > > > Sent: Thursday, April 25, 2013 10:14 PM

>

> > > > > To: SkyWires@yahoogroups.com

>

> > > > > Subject: RE: [SkyWires] Re: superloop 40m aerial

>

> > > > >

>

> > > > >

>

> > > > >

>

> > > > > Bill when you sent a copy my email back it did not have the size

>

> > > chart,

>

> > > > > because I can't see my email thru yahoo I have to ask did the chart

>

> > > showing

>

> > > > > the 2x,3x.4x and so forth come thru????

>

> > > > >

>

> > > > > For more antennas I have a 160 doublet with a 80M fan element that is

>

> > > a

>

> > > > > killer on 10M to the east and west, the loop is better north and

>

> > > south. I

>

> > > > > also have a 40M thru 6M all band vertical in work.

>

> > > > >

>

> > > > > Rich , Kd0zz

>

> > > > >

>

> > > > > From: SkyWires@yahoogroups.com [mailto:SkyWires@yahoogroups.com] On

>

> > > Behalf

>

> > > > > Of Bill Allen

>

> > > > > Sent: Thursday, April 25, 2013 8:13 PM

>

> > > > > To: SkyWires@yahoogroups.com

>

> > > > > Subject: RE: [SkyWires] Re: superloop 40m aerial

>

> > > > > >

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> > > > > >

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> > > > > >

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> > > > > >

>

> > > > > Richard,

>

> > > > > >

>

> > > > > >

>

> > > > > Wow - that sounds great!

>

> > > > > >

>

> > > > > I probably just have room to put up a shape like this and this size.

>

> > > While I

>

> > > > > will use a tuner when necessary, I want to get away from it for "all"

>

> > > the

>

> > > > > time. My youngest is 12, with his General. We need more antennas!

>

> > > > > >

>

> > > > > > Thanks,

>

> > > > > >

>

> > > > > > Bill

>

> > > > > >

>

> > > > > > AJ4TX

>

> > > > > >

>

> > > > > > -----Original Message-----

>

> > > > > > From: SkyWires@yahoogroups.com [mailto:SkyWires@yahoogroups.com]On

>

> > > Behalf Of

>

> > > > > Richard Schmuke

>

> > > > > Sent: Thursday, April 25, 2013 8:34 PM

>

> > > > > To: SkyWires@yahoogroups.com

>

> > > > > Subject: RE: [SkyWires] Re: superloop 40m aerial

>

> > > > >

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> > > > >

>

> > > > >

>

> > > > > When I build something I build per SWAG on most things. This is my

>

> > > main

>

> > > > > antenna. I put up a 80M size delta loop, installed split bolt and

>

> > > adjusted.

>

> > > > >

>

> > > > > Feed point about 35 to 40ft the other two about 25 to 30ft.

>

> > > > >

>

> > > > > Feed point on the south because that is where the support is.

>

> > > > >

>

> > > > > I cut it approximately, I put stakes in the ground, layout the wire

>

> > > and

>

> > > > > hoisted it up

>

> > > > >

>

> > > > > Hooked up the analyzer and tweaked it for the middle of the 20M phone

>

> > > band,

>

> > > > > The theory for size is as follows and you can see my SWR readings are

>

> > > at my

>

> > > > > bucket.

>

> > > > >

>

> > > > >

>

> > > http://s1102.photobucket.com/user/KD0ZZ/media/80MLoop_zpsa6e4cfe7.jpeg.html

>

> > > [2]

>

> > > > >

>

> > > > > All my main bands are good but 17M comes in a little low on phone but

>

> > > with

>

> > > > > a any type of tuner you have a all band antenna, I even work 6M on it

>

> > > > >

>

> > > > >

>

> > > > > Loop Dimensions

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> > > > > 14.2 Loop

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> > > > >

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> > > > > X

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> > > > > 10m

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> > > > >

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> > > > > 12M

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> > > > > 15M

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> > > > > 17M

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> > > > > 20M

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> > > > >

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> > > > > 40M 80M

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> > > > > 1005/F MHz

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> > > > >

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> > > > > 70.770

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> > > > >

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> > > > > 141.540

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> > > > > 2

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> > > > > 70.770

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> > > > >

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> > > > > 3

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> > > > >

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> > > > > 212.310

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> > > > > 6

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> > > > > 5.3

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> > > > > 4.5

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> > > > > 3.8

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> > > > > 3

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> > > > > 1.5

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> > > > > 0.8

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> > > > > 70.770

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> > > > > 70.770

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> > > > > 353.850

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> > > > > 8.8

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> > > > > 6.4

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> > > > > 5

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> > > > > 2.5

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> > > > > 1.3

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> > > > > 70.770

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> > > > > 6

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> > > > > 424.620

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> > > > > 10.6

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> > > > > 1.6

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> > > > > 70.770

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> > > > > 1.8

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> > > > > 70.770

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> > > > > 566.160

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> > > > > 16X

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> > > > > 14X

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> > > > > 12X

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> > > > > 10X

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> > > > > 8X

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> > > > > 4X

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> > > > > 2X

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> > > > > 1X loop is a 100 Ohm antenna , a 2X loop and larger close to 200 Ohm

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> > > > > 2X in length loop, or greater can be matched with 50 Ohm coax and a

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> > > 4:1

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> > > > > Balun if

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> > > > > the overall length of the loop is a multiple of the length at that

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> > > > > frequency

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> > > > > Even Multipliers will make it a resonate antenna, A 4X and 8X loop

>

> > > will

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> > > > > match

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> > > > > the most bands when used with a 4:1 Balun

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> > > > > With the correct resonate length of the antenna no tuner adjustment

>

> > > is

>

> > > > > needed

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> > > > > on the 7 bands shown

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> > > > >

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> > > > > Rich , Kd0zz

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>

> > > > > From: SkyWires@yahoogroups.com [mailto:SkyWires@yahoogroups.com] On

>

> > > Behalf

>

> > > > > Of allenbh57

>

> > > > > Sent: Thursday, April 25, 2013 6:28 PM

>

> > > > > To: SkyWires@yahoogroups.com

>

> > > > > Subject: [SkyWires] Re: superloop 40m aerial

>

> > > > >

>

> > > > >

>

> > > > >

>

> > > > > Hello Rich,

>

> > > > > The length on the drawing comes out to 3.55 MHz if you use the

>

> > > formula. I am

>

> > > > > interested in a couple of things about this antenna:

>

> > > > >

>

> > > > > 1. Where is it directional? I'm thinking out of the V at the

>

> > > feedpoint. Mine

>

> > > > > would be looking out to the North.

>

> > > > >

>

> > > > > 2. How high did you have it? I could put the feedpoint at about 20 to

>

> > > 25

>

> > > > > feet, higher on the "back".

>

> > > > >

>

> > > > > 3. Is it a close match on any bands?

>

> > > > >

>

> > > > > (Have not plugged it into EXNEC but if I get a chance I want to).

>

> > > Will share

>

> > > > > the results.

>

> > > > >

>

> > > > > Tnx and 73,

>

> > > > > Bill AJ4TX

>

> > > > >

>

> > > > > --- In SkyWires@yahoogroups.com ,

>

> > > > > "Richard Schmuke" wrote:

>

> > > > > >

>

> > > > > > I think they added the wording "super" for the same reason you said

>

> > > Glen,

>

> > > > > > mine also worked super. I put one up with a coax transformer

>

> > > section and

>

> > > > > it

>

> > > > > > worked fine. I wanted a little more and other bands so now use a

>

> > > 80M delta

>

> > > > > > loop with a homemade 4:1 balun at the feed point and work all bands

>

> > > 40

>

> > > > > thru

>

> > > > > > 6 with it. It is my main antenna.

>

> > > > > >

>

> > > > > > Drawing at

>

> > > http://s1102.photobucket.com/user/KD0ZZ/media/80MDelta.jpg.html [3]

>

> > > > > >

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> > > > > > Rich , Kd0zz

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> > > > > >

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> > > > > >

>

> > > > > > From: SkyWires@yahoogroups.com

>

> > > > > > [mailto:SkyWires@yahoogroups.com] On

>

> > > > > > Behalf

>

> > > > > > Of goroberts

>

> > > > > > Sent: Thursday, April 25, 2013 7:24 AM

>

> > > > > > To: SkyWires@yahoogroups.com

>

> > > > > > Subject: [SkyWires] Re: superloop 40m aerial

>

> > > > > >

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> > > > > > I'm not sure what a "superloop" is unless the inference is that

>

> > > loops are

>

> > > > > > "super" in general, but I've used a full wave loop for years and am

>

> > > very

>

> > > > > > pleased with it. Mine is an 80m loop but the principles are the

>

> > > same. If

>

> > > > > you

>

> > > > > > intend to use it as a mono band antenna the you can feed it with

>

> > > coax

>

> > > > > > directly, but if you plan on using it as a multi band antenna make

>

> > > it a

>

> > > > > > little shorter, use a good quality 4:1 balun and your internal

>

> > > tuner will

>

> > > > > be

>

> > > > > > able to match it as expected. The reason it needs to be a bit

>

> > > shorter on

>

> > > > > the

>

> > > > > > lowest band is the impeadance needs to NOT be right at 50ohms since

>

> > > you're

>

> > > > > > using it on other bands where the impeadance will surely be

>

> > > different.

>

> > > > > This

>

> > > > > > way the balun and the tuner do the heavy lifting. Open ladder line

>

> > > can be

>

> > > > > > used instead of the above but refer to the ARRL Antenna books or

>

> > > other

>

> > > > > > sources. There's a lot of incomplete and just wrong information on

>

> > > ths web

>

> > > > > > so stick with good sources. I use a DX Egineering "tuner" balun

>

> > > after many

>

> > > > > > orher failed methods. They have an EXCELLENT faq page that hits

>

> > > this nail

>

> > > > > on

>

> > > > > > the head.

>

> > > > > >

>

> > > > > > Good luck,

>

> > > > > > Glen -KE7FD

>

> > > > > >

>

> > > > > > --- In SkyWires@yahoogroups.com

>

> > > > > > ,

>

> > > > > > "stevenfleming16" wrote:

>

> > > > > >

>

> > > > > > Hello

>

> > > > > > I wonder if anyone has built this aerial and has the correct

>

> > > dimensions

>

> > > > > > for this project...any comments welcomed...

>

> > > > > > Many thanks

>

> > > > > > Steve

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> > > > > >

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> > > Links:

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> > > ------

>

> > > [1] http://www.youtube.com/watch?v=SOvhetU1_ps

>

> > > [2]

>

> > > http://s1102.photobucket.com/user/KD0ZZ/media/80MLoop_zpsa6e4cfe7.jpeg.html

>

> > > [3] http://s1102.photobucket.com/user/KD0ZZ/media/80MDelta.jpg.html

>

> > > [4]

>

> > > http://groups.yahoo.com/group/SkyWires/post;_ylc=X3oDMTJxb2ZpMnZ0BF9TAzk3Mz

>

> > > U5NzE0BGdycElkAzEwOTQ2MTE5BGdycHNwSWQDMTcwNTA2MzEwOARtc2dJZAM0MjM4BHNlYwNmd

>

> > > HIEc2xrA3JwbHkEc3RpbWUDMTM2NzE5NTAxNw--?act=replycolor: #2D50FD;

>

> > > [5]

>

> > > http://groups.yahoo.com/group/SkyWires/post;_ylc=X3oDMTJmMWVkM2JlBF9TAzk3Mz

>

> > > U5NzE0BGdycElkAzEwOTQ2MTE5BGdycHNwSWQDMTcwNTA2MzEwOARzZWMDZnRyBHNsawNudHBjB

>

> > > HN0aW1lAzEzNjcxOTUwMTc-[6]

>

> > > http://groups.yahoo.com/group/SkyWires/message/4213;_ylc=X3oDMTM1bThyMGc2BF

>

> > > 9TAzk3MzU5NzE0BGdycElkAzEwOTQ2MTE5BGdycHNwSWQDMTcwNTA2MzEwOARtc2dJZAM0MjM4B

>

> > > HNlYwNmdHIEc2xrA3Z0cGMEc3RpbWUDMTM2NzE5NTAxNwR0cGNJZAM0MjEz[7]

>

> > > http://groups.yahoo.com/group/SkyWires/members;_ylc=X3oDMTJnMDRyNzU1BF9TAzk

>

> > > 3MzU5NzE0BGdycElkAzEwOTQ2MTE5BGdycHNwSWQDMTcwNTA2MzEwOARzZWMDdnRsBHNsawN2bW

>

> > > JycwRzdGltZQMxMzY3MTk1MDE3?o=6[8]

>

> > > http://groups.yahoo.com/group/SkyWires;_ylc=X3oDMTJmc2x0bGFxBF9TAzk3MzU5NzE

>

> > > 0BGdycElkAzEwOTQ2MTE5BGdycHNwSWQDMTcwNTA2MzEwOARzZWMDdnRsBHNsawN2Z2hwBHN0aW

>

> > > 1lAzEzNjcxOTUwMTc-[9]

>

> > > http://groups.yahoo.com/;_ylc=X3oDMTJlcGlkNmlwBF9TAzk3MzU5NzE0BGdycElkAzEwO

>

> > > TQ2MTE5BGdycHNwSWQDMTcwNTA2MzEwOARzZWMDZnRyBHNsawNnZnAEc3RpbWUDMTM2NzE5NTAx

>

> > > Nw--[10] http://docs.yahoo.com/info/terms/

>

> > >

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> > >

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> >

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4246. 160M-80M-40M Sky Wire Horizontal Loop Antenna

Yahoo group: SkyWires
Date: 2013-05-11 19:40:54 UTC
From: rocketman10002003
Topic: 4246 Message: 4246

1 Dose the sides of the antenna have tobe at a specific lenght when used with a Palstar AT4K antenna tuner. I plan on using a ladder line to feed the antenna?
2 I have the space to make the sides 170 ft. for a total length of 680 ft. Is this tunable?
3 I plan on hanging the wire 55ft. in the air, is this to high?
4 Is there a way to provide lighting pertection with out unhooking the antenna from the tuner?
5 Any thoughts on this project would be appreciated.
Thanks for your time Dale KC9WXG

4247. Re: 160M-80M-40M Sky Wire Horizontal Loop Antenna

Yahoo group: SkyWires
Date: 2013-05-12 02:14:55 UTC
From: B
Topic: 4246 Message: 4247

If the entire length of the antenna is achieved without any real sharp right angles, I don;t think the need to be equal.
Any antenna array is tunable,,it depends on the frequencies you will be using it at.
The higher the better!!!!!!
A lightning arrestor at the terminal point to a good earth ground should suffice but personally I would have a knife switch to connect the antenna array directly to ground when there is strong lightning activity to avoid any bleed over.

--- In SkyWires@yahoogroups.com, "rocketman10002003" <rocketman@...> wrote:
>
> 1 Dose the sides of the antenna have tobe at a specific lenght when used with a Palstar AT4K antenna tuner. I plan on using a ladder line to feed the antenna?
> 2 I have the space to make the sides 170 ft. for a total length of 680 ft. Is this tunable?
> 3 I plan on hanging the wire 55ft. in the air, is this to high?
> 4 Is there a way to provide lighting pertection with out unhooking the antenna from the tuner?
> 5 Any thoughts on this project would be appreciated.
> Thanks for your time Dale KC9WXG
>

4248. AW: [SkyWires] 160M-80M-40M Sky Wire Horizontal Loop Antenna

Yahoo group: SkyWires
Date: 2013-05-12 09:23:34 UTC
From: siegfried jackstien
Topic: 4246 Message: 4248

Your palstar should easy tune it BUT ... I would simulate that length with an antenna soft (reason is to know what impedances your tuner has to handle on different bands)

Why not make a resonant loop (168m or 1wl for topband) ???

Tuneable is even a wet noodle ... question is how good will it work ...

Height influences the angle of the antenna (cloudwarmer or not)

At 55ft height it should work well for 40m on dx ... and be a cloudwarmer on 160 and 80

You can add a spark gap at the tuner end of the ladderline ... but disconnecting would be way safer cause even a nearby strike could kill your tuner (and other things)

Dg9bfc

sigi

> -----Ursprüngliche Nachricht-----
> Von: SkyWires@yahoogroups.com [mailto:SkyWires@yahoogroups.com] Im Auftrag
> von rocketman10002003
> Gesendet: Samstag, 11. Mai 2013 19:41
> An: SkyWires@yahoogroups.com
> Betreff: [SkyWires] 160M-80M-40M Sky Wire Horizontal Loop Antenna
>
>
>
> 1 Dose the sides of the antenna have tobe at a specific lenght when used
> with a Palstar AT4K antenna tuner. I plan on using a ladder line to feed
> the antenna?
> 2 I have the space to make the sides 170 ft. for a total length of 680 ft.
> Is this tunable?
> 3 I plan on hanging the wire 55ft. in the air, is this to high?
> 4 Is there a way to provide lighting pertection with out unhooking the
> antenna from the tuner?
> 5 Any thoughts on this project would be appreciated.
> Thanks for your time Dale KC9WXG
>
>
>
>

4249. Re: 160M-80M-40M Sky Wire Horizontal Loop Antenna

Yahoo group: SkyWires
Date: 2013-05-12 10:08:52 UTC
From: Warren
Topic: 4246 Message: 4249

With proper planning and installation you should not have to disconnect the antenna during lightning storms. I'm sure you have FM and television broadcast stations in your area, not to mention cell phones, paging systems, and so on. They all continue to operate during any type of weather including lightning. There is no reason for yours not to as well.

I plan to install a 160M loop antenna, supported from four trees. It will use ladder line to a 4:1 balun mounted outside. From there, coaxial cable will carry the RF to a tuner and the transceiver. The balun provides a DC ground for everything. The balun will be close to the main electrical entrance for the house. The coaxial cable shield will have a copper strap connected and it will be bonded to the AC entrance ground. Several radials and extra ground rods will be placed there as well. Short of a direct hit, which is difficult to protect against anyhow, I have no concerns with lightning moving through.

There are several lightning protection and grounding documents written by FM broadcast companies. Nautel, Broadcast Electronics, and Polyphaser have very good pre-installation suggestions. I've summarized my thoughts on them, and provided links to the originals in this document.
http://members.rennlist.org/warren/grounding.pdf

> 4 Is there a way to provide lighting protection with out unhooking the antenna from the tuner?
> 5 Any thoughts on this project would be appreciated.

4250. RE: [SkyWires] 160M-80M-40M Sky Wire Horizontal Loop Antenna

Yahoo group: SkyWires
Date: 2013-05-12 18:47:29 UTC
From: John Hamilton
Topic: 4246 Message: 4250

I had steering diodes in my K2/100 power amp taken out by static generated during a wind storm. I placed a 1 meg carbon resistor across the feedline to bleed off the static and haven't had a problem since. This will work for any long-element antenna.

73, jon, ad7aw

From: SkyWires@yahoogroups.com [mailto:SkyWires@yahoogroups.com] On Behalf Of rocketman10002003
Sent: Saturday, May 11, 2013 12:41
To: SkyWires@yahoogroups.com
Subject: [SkyWires] 160M-80M-40M Sky Wire Horizontal Loop Antenna

1 Dose the sides of the antenna have tobe at a specific lenght when used with a Palstar AT4K antenna tuner. I plan on using a ladder line to feed the antenna?
2 I have the space to make the sides 170 ft. for a total length of 680 ft. Is this tunable?
3 I plan on hanging the wire 55ft. in the air, is this to high?
4 Is there a way to provide lighting pertection with out unhooking the antenna from the tuner?
5 Any thoughts on this project would be appreciated.
Thanks for your time Dale KC9WXG

4251. 40m loop

Yahoo group: SkyWires
Date: 2013-05-18 21:24:29 UTC
From: g0mgm@ymail.com
Topic: 4251 Message: 4251

Im new to the group and have just installed a loop but im having a few issues getting it resonant. The setup is roughly a diamond shape with one corner being 34 feet high and the other three being abt 25 feet high.

The feed point is at one of the 25 ft high corners with rg213 coax. Currently its Swr is 2.8:1 at 6.8MHz on the analyser so its still too long at 143.5ft for 7.07MHz which is what i want it centered on. I have already cut abt 1.5ft off and the resonant freq has moved but no improvement on swr.

Any sugestions on how to improve it? I can try a 4:1 balun tomorrow but was wondering if I should change the feedpoint?

Thanks

Rob G0MGM

4252. Re: [SkyWires] 40m loop

Yahoo group: SkyWires
Date: 2013-05-18 22:18:21 UTC
From: Chris Wilson
Topic: 4251 Message: 4252

>
> Im new to the group and have just installed a loop but im having a
> few issues getting it resonant. The setup is roughly a diamond shape
> with one corner being 34 feet high and the other three being abt 25 feet high.

> The feed point is at one of the 25 ft high corners with rg213 coax.
> Currently its Swr is 2.8:1 at 6.8MHz on the analyser so its still
> too long at 143.5ft for 7.07MHz which is what i want it centered on.
> I have already cut abt 1.5ft off and the resonant freq has moved but no improvement on swr.

> Any sugestions on how to improve it? I can try a 4:1 balun tomorrow
> but was wondering if I should change the feedpoint?

> Thanks

> Rob G0MGM

18/05/2013 23:12

I resonate my big (180 odd meter circumference) horizontal quad loop
by feeding it with 450 Ohm ladderline and adjusting ladderline length.
There's a web site somewhere that shows how someone uses a series of
relays to switch in and out "loops" of ladderline to achieve resonance
on several bands. I can probably find it if it's of interest? I also
think having a PROPER balanced matching unit is a real boon with
loops, I am building one based on PA0FRI designs, using a vac cap and
a big roller inductor. http://pa0fri.home.xs4all.nl/ATU/Smatch/smatcheng.htm

I don't think changing the feedpoint on a horizontal loop makes that much
difference. I love my loop, very low noise, simple, discreet, and also
CHEAP :)

Good luck Rob!

--
Best Regards,
Chris Wilson. 2E0ILY

4253. Re: [SkyWires] 40m loop

Yahoo group: SkyWires
Date: 2013-05-18 23:13:59 UTC
From: Andy
Topic: 4251 Message: 4253

g0mgm@... <no_reply@yahoogroups.com> wrote:

The feed point is at one of the 25 ft high corners with rg213 coax.
> Currently its Swr is 2.8:1 at 6.8MHz on the analyser so its still too long
> at 143.5ft for 7.07MHz which is what i want it centered on. I have already
> cut abt 1.5ft off and the resonant freq has moved but no improvement on swr.
>

A one wavelength long loop does not have a 50 ohm impedance. It is around
100 or 120 ohms. 120 ohms means an SWR of 2.4:1 on a 50 ohm feedline.
Trimming the loop shorter or longer does not fix that. If you want to get
the SWR down on the coax, you need to transform the impedance down to 50
ohms resistive. It can't get there without help.

Plus the balanced/unbalanced mismatch between the coax and the loop could
be making it worse.

A 4:1 balun might bring the feedpoint down to 25-30 ohms, still giving you
an SWR of around 2:1.

Andy

4254. No Tune with Ladder Line (switchable lengths)

Yahoo group: SkyWires
Date: 2013-05-19 04:43:02 UTC
From: allenbh57
Topic: 4251 Message: 4254

This might be what you are thinking of:
http://www.w5dxp.com/notuner.htm

He is using it on a dipole, but it should work for other types too. The key is using the length of feedline for matching:

The No-Tuner, All-HF-Band, Horizontal, Center-Fed Antenna is our old friend, the 80 meter halfwave dipole dressed up a bit. By varying the length of the 450 ohm ladder-line feeding the antenna, we can achieve an SWR of less than 2:1 on all frequencies on all HF bands with the exception of the lowest part of 80m. On 75m, we are feeding the antenna with a half-wavelength of ladder-line. On 40m, we are feeding it with 3/4 wavelength of ladder-line.

This should work for a loop also.

-Bill
AJ4TX

--- In SkyWires@yahoogroups.com, Chris Wilson <chris@...> wrote:
>
>
>
> >
> > Im new to the group and have just installed a loop but im having a
> > few issues getting it resonant. The setup is roughly a diamond shape
> > with one corner being 34 feet high and the other three being abt 25 feet high.
>
> > The feed point is at one of the 25 ft high corners with rg213 coax.
> > Currently its Swr is 2.8:1 at 6.8MHz on the analyser so its still
> > too long at 143.5ft for 7.07MHz which is what i want it centered on.
> > I have already cut abt 1.5ft off and the resonant freq has moved but no improvement on swr.
>
> > Any sugestions on how to improve it? I can try a 4:1 balun tomorrow
> > but was wondering if I should change the feedpoint?
>
> > Thanks
>
> > Rob G0MGM
>
>
>
>
> 18/05/2013 23:12
>
> I resonate my big (180 odd meter circumference) horizontal quad loop

> by feeding it with 450 Ohm ladderline and adjusting ladderline length.
> There's a web site somewhere that shows how someone uses a series of
> relays to switch in and out "loops" of ladderline to achieve resonance
> on several bands. I can probably find it if it's of interest? I also
> think having a PROPER balanced matching unit is a real boon with
> loops, I am building one based on PA0FRI designs, using a vac cap and
> a big roller inductor. http://pa0fri.home.xs4all.nl/ATU/Smatch/smatcheng.htm
>
> I don't think changing the feedpoint on a horizontal loop makes that much
> difference. I love my loop, very low noise, simple, discreet, and also
> CHEAP :)
>
> Good luck Rob!
>
> --
> Best Regards,
> Chris Wilson. 2E0ILY
>

4255. Re: 40m loop

Yahoo group: SkyWires
Date: 2013-05-19 08:44:14 UTC
From: g0mgm@ymail.com
Topic: 4251 Message: 4255

Thanks for the replies. Very useful info.

I am a bit confused now as with my MiniVNA I see a 34.72 Impedance and 24.47 Reactance at 6.8 MHz. As you say I would have expected something like 100-150 Ohm Impedance there?

--- In SkyWires@yahoogroups.com, Andy <ai.egrps@...> wrote:
>
> g0mgm@... <no_reply@yahoogroups.com> wrote:
>
> The feed point is at one of the 25 ft high corners with rg213 coax.
> > Currently its Swr is 2.8:1 at 6.8MHz on the analyser so its still too long
> > at 143.5ft for 7.07MHz which is what i want it centered on. I have already
> > cut abt 1.5ft off and the resonant freq has moved but no improvement on swr.
> > >
> >
> A one wavelength long loop does not have a 50 ohm impedance. It is around
> 100 or 120 ohms. 120 ohms means an SWR of 2.4:1 on a 50 ohm feedline.
> Trimming the loop shorter or longer does not fix that. If you want to get
> the SWR down on the coax, you need to transform the impedance down to 50
> ohms resistive. It can't get there without help.
>
> Plus the balanced/unbalanced mismatch between the coax and the loop could
> be making it worse.
>
> A 4:1 balun might bring the feedpoint down to 25-30 ohms, still giving you
> an SWR of around 2:1.
>
> Andy
>

4256. RE: [SkyWires] 40m loop

Yahoo group: SkyWires
Date: 2013-05-19 12:52:16 UTC
From: Richard Schmuke
Topic: 4251 Message: 4256
Attachments: 2 described; binary payloads are missing from this source WARC

If you are looking for a low SWR you need a 2:1 transformer and yes they are as easy to make as a 1:1 or 4:1. If you install a 4:1 it will be off in the other direction because you antenna is about 100 ohm and your coax is 50 ohm. The other fix is to use a coax transformer, a 1/4wl of 75 ohm coax at the feed point.

If you make a coax transformer don't forget to figure the velocity factor of the cable use.

Rich, Kd0zz

From: SkyWires@yahoogroups.com [mailto:SkyWires@yahoogroups.com] On Behalf Of g0mgm@...
Sent: Saturday, May 18, 2013 4:24 PM
To: SkyWires@yahoogroups.com
Subject: [SkyWires] 40m loop

Im new to the group and have just installed a loop but im having a few issues getting it resonant. The setup is roughly a diamond shape with one corner being 34 feet high and the other three being abt 25 feet high.

The feed point is at one of the 25 ft high corners with rg213 coax. Currently its Swr is 2.8:1 at 6.8MHz on the analyser so its still too long at 143.5ft for 7.07MHz which is what i want it centered on. I have already cut abt 1.5ft off and the resonant freq has moved but no improvement on swr.

Any sugestions on how to improve it? I can try a 4:1 balun tomorrow but was wondering if I should change the feedpoint?

Thanks

Rob G0MGM

4257. Re: [SkyWires] Re: 40m loop

Yahoo group: SkyWires
Date: 2013-05-20 05:48:49 UTC
From: Andy
Topic: 4251 Message: 4257

g0mgm@... <no_reply@yahoogroups.com> wrote:

I am a bit confused now as with my MiniVNA I see a 34.72 Impedance and
> 24.47 Reactance at 6.8 MHz. As you say I would have expected something like
> 100-150 Ohm Impedance there?
>

Are you measuring this directly at the loop itself?

If you have feedline between the VNA and the loop, the feedline will
transform the impedance (by taking you part-way around the Smith chart).

If you want to know the impedance at the antenna, you can use feedline in
your measurement as long as it is a whole number of half-wavelengths long
at 6.8 MHz (and if the feedline is very low loss).

Andy

4258. Portable Field Day Loop

Yahoo group: SkyWires
Date: 2013-05-21 00:07:28 UTC
From: Gary D
Topic: 4258 Message: 4258

Hi all, I'm thinking of a multi band portable loop for field day. I will be setting up in a field with a 22 foot 3 section extendable metal pole. 80/40/20/10 meter ideally. Perferably Coax fed, as I can use my 1/4 Balun I use at the Apex of my 17M delta loop. I don't have much experience with loops other than the 17m delta loop I currently use, and it works very well. I understand they work best cut for a given band. Any designs welcome. I will be using a portale MFJ antenna tuner with my Kenwood TS/50. Thanks, Gary W3GRD.

4259. RE: [SkyWires] Portable Field Day Loop

Yahoo group: SkyWires
Date: 2013-05-21 00:51:49 UTC
From: Richard Schmuke
Topic: 4258 Message: 4259
Attachments: 2 described; binary payloads are missing from this source WARC

1X loop is a 100 Ohm antenna , a 2X loop and larger are close to 200 Ohm

2X in length loop, or greater can be matched with 50 Ohm coax and a 4:1 Balun if

the overall length of the loop is a multiple of the length at that frequency

Even Multipliers will make it a resonate antenna, A 4X and 8X loop will match

the most bands when used with a 4:1 Balun

With the correct resonate length of the antenna no tuner adjustment is needed

on the 7 bands shown

Chart at
http://s1102.photobucket.com/user/KD0ZZ/media/Loop_zps75e5682a.jpg.html

Note to work 80M this way you need a 160 loop

Rich , Kd0zz

From: SkyWires@yahoogroups.com [mailto:SkyWires@yahoogroups.com] On Behalf Of Gary D
Sent: Monday, May 20, 2013 7:07 PM
To: SkyWires@yahoogroups.com
Subject: [SkyWires] Portable Field Day Loop

Hi all, I'm thinking of a multi band portable loop for field day. I will be setting up in a field with a 22 foot 3 section extendable metal pole. 80/40/20/10 meter ideally. Perferably Coax fed, as I can use my 1/4 Balun I use at the Apex of my 17M delta loop. I don't have much experience with loops other than the 17m delta loop I currently use, and it works very well. I understand they work best cut for a given band. Any designs welcome. I will be using a portale MFJ antenna tuner with my Kenwood TS/50. Thanks, Gary W3GRD.

4260. Re: 40m loop

Yahoo group: SkyWires
Date: 2013-05-21 19:03:21 UTC
From: g0mgm@ymail.com
Topic: 4251 Message: 4260

Many tnx to everyone who replied, have now installed the 75Ohm matching section and the antenna is working a treat. Getting 1.3:1 SWR from 7 - 7.2MHz and 55Ohm Impedance and 5Ohm Reactance.

Thanks again.

Rob

G0MGM

--- In SkyWires@yahoogroups.com, Andy <ai.egrps@...> wrote:
>
> g0mgm@... <no_reply@yahoogroups.com> wrote:
>
> I am a bit confused now as with my MiniVNA I see a 34.72 Impedance and
> > 24.47 Reactance at 6.8 MHz. As you say I would have expected something like
> > 100-150 Ohm Impedance there?
> >
>
> Are you measuring this directly at the loop itself?
>
> If you have feedline between the VNA and the loop, the feedline will
> transform the impedance (by taking you part-way around the Smith chart).
>
> If you want to know the impedance at the antenna, you can use feedline in
> your measurement as long as it is a whole number of half-wavelengths long
> at 6.8 MHz (and if the feedline is very low loss).
>
> Andy
>

4261. Re: Backyard Wire Loop Antenna, Baluns and Tuning

Yahoo group: SkyWires
Date: 2013-05-22 05:58:39 UTC
From: kp4md
Topic: 4202 Message: 4261

Vk1OD explains the flaw in switchable 4:1 / 1:1 current baluns using a single core.
http://vk1od.net/balun/gsc/ <http://vk1od.net/balun/gsc/>
KDØZZ's solution using two separate cores will truly function as a current balun.
Carol, KP4MD

--- In SkyWires@yahoogroups.com, "Richard Schmuke" wrote:
>
> I made it easier to tune on one of my antenna set ups by adding switchable
> balun, I use 1:1 on 160 and 4:1 on other bands. Here is the schematic
> http://www.angelfire.com/electronic2/qrp/balun.html ,it is for QRP, I just
> used larger components for a KW size.
> http://i1102.photobucket.com/albums/g453/KD0ZZ/4to11to12.jpg
>
>
>
>
>
> Kd0zz , Rich
>
> I used to think I was indecisive, but now I'm not so sure.
>
>
>
>
>
>
>
>
> From: SkyWires@yahoogroups.com [mailto:SkyWires@yahoogroups.com] On Behalf
> Of siegfried jackstien
> Sent: Thursday, February 07, 2013 4:49 AM
> To: SkyWires@yahoogroups.com
> Subject: AW: [SkyWires] Backyard Wire Loop Antenna, Baluns and Tuning
>
>
>
>
>
>
> On my topband loop i also changed the feeder length to have a low swr
>
> Now the end result is that on some bands I use the short feeder (from

> antenna to shack) and on some bands I add another length (plugged in
between
> with banana plugs)
>
> Dg9bfc
>
> Sigi
>
> > -----Ursprüngliche Nachricht-----
> > Von: SkyWires@yahoogroups.com
> [mailto:SkyWires@yahoogroups.com] Im
> Auftrag
> > von Noodle10536
> > Gesendet: Donnerstag, 7. Februar 2013 03:01
> > An: SkyWires@yahoogroups.com
> > Betreff: [SkyWires] Backyard Wire Loop Antenna, Baluns and Tuning
> >
> >
> >
> > Hello evryone, I have installed a 545' wire loop antenna. It is in a
> > diamond shape due to available trees to support it. I would describe
the
> > shape similar to the ARRL symbol (diamond). It is fed off one of the
ends
> > to about 40' of 16ga 450 ohm ladder line into the shack. The loop
varies
> > in height from about 25' at the low point to about 38' at the high
point.
> > I have experimented with many baluns but thus far have not gottne it
to
> > tune easily and difficult to tune on 160m. I have tried two 4:1
baluns, a
> > 9:1 balun and a 1:1 balun. I have tested it with an MFJ analyzer and
have
> > gotten about 7 ohms at 1.900 with the 9:1 and 4:1 and about 200 ohms
with
> > the 1:1. Any suggestions to improve ease of tuning welcome.
> >
> > Thanks, Peter.
> > KC2RBX
> >
> >
> >
> >
>

4262. AW: [SkyWires] No Tune with Ladder Line (switchable lengths)

Yahoo group: SkyWires
Date: 2013-05-22 09:09:52 UTC
From: siegfried jackstien
Topic: 4251 Message: 4262

I change the

> -----Ursprüngliche Nachricht-----
> Von: SkyWires@yahoogroups.com [mailto:SkyWires@yahoogroups.com] Im Auftrag
> von allenbh57
> Gesendet: Sonntag, 19. Mai 2013 04:43
> An: SkyWires@yahoogroups.com
> Betreff: [SkyWires] No Tune with Ladder Line (switchable lengths)
>
>
>
> This might be what you are thinking of:
> http://www.w5dxp.com/notuner.htm
>
> He is using it on a dipole, but it should work for other types too. The
> key is using the length of feedline for matching:
>
> The No-Tuner, All-HF-Band, Horizontal, Center-Fed Antenna is our old
> friend, the 80 meter halfwave dipole dressed up a bit. By varying the
> length of the 450 ohm ladder-line feeding the antenna, we can achieve an
> SWR of less than 2:1 on all frequencies on all HF bands with the exception
> of the lowest part of 80m. On 75m, we are feeding the antenna with a half-
> wavelength of ladder-line. On 40m, we are feeding it with 3/4 wavelength
> of ladder-line.
>
> This should work for a loop also.
>
> -Bill
> AJ4TX
>
> --- In SkyWires@yahoogroups.com <mailto:SkyWires%40yahoogroups.com> ,
> Chris Wilson <chris@...> wrote:
> >
> >
> >
> > >
> > > Im new to the group and have just installed a loop but im having a
> > > few issues getting it resonant. The setup is roughly a diamond shape
> > > with one corner being 34 feet high and the other three being abt 25
> feet high.
> >
> > > The feed point is at one of the 25 ft high corners with rg213 coax.
> > > Currently its Swr is 2.8:1 at 6.8MHz on the analyser so its still
> > > too long at 143.5ft for 7.07MHz which is what i want it centered on.
> > > I have already cut abt 1.5ft off and the resonant freq has moved but

> no improvement on swr.
> >
> > > Any sugestions on how to improve it? I can try a 4:1 balun tomorrow
> > > but was wondering if I should change the feedpoint?
> >
> > > Thanks
> >
> > > Rob G0MGM
> >
> >
> >
> >
> > 18/05/2013 23:12
> >
> > I resonate my big (180 odd meter circumference) horizontal quad loop
> > by feeding it with 450 Ohm ladderline and adjusting ladderline length.
> > There's a web site somewhere that shows how someone uses a series of
> > relays to switch in and out "loops" of ladderline to achieve resonance
> > on several bands. I can probably find it if it's of interest? I also
> > think having a PROPER balanced matching unit is a real boon with
> > loops, I am building one based on PA0FRI designs, using a vac cap and
> > a big roller inductor.
> http://pa0fri.home.xs4all.nl/ATU/Smatch/smatcheng.htm
> >
> > I don't think changing the feedpoint on a horizontal loop makes that
> much
> > difference. I love my loop, very low noise, simple, discreet, and also
> > CHEAP :)
> >
> > Good luck Rob!
> >
> > --
> > Best Regards,
> > Chris Wilson. 2E0ILY
> >
>
>
>
>

4263. AW: [SkyWires] No Tune with Ladder Line (switchable lengths)

Yahoo group: SkyWires
Date: 2013-05-22 09:17:02 UTC
From: siegfried jackstien
Topic: 4251 Message: 4263

I change the ladderline length from my 168m loop to balun to make it multiband :-)

On the 2 lowest frequencies (160 and 80) the impedance is low ... with a quarterwave length I bring it up in the range of 400 to 500 ohms and then with a homebrewed 1:9 balun back down to 50 ohms

On 40 the impedance of the loop is higher (also around 400-500 ohms) and then I use a halfwave length of ladderline (that is a quarterwave on 80) to bring that 400-500 ohms down to the balun (and the also back to 50 ohms)

On bands above that the impedance is also higher (cause such a big loop has many wavelengths on 20m and double that on 10m) ...

There the ladderline is almost matched and so ther is no transforming

.... it is a mixed setup with matched conditions on higher bands and with transforming with the lengths of the line on the lower bands

Dg9bfc

Sigi

> -----Ursprüngliche Nachricht-----
> Von: SkyWires@yahoogroups.com [mailto:SkyWires@yahoogroups.com] Im Auftrag
> von allenbh57
> Gesendet: Sonntag, 19. Mai 2013 04:43
> An: SkyWires@yahoogroups.com
> Betreff: [SkyWires] No Tune with Ladder Line (switchable lengths)
>
>
>
> This might be what you are thinking of:
> http://www.w5dxp.com/notuner.htm
>
> He is using it on a dipole, but it should work for other types too. The
> key is using the length of feedline for matching:
>
> The No-Tuner, All-HF-Band, Horizontal, Center-Fed Antenna is our old
> friend, the 80 meter halfwave dipole dressed up a bit. By varying the
> length of the 450 ohm ladder-line feeding the antenna, we can achieve an
> SWR of less than 2:1 on all frequencies on all HF bands with the exception
> of the lowest part of 80m. On 75m, we are feeding the antenna with a half-
> wavelength of ladder-line. On 40m, we are feeding it with 3/4 wavelength
> of ladder-line.
>
> This should work for a loop also.

>
> -Bill
> AJ4TX
>
> --- In SkyWires@yahoogroups.com <mailto:SkyWires%40yahoogroups.com> ,
> Chris Wilson <chris@...> wrote:
> >
> >
> >
> > >
> > > Im new to the group and have just installed a loop but im having a
> > > few issues getting it resonant. The setup is roughly a diamond shape
> > > with one corner being 34 feet high and the other three being abt 25
> feet high.
> >
> > > The feed point is at one of the 25 ft high corners with rg213 coax.
> > > Currently its Swr is 2.8:1 at 6.8MHz on the analyser so its still
> > > too long at 143.5ft for 7.07MHz which is what i want it centered on.
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> > > Any sugestions on how to improve it? I can try a 4:1 balun tomorrow
> > > but was wondering if I should change the feedpoint?
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> > > Thanks
> >
> > > Rob G0MGM
> >
> >
> >
> >
> > 18/05/2013 23:12
> >
> > I resonate my big (180 odd meter circumference) horizontal quad loop
> > by feeding it with 450 Ohm ladderline and adjusting ladderline length.
> > There's a web site somewhere that shows how someone uses a series of
> > relays to switch in and out "loops" of ladderline to achieve resonance
> > on several bands. I can probably find it if it's of interest? I also
> > think having a PROPER balanced matching unit is a real boon with
> > loops, I am building one based on PA0FRI designs, using a vac cap and
> > a big roller inductor.
> http://pa0fri.home.xs4all.nl/ATU/Smatch/smatcheng.htm
> >
> > I don't think changing the feedpoint on a horizontal loop makes that
> much
> > difference. I love my loop, very low noise, simple, discreet, and also
> > CHEAP :)
> >
> > Good luck Rob!
> >

> > --
> > Best Regards,
> > Chris Wilson. 2E0ILY
> >
>
>
>
>

4266. RE: [SkyWires] Increase your fan page likes

Yahoo group: SkyWires
Date: 2013-05-30 21:35:03 UTC
From: David Shrum
Topic: 4266 Message: 4266

Original messages deleted, the sender is now moderated.

Dave N8PU
Co-Moderator

-----Original Message-----
From: SkyWires@yahoogroups.com [mailto:SkyWires@yahoogroups.com] On Behalf Of Terry Bosma
Sent: Thursday, May 30, 2013 4:37 PM
To: skywires@yahoogroups.com
Subject: [SkyWires] Increase your fan page likes easly

No virus found in this message.
Checked by AVG - www.avg.com
Version: 2013.0.2904 / Virus Database: 3184/6369 - Release Date: 05/30/13

4268. RE: [SkyWires] Antenna Towers

Yahoo group: SkyWires
Date: 2013-06-01 22:37:31 UTC
From: Bob Hardin
Topic: 4267 Message: 4268

"must be picked up here"

Where is here?

-----Original Message-----
From: SkyWires@yahoogroups.com [mailto:SkyWires@yahoogroups.com] On Behalf Of w0szv
Sent: Saturday, June 01, 2013 5:13 PM
To: SkyWires@yahoogroups.com
Subject: [SkyWires] Antenna Towers

I have 3 55ft towers with guy wires, turnbuckles and mobile home anchors for sale. $300.00 each. towers are on ground next to shop ready to be taken apart. no shipping, must be picked up here. please contact off list if interested.
thanks
Eldon

Yahoo! Groups Links

4269. Re: Portable Field Day Loop

Yahoo group: SkyWires
Date: 2013-06-03 16:10:50 UTC
From: Alan
Topic: 4258 Message: 4269

Hi Gary, just saw your post and though I'd share with you an antenna I built in a hurry for last years fd. I saw it in the arrl field day manual. Its a 40m fullwave loop in a square, it requires one corner as high as possible and thats where you feed it directly with 50 ohm coax. I used it last year and was pleased with the results. Yes, I had to use a tuner on a couple of bands but it really worked well on 40 and 20 without the tuner. I'm sure there is lineloss but keep the feedline short as I did 35 ft of rg8x. I pulled it up in a tree and it had a nice slope to it. It was our main 40-10 meter antenna. I had a couple of other antennas for 15 and 20 but the loop was much stronger. Hey we won 1A in our Section..hope this helps, 73 Alan

--- In SkyWires@yahoogroups.com, "Gary D" <scoutih79@...> wrote:
>
> Hi all, I'm thinking of a multi band portable loop for field day. I will be setting up in a field with a 22 foot 3 section extendable metal pole. 80/40/20/10 meter ideally. Perferably Coax fed, as I can use my 1/4 Balun I use at the Apex of my 17M delta loop. I don't have much experience with loops other than the 17m delta loop I currently use, and it works very well. I understand they work best cut for a given band. Any designs welcome. I will be using a portale MFJ antenna tuner with my Kenwood TS/50. Thanks, Gary W3GRD.
>

4270. Re: Portable Field Day Loop

Yahoo group: SkyWires
Date: 2013-06-07 21:07:57 UTC
From: ad6aa
Topic: 4258 Message: 4270

Thanks, this is what I needed to be inspired to build a new FD antenna.

So a 80 meter Horizontal loop with a 4:1 Balun will be the new FD antenna this year.

And not worried if it's a NVIS antenna on 80 meters....with the Bay area to the north and LA to the south I'll still have plenty to work with this antenna. HAHA Will probably also set up a G5RV.

Mike
AD6AA

--- In SkyWires@yahoogroups.com, "Richard Schmuke" <rdj@...> wrote:
>
>
> 1X loop is a 100 Ohm antenna , a 2X loop and larger are close to 200 Ohm
>
>
>
> 2X in length loop, or greater can be matched with 50 Ohm coax and a 4:1
> Balun if
>
>
> the overall length of the loop is a multiple of the length at that
> frequency
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>
>
> Even Multipliers will make it a resonate antenna, A 4X and 8X loop will
> match
>
>
>
> the most bands when used with a 4:1 Balun
>
>
>
> With the correct resonate length of the antenna no tuner adjustment is
> needed
>
>
> on the 7 bands shown
>
> Chart at
> http://s1102.photobucket.com/user/KD0ZZ/media/Loop_zps75e5682a.jpg.html
>
>

>
> Note to work 80M this way you need a 160 loop
>
> Rich , Kd0zz
>
>

4272. Antenna patent collections & related info found on eBay

Yahoo group: SkyWires
Date: 2013-06-17 01:21:03 UTC
From: Jack
Topic: 4272 Message: 4272

I found these listings of possible interest to subscribers to this Group:

500+ Wideband Antenna Patents on CD-ROM! ☐ 360132818172

THE RHOMBIC ANTENNA: RHOMBIC ANTENNA DESIGN BY A.E. HARPER + 91 RHOMBIC PATENTS ☐ 251023591085

Jack

4273. Check out this neat slideshow I made on TripWow

Yahoo group: SkyWires
Date: 2013-06-18 11:52:44 UTC
From: yo2mbu@...
Topic: 4273 Message: 4273

YP10KQT's slideshow has been shared with you

Your friend yo2mbu@... says:

"Contest IARU 50 Mhz Silagiu Romania"

Link: http://tripwow.tripadvisor.com/tripwow/ta-07ab-092a-cb44?em=1&st=126168584

Create your own slideshow at
http://tripwow.tripadvisor.com/tripwow/builder/?cs=&ssid=ta-07ab-092a-cb44&create_new=0&theme=&affinity=&em=1&st=126168584

This message was sent by yo2mbu@... from the TripAdvisor™ TripWow websiteIf you would like to unsubscribe and stop receiving these emails click here: http://email.tripwow.com/wf/unsubscribe?upn=MY9wiNe-2F5-2Fptv6485NDuIQ2K0DFnQ5mmEXrfD18hz9jp2rtg5D-2Fh3WYSAVH74dNTl7COxk8Df3olAcyhe0GoChS9-2BdNfdOgsy2Blm6j-2FLnNaqWxCLeo-2BYipcJflWyhos1Zn50QdFknScJAxfC6JqnF0X8ZbAU41QbNH7EYdoUTCF1nxxq-2FlGCXRWl4Tu-2BmHRsbh29RJE2PIucAdkTaqLow-3D-3D.
Sent by TravelPod - 377 Dalhousie, Suite 301 Ottawa, Ontario K1N 9N8

4274. Re: Portable Field Day Loop

Yahoo group: SkyWires
Date: 2013-07-03 20:42:45 UTC
From: ad6aa
Topic: 4258 Message: 4274

Just a update on the FD Loop antenna. I went ahead and built the 80 meter loop. I used 5 poles and got it up about 20 feet in the air.

It almost always received better than a multi-band dipole we were also using, sometimes by 5 to 6 S units. It appeared to work the best on 40 and 80 meters. On 20 meters it seemed to hear a lot better than it got out. There were a few signals on 20 meters that were S-7, S-8 that could not be worked.

It easily tuned up, with the built-in tuner in the radio, on all the bands.

Mike
AD6AA

--- In SkyWires@yahoogroups.com, "ad6aa" <greentractor01@...> wrote:
>
>
>
> Thanks, this is what I needed to be inspired to build a new FD antenna.
>
> So a 80 meter Horizontal loop with a 4:1 Balun will be the new FD antenna this year.
>
> And not worried if it's a NVIS antenna on 80 meters....with the Bay area to the north and LA to the south I'll still have plenty to work with this antenna. HAHA Will probably also set up a G5RV.
>
> Mike
> AD6AA
>

4275. Re: Loop antenna, fed with 450 Ohm window-line: LENGHTS

Yahoo group: SkyWires
Date: 2013-07-20 13:25:48 UTC
From: Thomas F Giella W4HM
Topic: 4275 Message: 4275

I've been experimenting with a 300 foot long horizontal loop on 80-6 meters for 9 years. It has been fed with anywhere from 40-150 ft of 300 and 450 ohm window line to Palstar BT-1500A and MFJ-974HB balanced antenna tuners and noticed no problems in tuning or radiation patterns.

Of course on some frequencies a high voltage point has been at the tuner but the tuner handled it with no problems and no RFI in the radio shack.

So from my personal experience the length of the window line doesn't matter, especially if you are going to use it as a multiband antenna. Just use the shortest length you can get away with.

BTW the antenna works really well on 40-6 meters QRP operation and DXing. Also on HF radio shortwave program listening and DXing.

I have a web page on it at http://www.wcflunatall.com/w4hm15.htm .

73 & GUD DX,
Thomas F. Giella W4HM
Lakeland, FL, USA
w4hm@...

W4HM Amateur Radio & SWL Autobiography: http://www.w4hm.org

4276. Re: [SkyWires] Re: Loop antenna, fed with 450 Ohm window-line: LENGHTS

Yahoo group: SkyWires
Date: 2013-07-20 17:57:12 UTC
From: denton sprague
Topic: 4275 Message: 4276

what are you using to tune 6 meters? I used an LL tuner(double pi network) for 80 thru 10 to feed my 270' or thereabouts horizontial loop but It will not do 6 meters.

From: Thomas F Giella W4HM <w4hm@...>
To: "SWL Antenna @ Yahoo" <Shortwave-SWL-Antenna@yahoogroups.com>; "SkyWires @ yahoo" <SkyWires@yahoogroups.com>; "ham-antennas @ yahoo" <ham-antennas@yahoogroups.com>
Sent: Saturday, July 20, 2013 6:25 AM
Subject: [SkyWires] Re: Loop antenna, fed with 450 Ohm window-line: LENGHTS

I've been experimenting with a 300 foot long horizontal loop on 80-6 meters for 9 years. It has been fed with anywhere from 40-150 ft of 300 and 450 ohm window line to Palstar BT-1500A and MFJ-974HB balanced antenna tuners and noticed no problems in tuning or radiation patterns.

Of course on some frequencies a high voltage point has been at the tuner but the tuner handled it with no problems and no RFI in the radio shack.

So from my personal experience the length of the window line doesn't matter, especially if you are going to use it as a multiband antenna. Just use the shortest length you can get away with.

BTW the antenna works really well on 40-6 meters QRP operation and DXing. Also on HF radio shortwave program listening and DXing.

I have a web page on it at http://www.wcflunatall.com/w4hm15.htm .

73 & GUD DX,
Thomas F. Giella W4HM
Lakeland, FL, USA
w4hm@...

W4HM Amateur Radio & SWL Autobiography: http://www.w4hm.org

4277. AW: [SkyWires] Re: Loop antenna, fed with 450 Ohm window-line: LENGHTS

Yahoo group: SkyWires
Date: 2013-07-20 20:46:22 UTC
From: siegfried jackstien
Topic: 4275 Message: 4277

... and if you have a very high impedance point on the tuner end and your tuner can NOT handle that ... just add a few feet of ladderline and try again

Dg9bfc

sigi

> -----Ursprüngliche Nachricht-----
> Von: SkyWires@yahoogroups.com [mailto:SkyWires@yahoogroups.com] Im Auftrag
> von Thomas F Giella W4HM
> Gesendet: Samstag, 20. Juli 2013 13:26
> An: SWL Antenna @ Yahoo; SkyWires @ yahoo; ham-antennas @ yahoo
> Betreff: [SkyWires] Re: Loop antenna, fed with 450 Ohm window-line:
> LENGHTS
>
>
>
> I've been experimenting with a 300 foot long horizontal loop on 80-6
> meters
> for 9 years. It has been fed with anywhere from 40-150 ft of 300 and 450
> ohm
> window line to Palstar BT-1500A and MFJ-974HB balanced antenna tuners and
> noticed no problems in tuning or radiation patterns.
>
> Of course on some frequencies a high voltage point has been at the tuner
> but
> the tuner handled it with no problems and no RFI in the radio shack.
>
> So from my personal experience the length of the window line doesn't
> matter,
> especially if you are going to use it as a multiband antenna. Just use the
> shortest length you can get away with.
>
> BTW the antenna works really well on 40-6 meters QRP operation and DXing.
> Also on HF radio shortwave program listening and DXing.
>
> I have a web page on it at http://www.wcflunatall.com/w4hm15.htm .
>
> 73 & GUD DX,
> Thomas F. Giella W4HM
> Lakeland, FL, USA
> w4hm@... <mailto:w4hm%40tampabay.rr.com>
>

> W4HM Amateur Radio & SWL Autobiography: http://www.w4hm.org
>
>
>
>

4278. What Are You Using on 6 Meters?

Yahoo group: SkyWires
Date: 2013-07-21 13:44:35 UTC
From: Thomas F Giella W4HM
Topic: 4278 Message: 4278

For 6 meters I use a Comtek 4:1 BALUN between the 300 ohm window line and the internal tuner of the Icom IC-7600. It will tune the whole 6 meters band with no problems.

73 & GUD DX,
Thomas F. Giella W4HM
Lakeland, FL, USA
w4hm@...

W4HM Amateur Radio & SWL Autobiography: http://www.w4hm.org

4279. Re: What Are You Using on 6 Meters?

Yahoo group: SkyWires
Date: 2013-07-21 18:02:47 UTC
From: N4EHX
Topic: 4278 Message: 4279

Using a 2 Wavelength 160 meter

loop up 40', like you fed with a 4:1 and 450 OHM LadderLine

Internal tuner in my newer IC-9100 tunes it with ease.....Mac

--- In SkyWires@yahoogroups.com, "Thomas F Giella W4HM" <w4hm@...> wrote:
>
> For 6 meters I use a Comtek 4:1 BALUN between the 300 ohm window line and
> the internal tuner of the Icom IC-7600. It will tune the whole 6 meters band
> with no problems.
>
> 73 & GUD DX,
> Thomas F. Giella W4HM
> Lakeland, FL, USA
> w4hm@...
>
> W4HM Amateur Radio & SWL Autobiography: http://www.w4hm.org
>

4280. Re: [SkyWires] What Are You Using on 6 Meters?

Yahoo group: SkyWires
Date: 2013-07-22 13:10:29 UTC
From: Hylton Thompson
Topic: 4278 Message: 4280

I have just erected an experimental loop in my small garden. It is too short for full wave resonance at 40m but I plan to put a "tuck" in it to correct this. I am using 15m of 450 ohm window line with a 4:1 balun to feed it

As it is now, I need to use my Palstar AT2K to tune the 40 and 80m bands, but the ATU in my IC-7700 copes 100% with 6m thru 28m.

73 Hilt (G6AVL)

----- Original message -----
From: Thomas F Giella W4HM <[1]w4hm@...>
To: "SkyWires @ yahoo" <[2]SkyWires@yahoogroups.com>
Subject: [SkyWires] What Are You Using on 6 Meters?
Date: Sun, 21 Jul 2013 09:44:35 -0400

For 6 meters I use a Comtek 4:1 BALUN between the 300 ohm window line and
the internal tuner of the Icom IC-7600. It will tune the whole 6 meters band
with no problems.

73 & GUD DX,
Thomas F. Giella W4HM
Lakeland, FL, USA
[3]w4hm@...

W4HM Amateur Radio & SWL Autobiography: [4]http://www.w4hm.org

---

Yahoo! Groups Links

References

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3. mailto:w4hm@...
4. http://www.w4hm.org/
5. http://groups.yahoo.com/group/SkyWires/
6. http://groups.yahoo.com/group/SkyWires/join
7. mailto:SkyWires-digest@yahoogroups.com
8. mailto:SkyWires-fullfeatured@yahoogroups.com
9. mailto:SkyWires-unsubscribe@yahoogroups.com
10. http://docs.yahoo.com/info/terms/

4281. AW: [SkyWires] What Are You Using on 6 Meters?

Yahoo group: SkyWires
Date: 2013-07-22 16:13:37 UTC
From: siegfried jackstien
Topic: 4278 Message: 4281

So do a second experiment

Feed your loop away from the house (ladderline has low loss so no problem!)
... so the "closed side" is close to the house (maybe close to shacks
window?!?)

Now open your loop for the lower bands to have a "bent dipole"

A friend from me uses this "trick" to use his 80 loop on topband as bent
dipole and it works superb ...

On higher bands opening the loop changes the direction of the multiple lobes
so you have 2 different setups to use on the higher bands

Dg9bfc

Sigi

> -----Ursprüngliche Nachricht-----
> Von: SkyWires@yahoogroups.com [mailto:SkyWires@yahoogroups.com] Im Auftrag
> von Hylton Thompson
> Gesendet: Montag, 22. Juli 2013 13:10
> An: SkyWires@yahoogroups.com
> Betreff: Re: [SkyWires] What Are You Using on 6 Meters?
>
>
>
> I have just erected an experimental loop in my small garden. It is too
> short for full wave resonance at 40m but I plan to put a "tuck" in it to
> correct this. I am using 15m of 450 ohm window line with a 4:1 balun to
> feed it
>
> As it is now, I need to use my Palstar AT2K to tune the 40 and 80m bands,
> but the ATU in my IC-7700 copes 100% with 6m thru 28m.
>
> 73 Hilt (G6AVL)
>
>
> ----- Original message -----
> From: Thomas F Giella W4HM <w4hm@...>
> To: "SkyWires @ yahoo" <SkyWires@yahoogroups.com>
> Subject: [SkyWires] What Are You Using on 6 Meters?
> Date: Sun, 21 Jul 2013 09:44:35 -0400
>
> For 6 meters I use a Comtek 4:1 BALUN between the 300 ohm window line and
> the internal tuner of the Icom IC-7600. It will tune the whole 6 meters
> band

> with no problems.
>
> 73 & GUD DX,
> Thomas F. Giella W4HM
> Lakeland, FL, USA
> w4hm@...
>
> W4HM Amateur Radio & SWL Autobiography: http://www.w4hm.org
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> Yahoo! Groups Links
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4282. Re: [SkyWires] What Are You Using on 6 Meters?

Yahoo group: SkyWires
Date: 2013-07-22 23:14:12 UTC
From: Hylton Thompson
Topic: 4278 Message: 4282

Thank you for your response Sigi. It has taken me a year to get planning permission from my county council for this loop. This was due to vigorous objections from an immediate neighbour.

The loop is corner fed with the feeder as inconspicuous as possible. It comes down the outside of one of the 4 fibreglass support poles that is located on a corner of my house beside my shack window.

I hear what you are saying but I don't want to provoke the neighbour further by having the feeder in his field of view at the bottom of our garden. The house end of the loop is 2.5 metres higher by the way.

I did open the loop at the bottom of the garden while experimenting and found the resulting doublet was more sensitive than the loop in some directions, as you suggest, but the loop is so much quieter that I prefer to just stick with it, for the moment at least.

I now need to increase its length to get 40m resonance and will probably do this by dropping a fold of wire down. I think this will be better than increasing feeder length because the vertical fold will at least radiate something.

Hilt

----- Original message -----
From: siegfried jackstien <[1]siegfried.jackstien@...>
To: [2]SkyWires@yahoogroups.com
Subject: AW: [SkyWires] What Are You Using on 6 Meters?
Date: Mon, 22 Jul 2013 16:13:37 -0000

So do a second experiment

Feed your loop away from the house (ladderline has low loss so no problem!)
... so the "closed side" is close to the house (maybe close to shacks window?!?)

Now open your loop for the lower bands to have a "bent dipole"

A friend from me uses this "trick" to use his 80 loop on topband as bent
dipole and it works superb ...

On higher bands opening the loop changes the direction of the multiple lobes
so you have 2 different setups to use on the higher bands

Dg9bfc

Sigi

-----Ursprüngliche Nachricht-----

Von: [3]SkyWires@yahoogroups.com [[4]mailto:SkyWires@yahoogroups.com]
Im Auftrag

von Hylton Thompson

Gesendet: Montag, 22. Juli 2013 13:10

An: [5]SkyWires@yahoogroups.com

Betreff: Re: [SkyWires] What Are You Using on 6 Meters?

I have just erected an experimental loop in my small garden. It is too

short for full wave resonance at 40m but I plan to put a "tuck" in it
to

correct this. I am using 15m of 450 ohm window line with a 4:1 balun to

feed it

As it is now, I need to use my Palstar AT2K to tune the 40 and 80m
bands,

but the ATU in my IC-7700 copes 100% with 6m thru 28m.

73 Hilt (G6AVL)

----- Original message -----

From: Thomas F Giella W4HM <[6]w4hm@tampabay.rr.com>

To: "SkyWires @ yahoo" <[7]SkyWires@yahoogroups.com>

Subject: [SkyWires] What Are You Using on 6 Meters?

Date: Sun, 21 Jul 2013 09:44:35 -0400

For 6 meters I use a Comtek 4:1 BALUN between the 300 ohm window line
and

the internal tuner of the Icom IC-7600. It will tune the whole 6 meters

band

with no problems.

73 & GUD DX,

Thomas F. Giella W4HM

Lakeland, FL, USA

[8]w4hm@...

W4HM Amateur Radio & SWL Autobiography: [9]http://www.w4hm.org

---

Yahoo! Groups Links

Yahoo! Groups Links

References

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2. mailto:SkyWires@yahoogroups.com
3. mailto:SkyWires@yahoogroups.com
4. mailto:SkyWires@yahoogroups.com
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12. mailto:SkyWires-digest@yahoogroups.com
13. mailto:SkyWires-fullfeatured@yahoogroups.com
14. mailto:SkyWires-unsubscribe@yahoogroups.com
15. http://docs.yahoo.com/info/terms/

4283. AW: [SkyWires] What Are You Using on 6 Meters?

Yahoo group: SkyWires
Date: 2013-07-23 09:13:15 UTC
From: siegfried jackstien
Topic: 4278 Message: 4283

>
> Thank you for your response Sigi. It has taken me a year to get planning
> permission from my county council for this loop. This was due to vigorous
> objections from an immediate neighbour.

Wow ... trouble with a 40m loop (slightly short) ?!?!

I use a topband loop here and plan to build a REAL big loop (3 wl for topband equals a 6 wl for 80 ... yes I HAVE some room here :-)

>
> The loop is corner fed with the feeder as inconspicuous as possible. It
> comes down the outside of one of the 4 fibreglass support poles that is
> located on a corner of my house beside my shack window.
>

Years ago i also was on such a small city lot

I zig-zagged the ladderline in the attic to have a longer run from tuner to loop ...

> I hear what you are saying but I don't want to provoke the neighbour
> further by having the feeder in his field of view at the bottom of our
> garden. The house end of the loop is 2.5 metres higher by the way.
>
> I did open the loop at the bottom of the garden while experimenting and
> found the resulting doublet was more sensitive than the loop in some
> directions, as you suggest, but the loop is so much quieter that I prefer
> to just stick with it, for the moment at least.
>

But for using it on 80 you should open it ...

another band to use ... only for local ragchew ... but another band

and ... yes I know the loop is VERY quiet

> I now need to increase its length to get 40m resonance and will probably
> do this by dropping a fold of wire down. I think this will be better than
> increasing feeder length because the vertical fold will at least radiate
> something.

You could maybe lift up the feeding point and have the loop sloped somewhat?!? ... that would also increase the length

What about adding radials below the feeding point and use the loop and the vertical feedingline against ground (vertical with a big tophat)

Dg9bfc

Sigi

4284. Tree's

Yahoo group: SkyWires
Date: 2013-07-23 18:13:26 UTC
From: Richard Schmuke
Topic: 4284 Message: 4284

A few days ago the question was presented about running a large loop thru trees VS cutting down a thick forest for a clear path. I have received no answers as of yet so I am tossing to question of to a few more people. I have a good performing 80M size delta loop now in my yard. I have been thinking about one 3 or 4 times larger but that would mean a lot of cutting or contact with trees. Anyone have experience with antennas thru trees on HF. I don't need the fire wood, I heat with wood pellets and have a bad back so would like to avoid any excess cutting and can't afford a D8.

Rich , Kd0zz

4285. AW: [SkyWires] Tree's

Yahoo group: SkyWires
Date: 2013-07-23 19:04:29 UTC
From: siegfried jackstien
Topic: 4284 Message: 4285

Hi rich

I would only cut out some branches and not the whole trees if possible

The damping of trees is very low (I have half of my 160m loop trough trees)
... so only the branches that really are in the way ...

You maybe could add some more insulators and secure the loop on the trees
along its run on just some more points

Lower sag ... and lower tension on the ends needed

Dg9bfc

Sigi

Ps how do you plan to erect the loop??? Slingshot? Cross-bow? Ladder?

> -----Ursprüngliche Nachricht-----
> Von: SkyWires@yahoogroups.com [mailto:SkyWires@yahoogroups.com] Im Auftrag
> von Richard Schmuke
> Gesendet: Dienstag, 23. Juli 2013 18:13
> An: Richard Schmuke
> Betreff: [SkyWires] Tree's
>
>
>
> A few days ago the question was presented about running a large loop thru
> trees VS cutting down a thick forest for a clear path. I have received no
> answers as of yet so I am tossing to question of to a few more people. I
> have a good performing 80M size delta loop now in my yard. I have been
> thinking about one 3 or 4 times larger but that would mean a lot of
> cutting or contact with trees. Anyone have experience with antennas thru
> trees on HF. I don□t need the fire wood, I heat with wood pellets and have
> a bad back so would like to avoid any excess cutting and can□t afford a
> D8.
>
>
>
> Rich , Kd0zz
>
>

4286. Re: Support for 160m loop?

Yahoo group: SkyWires
Date: 2013-07-24 04:40:36 UTC
From: O-B-1
Topic: 4227 Message: 4286

I may be in luck... A city nearby has auctioned off street light poles. An acquaintance bid $40 for one and got it for that.

I think I will contact city hall to watch their auctions for more. It appears they are replacing the steal poles with the ornate cement poles.

O-B-1

--- In SkyWires@yahoogroups.com, "O-B-1" <dwmitchell61@...> wrote:
>
> What is an economical way to support the loop?
>
> My property is 150x704 feet, has a flat area about 100 feet from house 150x500 feet that has no trees whatsoever.
>
> It appears wood utility poles are fairly expensive.
>
> The width of the property at 150' leaves hardly any room for guy wires if the sides of the loop are 143.5 feet.
>
> Ideal height is 40 feet I understand.
>
>
> Any ideas?
>

4287. Receive only full-wave loop...

Yahoo group: SkyWires
Date: 2013-07-24 04:56:32 UTC
From: O-B-1
Topic: 4287 Message: 4287

I am in transmitting, merely receiving.

I have read of many connections from the antenna to the tuner.

For receive only, I should be able to just use a coax air choke to reduce the RF currents on the shield from sources in the house, no?

4288. Re: [SkyWires] Receive only full-wave loop...

Yahoo group: SkyWires
Date: 2013-07-24 05:23:45 UTC
From: Steven KA9MOT
Topic: 4287 Message: 4288

If you're just receiving, no need to worry about RF on your shield. Any noise you pick up from the house will be picked up by the antenna....much more than you might pick up on the coax.

On Tue, Jul 23, 2013 at 11:56 PM, O-B-1 <dwmitchell61@...> wrote:

> **
>
>
> I am in transmitting, merely receiving.
>
> I have read of many connections from the antenna to the tuner.
>
> For receive only, I should be able to just use a coax air choke to reduce
> the RF currents on the shield from sources in the house, no?
>
>
>

4289. RE: [SkyWires] Support for 160m loop?

Yahoo group: SkyWires
Date: 2013-07-24 12:07:34 UTC
From: David Mitchell
Topic: 4227 Message: 4289

Thank you, Richard. Looks like a good solution... ease of maintenance.
On Apr 26, 2013 12:39 PM, "Richard Schmuke" <rdj@...> wrote:

> **
>
>
> Here is a simple tilt mast I use as a support for my loop. I does not have
> to be made as strong as the drawing, mine also supports a beam and rotor.*
> ***
>
> http://s1102.photobucket.com/user/KD0ZZ/media/TiltOverB-1.jpg.html****
>
> ** **
>
> Rich, Kd0zz****
>
> ** **
>
> *From:* SkyWires@yahoogroups.com [mailto:SkyWires@yahoogroups.com] *On
> Behalf Of *O-B-1
> *Sent:* Friday, April 26, 2013 10:59 AM
> *To:* SkyWires@yahoogroups.com
> *Subject:* [SkyWires] Support for 160m loop?****
>
> ** **
>
> ****
>
> What is an economical way to support the loop?
>
> My property is 150x704 feet, has a flat area about 100 feet from house
> 150x500 feet that has no trees whatsoever.
>
> It appears wood utility poles are fairly expensive.
>
> The width of the property at 150' leaves hardly any room for guy wires if
> the sides of the loop are 143.5 feet.
>
> Ideal height is 40 feet I understand.
>
> Any ideas?****
>
> ****
>
>

4290. Re: [SkyWires] Receive only full-wave loop...

Yahoo group: SkyWires
Date: 2013-07-24 15:58:27 UTC
From: Andy
Topic: 4287 Message: 4290

Almost everything about transmit antennas, is also true for receive antennas.

This includes common-mode currents, or "RF on the outside of the coax". While you won't get burned by touching it, it is generally undesired because it means the feedline is acting as part of the antenna and will be picking up signals, and unless you want that to happen, you should try to see that it doesn't. By choking off those common-mode currents, you stop them from finding a path into your receiver. In other words, reception might be quieter and cleaner if you make the effort to stop common-mode currents by using an appropriate balun.

If an air choke ("ugly balun") was good enough for transmitting (at the frequencies you are using), then it will be good enough for receiving. If it wasn't adequate for transmitting (ignoring the power handling issue, which the air choke shouldn't have), then it would not be adequate for receiving either.

Common-mode problems aside ... at HF and MF frequencies, a receiving antenna can have quite a bit of loss and still work well. That's because the dominant noise source on those frequencies is either man-made, atmospheric, or cosmic; not internal to the receiver electronics. So reduced signal strength doesn't degrade the signal/noise ratio. This is one area where a receive antenna can differ quite a bit from a transmitting antenna. But you still have the same concerns about common-mode currents because it makes the receiving antenna more susceptible to picking up locally generated man-made noise.

Andy

4291. Not Enough Space for One Wavelength?

Yahoo group: SkyWires
Date: 2013-07-30 12:00:46 UTC
From: N3SW
Topic: 4291 Message: 4291

I don't have enough yard space to fit a one wavelength horizontal loop skywire for 80m. Has anyone ever tried using twinlead as the antenna element and twisting the wires at the feedpoint to double the physical length? Or am I describing a horizontal DCTL?

I will be feeding the antenna with TV twinlead and using a Tentec 229 transmatch in the shack.

My original plan was to try using a short loop of regular wire (less than 1 wl.), but then this idea occurred to me. I have a big spool of TV twinlead I am not using for anything else...

-Scott N3SW-

4292. AW: [SkyWires] Not Enough Space for One Wavelength?

Yahoo group: SkyWires
Date: 2013-07-31 13:43:23 UTC
From: siegfried jackstien
Topic: 4291 Message: 4292

How much room do you have??

Maybe you can make a shorter loop and live with that (if it is not that much shorter as needed) ... or you can "zig-zag" one or 2 sides maybe?!? (between this bush and the garage and the tree and ... you got the idea)

Or ... build a 40m loop

Add a switch at the opposite of feeding and work the loop as "bent dipole" on 80 (a friend does this on 160/80 ... flipping the switch also changes the lobes on higher bands)

Dg9bfc

Sigi

> -----Ursprüngliche Nachricht-----
> Von: SkyWires@yahoogroups.com [mailto:SkyWires@yahoogroups.com] Im Auftrag
> von N3SW
> Gesendet: Dienstag, 30. Juli 2013 12:01
> An: SkyWires@yahoogroups.com
> Betreff: [SkyWires] Not Enough Space for One Wavelength?
>
>
>
> I don't have enough yard space to fit a one wavelength horizontal loop
> skywire for 80m. Has anyone ever tried using twinlead as the antenna
> element and twisting the wires at the feedpoint to double the physical
> length? Or am I describing a horizontal DCTL?
>
> I will be feeding the antenna with TV twinlead and using a Tentec 229
> transmatch in the shack.
>
> My original plan was to try using a short loop of regular wire (less than
> 1 wl.), but then this idea occurred to me. I have a big spool of TV
> twinlead I am not using for anything else...
>
> -Scott N3SW-
>
>
>
>

4293. Re: [SkyWires] Not Enough Space for One Wavelength?

Yahoo group: SkyWires
Date: 2013-07-31 18:54:50 UTC
From: Andy
Topic: 4291 Message: 4293

It will radiate even if it isn't a full wavelength circumference. It just won't present a resistive load. You can change that by adding extra wire in the right places, which doesn't need to be stretched out into a loop. I saw somewhere about adding capacitance or inductance to the loop, which you do by adding wire at current nodes or voltage nodes, to make the loop seem electrically longer.

I have seen very little written about large multi-turn loops.

Andy

4294. AW: [SkyWires] Not Enough Space for One Wavelength?

Yahoo group: SkyWires
Date: 2013-08-01 13:48:02 UTC
From: Thomas F Giella W4HM
Topic: 4291 Message: 4294

You could zig zag one of the horizontal loop antenna legs in the horizontal plane. It's called a linear load and it will radiate. I've done that in the past sucessfully on a 160 meter 1 full wave horizontal loop.

If you use twin lead for the antenna element you will end up with lot's of RF signal cancellation.

73 & GUD DX,
Thomas F. Giella W4HM
Lakeland, FL, USA
w4hm@...

W4HM Amateur Radio & SWL Autobiography: http://www.w4hm.org

4295. Loop Supports

Yahoo group: SkyWires
Date: 2013-08-01 14:26:29 UTC
From: John Chmielewski
Topic: 4295 Message: 4295

I am looking for ideas for supports for my 160 meter loop.At present i'm using the rope over the trees method but would like to go to something more reliable.I'm looking to support the loop at around 40'.I have gotten very spoiled with having the loop and do not want to give it up.Thanks to the group.

73 John N2XD

4296. AW: [SkyWires] Loop Supports

Yahoo group: SkyWires
Date: 2013-08-01 16:51:30 UTC
From: siegfried jackstien
Topic: 4295 Message: 4296

Whats unreliable with a tree and some rope (maybe add pull-eyes and counter-weights..)....

Maybe you just used the wrong materials?!?

I have a 1wl loop up here for some years now (same thing ... rope and trees) ... cheap ... and easy to repair IF something breaks

Dg9bfc

Sigi

Ps buy/build a spudgun ... www.antennalauchers.com

> -----Ursprüngliche Nachricht-----
> Von: SkyWires@yahoogroups.com [mailto:SkyWires@yahoogroups.com] Im Auftrag
> von John Chmielewski
> Gesendet: Donnerstag, 1. August 2013 14:26
> An: SkyWires @ yahoo
> Betreff: [SkyWires] Loop Supports
>
>
>
> I am looking for ideas for supports for my 160 meter loop.At present i'm
> using the rope over the trees method but would like to go to something
> more reliable.I'm looking to support the loop at around 40'.I have gotten
> very spoiled with having the loop and do not want to give it up.Thanks to
> the group.
>
> 73 John N2XD
>
>

4297. Re: Not Enough Space for One Wavelength?

Yahoo group: SkyWires
Date: 2013-08-01 23:57:59 UTC
From: N3SW
Topic: 4291 Message: 4297

I will look at my situation and see if I can zig-zag more wire into the configuration, as several of you have suggested. Thanks.
-sw-

--- In SkyWires@yahoogroups.com, Andy <ai.egrps@...> wrote:
>
> It will radiate even if it isn't a full wavelength circumference. It just
> won't present a resistive load. You can change that by adding extra wire
> in the right places, which doesn't need to be stretched out into a loop. I
> saw somewhere about adding capacitance or inductance to the loop, which you
> do by adding wire at current nodes or voltage nodes, to make the loop seem
> electrically longer.
>
> I have seen very little written about large multi-turn loops.
>
> Andy
>

4298. Re: 2 Turn Full Wave Loop

Yahoo group: SkyWires
Date: 2013-08-23 16:29:54 UTC
From: w2vmc
Topic: 2195 Message: 4298

Hi,

I put up one of these, yesterday, and it does seem to have gain over the old 75M full wave loop I had up at the same height. It also seems to be just a tad "quieter."

I didn't realize that this is what I was putting up when I did as I was looking for a way to cram 160 meters worth of wire in 75 meters worth of space. After seeing how well it worked on 75M, I discovered the information you posted. "So," I thought, "this is what I did!"

Thanks for posting it!

73,

W2VMC
--- In SkyWires@yahoogroups.com, "Dr.Ace Ratliff" <wh2t@...> wrote:
>
> Hi ,
> See these files I uploaded today !
>
> You can access these file at the URLs:
> http://groups.yahoo.com/group/SkyWires/files/2_Turn_Loop_1.jpg
>
> AND
>
> http://groups.yahoo.com/group/SkyWires/files/2_Turn_Loop_2.jpg
>
> 73, Ace - WH2T.com
>
>
>
> ----- Original Message -----
> From: ki4syx
> To: SkyWires@yahoogroups.com
> Sent: Sunday, March 04, 2007 7:20 PM
> Subject: [SkyWires] Re: 2 Turn Full Wave Loop
>
>
> --- In SkyWires@yahoogroups.com, "Dr.Ace" <wh2t@> wrote:
> >
> > Hi All,
> > FYI, The Feb 2007 issue of Worldradio page 16 has an informative
> > article on a zip cord
> > 2 Turn Full Wave Loop. The article by N4FWD claims the antenna has gain
> > over a 1 Turn Full Wave Loop.
> > Ace - WH2T

> >
>
> I wish I could read the article. Was this experimentally determined or
> just simulated? I ran a simulation of this through MMANA and it didn't
> appear to add any gain.
>

4299. 40 Meter Loop Antenna on 80 Meters and WARC Bands

Yahoo group: SkyWires
Date: 2013-08-29 06:50:30 UTC
From: kp4md
Topic: 4299 Message: 4299

Full wave loop antennas present non-reactive loads on their resonant frequency and harmonics thereof, but their high reactance between these frequencies may present matching problems at the transmitter end of the transmission line. These vector network analyzer measurements over 3 to 30 MHz demonstrate the effect of lengthening a 140 ohm zip cord transmission line to a 7 MHz full wave loop antenna from a random 37.9 feet to an electrical half wavelength at 7 MHz (51 feet). This eliminated skewing of the natural resonant frequencies of the loop antenna at its natural fundamental and harmonic frequencies. Also, the impedance transforming characteristics of this transmission line at frequencies where it is also an odd multiple of a quarter wavelength (3.5, 10.5, 17.5, and 24.5 MHz) transformed the loop antenna's high impedance at those frequencies to a low impedance, eliminating high RF voltage on the matching network and facilitating transmitter matching on 3.5 MHz and the WARC bands.
Carol, KP4MD

https://picasaweb.google.com/114032640816757126398/40MeterLoopAntennaOn8\
0MetersAndWARCBands?authuser=0&feat=directlink
<https://picasaweb.google.com/114032640816757126398/40MeterLoopAntennaOn\
80MetersAndWARCBands?authuser=0&feat=directlink>

4300. Re(0); 5

Yahoo group: SkyWires
Date: 2013-08-29 07:04:08 UTC
From: Michael Williams
Topic: 4300 Message: 4300

referral program http://incore21.com/fsjwafav/satellite.php

Sent: 8/29/2013 8:04:12 AM

From Michael Williams

4301. Re: 40 Meter Loop Antenna on 80 Meters and WARC Bands

Yahoo group: SkyWires
Date: 2013-08-29 18:37:21 UTC
From: kp4md
Topic: 4299 Message: 4301

My 40 meter full wave antenna is 140 feet of wire in a nearly square loop http://www.qsl.net/kp4md/kp4mdnec2.htm <http://www.qsl.net/kp4md/kp4mdnec2.htm> . I intend to use it on all HF bands, including the WARC bands. As its impedance varies widely over this range I use 18AWG zip cord speaker wire as a balanced transmission line which is easily wound on a ferrite core to form a common mode choke (1:1 current balun). The final impedance matching to 50 ohms is accomplished by an LDG autotuner attached to the transmitter. I am presently testing this antenna system on all HF bands using frequency hopping WSPR mode. My current WSPR spot reports are posted at http://wsprnet.org/olddb.php?findcall=kp4md&findreporter=kp4md <http://wsprnet.org/olddb.php?findcall=kp4md&findreporter=kp4md> ï»¿

4302. Re: [SkyWires] Re: 40 Meter Loop Antenna on 80 Meters and WARC Bands

Yahoo group: SkyWires
Date: 2013-09-02 06:11:09 UTC
From: Don Sanders
Topic: 4299 Message: 4302

Zip cord , both speaker and AC extention wire, works well as a balanced
feed line on160 to 30 meters.
At 20 and up the loss due to the insulation is 4 db per 100 foot.
This has been tested by ARRL lab and others and reports were in QST.
It has about 105 ohm line impedance and velocity factor of .70.
I use it for feeding a 2 turn vertical loop of 80 foot of zip cord for
mainly
receiving on 80 , 40, and 30 to reduce noise.
However my SGC 230 tuner will tune it from 80 to 10 meters for transmitting
and it works almost as well as my horiz coax fed dipole at 35 feet above
ground.

Don HC4/W4BWS

On Thu, Aug 29, 2013 at 1:37 PM, kp4md <kp4md@...> wrote:

> **
>
>
> My 40 meter full wave antenna is 140 feet of wire in a nearly square loop
> http://www.qsl.net/kp4md/kp4mdnec2.htm.
> I intend to use it on all HF bands, including the WARC bands.
> As its impedance varies widely over this range I use 18AWG zip cord
> speaker wire as a balanced transmission line which is easily wound on a
> ferrite core to form a common mode choke (1:1 current balun).
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> autotuner attached to the transmitter.
> I am presently testing this antenna system on all HF bands using frequency
> hopping WSPR mode.
> My current WSPR spot reports are posted at
> http://wsprnet.org/olddb.php?findcall=kp4md&findreporter=kp4mdï»¿
>
>
>

4303. Extending a Loop

Yahoo group: SkyWires
Date: 2013-10-13 19:40:38 UTC
From: Scott MacKenzie
Topic: 4303 Message: 4303

All:

I want to put up a 270 ft long loop. However, I don't have quite the space to do so. It is possible to use about 30 feet of ladder line shorted at the bottom and 240 feet of wire to achieve the necessary length?

Thanks

Scott

4304. RE: Extending a Loop

Yahoo group: SkyWires
Date: 2013-10-14 10:37:58 UTC
From: <warrenstone@...>
Topic: 4303 Message: 4304

30 feet of ladder line would increase the effective line length by 60 feet.
As a loading section it would not radiate any significant energy so why not just leave it out?
Build a 240 foot loop, connect to the tuner, and use it.

---In SkyWires@yahoogroups.com, <skywires@yahoogroups.com> wrote:

All:

I want to put up a 270 ft long loop. However, I don't have quite the space to do so. It is possible to use about 30 feet of ladder line shorted at the bottom and 240 feet of wire to achieve the necessary length?

Thanks

Scott

4305. 2.5-25KV BUTTERFLY CAPACITOR KITS VA6POP

Yahoo group: SkyWires
Date: 2013-10-15 15:23:39 UTC
From: <pop_vasile@...>
Topic: 4305 Message: 4305

2.5-25KV BUTTERFLY CAPACITOR KITS VA6POP I can build for u any air variable capacitors kits https://www.youtube.com/watch? v=thw0RLOh6zM https://www.youtube.com/watch?v=thw0RLOh6zM www.youtube.com/watch?v=fV- FWFQO6As http://www.youtube.com/watch?v=fV-FWFQO6As www.youtube.com/watch?v= dmZxgmalP9g http://www.youtube.com/watch?v=dmZxgmalP9g http://forums.qrz.com/ showthread.php?351604- Butterfly-capacitor-kits-5- 15kv http://forums.qrz.com/showthread.php?351604-Butterfly-capacitor-kits-5-15kv http://www.flickr.com/photos/ 93005502@N08/page3/ http://www.flickr.com/photos/93005502@N08/page3/ http://forums.qrz.com/ showthread.php?378701-2-5- 15kv-butterfly-capacitor-kits& p=\ http://forums.qrz.com/showthread.php?378701-2-5-15kv-butterfly-capacitor-kits&p=%5C 2764980#post2764980 http://groups.yahoo.com/group/ loopantennas/photos/album/ 1355109643/pic/list http://groups.yahoo.com/group/loopantennas/photos/album/1355109643/pic/list http://groups.yahoo.com/group/ loopantennas/photos/album/ 1356390600/pic/list http://groups.yahoo.com/group/loopantennas/photos/album/1356390600/pic/list I have kits: 2.5" OD ROTOR 3" OD ROTOR 4" OD ROTOR 5" OD ROTOR 6" OD ROTOR 8" OD ROTOR 10" OD ROTOR
VA6POP yo5bzz(at)gmail.com http://gmail.com/

4306. RE: [SkyWires] RE: Extending a Loop

Yahoo group: SkyWires
Date: 2013-10-19 19:50:47 UTC
From: Scott MacKenzie
Topic: 4303 Message: 4306

I am not sure I can fit 240 feet, but I am almost sure I can put up about 200 feet, so if I use 200 feet and 30 feet of ladder line, I should be able to tune 80-40-20M - right?

_____

From: SkyWires@yahoogroups.com [mailto:SkyWires@yahoogroups.com] On Behalf Of warrenstone@...
Sent: Monday, October 14, 2013 6:38 AM
To: SkyWires@yahoogroups.com
Subject: [SkyWires] RE: Extending a Loop

30 feet of ladder line would increase the effective line length by 60 feet. As a loading section it would not radiate any significant energy so why not just leave it out?
Build a 240 foot loop, connect to the tuner, and use it.

---In SkyWires@yahoogroups.com, <skywires@yahoogroups.com> wrote:

All:

I want to put up a 270 ft long loop. However, I don't have quite the space to do so. It is possible to use about 30 feet of ladder line shorted at the bottom and 240 feet of wire to achieve the necessary length?

Thanks

Scott

4307. 160 Meter horizontal loop installation (Winter Project)

Yahoo group: SkyWires
Date: 2013-10-20 01:16:52 UTC
From: <narikawa@...>
Topic: 4307 Message: 4307

Hi Folks

I am installing a 160 meter horizontal loop antenna before winter snow hits. It will be fun to see how it works over the winter.

I am shooting for at least 550 feet and have a 4 corner supports install in trees. I took time to install pulleys, and the ends terminate at the base of the trees for easy adjustment and maintenance.

I plan to mount an SGC-239 at the feedpoint.

I currently have the SCG-239 connected to an end feed long wire antenna (500 > feet) that has worked very well for years.

What would be the difference if I ran ladder line (15 feet) to the SCG-239 instead of mounting it at the feedpoint (handing in the air)?

4308. AW: [SkyWires] 160 Meter horizontal loop installation (Winter Project)

Yahoo group: SkyWires
Date: 2013-10-20 07:58:02 UTC
From: siegfried jackstien
Topic: 4307 Message: 4308

No difference in antenna performance ... some bands may be easier to tune (or also some maybe impossible to tune!!!) ... if that is the case then change ladderline length

I feed my topband loop with about 15-16m (don☐t know exactly) windowline ...
and for low band and some other bands I add another 20m with banana plugs
... and at the shack end a homebrewed 1:9 balun

With some cutntry I now have a multiband antenna that I can use on most bands without tuner ... but it took me SEVERAL days to get to that solution

I made an excel sheet for my notes ... and then made antenna and ladderline in different lengths and try again ... till it fits my needs :-)

If you install an autotuner at the antenna (or close to it with some ladderline in between) ... you have to try out all bands and if the tuner does not find a match .. or just a matching point with very high or very low impedance then change the ladderline length and try again ALL BANDS

I modelled my loop and it is not equal on the 3 sides (more or less 40/60/70m) ... feeding in a corner between 40 and 60m run

If you have a direction on the higher bands that you wanna work then you should try to locate the feeding point at the opposite corner of that direction (or in the corner pointing TO that direction ... both setups do work fine) ... I made mine that the max gain on 40 runs north east south west (vk/zl short and long path)

If you have your loop installed ... you will never ever want any other antenna (except a big beam/4sq or similar)

Or in other words ... YOU WILL LOVE IT :-)

Dg9bfc

Sigi

> -----Ursprüngliche Nachricht-----
> Von: SkyWires@yahoogroups.com [mailto:SkyWires@yahoogroups.com] Im Auftrag
> von narikawa@...
> Gesendet: Sonntag, 20. Oktober 2013 01:17
> An: SkyWires@yahoogroups.com
> Betreff: [SkyWires] 160 Meter horizontal loop installation (Winter
> Project)
>
>
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> Hi Folks

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> I am installing a 160 meter horizontal loop antenna before winter snow
> hits. It will be fun to see how it works over the winter.
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> in trees. I took time to install pulleys, and the ends terminate at the
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> I plan to mount an SGC-239 at the feedpoint.
>
> I currently have the SCG-239 connected to an end feed long wire antenna
> (500 > feet) that has worked very well for years.
>
> What would be the difference if I ran ladder line (15 feet) to the SCG-239
> instead of mounting it at the feedpoint (handing in the air)?
>
>

4309. RE: AW: [SkyWires] 160 Meter horizontal loop installation (Winter Project)

Yahoo group: SkyWires
Date: 2013-10-20 14:22:23 UTC
From: <narikawa@...>
Topic: 4307 Message: 4309

Hi Sigi

Thanks for sharing your experience. I got the four corners up yesterday, but today I have a combination of rain and sleet (ice) making my final wire run a challenge.

I was going to mount the SCG-239 inline. This meant that I would need to create a waterproof enclosure and run power. The weight of the tuner would also make the wire sag significantly.

I will get some ladder line ASAP and keep the tuner in a weather proof electrical enclosure (close to radio) and keep the ladder line as short as possible. I think it will be less then 20 feet vertical. This will be a much better installation for me as I can now monitor the tuner.

My goal is to have a multi-band antenna system that will work with normal amateur radio use and ALE (Automatic Link Establishment). My property won't work well for towers, but will support a long wire system.

Once it get everything working I will take some photo and post them so you can see the final result.

Thanks

---In SkyWires@yahoogroups.com, <skywires@yahoogroups.com> wrote:

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(or also some maybe impossible to tune!!!) ... if that is the case then
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in different lengths and try again ... till it fits my needs :-)

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ladderline in between) ... you have to try out all bands and if the tuner
does not find a match .. or just a matching point with very high or very low
impedance then change the ladderline length and try again ALL BANDS

I modelled my loop and it is not equal on the 3 sides (more or less
40/60/70m) ... feeding in a corner between 40 and 60m run

If you have a direction on the higher bands that you wanna work then you should try to locate the feeding point at the opposite corner of that direction (or in the corner pointing TO that direction ... both setups do work fine) ... I made mine that the max gain on 40 runs north east south west (vk/zl short and long path)

If you have your loop installed ... you will never ever want any other antenna (except a big beam/4sq or similar)

Or in other words ... YOU WILL LOVE IT :-)

Dg9bfc

Sigi

> -----Ursprüngliche Nachricht-----
> Von: SkyWires@yahoogroups.com mailto:SkyWires@yahoogroups.com [mailto:SkyWires@yahoogroups.com mailto:SkyWires@yahoogroups.com] Im Auftrag
> von narikawa@... mailto:narikawa@...
> Gesendet: Sonntag, 20. Oktober 2013 01:17
> An: SkyWires@yahoogroups.com mailto:SkyWires@yahoogroups.com
> Betreff: [SkyWires] 160 Meter horizontal loop installation (Winter
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> Hi Folks
>
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> base of the trees for easy adjustment and maintenance.
>
> I plan to mount an SGC-239 at the feedpoint.
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> I currently have the SCG-239 connected to an end feed long wire antenna
> (500 > feet) that has worked very well for years.
>
> What would be the difference if I ran ladder line (15 feet) to the SCG-239
> instead of mounting it at the feedpoint (handing in the air)?
>
>

4310. AW: AW: [SkyWires] 160 Meter horizontal loop installation (Winter Project)

Yahoo group: SkyWires
Date: 2013-10-20 18:40:44 UTC
From: siegfried jackstien
Topic: 4307 Message: 4310

The autotuner is an unbalanced tuner ... so I would then add a choke on the input AND on the power lines to lift the tuner up rf wise

My friend did the same with his dipole and it works 160-10 ...

Dg9bfc

Sigi

> -----Ursprüngliche Nachricht-----
> Von: SkyWires@yahoogroups.com [mailto:SkyWires@yahoogroups.com] Im Auftrag
> von narikawa@...
> Gesendet: Sonntag, 20. Oktober 2013 14:22
> An: SkyWires@yahoogroups.com
> Betreff: RE: AW: [SkyWires] 160 Meter horizontal loop installation (Winter
> Project)
>
>
>
> Hi Sigi
>
>
>
>
> Thanks for sharing your experience. I got the four corners up yesterday,
> but today I have a combination of rain and sleet (ice) making my final
> wire run a challenge.
>
>
>
>
> I was going to mount the SCG-239 inline. This meant that I would need to
> create a waterproof enclosure and run power. The weight of the tuner would
> also make the wire sag significantly.
>
>
>
>
> I will get some ladder line ASAP and keep the tuner in a weather proof
> electrical enclosure (close to radio) and keep the ladder line as short as
> possible. I think it will be less then 20 feet vertical. This will be a
> much better installation for me as I can now monitor the tuner.
>
>
>

>
> My goal is to have a multi-band antenna system that will work with normal
> amateur radio use and ALE (Automatic Link Establishment). My property
> won't work well for towers, but will support a long wire system.
>
>
>
>
>
> Once it get everything working I will take some photo and post them so you
> can see the final result.
>
>
>
>
>
> Thanks
>
>
>
>
> ---In SkyWires@yahoogroups.com, <skywires@yahoogroups.com> wrote:
>
>
> No difference in antenna performance ... some bands may be easier to tune
> (or also some maybe impossible to tune!!!) ... if that is the case then
> change ladderline length
>
> I feed my topband loop with about 15-16m (don□t know exactly) windowline
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> ... and at the shack end a homebrewed 1:9 balun
>
> With some cutntry I now have a multiband antenna that I can use on most
> bands without tuner ... but it took me SEVERAL days to get to that
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>
> I made an excel sheet for my notes ... and then made antenna and
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> in different lengths and try again ... till it fits my needs :-)
>
> If you install an autotuner at the antenna (or close to it with some
> ladderline in between) ... you have to try out all bands and if the tuner
> does not find a match .. or just a matching point with very high or very
> low
> impedance then change the ladderline length and try again ALL BANDS
>
> I modelled my loop and it is not equal on the 3 sides (more or less
> 40/60/70m) ... feeding in a corner between 40 and 60m run

>
> If you have a direction on the higher bands that you wanna work then you
> should try to locate the feeding point at the opposite corner of that
> direction (or in the corner pointing TO that direction ... both setups do
> work fine) ... I made mine that the max gain on 40 runs north east south
> west (vk/zl short and long path)
>
> If you have your loop installed ... you will never ever want any other
> antenna (except a big beam/4sq or similar)
>
> Or in other words ... YOU WILL LOVE IT :-)
>
> Dg9bfc
>
> Sigi
>
>
>
>
> > -----Ursprüngliche Nachricht-----
> > Von: SkyWires@yahoogroups.com [mailto:SkyWires@yahoogroups.com] Im
> Auftrag
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> > Gesendet: Sonntag, 20. Oktober 2013 01:17
> > An: SkyWires@yahoogroups.com
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> >
> > Hi Folks
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> > I am installing a 160 meter horizontal loop antenna before winter
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> > I am shooting for at least 550 feet and have a 4 corner supports
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> > I plan to mount an SGC-239 at the feedpoint.
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> SCG-239
> > instead of mounting it at the feedpoint (handing in the air)?
> >
> >
>
>

4311. RE: 160 Meter horizontal loop installation (Winter Project)

Yahoo group: SkyWires
Date: 2013-10-21 15:51:54 UTC
From: <hmlong@...>
Topic: 4307 Message: 4311

Congratulations on getting your 550' loop up. I bet you got plenty of exercise walking around adjusting it. My 550' loop is up about 50-60 feet on average and I am feeding it with about 65 feet of homebrew ladder line with 600ohm characteristic spacing to a homebrew true balanced antenna tuner, with synchronized roller inductors. This allows QRO power when needed too. The feed point is near one of the tree ties so the weight of the ladder line does not cause antenna sag. The antenna and feedline are all 12gauge wire and it works on all HF bands.

Additionally my loop is tied out at 6 trees making it more rounded, maximizing the planer area within the loop and a bit more unidirectional - though not perfect.

It sounds like you live in an area where you get “sticky” snow and ice, as I do. The commercial window line is compromised in the inclement weather, if that is of concern to you. I evolved into homebrew ladderline for that reason and during inclement weather I connect a big old Variac AC supply directly to the loop leads, crank it up to about 20volts at 20 amps through the loop for 20 minutes and melt the snow off the sagging antenna and ladderline. Homebrew ladderline is easy to make too. In any iteration though a 550' loop works great. Good luck with it....
73 Hank N2MU ...-.- ..

---In skywires@yahoogroups.com, <narikawa@...> wrote:

Hi Sigi

Thanks for sharing your experience. I got the four corners up yesterday, but today I have a combination of rain and sleet (ice) making my final wire run a challenge.

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Once it get everything working I will take some photo and post them so you can see the final result.

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If you have a direction on the higher bands that you wanna work then you should try to locate the feeding point at the opposite corner of that direction (or in the corner pointing TO that direction ... both setups do work fine) ... I made mine that the max gain on 40 runs north east south west (vk/zl short and long path)

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Or in other words ... YOU WILL LOVE IT :-)

Dg9bfc

Sigi

> -----Ursprüngliche Nachricht-----
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> Gesendet: Sonntag, 20. Oktober 2013 01:17
> An: SkyWires@yahoogroups.com mailto:SkyWires@yahoogroups.com
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> I plan to mount an SGC-239 at the feedpoint.
>
> I currently have the SCG-239 connected to an end feed long wire antenna
> (500 > feet) that has worked very well for years.
>
> What would be the difference if I ran ladder line (15 feet) to the SCG-239
> instead of mounting it at the feedpoint (handing in the air)?
>
>

4312. Re: [SkyWires] RE: 160 Meter horizontal loop installation (Winter Project)

Yahoo group: SkyWires
Date: 2013-10-21 16:41:44 UTC
From: Chris Wilson
Topic: 4307 Message: 4312

On 21 Oct 2013 08:51:54 -0700, you wrote:

>Congratulations on getting your 550' loop up. I bet you got plenty of exercise walking around adjusting it. My 550' loop is up about 50-60 feet on average and I am feeding it with about 65 feet of homebrew ladder line with 600ohm characteristic spacing to a homebrew true balanced antenna tuner, with synchronized roller inductors. This allows QRO power when needed too. The feed point is near one of the tree ties so the weight of the ladder line does not cause antenna sag. The antenna and feedline are all 12gauge wire and it works on all HF bands.
>
>Additionally my loop is tied out at 6 trees making it more rounded, maximizing the planer area within the loop and a bit more unidirectional - though not perfect.
>
>It sounds like you live in an area where you get ☐sticky☐ snow and ice, as I do. The commercial window line is compromised in the inclement weather, if that is of concern to you. I evolved into homebrew ladderline for that reason and during inclement weather I connect a big old Variac AC supply directly to the loop leads, crank it up to about 20volts at 20 amps through the loop for 20 minutes and melt the snow off the sagging antenna and ladderline. Homebrew ladderline is easy to make too. In any iteration though a 550' loop works great. Good luck with it....
>73 Hank N2MU ...-.- ..

Great idea re the heating, my big loop also suffers ice build up, this
will also give the birdies something to warm their toes on ;)

--

Best Regards,
Chris Wilson.

4313. AW: [SkyWires] RE: 160 Meter horizontal loop installation (Winter Project)

Yahoo group: SkyWires
Date: 2013-10-21 17:03:38 UTC
From: siegfried jackstien
Topic: 4307 Message: 4313

But do not use tooo much current or you will have a very big "light bulb" in your garden hi hi

Dg9bfc

Sigi

> -----Ursprüngliche Nachricht-----
> Von: SkyWires@yahoogroups.com [mailto:SkyWires@yahoogroups.com] Im Auftrag
> von Chris Wilson
> Gesendet: Montag, 21. Oktober 2013 16:42
> An: SkyWires@yahoogroups.com
> Betreff: Re: [SkyWires] RE: 160 Meter horizontal loop installation (Winter
> Project)
>
>
>
> On 21 Oct 2013 08:51:54 -0700, you wrote:
>
> >Congratulations on getting your 550' loop up. I bet you got plenty of
> exercise walking around adjusting it. My 550' loop is up about 50-60 feet
> on average and I am feeding it with about 65 feet of homebrew ladder line
> with 600ohm characteristic spacing to a homebrew true balanced antenna
> tuner, with synchronized roller inductors. This allows QRO power when
> needed too. The feed point is near one of the tree ties so the weight of
> the ladder line does not cause antenna sag. The antenna and feedline are
> all 12gauge wire and it works on all HF bands.
> >
> >Additionally my loop is tied out at 6 trees making it more rounded,
> maximizing the planer area within the loop and a bit more unidirectional -
> though not perfect.
> >
> >It sounds like you live in an area where you get ☐sticky☐ snow and ice,
> as I do. The commercial window line is compromised in the inclement
> weather, if that is of concern to you. I evolved into homebrew ladderline
> for that reason and during inclement weather I connect a big old Variac AC
> supply directly to the loop leads, crank it up to about 20volts at 20 amps
> through the loop for 20 minutes and melt the snow off the sagging antenna
> and ladderline. Homebrew ladderline is easy to make too. In any iteration
> though a 550' loop works great. Good luck with it....
> >73 Hank N2MU ...-.- ..
>
> Great idea re the heating, my big loop also suffers ice build up, this
> will also give the birdies something to warm their toes on ;)
>

> --
>
> Best Regards,
> Chris Wilson.
>
>
>

4314. RE: 160 Meter horizontal loop installation (Winter Project)

Yahoo group: SkyWires
Date: 2013-10-21 21:53:55 UTC
From: <k4aav@...>
Topic: 4307 Message: 4314

I plan on starting my 160m loop project shortly but I don't have the trees. I plan to install about 15 ft above ground with the NVIS concept. I plan on feeding with a 4:1 balun and coax. I cannot use ladder line here, too far away from the house. Any thought to the wire length for that height? Some have told me to start at 560 and trim my back if needed.

Thoughts?

Will, K4AAV

---In SkyWires@yahoogroups.com, <skywires@yahoogroups.com> wrote:

Hi Folks

I am installing a 160 meter horizontal loop antenna before winter snow hits. It will be fun to see how it works over the winter.

I am shooting for at least 550 feet and have a 4 corner supports install in trees. I took time to install pulleys, and the ends terminate at the base of the trees for easy adjustment and maintenance.

I plan to mount an SGC-239 at the feedpoint.

I currently have the SCG-239 connected to an end feed long wire antenna (500 > feet) that has worked very well for years.

What would be the difference if I ran ladder line (15 feet) to the SCG-239 instead of mounting it at the feedpoint (handing in the air)?

4315. RE: 160 Meter horizontal loop installation (Winter Project)

Yahoo group: SkyWires
Date: 2013-10-22 00:14:19 UTC
From: <narikawa@...>
Topic: 4307 Message: 4315

Hi Chris

Heating the cable has to be the greatest antenna idea I have ever heard. This could be great in the winter. Ice storms can create a lot of weight. I plan to try different wire to see how they perform.

I will get busy finding Variac AC supply or similar.

THANKS

---In skywires@yahoogroups.com, <chris@...> wrote:

On 21 Oct 2013 08:51:54 -0700, you wrote:

>Congratulations on getting your 550' loop up. I bet you got plenty of exercise walking around adjusting it. My 550' loop is up about 50-60 feet on average and I am feeding it with about 65 feet of homebrew ladder line with 600ohm characteristic spacing to a homebrew true balanced antenna tuner, with synchronized roller inductors. This allows QRO power when needed too. The feed point is near one of the tree ties so the weight of the ladder line does not cause antenna sag. The antenna and feedline are all 12gauge wire and it works on all HF bands.
>
>Additionally my loop is tied out at 6 trees making it more rounded, maximizing the planer area within the loop and a bit more unidirectional - though not perfect.
>
>It sounds like you live in an area where you get □sticky□ snow and ice, as I do. The commercial window line is compromised in the inclement weather, if that is of concern to you. I evolved into homebrew ladderline for that reason and during inclement weather I connect a big old Variac AC supply directly to the loop leads, crank it up to about 20volts at 20 amps through the loop for 20 minutes and melt the snow off the sagging antenna and ladderline. Homebrew ladderline is easy to make too. In any iteration though a 550' loop works great. Good luck with it....
>73 Hank N2MU ...-.- ..

Great idea re the heating, my big loop also suffers ice build up, this
will also give the birdies something to warm their toes on ;)

--

Best Regards,
Chris Wilson.

4316. RE: 160 Meter horizontal loop installation (Winter Project)

Yahoo group: SkyWires
Date: 2013-10-22 00:19:16 UTC
From: <narikawa@...>
Topic: 4307 Message: 4316

My main height consideration is the garbage truck. I think it a 80,000 lb unit and I need the wire to provide clearance. The truck has to use my turnaround or they can't pickup by neighbors trash.

I would like to keep it low enough to have NVIS properties.

My roll of wire is about 656 feet.

---In skywires@yahoogroups.com, <k4aav@...> wrote:

I plan on starting my 160m loop project shortly but I don't have the trees. I plan to install about 15 ft above ground with the NVIS concept. I plan on feeding with a 4:1 balun and coax. I cannot use ladder line here, too far away from the house. Any thought to the wire length for that height? Some have told me to start at 560 and trim my back if needed.

Thoughts?

Will, K4AAV

---In SkyWires@yahoogroups.com, <skywires@yahoogroups.com> wrote:

Hi Folks

I am installing a 160 meter horizontal loop antenna before winter snow hits. It will be fun to see how it works over the winter.

I am shooting for at least 550 feet and have a 4 corner supports install in trees. I took time to install pulleys, and the ends terminate at the base of the trees for easy adjustment and maintenance.

I plan to mount an SGC-239 at the feedpoint.

I currently have the SCG-239 connected to an end feed long wire antenna (500 > feet) that has worked very well for years.

What would be the difference if I ran ladder line (15 feet) to the SCG-239 instead of mounting it at the feedpoint (handing in the air)?

4317. AW: [SkyWires] RE: 160 Meter horizontal loop installation (Winter Project)

Yahoo group: SkyWires
Date: 2013-10-22 14:25:28 UTC
From: siegfried jackstien
Topic: 4307 Message: 4317

5m is VERY low ... you heat up the ground ... that□s all

Nvis does also work with higher installatiojn heights..

10-15m would be my goal ... even that is low (compared to wavelength on topband)

At that height it would work "nvis" on 80 and 160 (and also a bit on 40m)

From 40m upwards that loop will be a good dx antenna (an elmer once said to me if you can not make it high ... then make it long)

Dg9bfc

Sigi

> -----Ursprüngliche Nachricht-----
> Von: SkyWires@yahoogroups.com [mailto:SkyWires@yahoogroups.com] Im Auftrag
> von narikawa@...
> Gesendet: Dienstag, 22. Oktober 2013 00:19
> An: SkyWires@yahoogroups.com
> Betreff: [SkyWires] RE: 160 Meter horizontal loop installation (Winter
> Project)
>
>
>
> My main height consideration is the garbage truck. I think it a 80,000 lb
> unit and I need the wire to provide clearance. The truck has to use my
> turnaround or they can't pickup by neighbors trash.
>
> I would like to keep it low enough to have NVIS properties.
>
>
>
>
>
>
> My roll of wire is about 656 feet.
>
>
>
>
>
> ---In skywires@yahoogroups.com, <k4aav@...> wrote:
>
>
>
> I plan on starting my 160m loop project shortly but I don't have the
> trees. I plan to install about 15 ft above ground with the NVIS concept. I

> plan on feeding with a 4:1 balun and coax. I cannot use ladder line here,
> too far away from the house. Any thought to the wire length for that
> height? Some have told me to start at 560 and trim my back if needed.
>
>
>
> Thoughts?
>
>
>
> Will, K4AAV
>
>
>
> ---In SkyWires@yahoogroups.com, <skywires@yahoogroups.com> wrote:
>
>
> Hi Folks
>
> I am installing a 160 meter horizontal loop antenna before winter snow
> hits. It will be fun to see how it works over the winter.
>
> I am shooting for at least 550 feet and have a 4 corner supports install
> in trees. I took time to install pulleys, and the ends terminate at the
> base of the trees for easy adjustment and maintenance.
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> I plan to mount an SGC-239 at the feedpoint.
>
> I currently have the SCG-239 connected to an end feed long wire antenna
> (500 > feet) that has worked very well for years.
>
> What would be the difference if I ran ladder line (15 feet) to the SCG-239
> instead of mounting it at the feedpoint (handing in the air)?
>
>

4318. AW: [SkyWires] RE: 160 Meter horizontal loop installation (Winter Project)

Yahoo group: SkyWires
Date: 2013-10-22 14:26:58 UTC
From: siegfried jackstien
Topic: 4307 Message: 4318

.... you wrote that the distance is to high for ladderline??? Absolutely wrong! .. as more distance you have as more is a reason to change from coax to ladderline ....LOWER LOSS and multiband use!!!!

5m is very low (compared to wavelength on topband) ... go higher and you have better signals (not heating the worms in the ground)

Dg9bfc

Sigi

> -----Ursprüngliche Nachricht-----
> Von: SkyWires@yahoogroups.com [mailto:SkyWires@yahoogroups.com] Im Auftrag
> von k4aav@...
> Gesendet: Montag, 21. Oktober 2013 21:54
> An: SkyWires@yahoogroups.com
> Betreff: [SkyWires] RE: 160 Meter horizontal loop installation (Winter
> Project)
>
>
>
> I plan on starting my 160m loop project shortly but I don't have the
> trees. I plan to install about 15 ft above ground with the NVIS concept. I
> plan on feeding with a 4:1 balun and coax. I cannot use ladder line here,
> too far away from the house. Any thought to the wire length for that
> height? Some have told me to start at 560 and trim my back if needed.
>
>
>
> Thoughts?
>
>
>
> Will, K4AAV
>
>
>
> ---In SkyWires@yahoogroups.com, <skywires@yahoogroups.com> wrote:
>
>
> Hi Folks
>
> I am installing a 160 meter horizontal loop antenna before winter snow
> hits. It will be fun to see how it works over the winter.
>
> I am shooting for at least 550 feet and have a 4 corner supports install

> in trees. I took time to install pulleys, and the ends terminate at the
> base of the trees for easy adjustment and maintenance.
>
> I plan to mount an SGC-239 at the feedpoint.
>
> I currently have the SCG-239 connected to an end feed long wire antenna
> (500 > feet) that has worked very well for years.
>
> What would be the difference if I ran ladder line (15 feet) to the SCG-239
> instead of mounting it at the feedpoint (handing in the air)?
>
>

4319. RE: AW: [SkyWires] RE: 160 Meter horizontal loop installation (Winter Project)

Yahoo group: SkyWires
Date: 2013-10-22 23:46:37 UTC
From: <narikawa@...>
Topic: 4307 Message: 4319

Hi Sigi

Picked up enough 450 ohm ladder line today to connect the loop to the SG-239 tuner. I need to make some minor corner adjustments, then I can sting the antenna wire.

---In SkyWires@yahoogroups.com, <skywires@yahoogroups.com> wrote:

.... you wrote that the distance is to high for ladderline??? Absolutely
wrong! .. as more distance you have as more is a reason to change from coax
to ladderline ....LOWER LOSS and multiband use!!!!

5m is very low (compared to wavelength on topband) ... go higher and you
have better signals (not heating the worms in the ground)

Dg9bfc

Sigi

> -----Ursprüngliche Nachricht-----
> Von: SkyWires@yahoogroups.com mailto:SkyWires@yahoogroups.com
[mailto:SkyWires@yahoogroups.com mailto:SkyWires@yahoogroups.com] Im Auftrag
> von k4aav@... mailto:k4aav@...
> Gesendet: Montag, 21. Oktober 2013 21:54
> An: SkyWires@yahoogroups.com mailto:SkyWires@yahoogroups.com
> Betreff: [SkyWires] RE: 160 Meter horizontal loop installation (Winter
> Project)
>
>
>
> I plan on starting my 160m loop project shortly but I don't have the
> trees. I plan to install about 15 ft above ground with the NVIS concept. I
> plan on feeding with a 4:1 balun and coax. I cannot use ladder line here,
> too far away from the house. Any thought to the wire length for that
> height? Some have told me to start at 560 and trim my back if needed.
>
>
>
> Thoughts?
>
>
>
> Will, K4AAV
>
>
>

> ---In SkyWires@yahoogroups.com mailto:SkyWires@yahoogroups.com,
<skywires@yahoogroups.com mailto:skywires@yahoogroups.com> wrote:
>
>
> Hi Folks
>
> I am installing a 160 meter horizontal loop antenna before winter snow
> hits. It will be fun to see how it works over the winter.
>
> I am shooting for at least 550 feet and have a 4 corner supports install
> in trees. I took time to install pulleys, and the ends terminate at the
> base of the trees for easy adjustment and maintenance.
>
> I plan to mount an SGC-239 at the feedpoint.
>
> I currently have the SCG-239 connected to an end feed long wire antenna
> (500 > feet) that has worked very well for years.
>
> What would be the difference if I ran ladder line (15 feet) to the SCG-239
> instead of mounting it at the feedpoint (handing in the air)?
>
>

4320. Re: AW: [SkyWires] RE: 160 Meter horizontal loop installation (Winter Project)

Yahoo group: SkyWires
Date: 2013-10-23 11:15:05 UTC
From: Ken
Topic: 4307 Message: 4320

On Oct 22, 2013, at 10:25 AM, siegfried jackstien wrote:

> 5m is VERY low ... you heat up the ground ... that’s all
>
> Nvis does also work with higher installatiojn heights..
>
> 10-15m would be my goal ... even that is low (compared to wavelength on
> topband)

I agree, higher would be better and still NVIS. Probably anything under 30m off the ground would be NVIS on 160.

However, I do remember an old article in QST where they talked about portable NVIS antennas that were only a foot or so off of the ground. IDK, I guess that's better than a 8ft whip on 160....maybe...

73,
Ken WA8JXM

4321. RE: 160 Meter horizontal loop installation (Winter Project)

Yahoo group: SkyWires
Date: 2013-10-26 00:47:32 UTC
From: <narikawa@...>
Topic: 4307 Message: 4321

10/25/13 Update

I have corners up and 500 feet of wire pulled. I contacted SCG Technical Support to verify the connection between the SG-239 and the loop antenna. They said 450 ohm ladder line from the loop to the tuner was best and to not cut the loop to NOT cut to the specific band.

I will verify the insulators, connect the ladder line, and test.

Thanks for the feedback, I will keep you updated.

---In skywires@yahoogroups.com, <narikawa@...> wrote:

Hi Folks

I am installing a 160 meter horizontal loop antenna before winter snow hits. It will be fun to see how it works over the winter.

I am shooting for at least 550 feet and have a 4 corner supports install in trees. I took time to install pulleys, and the ends terminate at the base of the trees for easy adjustment and maintenance.

I plan to mount an SGC-239 at the feedpoint.

I currently have the SCG-239 connected to an end feed long wire antenna (500 > feet) that has worked very well for years.

What would be the difference if I ran ladder line (15 feet) to the SCG-239 instead of mounting it at the feedpoint (handing in the air)?

4322. RE: 160 Meter horizontal loop installation (Winter Project)

Yahoo group: SkyWires
Date: 2013-10-27 00:14:53 UTC
From: <narikawa@...>
Topic: 4307 Message: 4322

10/26/13 Update (It works great)

I spent most of the day (a lot of walking back and forth) making final adjustments. So far Ia am very happy with the results. The SCG-239 tunes every band and I can't believe the reception and low noise floor.

Thanks for everyone help!!!!

---In skywires@yahoogroups.com, <narikawa@...> wrote:

Hi Folks

I am installing a 160 meter horizontal loop antenna before winter snow hits. It will be fun to see how it works over the winter.

I am shooting for at least 550 feet and have a 4 corner supports install in trees. I took time to install pulleys, and the ends terminate at the base of the trees for easy adjustment and maintenance.

I plan to mount an SGC-239 at the feedpoint.

I currently have the SCG-239 connected to an end feed long wire antenna (500 > feet) that has worked very well for years.

What would be the difference if I ran ladder line (15 feet) to the SCG-239 instead of mounting it at the feedpoint (handing in the air)?

4323. RE: 160 Meter horizontal loop installation (Winter Project)

Yahoo group: SkyWires
Date: 2013-10-27 01:53:25 UTC
From: <allenbh@...>
Topic: 4307 Message: 4323

Wow - glad it is working for you. If I am creative I should be able to get ~570' (160M loop) in the air. Won't have an auto-tuner tho. Wondering what the height of your wire is and how it varies??

We have a long wire that is marginal but functional. I want to turn it into a loop.

73,
Bill

---In skywires@yahoogroups.com, <narikawa@...> wrote:

10/26/13 Update (It works great)

I spent most of the day (a lot of walking back and forth) making final adjustments. So far Ia am very happy with the results. The SCG-239 tunes every band and I can't believe the reception and low noise floor.

Thanks for everyone help!!!!

---In skywires@yahoogroups.com, <narikawa@...> wrote:

Hi Folks

I am installing a 160 meter horizontal loop antenna before winter snow hits. It will be fun to see how it works over the winter.

I am shooting for at least 550 feet and have a 4 corner supports install in trees. I took time to install pulleys, and the ends terminate at the base of the trees for easy adjustment and maintenance.

I plan to mount an SGC-239 at the feedpoint.

I currently have the SCG-239 connected to an end feed long wire antenna (500 > feet) that has worked very well for years.

What would be the difference if I ran ladder line (15 feet) to the SCG-239 instead of mounting it at the feedpoint (handing in the air)?

4324. stringing a large loop across a deep gully?

Yahoo group: SkyWires
Date: 2013-10-27 14:06:36 UTC
From: Ken
Topic: 4324 Message: 4324

I don't have much in the way of tall supports, but I do have a fairly deep gully starting 150' from the house. I'm toying with the idea of stretching a 1000-1200 ft loop across the gully to get some height above ground. It might only be 10-20' above ground on the corners and two sides, but probably 50-80' over the gully.

Any thoughts on the effectiveness of something like this, especially for 80/160?

Thanks,
Ken WA8JXM

4325. Re: [SkyWires] stringing a large loop across a deep gully?

Yahoo group: SkyWires
Date: 2013-10-28 03:21:56 UTC
From: Adrian Flynn
Topic: 4324 Message: 4325

Hi Ken,

I don't see why it wouldn't work.
I use to "Fake" a engine problem so I could set on top of an overpass in central Phoenix as I could work much better skip on CB from there.

73
Adrian KF7DYU

On Sun, Oct 27, 2013 at 10:06 AM, Ken <wa8jxm@...> wrote:

> **
>
>
> I don't have much in the way of tall supports, but I do have a fairly deep
> gully starting 150' from the house. I'm toying with the idea of stretching
> a 1000-1200 ft loop across the gully to get some height above ground. It
> might only be 10-20' above ground on the corners and two sides, but
> probably 50-80' over the gully.
>
> Any thoughts on the effectiveness of something like this, especially for
> 80/160?
>
> Thanks,
> Ken WA8JXM
>
>

4326. AW: [SkyWires] RE: 160 Meter horizontal loop installation (Winter Project)

Yahoo group: SkyWires
Date: 2013-10-28 07:27:29 UTC
From: siegfried jackstien
Topic: 4307 Message: 4326

Thats what i told you ... you will love it

The loop has a very low noise level (much lower than any dipole) and you hear stations that otherwise would be buried in the noise

Even a "s0" signal can be "q5" (nothing on the signal-metre but easy readable)

.....

Did you install a choke at the input of the tuner and on the power cables of the sgc tuner (or maybe a 1:1 or 1:4 at the output)??

Tell us some more details (that may help others for their installation)

.....

Greetz

Dg9bfc

Sigi

> -----Ursprüngliche Nachricht-----
> Von: SkyWires@yahoogroups.com [mailto:SkyWires@...m] Im Auftrag
> von narikawa@...
> Gesendet: Sonntag, 27. Oktober 2013 00:15
> An: SkyWires@yahoogroups.com
> Betreff: [SkyWires] RE: 160 Meter horizontal loop installation (Winter
> Project)
>
>
>
> 10/26/13 Update (It works great)
>
>
>
>
> I spent most of the day (a lot of walking back and forth) making final
> adjustments. So far Ia am very happy with the results. The SCG-239 tunes
> every band and I can't believe the reception and low noise floor.
>
>
>
>
> Thanks for everyone help!!!!
>

>
>
>
> ---In skywires@yahoogroups.com, <narikawa@...> wrote:
>
>
> Hi Folks
>
> I am installing a 160 meter horizontal loop antenna before winter snow
> hits. It will be fun to see how it works over the winter.
>
> I am shooting for at least 550 feet and have a 4 corner supports install
> in trees. I took time to install pulleys, and the ends terminate at the
> base of the trees for easy adjustment and maintenance.
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> I plan to mount an SGC-239 at the feedpoint.
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> I currently have the SCG-239 connected to an end feed long wire antenna
> (500 > feet) that has worked very well for years.
>
> What would be the difference if I ran ladder line (15 feet) to the SCG-239
> instead of mounting it at the feedpoint (handing in the air)?
>
>

4327. RE: stringing a large loop across a deep gully?

Yahoo group: SkyWires
Date: 2013-10-28 12:31:12 UTC
From: Thomas F Giella W4HM
Topic: 4324 Message: 4327

Ken the effective loop height will only be 10-20 feet above the ground not the 50-80 feet above the bottom of the gully but it should still work pretty good.

I currently am using a square in shape 288 foot long horizontal loop with each leg 72 feet long. At the four corners the height above ground is 35 feet. The antenna works very well for DXing and contesting on 40-6 meters.

Initially I had the loop up at only 20 feet at the corners as a test and it still worked very well for DXing and contesting on 40-10 meters. Actually I could see no obvious difference between loop performance at 20 or 35 feet.

73 & GUD DX,
Thomas F. Giella W4HM
Lakeland, FL, USA
w4hm@...

W4HM Amateur Radio & SWL Autobiography: http://www.w4hm.org

4328. Re: [SkyWires] RE: stringing a large loop across a deep gully?

Yahoo group: SkyWires
Date: 2013-10-28 15:09:31 UTC
From: Ken
Topic: 4324 Message: 4328

Tom,

Thanks for the reply. I was out scouting the ravine yesterday and I am kind of giving up on the idea. It's very steep terrain and would be difficult to clear a path. The one leg would be around 500' BUT.... the antenna would actually be below the surrounding ground level on three sides and below the next ridge in the other direction even though the 500' span would be over 100' above ground in the ravine. Yes, it would probably work okay but I don't know that it would be any better than a smaller loop erected in the clear on the ridgetop by the house. I'm not really a DXer, especially on 160 and 80 although I must say I am impressed with how JT-65 pulls out the signals. Right now I'm just using an 80m dipole with an average height of about 10'.

In one way, I have a dream location: 130 acres of land, plenty of room for antennas. Unfortunately, all the big trees are "down over the hillside" with nothing near the house.

73, Ken
WA8JXM

On Oct 28, 2013, at 8:31 AM, Thomas F Giella W4HM wrote:

> Ken the effective loop height will only be 10-20 feet above the ground not
> the 50-80 feet above the bottom of the gully but it should still work pretty
> good.
>
> I currently am using a square in shape 288 foot long horizontal loop with
> each leg 72 feet long. At the four corners the height above ground is 35
> feet. The antenna works very well for DXing and contesting on 40-6 meters.
>
> Initially I had the loop up at only 20 feet at the corners as a test and it
> still worked very well for DXing and contesting on 40-10 meters. Actually I
> could see no obvious difference between loop performance at 20 or 35 feet.
>
> 73 & GUD DX,
> Thomas F. Giella W4HM

4329. Re: [SkyWires] RE: stringing a large loop across a deep gully?

Yahoo group: SkyWires
Date: 2013-10-29 02:56:16 UTC
From: Dale Brix
Topic: 4324 Message: 4329

Ken: If you spend alittle time you can find a lot of Rohn used 25 tower sections . Some of it is free for taking it down. Build a hinge at the base and you can put it up by yourself. This way you can put the towers where you need them. Just a thought. Dale KC9WXG.
----- Original Message -----
From: Ken
To: SkyWires@yahoogroups.com
Sent: Monday, October 28, 2013 10:09 AM
Subject: Re: [SkyWires] RE: stringing a large loop across a deep gully?

Tom,

Thanks for the reply. I was out scouting the ravine yesterday and I am kind of giving up on the idea. It's very steep terrain and would be difficult to clear a path. The one leg would be around 500' BUT.... the antenna would actually be below the surrounding ground level on three sides and below the next ridge in the other direction even though the 500' span would be over 100' above ground in the ravine. Yes, it would probably work okay but I don't know that it would be any better than a smaller loop erected in the clear on the ridgetop by the house. I'm not really a DXer, especially on 160 and 80 although I must say I am impressed with how JT-65 pulls out the signals. Right now I'm just using an 80m dipole with an average height of about 10'.

In one way, I have a dream location: 130 acres of land, plenty of room for antennas. Unfortunately, all the big trees are "down over the hillside" with nothing near the house.

73, Ken
WA8JXM

On Oct 28, 2013, at 8:31 AM, Thomas F Giella W4HM wrote:

> Ken the effective loop height will only be 10-20 feet above the ground not
> the 50-80 feet above the bottom of the gully but it should still work pretty
> good.
>
> I currently am using a square in shape 288 foot long horizontal loop with
> each leg 72 feet long. At the four corners the height above ground is 35
> feet. The antenna works very well for DXing and contesting on 40-6 meters.
>
> Initially I had the loop up at only 20 feet at the corners as a test and it
> still worked very well for DXing and contesting on 40-10 meters. Actually I
> could see no obvious difference between loop performance at 20 or 35 feet.
>
> 73 & GUD DX,
> Thomas F. Giella W4HM

4330. RE: 40 Meter Loop Antenna on 80 Meters and WARC Bands

Yahoo group: SkyWires
Date: 2013-10-30 06:49:23 UTC
From: <kp4md@...>
Topic: 4299 Message: 4330

The principle of the 7 MHz full-wave loop operation on 3.5 MHz may be conceptualized by comparison with the HO loop, or halo antenna—a half-wave open loop antenna popular on VHF frequencies. The halo antenna is essentially a horizontal half-wave dipole with its elements curved to form an open-ended circular loop to provide a nearly omnidirectional radiation pattern. The halo antenna is typically fed at its low impedance center point, while its open ends exhibit high impedance. By analogy, the 7 MHz full-wave loop operates on 3.5 MHz as a half-wave halo antenna fed across its high impedance open ends. In this case, the impedance transforming characteristic of a 1/4 wavelength transmission line assists in coupling the high impedance antenna to the low 50 ohm impedance of the transmitter. This situation repeats at frequencies where the loop antenna is an odd multiple of a half-wavelength, that is, at 10.5, 17.5 and 24.5 MHz, near the "WARC" frequency bands.

The 100 ohm zip cord is preferable to 300 ohm twin-lead and 450 ohm ladder line for this application. The loop impedance varies between 80 and 350 ohms at its resonance points and between 800 and 1800 ohms at the midpoint peaks between resonance. For a quarter wavelength transmission line, the impedance seen by the transmitter (Z) is given by Z = Z02 / Zant, where Z0 is the characteristic impedance of the transmission line and Zant is the antenna impedance. Figures 55 and 56 compare these impedance transforming characteristics for 100 ohm and 450 ohm feed lines. The 100 ohm feed line transforms the impedance to 6 to 125 ohms at the transmitter, within the range of most antenna tuning units. However, a 450 ohm feed line renders an impedance range of 110 to 2500 ohms at the transmitter, values that exceed the operating range and safe voltage ratings of most antenna tuners.

http://www.qsl.net/kp4md/kp4mdnec2.htm#80m http://www.qsl.net/kp4md/kp4mdnec2.htm#80m

Horizontal Loop Antenna Parameters Measured at Transmitter End of Feed Line over 3 to 30 MHz
Fig. 51. Standing Wave Ratio and Reflection Loss - Random 37.9' feed line Fig. 52. Resistance and Reactance - Random 37.9' feed line
Fig. 53. Standing Wave Ratio and Reflection Loss - 51' feed line (0.5λ @ 7 MHz)
Fig. 54. Resistance and Reactance - 51' feed line (0.5λ @ 7 MHz) Impedance Transforming Characteristics of 100 and 450 ohm 1/4 Wave Transmission Lines
Fig. 55. A 100 ohm feed line transforms the antenna impedance to 6 to 125 ohms
at the transmitter, within the range of most antenna tuning units. Fig. 56. A 450 ohm ladder line renders an impedance range of 110 to 2500 ohms
at the transmitter, exceeding the safe operating range of most antenna tuners.

4331. RE: 160 Meter horizontal loop installation (Winter Project)

Yahoo group: SkyWires
Date: 2013-11-02 13:38:58 UTC
From: <narikawa@...>
Topic: 4307 Message: 4331

I can't believe how well this antenna works. I did not need a choke.

The technical support at SGC recommended "We generally recommend using 300-600 ohm ladder line style lead when connecting to loops or dipoles. This should work very well with your 160m loop. It will also help as it is actually best to not have the antenna cut to a specific band."

I like the combination of the TS-590 and SG-239. I will post some photos.

---In skywires@yahoogroups.com, <siegfried.jackstien@...> wrote:

Thats what i told you ... you will love it

The loop has a very low noise level (much lower than any dipole) and you
hear stations that otherwise would be buried in the noise

Even a "s0" signal can be "q5" (nothing on the signal-metre but easy
readable)

.....

Did you install a choke at the input of the tuner and on the power cables of
the sgc tuner (or maybe a 1:1 or 1:4 at the output)??

Tell us some more details (that may help others for their installation)

.....

Greetz

Dg9bfc

Sigi

> -----Ursprüngliche Nachricht-----
> Von: SkyWires@yahoogroups.com mailto:SkyWires@yahoogroups.com
[mailto:SkyWires@yahoogroups.com mailto:SkyWires@yahoogroups.com] Im Auftrag
> von narikawa@... mailto:narikawa@...
> Gesendet: Sonntag, 27. Oktober 2013 00:15
> An: SkyWires@yahoogroups.com mailto:SkyWires@yahoogroups.com
> Betreff: [SkyWires] RE: 160 Meter horizontal loop installation (Winter
> Project)
>
>
>
> 10/26/13 Update (It works great)
>
>

>
>
> I spent most of the day (a lot of walking back and forth) making final
> adjustments. So far Ia am very happy with the results. The SCG-239 tunes
> every band and I can't believe the reception and low noise floor.
>
>
>
>
> Thanks for everyone help!!!!
>
>
>
>
> ---In skywires@yahoogroups.com mailto:skywires@yahoogroups.com, <narikawa@...> wrote:
>
>
> Hi Folks
>
> I am installing a 160 meter horizontal loop antenna before winter snow
> hits. It will be fun to see how it works over the winter.
>
> I am shooting for at least 550 feet and have a 4 corner supports install
> in trees. I took time to install pulleys, and the ends terminate at the
> base of the trees for easy adjustment and maintenance.
>
> I plan to mount an SGC-239 at the feedpoint.
>
> I currently have the SCG-239 connected to an end feed long wire antenna
> (500 > feet) that has worked very well for years.
>
> What would be the difference if I ran ladder line (15 feet) to the SCG-239
> instead of mounting it at the feedpoint (handing in the air)?
>
>

4332. AW: [SkyWires] RE: 160 Meter horizontal loop installation (Winter Project)

Yahoo group: SkyWires
Date: 2013-11-03 09:07:06 UTC
From: siegfried jackstien
Topic: 4307 Message: 4332

>
> I can't believe how well this antenna works. I did not need a choke.

A choke will isolate the coax from tuner to the rig from the antenna

That will lower the noise that probably the coax could pick up (acts like
you would add a lossy longwire to your loop from common mode current)

Same for the power leads to the tuner (ground aka minus 12v is connected to
ground of tuner ... is connected to output of tuner and so is connected to
your loop) ... isolating BOTH (power and coax) should further improve
performance (lower noise and better s/n)

Dg9bfc

Sigi

4333. RE: 160 Meter horizontal loop installation (Winter Project)

Yahoo group: SkyWires
Date: 2013-11-03 16:55:05 UTC
From: <narikawa@...>
Topic: 4307 Message: 4333

Hi Sigi

Can you help identify material and a diagram or photos of the choke. I would like to get the parts and install before the snow falls.

Here is a link to a PDF I created with photos of my installation. I is in the file section of the forum.

http://f1.grp.yahoofs.com/v1/9H52UpY6z5bpOq9UdxSJU3HUh7MDxVeScRfoZFaNSou7ygB_Vqmh2mW-ydwRLqrlxi-svpG-pskDkqR75iSAJslwtUKWbq_S2Nt2/160%20Meter%20Horizontal%20Loop%20Antenna.pdf

---In skywires@yahoogroups.com, <siegfried.jackstien@...> wrote:

>
> I can't believe how well this antenna works. I did not need a choke.

A choke will isolate the coax from tuner to the rig from the antenna

That will lower the noise that probably the coax could pick up (acts like
you would add a lossy longwire to your loop from common mode current)

Same for the power leads to the tuner (ground aka minus 12v is connected to
ground of tuner ... is connected to output of tuner and so is connected to
your loop) ... isolating BOTH (power and coax) should further improve
performance (lower noise and better s/n)

Dg9bfc

Sigi

4334. Vertical loop and MFJ994BRT

Yahoo group: SkyWires
Date: 2013-11-04 15:01:59 UTC
From: g0mgm@ymail.com
Topic: 4334 Message: 4334

Hello

I have just put up a vertical loop, it is approx 180ft long and I am plnning on connecting it to an MFJ 994BRT to tune it. The highest point I can get is only about 25-30fet above ground and the base of the loop is about 6ft abve ground. Its the shape of a rectangle.

I've just been reading some of the documents in the Files area and they recommend using ladder line. Can I not just connect the ends to the tuner?

I have never used ladder line before and my shack is approx 80ft away from the antenna, but if I were to use ladder line all the way back to the shack most of it would berunning about a foot above the ground attached to the garden fence. Would that make a difference to the way it works?

Thanks

Rob

4335. Re: [SkyWires] Vertical loop and MFJ994BRT

Yahoo group: SkyWires
Date: 2013-11-04 17:25:44 UTC
From: Ken
Topic: 4334 Message: 4335

On Nov 4, 2013, at 10:01 AM, g0mgm@... wrote:

>
> I've just been reading some of the documents in the Files area and they recommend using ladder line. Can I not just connect the ends to the tuner?
>

Yes you can if you have a remote tuner.

> I have never used ladder line before and my shack is approx 80ft away from the antenna, but if I were to use ladder line all the way back to the shack most of it would berunning about a foot above the ground attached to the garden fence. Would that make a difference to the way it works?
>
>

Yes, that would be less than ideal for ladder line. It should ideally be several widths away from any metal or ground. My open wire line is 4" wide. If you are using something more narrow, 6" to a foot distance should be okay. It's best to twist the line over distance so as to balance each side to the metal or ground.

73,
Ken WA8JXM

4336. AW: [SkyWires] RE: 160 Meter horizontal loop installation (Winter Project)

Yahoo group: SkyWires
Date: 2013-11-04 18:02:19 UTC
From: siegfried jackstien
Topic: 4307 Message: 4336

The easiest would be an "ugly balun" ...

Next option would be "some turns of coax around a toroid"

Best would be maybe a real 1:1 balun (but that is a bit overkill)

For the power lines same thing ... a choke (or coil in other words) would isolate the tuner rf wise ... but it is still connected to ground dc wise

Dg9bfc

Sigi

> -----Ursprüngliche Nachricht-----
> Von: SkyWires@yahoogroups.com [mailto:SkyWires@yahoogroups.com] Im Auftrag
> von narikawa@...
> Gesendet: Sonntag, 3. November 2013 16:55
> An: SkyWires@yahoogroups.com
> Betreff: [SkyWires] RE: 160 Meter horizontal loop installation (Winter
> Project)
>
>
>
> Hi Sigi
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>
>
> Can you help identify material and a diagram or photos of the choke. I
> would like to get the parts and install before the snow falls.
>
>
>
>
> Here is a link to a PDF I created with photos of my installation. I is in
> the file section of the forum.
>
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>
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>
> http://f1.grp.yahoofs.com/v1/9H52UpY6z5bpOq9UdxSJU3HUh7MDxVeScRfoZFaNSou7y
> gB_Vqmh2mW-ydwRLqrlxi-svpG-
> pskDkqR75iSAJslwtUKWbq_S2Nt2/160%20Meter%20Horizontal%20Loop%20Antenna.pdf
>
>

>
>
> ---In skywires@yahoogroups.com, <siegfried.jackstien@...> wrote:
>
>
>
> >
> > I can't believe how well this antenna works. I did not need a
> choke.
>
>
>
> A choke will isolate the coax from tuner to the rig from the antenna
>
> That will lower the noise that probably the coax could pick up (acts like
> you would add a lossy longwire to your loop from common mode current)
>
> Same for the power leads to the tuner (ground aka minus 12v is connected
> to
> ground of tuner ... is connected to output of tuner and so is connected to
> your loop) ... isolating BOTH (power and coax) should further improve
> performance (lower noise and better s/n)
>
> Dg9bfc
>
> Sigi
>
>

4337. RE: Re: [SkyWires] Vertical loop and MFJ994BRT

Yahoo group: SkyWires
Date: 2013-11-04 18:50:44 UTC
From: g0mgm@ymail.com
Topic: 4334 Message: 4337

Thanks Ken. Yes I am planning to use the MFJ 994BRT at one corner of the loop. The tuner will be abt 2 ft above the ground and the corner of the loop will be abt 4ft at that end. I will bring a couple of tails from the corner to the tuner. Fingers crossed it works ok. Rob G0MGM

4338. RE: Vertical loop and MFJ994BRT

Yahoo group: SkyWires
Date: 2013-11-09 18:45:30 UTC
From: g0mgm@ymail.com
Topic: 4334 Message: 4338

OK I have connected the loop to the MFJ994BRT and it tunes OK on 30m and down to 10m, but on 40m 60m and 80m it tries and just seems to hunt constantly.

At 180 odd feet it should be more than long enough for a 40m loop but it wont tune.

Any ideas? Is this a resonant length? Or should I feed it through a 4:1 balun with coax?

---In skywires@yahoogroups.com, <no_reply@yahoogroups.com> wrote:

Thanks Ken. Yes I am planning to use the MFJ 994BRT at one corner of the loop. The tuner will be abt 2 ft above the ground and the corner of the loop will be abt 4ft at that end. I will bring a couple of tails from the corner to the tuner. Fingers crossed it works ok. Rob G0MGM

4339. RE: Vertical loop and MFJ994BRT

Yahoo group: SkyWires
Date: 2013-11-09 20:57:41 UTC
From: <kc9q@...>
Topic: 4334 Message: 4339

180 ft is resonant around 5.6 MHz. Too long for 40 Meters (7 MHz) to work properly. The formula to calulate is 1005/F(MHz) = Length in feet. A loop will work on its fundemental design frequency and all harmonivs (even and odd) above it. So your loop should be about 1005/7 = 143.6 feet. Please note that it wil not tune up on 160, 80, or 60 Meters as it is too short, and could cause damage to your antenna tuner. The 143.6 feet is for bare copper wire, and will be about 3% shorter (multiply answer by .97) if using insulated wire. You may have better luck with this length. There should be no need for a balun when using the MFJ-994BRT remote antenna tuner for this application. 73, Mike, KC9Q

---In skywires@yahoogroups.com, <no_reply@yahoogroups.com> wrote:

OK I have connected the loop to the MFJ994BRT and it tunes OK on 30m and down to 10m, but on 40m 60m and 80m it tries and just seems to hunt constantly.

At 180 odd feet it should be more than long enough for a 40m loop but it wont tune.

Any ideas? Is this a resonant length? Or should I feed it through a 4:1 balun with coax?

---In skywires@yahoogroups.com, <no_reply@yahoogroups.com> wrote:

Thanks Ken. Yes I am planning to use the MFJ 994BRT at one corner of the loop. The tuner will be abt 2 ft above the ground and the corner of the loop will be abt 4ft at that end. I will bring a couple of tails from the corner to the tuner. Fingers crossed it works ok. Rob G0MGM

4340. AW: [SkyWires] RE: Vertical loop and MFJ994BRT

Yahoo group: SkyWires
Date: 2013-11-10 15:46:49 UTC
From: siegfried jackstien
Topic: 4334 Message: 4340

Try to add some feet of ladderline could bring you closer to the "sweet spot"

It is too long for 40 and too short for 80

But it should be possible to tune it on that bands

If you are very close to a high impedance point then maybe the tuner will not find a match

Adding a few feet of feeding line shifts you away from that high impedance and high voltage point ... and then the tuner maybe does find a match (and then the antenna WILL work even if it is a bit short)

Dg9bfc

Sigi

Ps why not a bigger loop (240-260 feet) ??? you can "zig zack" it if needed

> -----Ursprüngliche Nachricht-----
> Von: SkyWires@yahoogroups.com [mailto:SkyWires@yahoogroups.com] Im Auftrag
> von g0mgm@...
> Gesendet: Samstag, 9. November 2013 18:46
> An: SkyWires@yahoogroups.com
> Betreff: [SkyWires] RE: Vertical loop and MFJ994BRT
>
>
>
> OK I have connected the loop to the MFJ994BRT and it tunes OK on 30m and
> down to 10m, but on 40m 60m and 80m it tries and just seems to hunt
> constantly.
>
>
>
>
> At 180 odd feet it should be more than long enough for a 40m loop but it
> wont tune.
>
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>
>
> Any ideas? Is this a resonant length? Or should I feed it through a 4:1
> balun with coax?
>
>

>
>
> ---In skywires@yahoogroups.com, <no_reply@...m> wrote:
>
>
> Thanks Ken. Yes I am planning to use the MFJ 994BRT at one corner of the
> loop. The tuner will be abt 2 ft above the ground and the corner of the
> loop will be abt 4ft at that end. I will bring a couple of tails from the
> corner to the tuner. Fingers crossed it works ok. Rob G0MGM
>
>

4341. RE: Vertical loop and MFJ994BRT

Yahoo group: SkyWires
Date: 2013-11-11 12:57:29 UTC
From: g0mgm@ymail.com
Topic: 4334 Message: 4341

Hi Sigi

Thanks for the reply. Well I was reading about a random wire loop being tuned with a remote tuner on the SGC website so that I what I was trying to do but the tuner doesn't like it.

What I was going to try first is to put a 4:1 Balun and a 3m coax run to the tuner and see if that worked, if not I will try the ladder line. Currently the loop has a lot of slack in it so it not taught across the tree. I think I have put in a few zig-zags already so cant fit in an extra 60ft unfortunately.

I already have a 40m horizontal loop up fed with a 75ohm matching stub, and I wanted something for 80m and 60m. I guess I wont have enough space for a loop that size, so I may end up putting ladder line on the 40m loop to make it multi band and turn the vertical loop on the remote tuner to a long wire.

---In skywires@yahoogroups.com, <siegfried.jackstien@...> wrote:

Try to add some feet of ladderline could bring you closer to the "sweet
spot"

It is too long for 40 and too short for 80

But it should be possible to tune it on that bands

If you are very close to a high impedance point then maybe the tuner will
not find a match

Adding a few feet of feeding line shifts you away from that high impedance
and high voltage point ... and then the tuner maybe does find a match (and
then the antenna WILL work even if it is a bit short)

Dg9bfc

Sigi

Ps why not a bigger loop (240-260 feet) ??? you can "zig zack" it if needed

> -----Ursprüngliche Nachricht-----
> Von: SkyWires@yahoogroups.com mailto:SkyWires@yahoogroups.com
[mailto:SkyWires@yahoogroups.com mailto:SkyWires@yahoogroups.com] Im Auftrag
> von g0mgm@... mailto:g0mgm@...
> Gesendet: Samstag, 9. November 2013 18:46
> An: SkyWires@yahoogroups.com mailto:SkyWires@yahoogroups.com
> Betreff: [SkyWires] RE: Vertical loop and MFJ994BRT
>
>
>
> OK I have connected the loop to the MFJ994BRT and it tunes OK on 30m and

> down to 10m, but on 40m 60m and 80m it tries and just seems to hunt
> constantly.
>
>
>
>
> At 180 odd feet it should be more than long enough for a 40m loop but it
> wont tune.
>
>
>
>
>
> Any ideas? Is this a resonant length? Or should I feed it through a 4:1
> balun with coax?
>
>
>
>
> ---In skywires@yahoogroups.com mailto:skywires@yahoogroups.com,
<no_reply@yahoogroups.com mailto:no_reply@yahoogroups.com> wrote:
>
>
> Thanks Ken. Yes I am planning to use the MFJ 994BRT at one corner of the
> loop. The tuner will be abt 2 ft above the ground and the corner of the
> loop will be abt 4ft at that end. I will bring a couple of tails from the
> corner to the tuner. Fingers crossed it works ok. Rob G0MGM
>
>

4342. Re: [SkyWires] RE: Vertical loop and MFJ994BRT

Yahoo group: SkyWires
Date: 2013-11-11 17:15:33 UTC
From: Mark Graybill
Topic: 4334 Message: 4342

I think you'll find that going to a balanced feedline will make all the difference in the world when it comes to tuning. Coax just doesn't allow it. I went through the routine of trying to make coax work, myself, on an earlier antenna. The day I bit the bullet and just pulled down the feedpoint to attach a 300 ohm twinlead was the day I finally started being able to tune & transmit on non-resonant frequencies. Coax just won't let you do it.

Everything that goes up for HF has balanced feedline on it now, around here.

On getting a long enough loop, some people have hung 'spiral loops' to get a loop up in less space, though I have no experience with them. Here's an exchange on that:

http://www.eham.net/ehamforum/smf/index.php?topic=61161.0

Mark, W8BIT
On Nov 11, 2013 4:57 AM, "g0mgm@..." <no_reply@yahoogroups.com> wrote:

>
>
> Hi Sigi
>
>
>
> Thanks for the reply. Well I was reading about a random wire loop being
> tuned with a remote tuner on the SGC website so that I what I was trying to
> do but the tuner doesn't like it.
>
>
>
> What I was going to try first is to put a 4:1 Balun and a 3m coax run to
> the tuner and see if that worked, if not I will try the ladder line.
> Currently the loop has a lot of slack in it so it not taught across the
> tree. I think I have put in a few zig-zags already so cant fit in an extra
> 60ft unfortunately.
>
>
>
> I already have a 40m horizontal loop up fed with a 75ohm matching stub,
> and I wanted something for 80m and 60m. I guess I wont have enough space
> for a loop that size, so I may end up putting ladder line on the 40m loop
> to make it multi band and turn the vertical loop on the remote tuner to a
> long wire.
>
>

>
>
> ---In skywires@yahoogroups.com, <siegfried.jackstien@...> wrote:
>
> Try to add some feet of ladderline could bring you closer to the "sweet
> spot"
>
> It is too long for 40 and too short for 80
>
> But it should be possible to tune it on that bands
>
> If you are very close to a high impedance point then maybe the tuner will
> not find a match
>
> Adding a few feet of feeding line shifts you away from that high impedance
> and high voltage point ... and then the tuner maybe does find a match (and
> then the antenna WILL work even if it is a bit short)
>
> Dg9bfc
>
> Sigi
>
> Ps why not a bigger loop (240-260 feet) ??? you can "zig zack" it if needed
>
> > -----Ursprüngliche Nachricht-----
> > Von: SkyWires@yahoogroups.com [mailto:SkyWires@yahoogroups.com] Im
> Auftrag
> > von g0mgm@...
> > Gesendet: Samstag, 9. November 2013 18:46
> > An: SkyWires@yahoogroups.com
> > Betreff: [SkyWires] RE: Vertical loop and MFJ994BRT
> >
> >
> >
> > OK I have connected the loop to the MFJ994BRT and it tunes OK on 30m and
> > down to 10m, but on 40m 60m and 80m it tries and just seems to hunt
> > constantly.
> >
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> > At 180 odd feet it should be more than long enough for a 40m loop but it
> > wont tune.
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> >
> > Any ideas? Is this a resonant length? Or should I feed it through a 4:1
> > balun with coax?

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> >
> > ---In skywires@yahoogroups.com, <no_reply@yahoogroups.com> wrote:
> >
> >
> > Thanks Ken. Yes I am planning to use the MFJ 994BRT at one corner of the
> > loop. The tuner will be abt 2 ft above the ground and the corner of the
> > loop will be abt 4ft at that end. I will bring a couple of tails from the
> > corner to the tuner. Fingers crossed it works ok. Rob G0MGM
> >
> >
>
>
>

4343. Re: [SkyWires] RE: Vertical loop and MFJ994BRT

Yahoo group: SkyWires
Date: 2013-11-11 17:52:23 UTC
From: Ken
Topic: 4334 Message: 4343

On Nov 11, 2013, at 12:15 PM, Mark Graybill wrote:

> I think you'll find that going to a balanced feedline will make all the difference in the world when it comes to tuning. Coax just doesn't allow it. I went through the routine of trying to make coax work, myself, on an earlier antenna. The day I bit the bullet and just pulled down the feedpoint to attach a 300 ohm twinlead was the day I finally started being able to tune & transmit on non-resonant frequencies. Coax just won't let you do it.
>

That totally depends on the transmitter and/or tuner. There is no inherent reason that coax can't be tuned just as well as a balanced feed can be tuned.

Certain antennas and feedline lengths are harder to tune on various frequencies, but if you have a good enough tuner, coax feed can be used, albeit often with higher feedline losses, of course.

Just for example, I just ran through my coax fed 40m inverted vee and loaded it on all bands 10-12-15-17-20-30-40-60-80m. That was with the internal tuner on the Elecraft K3. The K3 did fail to get a decent match on 160, but I'm sure I could do that with the Palstar tuner.

Not to say that I would actually want to operate with the losses on some of those bands, however! ;-) But I have worked VK land with the 40m antenna on 30m.

Of course, if you have a feed impedance above what the tuner can handle, a 4:1 balun can bring that down into the range that the tuner can hanlde.

Ken WA8JXM

4344. RE: Vertical loop and MFJ994BRT

Yahoo group: SkyWires
Date: 2013-11-12 08:44:28 UTC
From: g0mgm@ymail.com
Topic: 4334 Message: 4344

Thanks you all for your input, I tried a short piece of coax and a 4:1 balun and it now tunes OK on certain parts of 160m and all of 80 and 60m. I will try some 450Ohm ladder I have and see what that does also.

But I will certainly read the port about putting loops in since I dont have the space.

Has anyone tried the Zip cord loop? I read somewhere about using two core power cord and connecting two of the ends together to make it into two loops essentially?

---In skywires@yahoogroups.com, <wa8jxm@...> wrote:

On Nov 11, 2013, at 12:15 PM, Mark Graybill wrote:

I think you'll find that going to a balanced feedline will make all the difference in the world when it comes to tuning. Coax just doesn't allow it. I went through the routine of trying to make coax work, myself, on an earlier antenna. The day I bit the bullet and just pulled down the feedpoint to attach a 300 ohm twinlead was the day I finally started being able to tune & transmit on non-resonant frequencies. Coax just won't let you do it.

That totally depends on the transmitter and/or tuner. There is no inherent reason that coax can't be tuned just as well as a balanced feed can be tuned.

Certain antennas and feedline lengths are harder to tune on various frequencies, but if you have a good enough tuner, coax feed can be used, albeit often with higher feedline losses, of course.

Just for example, I just ran through my coax fed 40m inverted vee and loaded it on all bands 10-12-15-17-20-30-40-60-80m. That was with the internal tuner on the Elecraft K3. The K3 did fail to get a decent match on 160, but I'm sure I could do that with the Palstar tuner.

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Of course, if you have a feed impedance above what the tuner can handle, a 4:1 balun can bring that down into the range that the tuner can hanlde.

Ken WA8JXM

4345. Commercial Skyloop antenna

Yahoo group: SkyWires
Date: 2013-11-13 19:09:36 UTC
From: grosseindienne
Topic: 4345 Message: 4345

For those who wants to get a commercial skyloop you can look at the Chameleon Antenna Skyloop.

They're pretty well made:

http://chameleonantenna.com/BASE%20ANTENNA/CHA%20SKYLOOP/CHA%20SKYLOOP.html

Thanks
-C

4346. AW: [SkyWires] Commercial Skyloop antenna

Yahoo group: SkyWires
Date: 2013-11-14 17:06:20 UTC
From: siegfried jackstien
Topic: 4345 Message: 4346

Or just buy a commercially built balun ... and add some wire and insulators
... and youre set

Dg9bfc

sigi

> -----Ursprüngliche Nachricht-----
> Von: SkyWires@yahoogroups.com [mailto:SkyWires@yahoogroups.com] Im Auftrag
> von grosseindienne
> Gesendet: Mittwoch, 13. November 2013 19:10
> An: SkyWires@yahoogroups.com
> Betreff: [SkyWires] Commercial Skyloop antenna
>
>
>
> For those who wants to get a commercial skyloop you can look at the
> Chameleon Antenna Skyloop.
>
> They're pretty well made:
>
> http://chameleonantenna.com/BASE%20ANTENNA/CHA%20SKYLOOP/CHA%20SKYLOOP.htm
> l
>
> Thanks
> -C
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>

4347. RE: [SkyWires] Commercial Skyloop antenna

Yahoo group: SkyWires
Date: 2013-11-14 17:21:35 UTC
From: Richard Schmuke
Topic: 4345 Message: 4347
Attachments: 2 described; binary payloads are missing from this source WARC

But Sigi, you know I also like to build my own baluns so they work better than store bought.

Rich, Kd0zz

From: SkyWires@yahoogroups.com [mailto:SkyWires@yahoogroups.com] On Behalf Of siegfried jackstien
Sent: Thursday, November 14, 2013 11:06 AM
To: SkyWires@yahoogroups.com
Subject: AW: [SkyWires] Commercial Skyloop antenna

Or just buy a commercially built balun ... and add some wire and insulators ... and youre set

Dg9bfc

sigi

> -----Ursprüngliche Nachricht-----
> Von: SkyWires@yahoogroups.com [mailto:SkyWires@yahoogroups.com] Im Auftrag
> von grosseindienne
> Gesendet: Mittwoch, 13. November 2013 19:10
> An: SkyWires@yahoogroups.com
> Betreff: [SkyWires] Commercial Skyloop antenna
>
>
>
> For those who wants to get a commercial skyloop you can look at the
> Chameleon Antenna Skyloop.
>
> They're pretty well made:
>
> http://chameleonantenna.com/BASE%20ANTENNA/CHA%20SKYLOOP/CHA%20SKYLOOP.htm
> l
>
> Thanks
> -C
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>
>

4348. AW: [SkyWires] Commercial Skyloop antenna

Yahoo group: SkyWires
Date: 2013-11-14 18:43:33 UTC
From: siegfried jackstien
Topic: 4345 Message: 4348

Ok ... i should have written buy or built a balun and add some wire :-)

Greetz

Dg9bfc

Sigi

> -----Ursprüngliche Nachricht-----
> Von: SkyWires@yahoogroups.com [mailto:SkyWires@yahoogroups.com] Im Auftrag
> von Richard Schmuke
> Gesendet: Donnerstag, 14. November 2013 17:22
> An: SkyWires@yahoogroups.com
> Betreff: RE: [SkyWires] Commercial Skyloop antenna
>
>
>
> But Sigi, you know I also like to build my own baluns so they work better
> than store bought.
>
> Rich, Kd0zz
>
>
>
> From: SkyWires@yahoogroups.com [mailto:SkyWires@yahoogroups.com] On Behalf
> Of siegfried jackstien
> Sent: Thursday, November 14, 2013 11:06 AM
> To: SkyWires@yahoogroups.com
> Subject: AW: [SkyWires] Commercial Skyloop antenna
>
>
>
>
>
> Or just buy a commercially built balun ... and add some wire and
> insulators
> ... and youre set
>
> Dg9bfc
>
> sigi
>
> > -----Ursprüngliche Nachricht-----
> > Von: SkyWires@yahoogroups.com [mailto:SkyWires@yahoogroups.com] Im
> Auftrag
> > von grosseindienne

> > Gesendet: Mittwoch, 13. November 2013 19:10
> > An: SkyWires@yahoogroups.com
> > Betreff: [SkyWires] Commercial Skyloop antenna
> >
> >
> >
> > For those who wants to get a commercial skyloop you can look at the
> > Chameleon Antenna Skyloop.
> >
> > They're pretty well made:
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> http://chameleonantenna.com/BASE%20ANTENNA/CHA%20SKYLOOP/CHA%20SKYLOOP.htm
> > l
> >
> > Thanks
> > -C
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4349. 160 Meter Loop Antenna SWR w/4:1 Balan

Yahoo group: SkyWires
Date: 2013-11-19 02:17:50 UTC
From: <narikawa@...>
Topic: 4349 Message: 4349

Hi Folks

I have been reading the that use of a 4:1 balun can be used on a 500 foot plus horizontal loop antenna. Tonight I connect a 4:1 balun and used an MFJ-269 to read the SWR. Here are my initial results. Does anyone have data on a similar loop antenna?

How would you interpret the data?

Thanks

2.000 > 3 1.800 > 3 4.000 > 3 3.800 2.5 7.300 3 7.175 3 10.150 < 2.5 10.100 2.5 14.350 > 3 14.225 > 3 18.168 > 3 18.068 > 3 21.450 0.5 21.275 1.5 28 3 29.7 3 54 3 50 > 3

4350. RE: [SkyWires] 160 Meter Loop Antenna SWR w/4:1 Balan

Yahoo group: SkyWires
Date: 2013-11-19 11:51:34 UTC
From: Richard Schmuke
Topic: 4349 Message: 4350
Attachments: 2 described; binary payloads are missing from this source WARC

I did not have a clear spot for a 160 but have a 80M size, then trimmed it for a good SWR in the 20M phone band. Here is a chart of my readings with a 4:1 balun

http://s1102.photobucket.com/user/KD0ZZ/media/80MLoop_zpsa6e4cfe7.jpeg.html

also your balun may not cover 160 to 6, here is a note about my balun when I made it, mine is centered on 10MHz.

http://s1102.photobucket.com/user/KD0ZZ/media/Balunjpeg_zps41dd0ff6.jpg.html

Rich, Kd0zz

From: SkyWires@yahoogroups.com [mailto:SkyWires@yahoogroups.com] On Behalf Of narikawa@...
Sent: Monday, November 18, 2013 8:18 PM
To: SkyWires@yahoogroups.com
Subject: [SkyWires] 160 Meter Loop Antenna SWR w/4:1 Balan

Hi Folks

I have been reading the that use of a 4:1 balun can be used on a 500 foot plus horizontal loop antenna. Tonight I connect a 4:1 balun and used an MFJ-269 to read the SWR. Here are my initial results. Does anyone have data on a similar loop antenna?

How would you interpret the data?

Thanks

2.000

> 3

1.800

> 3

4.000

> 3

3.800

2.5

7.300

3

7.175

3

10.150

< 2.5

10.100

2.5

14.350

> 3

14.225

> 3

18.168

> 3

18.068

> 3

21.450

0.5

21.275

1.5

28

3

29.7

3

54

3

50

> 3

4351. RE: RE: [SkyWires] 160 Meter Loop Antenna SWR w/4:1 Balan

Yahoo group: SkyWires
Date: 2013-11-26 01:59:28 UTC
From: <narikawa@...>
Topic: 4349 Message: 4351

Hi Richard

Thanks for the feedback. I looks like my antenna favors 3.8, 10.15, and 21.45.

I will need to use my SGC-239 to maintain a wideband operation. I may try extending the loop to 800 - 1000 feet next winter and an experiment.

Would a choke help my SWR numbers?

Thanks

---In SkyWires@yahoogroups.com, <rdj@...> wrote:

I did not have a clear spot for a 160 but have a 80M size, then trimmed it for a good SWR in the 20M phone band. Here is a chart of my readings with a 4:1 balun
http://s1102.photobucket.com/user/KD0ZZ/media/80MLoop_zpsa6e4cfe7.jpeg.html
http://s1102.photobucket.com/user/KD0ZZ/media/80MLoop_zpsa6e4cfe7.jpeg.html
also your balun may not cover 160 to 6, here is a note about my balun when I made it, mine is centered on 10MHz.
http://s1102.photobucket.com/user/KD0ZZ/media/Balunjpeg_zps41dd0ff6.jpg.html
http://s1102.photobucket.com/user/KD0ZZ/media/Balunjpeg_zps41dd0ff6.jpg.html

Rich, Kd0zz

From: SkyWires@yahoogroups.com [mailto:SkyWires@yahoogroups.com] On Behalf Of narikawa@...
Sent: Monday, November 18, 2013 8:18 PM
To: SkyWires@yahoogroups.com
Subject: [SkyWires] 160 Meter Loop Antenna SWR w/4:1 Balan

Hi Folks

I have been reading the that use of a 4:1 balun can be used on a 500 foot plus horizontal loop antenna. Tonight I connect a 4:1 balun and used an MFJ-269 to read the SWR. Here are my initial results. Does anyone have data on a similar loop antenna?

How would you interpret the data?

Thanks
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> 3
3.800
2.5
7.300
3

7.175
3
10.150
< 2.5
10.100
2.5
14.350
> 3
14.225
> 3
18.168
> 3
18.068
> 3
21.450
0.5
21.275
1.5
28
3
29.7
3
54
3
50
> 3

4352. RE: RE: [SkyWires] 160 Meter Loop Antenna SWR w/4:1 Balan

Yahoo group: SkyWires
Date: 2013-11-26 12:34:20 UTC
From: Richard Schmuke
Topic: 4349 Message: 4352
Attachments: 2 described; binary payloads are missing from this source WARC

If you are looking for a coax fed loop with low SWR points the large length numbers are 566 ft or 849 , 1172 and multiples . Most people over look the high SWR and use ladder line for a random length but you can find a length to give you what you want. Take a look at this chart and you will set there are lengths when all the bands come in. My set up is a delta loop, I tried a larger trapezoid shape but the numbers were no good.

http://s1102.photobucket.com/user/KD0ZZ/media/Loop_zps75e5682a.jpg.html

I hope the notes on the chart are clear, when you look at length you will see the length that will give you a good starting point. I know it worked on 80M size and the numbers are just projected up, I have not tried it myself but M0MCX has had great luck with his 160 delta, coax feed antenna.

http://www.youtube.com/watch?v=SOvhetU1_ps

I have the room for a very large loop but too many trees in the way and if I go too far in one direction I have a 350Kv line across the back of my property and might pick up noise.

A choke will keep RF from coming back down the line but I don’t think it will help much on you SWR problem, but a “ugly” choke won’t hurt anything. I run a 4:1 duel rod Guanella balun so it is a side by side 1:1 choke and the cross wire on one side to make it a 4:1. They are many plans on the web for this type.

Rich, Kd0zz

Subject: RE: RE: [SkyWires] 160 Meter Loop Antenna SWR w/4:1 Balan

Hi Richard

Thanks for the feedback. I looks like my antenna favors 3.8, 10.15, and 21.45.

I will need to use my SGC-239 to maintain a wideband operation. I may try extending the loop to 800 - 1000 feet next winter and an experiment.

Would a choke help my SWR numbers?

Thanks

---In SkyWires@yahoogroups.com, <rdj@...> wrote:

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http://s1102.photobucket.com/user/KD0ZZ/media/80MLoop_zpsa6e4cfe7.jpeg.html

also your balun may not cover 160 to 6, here is a note about my balun when I made it, mine is centered on 10MHz.

http://s1102.photobucket.com/user/KD0ZZ/media/Balunjpeg_zps41dd0ff6.jpg.html

Rich, Kd0zz

From: SkyWires@yahoogroups.com [mailto:SkyWires@yahoogroups.com] On Behalf Of narikawa@...
Sent: Monday, November 18, 2013 8:18 PM
To: SkyWires@yahoogroups.com
Subject: [SkyWires] 160 Meter Loop Antenna SWR w/4:1 Balan

Hi Folks

I have been reading the that use of a 4:1 balun can be used on a 500 foot plus horizontal loop antenna. Tonight I connect a 4:1 balun and used an MFJ-269 to read the SWR. Here are my initial results. Does anyone have data on a similar loop antenna?

How would you interpret the data?

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> 3

4.000

> 3

3.800

2.5

7.300

3

7.175

3

10.150

< 2.5

10.100

2.5

14.350

> 3

14.225

> 3

18.168

> 3

18.068

> 3

21.450

0.5

21.275

1.5

28

3

29.7

3

54

3

50

> 3

4353. 160 Meter Horizontal Loop - Fine Tuning Help Needed

Yahoo group: SkyWires
Date: 2014-01-05 23:31:21 UTC
From: <narikawa@...>
Topic: 4353 Message: 4353

Hi Folks

I am making very good progress with my 525 foot Horizontal Loop. Today I made a contact between MN and FL on ALE.

I am running a Kenwood 590 driving an SCG 239 tuner. The SWR indicated on my Kenwood meter show good SWR except on 18.106 and 10.1455.

How can I get the system to tune better on 18 and 10.

Thanks

4354. Re: [SkyWires] 160 Meter Horizontal Loop - Fine Tuning Help Needed

Yahoo group: SkyWires
Date: 2014-01-05 23:36:36 UTC
From: Chris Wilson
Topic: 4353 Message: 4354

Hello Narikawa,

Sunday, January 5, 2014, 11:31:21 PM, you wrote:
>
>
>
>
>
> Hi Folks

> I am making very good progress with my 525 foot Horizontal Loop.
> Today I made a contact between MN and FL on ALE.

> I am running a Kenwood 590 driving an SCG 239 tuner. The SWR
> indicated on my Kenwood meter show good SWR except on 18.106 and 10.1455.

> How can I get the system to tune better on 18 and 10.

> Thanks
>

You could consider playing with ladder line feeder lengths, or the
ultimate, with no matching unit needed at all:

http://www.w5dxp.com/notuner.htm

--
Best regards,
Chris mailto:chris@...

4355. RE: 160 Meter Horizontal Loop - Fine Tuning Help Needed

Yahoo group: SkyWires
Date: 2014-01-05 23:41:50 UTC
From: <narikawa@...>
Topic: 4353 Message: 4355

Hi Chris

Thanks for getting back to me. What are some experiments I could do with the ladder line?

---In SkyWires@yahoogroups.com, <chris@...> wrote:

Hello Narikawa,

Sunday, January 5, 2014, 11:31:21 PM, you wrote:
>
>
>
>
>
> Hi Folks

> I am making very good progress with my 525 foot Horizontal Loop.
> Today I made a contact between MN and FL on ALE.

> I am running a Kenwood 590 driving an SCG 239 tuner. The SWR
> indicated on my Kenwood meter show good SWR except on 18.106 and 10.1455.

> How can I get the system to tune better on 18 and 10.

> Thanks
>

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ultimate, with no matching unit needed at all:

http://www.w5dxp.com/notuner.htm http://www.w5dxp.com/notuner.htm

--
Best regards,
Chris mailto:chris@... mailto:chris@...

4356. Re: [SkyWires] RE: 160 Meter Horizontal Loop - Fine Tuning Help Needed

Yahoo group: SkyWires
Date: 2014-01-05 23:48:44 UTC
From: Chris Wilson
Topic: 4353 Message: 4356

Hello Narikawa,

Sunday, January 5, 2014, 11:41:50 PM, you wrote:
>
>
>
>
>

> Hi Chris

> Thanks for getting back to me. What are some experiments I could do with the ladder line?

Try longer and, if it will reach, shorter lengths, also you could mess
with the actual loop circumference. My 180 odd meter loop is not good
on 10 meters, ATU is peaky, easy to get RF in the shack (and my
PC's....). I intend doing the relays and various loops of ladder line,
as per the link. One day.... :)

--
Best regards,
Chris mailto:chris@...

4357. RE: 160 Meter Horizontal Loop - Fine Tuning Help Needed

Yahoo group: SkyWires
Date: 2014-01-05 23:59:13 UTC
From: <narikawa@...>
Topic: 4353 Message: 4357

I will try experimenting with the length of the feedline first.

Right now it is -13 degrees and tonight it will get to -30 degrees and the ladder line is very stiff. I have heard about various external chokes that could be placed on the ladder line.

I run ALE and the antenna must be broadband between 1.8 -- 28.32. The antenna would be perfect if I could get 18 and 10 to behave. ALE is constantly moved between bands.

4358. RE: [SkyWires] RE: 160 Meter Horizontal Loop - Fine Tuning Help Needed

Yahoo group: SkyWires
Date: 2014-01-06 01:10:36 UTC
From: Richard Schmuke
Topic: 4353 Message: 4358
Attachments: 2 described; binary payloads are missing from this source WARC

Follow the link Chris sent to you W5DXP , he has the best set up I have seen for a all band , no tuner needed set up.

http://www.w5dxp.com/notuner.htm

Rich, kd0zz

From: SkyWires@yahoogroups.com [mailto:SkyWires@yahoogroups.com] On Behalf Of narikawa@...
Sent: Sunday, January 05, 2014 5:42 PM
To: SkyWires@yahoogroups.com
Subject: [SkyWires] RE: 160 Meter Horizontal Loop - Fine Tuning Help Needed

Hi Chris

Thanks for getting back to me. What are some experiments I could do with the ladder line?

---In SkyWires@yahoogroups.com, <chris@...> wrote:

Hello Narikawa,

Sunday, January 5, 2014, 11:31:21 PM, you wrote:

>
>
>
>
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> Hi Folks

> I am making very good progress with my 525 foot Horizontal Loop.
> Today I made a contact between MN and FL on ALE.

> I am running a Kenwood 590 driving an SCG 239 tuner. The SWR
> indicated on my Kenwood meter show good SWR except on 18.106 and 10.1455.

> How can I get the system to tune better on 18 and 10.

> Thanks
>

You could consider playing with ladder line feeder lengths, or the
ultimate, with no matching unit needed at all:

http://www.w5dxp.com/notuner.htm

--
Best regards,
Chris mailto:chris@...

4359. RE: [SkyWires] 160 Meter Horizontal Loop - Fine Tuning Help Needed

Yahoo group: SkyWires
Date: 2014-01-06 01:22:25 UTC
From: Richard Schmuke
Topic: 4353 Message: 4359

Another possibility is a different balun. The built in balun on my MFJ 962-D tuner, even with the built in roller inductor was not the best so I made my own then added a switch on balun so it could be a 4:1 or a 1:1 , for the best SWR.

http://s1102.photobucket.com/user/KD0ZZ/media/4to11to12.jpg.html.

The basic Guanella current balun layout I used is on

http://s1102.photobucket.com/user/KD0ZZ/media/Balunjpeg_zps41dd0ff6.jpg.html

Rich, Kd0zz

4360. Re[2]: [SkyWires] RE: 160 Meter Horizontal Loop - Fine Tuning Help Needed

Yahoo group: SkyWires
Date: 2014-01-06 01:31:54 UTC
From: Chris Wilson
Topic: 4353 Message: 4360

Hello Richard,

Monday, January 6, 2014, 1:10:36 AM, you wrote:

> Follow the link Chris sent to you W5DXP , he has the best set up I
> have seen for a all band , no tuner needed set up.

>

> http://www.w5dxp.com/notuner.htm

>

> Rich, kd0zz

I have Googled this Ale stuff, and it seems it's resilient comms
software that constantly channel hops (ale ---- hops....?).Not sure
how you would drive the antenna feeder switching, sounds tricky.I
hadn't heard of this ale stuff before save down the pub.

Thanks for the tips on cutting Acrylic Rich!

--
Best regards,
Chris mailto:chris@...

4361. RE: 160 Meter Horizontal Loop - Fine Tuning Help Needed

Yahoo group: SkyWires
Date: 2014-01-06 01:35:32 UTC
From: <narikawa@...>
Topic: 4353 Message: 4361

Hi Rich

Thanks for your idea. I just ordered some knife switches. I how to get them soon.

I went outside (-16 degrees) and reset my SCG 239. Here is what I get now.

100 watts w/CW Tuning (I get rf noise on my PC speakers on 21.0960)

Freq SWR (read on Kenwood 590 display)

3.5960 1.25 7.1020 1.25 10.1455 1.75 14.1090 1.50 18.1060 2.00 21.0960 1.00 24.9260 1.00 28.1460 1.50

4362. AW: [SkyWires] 160 Meter Horizontal Loop - Fine Tuning Help Needed

Yahoo group: SkyWires
Date: 2014-01-06 16:36:36 UTC
From: siegfried jackstien
Topic: 4353 Message: 4362

Change the ladderline length from loop to tuner

Adding a few feet may help here :-)

I have a topbandloop fed with ladderline and a homebrewed balun (sits inside my manual tuner)

On most bands I do not need the tuner (and on the other the swr is very low so tuner losses will be low)

I made an excel sheet for my notes (sent to you with direct mail)

Open it and see my results :-)

I use 2 different lengths of ladderline (short run from loop to shack and the added length is "plugged in" with banana plugs)

With 3 days of try and error (yes it took a while!) I now have a REAL multibandantenna

Dg9bfc

Sigi

> -----Ursprüngliche Nachricht-----
> Von: SkyWires@yahoogroups.com [mailto:SkyWires@yahoogroups.com] Im Auftrag
> von narikawa@q.com
> Gesendet: Sonntag, 5. Januar 2014 23:31
> An: SkyWires@yahoogroups.com
> Betreff: [SkyWires] 160 Meter Horizontal Loop - Fine Tuning Help Needed
>
>
>
> Hi Folks
>
> I am making very good progress with my 525 foot Horizontal Loop. Today I
> made a contact between MN and FL on ALE.
>
> I am running a Kenwood 590 driving an SCG 239 tuner. The SWR indicated on
> my Kenwood meter show good SWR except on 18.106 and 10.1455.
>
> How can I get the system to tune better on 18 and 10.
>
> Thanks
>
>

4363. RE: 160 Meter Horizontal Loop - Fine Tuning Help Needed

Yahoo group: SkyWires
Date: 2014-01-06 20:06:20 UTC
From: Gary
Topic: 4353 Message: 4363

Those are good SWR's

4364. RE: 160 Meter Horizontal Loop - Fine Tuning Help Needed

Yahoo group: SkyWires
Date: 2014-01-07 01:27:33 UTC
From: <narikawa@...>
Topic: 4353 Message: 4364

Hi Folks

I really appreciate all the feedback.

- I have reviewed http://www.w5dxp.com/notuner.htm http://www.w5dxp.com/notuner.htm and this is very good information. I ordered several knife switches to experiment with.

- I will get some more ladder line so a can experiment with the feedline lenght once it get warm enough outside.

To work on ALE (Automatic Link Establishment) I need a mutliband antenna and scan about 1 band per second and periodically transmit on each band (3,7,10,14,18,12,24, and 28). This means that antenna system must provide rapid switching. The SCG 239 seems to work very well. Yesterday I got ALE working across all bands after performing a "hard reset" on the SCG 239. After the reset I got the following SWR reading on the Kenwood 590 display.

Freq SWR (read on Kenwood 590 display)

3.5960 1.25 7.1020 1.25 10.1455 1.75 14.1090 1.50 18.1060 2.00 21.0960 1.00 24.9260 1.00 28.1460 1.50
I will continue to tweak the antenna so it a good match on as many bands as I can achieve. The SCG 239 seem to adapt to the band that have high SWR (10, 14, and 28).

What are some other tweaks I can work on further fine tune the antenna system?

Thanks

http://www.w5dxp.com/notuner.htm

4365. AW: [SkyWires] RE: 160 Meter Horizontal Loop - Fine Tuning Help Needed

Yahoo group: SkyWires
Date: 2014-01-07 15:31:38 UTC
From: siegfried jackstien
Topic: 4353 Message: 4365

You should bypass the sgc and tune the loop and ladderline till you got the best overall compromise ... then the tuner has only low mismatch (and so low losses inside) ...

After that you should be "ready for take-off"

If you can not find a good compromise (low swr on all bands) then you shoulkd try to lower the swr especially on the bands that now have a higher swr (17 and 30m) ... then after putting the sgc back "online" you should have a low swr on ALL bands

Dg9bfc

Sigi

> -----Ursprüngliche Nachricht-----
> Von: SkyWires@yahoogroups.com [mailto:SkyWires@yahoogroups.com] Im Auftrag
> von narikawa@...
> Gesendet: Dienstag, 7. Januar 2014 01:28
> An: SkyWires@yahoogroups.com
> Betreff: [SkyWires] RE: 160 Meter Horizontal Loop - Fine Tuning Help
> Needed
>
>
>
> Hi Folks
>
> I really appreciate all the feedback.
>
> - I have reviewed http://www.w5dxp.com/notuner.htm and this is very good
> information. I ordered several knife switches to experiment with.
>
> - I will get some more ladder line so a can experiment with the feedline
> lenght once it get warm enough outside.
>
> To work on ALE (Automatic Link Establishment) I need a mutliband antenna
> and scan about 1 band per second and periodically transmit on each band
> (3,7,10,14,18,12,24, and 28). This means that antenna system must provide
> rapid switching. The SCG 239 seems to work very well. Yesterday I got ALE
> working across all bands after performing a "hard reset" on the SCG 239.
> After the reset I got the following SWR reading on the Kenwood 590
> display.
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>
>

> Freq SWR (read on Kenwood 590 display)
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> I will continue to tweak the antenna so it a good match on as many bands
> as I can achieve. The SCG 239 seem to adapt to the band that have high SWR
> (10, 14, and 28).
>
> What are some other tweaks I can work on further fine tune the antenna
> system?
>
> Thanks
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>
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>
>
>
> <http://www.w5dxp.com/notuner.htm>
>
>

4366. RE: 160 Meter Horizontal Loop - Fine Tuning Help Needed

Yahoo group: SkyWires
Date: 2014-01-11 23:44:36 UTC
From: <narikawa@...>
Topic: 4353 Message: 4366

Update 1/11/2014

I think I am close. I have ALE up and running. I have made soundings to Australia and Sweden several times a day for the last week. Very strong signal between MN an FL.

The 525' 160 meter horizontal loop seems to be doing well on 100 watts.

Thanks for your assistance!!!

4367. Horizontal Loop Antenna - Grounding

Yahoo group: SkyWires
Date: 2014-01-29 03:25:14 UTC
From: <narikawa@...>
Topic: 4367 Message: 4367

Hi Folks

I have a 525 foot Horizontal Loop Antenna that is performing very well and I am tweaking it. I install point-to-point ground from the ground rood to the radio case and it reduced RF.

I understand that the large Horizontal Loop Antenna builds up a static charge. What are you folks doing for grounding?

Thanks.

4368. Re: [SkyWires] Horizontal Loop Antenna - Grounding

Yahoo group: SkyWires
Date: 2014-01-29 05:40:58 UTC
From: Mark Graybill
Topic: 4367 Message: 4368

Mine goes through a coax feedthrough after a balun which has the shield side run to my ground. Inside I use an Alpha Delta switch to ground it when not in use (which is tied back into the same ground.)

If I were bringing the balanced line into the house, it would go to a knife switch that would be in the grounded position when not in use.

Mark Graybill, W8BIT
---
http://saundby.com/
Electronics, Books, Video Games, etc.

On Jan 28, 2014, at 7:25 PM, <narikawa@...> wrote:

> Hi Folks
>
> I have a 525 foot Horizontal Loop Antenna that is performing very well and I am tweaking it. I install point-to-point ground from the ground rood to the radio case and it reduced RF.
>
> I understand that the large Horizontal Loop Antenna builds up a static charge. What are you folks doing for grounding?
>
> Thanks.
>
>

4369. Re: [SkyWires] Horizontal Loop Antenna - Grounding

Yahoo group: SkyWires
Date: 2014-01-29 07:41:11 UTC
From: <allenbh@...>
Topic: 4367 Message: 4369

Aside from the necessity of grounding the loop when not in use, what about the use of a coil to ground to bleed off the static charge during normal operation? I have used this on a longwire before. The coil (L) would have a Hi Z at RF, but readily takes the static (DC) to ground.

73,
Bill
AJ4TX

4370. RE: Horizontal Loop Antenna - Grounding

Yahoo group: SkyWires
Date: 2014-01-30 00:02:39 UTC
From: <narikawa@...>
Topic: 4367 Message: 4370

Hi Mark & Bill

Thanks for the feedback. I have the loop connected to an SCG-239 tuner. A short 15 foot length of ladder line is connected to the input (signal and ground) and the input is 12 volt DC and coax from my Kenwood 590s.

My Options:

(1) Run ground braid from the grounding rod to the shield of the coax connector.
(2) Coil to ground

I just got some knife switches, but I am running ALE and the radio runs 24/7. I should check my insurance policy?

I saw this device and ordered one to test.

http://www.arraysolutions.com/Products/AS-309H.htm

Have you seen this device before? What do you think about the concept?

Thanks

4371. RE: Horizontal Loop Antenna - Grounding

Yahoo group: SkyWires
Date: 2014-01-30 02:52:58 UTC
From: <allenbh@...>
Topic: 4367 Message: 4371

Not having run either a loop (yet - it is on the short list!!!), or feeding with balanced line, I have not tried that. Looks good. How it may compare I cannot say. There are individual line arrestors - guess they could be connected up as a pair. But that product looks good. I'd compare specs...

I would still run a coil or resistor to ground. Not for direct hits, but to bleed off the charge that builds up. It is simple to do: http://www.k0bg.com/static.html

See this informative article:
http://www.reeve.com/Documents/Articles%20Papers/AntennaSystemGroundingRequirements_Reeve.pdf

Also: http://taarc.rebelwolf.com/images/Grounding.pdf

http://elecraft.365791.n2.nabble.com/static-buildup-on-antennas-td7562400.html

Found this article:
http://oh7ug.net/index.php?option=com_content&view=article&id=344:stat.
Good information for static buildup on antenna wires. Just a bleeder to ground. The bleeder was constructed with the three 10 Mohm 1W /3.5 kV high voltage resistors in parallel.

ALE sounds interesting - tell me more!
73,
Bill
AJ4TX

---In SkyWires@yahoogroups.com, <narikawa@...> wrote:

Hi Mark & Bill

Thanks for the feedback. I have the loop connected to an SCG-239 tuner. A short 15 foot length of ladder line is connected to the input (signal and ground) and the input is 12 volt DC and coax from my Kenwood 590s.

My Options:

(1) Run ground braid from the grounding rod to the shield of the coax connector.
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I saw this device and ordered one to test.

http://www.arraysolutions.com/Products/AS-309H.htm

Have you seen this device before? What do you think about the concept?

Thanks

4372. Re: [SkyWires] RE: Horizontal Loop Antenna - Grounding

Yahoo group: SkyWires
Date: 2014-01-30 04:24:43 UTC
From: Mark Graybill
Topic: 4367 Message: 4372

The AS-309 looks better than a homebrew ground rod with spark plugs on it as spark gaps. I'd definitely consider using one.

Mark, W8BIT

On Wed, Jan 29, 2014 at 4:02 PM, <narikawa@...> wrote:

>
>
> Hi Mark & Bill
>
> Thanks for the feedback. I have the loop connected to an SCG-239 tuner. A
> short 15 foot length of ladder line is connected to the input (signal and
> ground) and the input is 12 volt DC and coax from my Kenwood 590s.
>
> My Options:
>
> (1) Run ground braid from the grounding rod to the shield of the coax
> connector.
> (2) Coil to ground
>
> I just got some knife switches, but I am running ALE and the radio runs
> 24/7. I should check my insurance policy?
>
> I saw this device and ordered one to test.
>
> http://www.arraysolutions.com/Products/AS-309H.htm
>
> Have you seen this device before? What do you think about the concept?
>
> Thanks
>
>

4373. Re: Horizontal Loop Antenna - Grounding

Yahoo group: SkyWires
Date: 2014-01-30 11:10:45 UTC
From: Warren Stone
Topic: 4367 Message: 4373

The SGC239 has the RF output at DC ground via T1 at the output. That will provide continuous static discharge for whatever antenna is connected.

I would be concerned with multiple ground points not properly bonded together. If you experience a ground surge through another source such as the AC feed from the house it will look for a path to dissipate. It may see the ATU ground and find a path via the feedline and the transceiver. Unless you have the system bonded properly your transceiver will act as a jumper between the two grounds. It could experience considerable current and potential damage.

A 500+ foot loop is in the works for here as well. It will have balanced feed to a Balun Designs 4115 4:1 current balun. The coax will enter the house very close to the AC entrance where there will be a copper bus bonded to the electrical panel. A double Type-N connector will accept the line to the balun and another to the transceiver in another room. The line to the transceiver will have a few turns through a toroid. Two copper straps run from the electrical panel to the operating desk to keep everything at the same potential. The AC entrance will have an added ground rod as well. I have my satellite TV lines connected the same way. They enter near the AC entrance, bond to the same ground bus, couple loops through the toroid and then to the TV. If there is a direct hit or a large AC entrance surge the entire house, including radio equipment will remain at the same potential. There will be little or no current passing through equipment.

http://members.rennlist.org/warren/grounding.pdf

Warren
VO1KS

4374. AW: [SkyWires] RE: Horizontal Loop Antenna - Grounding

Yahoo group: SkyWires
Date: 2014-01-30 15:24:55 UTC
From: siegfried jackstien
Topic: 4367 Message: 4374

Add a choke to the 12v dc line ...

And add a choke (balun) to the input side of the tuner

...

Now your tuner is isolated rf wise (floating) and that keeps your ladderline
well balanced

Now ... add your ground connection at the trx side of the balun

Your loop now has a direct dc connection to ground

> -----Ursprüngliche Nachricht-----
> Von: SkyWires@...m [mailto:SkyWires@yahoogroups.com] Im Auftrag
> von narikawa@...
> Gesendet: Donnerstag, 30. Januar 2014 00:03
> An: SkyWires@yahoogroups.com
> Betreff: [SkyWires] RE: Horizontal Loop Antenna - Grounding
>
>
>
> Hi Mark & Bill
>
> Thanks for the feedback. I have the loop connected to an SCG-239 tuner. A
> short 15 foot length of ladder line is connected to the input (signal and
> ground) and the input is 12 volt DC and coax from my Kenwood 590s.
>
> My Options:
>
> (1) Run ground braid from the grounding rod to the shield of the coax
> connector.
> (2) Coil to ground
>
> I just got some knife switches, but I am running ALE and the radio runs
> 24/7. I should check my insurance policy?
>
> I saw this device and ordered one to test.
>
> http://www.arraysolutions.com/Products/AS-309H.htm
>
> Have you seen this device before? What do you think about the concept?
>
> Thanks
>
>

4375. RE: Horizontal Loop Antenna - Grounding

Yahoo group: SkyWires
Date: 2014-01-31 03:05:17 UTC
From: <narikawa@...>
Topic: 4367 Message: 4375

I have basic conceptual knowledge of using a choke. Can you help identify parts and installation. A photo would be very much appreciated if possible.

I would like to identify all possible options. Thanks

4376. RE: Horizontal Loop Antenna - Grounding

Yahoo group: SkyWires
Date: 2014-01-31 03:19:14 UTC
From: <narikawa@...>
Topic: 4367 Message: 4376

Hi Warren

Thanks for the feedback! To ensure I understand properly, the SCG-239 will discharge static by design?

I have a single point ground and have a separate flat wire braid going from the ground rod to each piece of equipment.

I just received an Array Solutions AS-309H "Ladder Line Twin Line Arrestor", what do you think of this device?

http://www.arraysolutions.com/Products/AS-309H.htm

I plan to install the AS-309H once we get out of -10 degrees weather. The ladder line is very stiff at these temperatures.

I also have some Alpha Delat TT3G50 arrestors that I plan to put between my Lenwood 590s and the SGC-293 (very near the actual ground rod.

I am very happy with the big loop, I can't believe how well it works in term of a multi-band antenna.

I am using ALE and the system will be on-line 24/7. I plan to verify my insurance coverage and maybe look into ARRL insurance.

4377. RE: Horizontal Loop Antenna - Grounding

Yahoo group: SkyWires
Date: 2014-01-31 03:21:55 UTC
From: <narikawa@...>
Topic: 4367 Message: 4377

Hi Bill

These are great references, I will review them carefully. Thanks

4378. RE: Horizontal Loop Antenna - Grounding

Yahoo group: SkyWires
Date: 2014-01-31 06:14:50 UTC
From: <allenbh@...>
Topic: 4367 Message: 4378

I believe in learning by asking, reading and doing...

X(l) = 2 * Pi * Frequency (Hz) * Inductance (Farads), so at 7 MHz 500 uH (.5 mH) gives you about 22K of reactance. Probably high enough not to bother your antenna (50 to 400 ohms), but will bleed off static.

Play around with the values - here is a good calculator online:
http://www.calculatoredge.com/electronics/reactance.htm.

Here is a coil calculator: http://www.66pacific.com/calculators/coil_calc.aspx

You can also plug formulas into Excel (or Open Office - it is free!). Do that and check your calculations against an online calculator. Then you can learn to make a toolbox for yourself. You can add graphing, etc.

After reading the links I sent you I will probably make sure I have mine grounded with either a coil or resistors as suggested. I had a coil on there awhile back - need to check it! Also simply putting 3 each 1Meg resistors on a coax connector and putting it on a TEE to your antenna connector will keep those static charges down. The amount of static that can build up from wind, rain, snow or dist is frightening! And damaging to your Rx front end!!

A bleeder (coil or resistor) can be tied from your loop to ground outside, or simply put the resistors across your coax terminals. That is NOT lightning protection - that is another whole chapter! See the links on that - there is a lot of good information, and the balanced line protector you posted would be a great place to start.

Question for you - how do you make use of ALE? I think it would be very interesting.
73,
Bill AJ4TX

4379. RE: Horizontal Loop Antenna - Grounding

Yahoo group: SkyWires
Date: 2014-01-31 16:47:30 UTC
From: <kk4xo.bill@...>
Topic: 4367 Message: 4379

If you would like to build your own, then get your hands on this back issue of Electric Radio Magazine - Electric Radio #284, January 2013 - Eisenbrey, "Building your own lightening protection system for your ladder line": http://www.radiolabworks.com/ersearch.html http://www.radiolabworks.com/ersearch.html -

You can also take a look at a system that is used for FCP Inverted L antennas...scroll down the page to the K2AV Installation Notes - I would imagine that the spark-plug/resistor combination would work for each ladder line leg as well: http://www.w0uce.net/K2AVantennas.html http://www.w0uce.net/K2AVantennas.html

73 - Bill, KK4XO

4380. RE: Horizontal Loop Antenna - Grounding

Yahoo group: SkyWires
Date: 2014-02-04 01:27:05 UTC
From: <narikawa@...>
Topic: 4367 Message: 4380

Great article, never seen this configuration before? Thanks

4381. 2.5 to 1 air core balun winding details wanted

Yahoo group: SkyWires
Date: 2014-02-20 00:49:55 UTC
From: <m6mrp@...>
Topic: 4381 Message: 4381

Hi guys, I have tried this one a few other antenna groups but with no help so far, trying to find the winding details for a 2.5:1 air core balun for a loop antenna (not toroid I have those details) I know a guy in the US sells them and has good reviews so want to try one out of interest but shipping one out here to the UK is just not cost effective for the cost of a plastic tube former and some old wire, I have heard many arguments against these things but have had good results with a 4:1 air core balun on another antenna I use so would like to try one against the toroid balun on a loop out of interest. Any winding details or a link for them please as Ive searched and searched and come up blank.
73
Phil
M6MRP

4382. WINTER FEEEZE - Heating a 160 meter horizontal loop antenna

Yahoo group: SkyWires
Date: 2014-02-22 21:13:16 UTC
From: <narikawa@...>
Topic: 4382 Message: 4382

Hi Folks
I Minnesota we just had the worse snow.ice conditions in many years. There was about 1" - 2" of snow/ice on every part of my big 160 meter loop. The corner spring did their job very well and many parts of the loop sagged over 10".

Put on the snow shoes (the largest commercial available) and still was over my knees in snow. I made my way to corner supports and pulled the support out 15' then let them snap back several times (hard work getting through the snow, and sweating like a pig). This removes about 50 % of the covering. The rest I have to use a very long paint pole to break the snow/ice from the rest of the wire.

Someone suggested disconnecting the antenna then using a variac transformer to heat the wire. I have planned to do this next year, but I am now a little more motivated to get it done before next winter.

Can someone who has none this provide me part numbers, sources, and operating procedures?

4383. Re: [SkyWires] WINTER FEEEZE - Heating a 160 meter horizontal loop antenna

Yahoo group: SkyWires
Date: 2014-02-23 00:53:24 UTC
From: Van Lincoln
Topic: 4382 Message: 4383

At 21:13 2/22/2014, you wrote:

>Hi Folks
>In Minnesota we just had the worse snow.ice
>conditions in many years. There was about 1" -
>2" of snow/ice on every part of my big 160 meter
>loop. The corner spring did their job very well
>and many parts of the loop sagged over 10".
>
>Put on the snow shoes (the largest commercial
>available) and still was over my knees in snow.
>I made my way to corner supports and pulled the
>support out 15' then let them snap back several
>times (hard work getting through the snow, and
>sweating like a pig). This removes about 50 % of
>the covering. The rest I have to use a very long
>paint pole to break the snow/ice from the rest of the wire.
>
>Someone suggested disconnecting the antenna then
>using a variac transformer to heat the wire. I
>have planned to do this next year, but I am now
>a little more motivated to get it done before next winter.
>
>Can someone who has none this provide me part
>numbers, sources, and operating procedures?
>
>==========
=====
>old message about this technique found:

Congratulations on getting your 550' loop up. I
bet you got plenty of exercise walking around
adjusting it. My 550' loop is up about 50-60
feet on average and I am feeding it with about 65
feet of homebrew ladder line with 600ohm
characteristic spacing to a homebrew true
balanced antenna tuner, with synchronized roller
inductors. This allows QRO power when needed
too. The feed point is near one of the tree ties
so the weight of the ladder line does not cause
antenna sag. The antenna and feedline are all
12gauge wire and it works on all HF bands.
Additionally my loop is tied out at 6 trees
making it more rounded, maximizing the planer

area within the loop and a bit more unidirectional - though not perfect.

It sounds like you live in an area where you get
□sticky□ snow and ice, as I do. The commercial
window line is compromised in the inclement
weather, if that is of concern to you. I evolved
into homebrew ladderline for that reason and
during inclement weather I connect a big old
Variac AC supply directly to the loop leads,
crank it up to about 20volts at 20 amps through
the loop for 20 minutes and melt the snow off the
sagging antenna and ladderline. Homebrew
ladderline is easy to make too. In any iteration
though a 550' loop works great. Good luck with it.... 73 Hank N2MU

><http://groups.yahoo.com/group/SkyWires;_ylc=X3oDMTJmOG9kZTI1BF9TAzk3MzU5NzE0BGdycElkAzEwOTQ2MTE5BGdycHNwSWQDMTcwNTA2MzEwOARzZWMDdnRsBHNsawN2Z2hwBHN0aW1lAzEzOTMxMDM1OTc->Visit
>Your Group
> *
> <http://groups.yahoo.com/group/SkyWires/members;_ylc=X3oDMTJnOXY1ZjhsBF9TAzk3MzU5NzE0BGdycElkAzEwOTQ2MTE5BGdycHNwSWQDMTcwNTA2MzEwOARzZWMDdnRsBHNsawN2bWJycwRzdGltZQMxMzkzMTAzNTk3?o=6>New
> Members 2
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><http://info.yahoo.com/privacy/us/yahoo/groups/details.html>Privacy
>□
><mailto:SkyWires-unsubscribe@yahoogroups.com?subject=Unsubscribe>Unsubscribe
>□ <http://info.yahoo.com/legal/us/yahoo/utos/terms/>Terms of Use
>
>

4384. RE: WINTER FEEEZE - Heating a 160 meter horizontal loop antenna

Yahoo group: SkyWires
Date: 2014-02-24 15:50:33 UTC
From: <hmlong@...>
Topic: 4382 Message: 4384

Hi,
I'm the person that posted the variac idea previously...
I can appreciate your description of sweating like a pig when you go through the snow as I have experienced the same when sinking into 2' to 4' of frozen snow while attending to my antenna or getting logs for extra heating. It's enough to create a panic attack! I'm sure your weather was worse than mine here in North-Central NJ though...

I don't have any suggestions about a specific variac etc. but this year the temperatures here were so cold (0 to 12 degrees F daily) that 20volts at about 20 amps was not enough to clear off my 12gauge 550' loop quickly, and I had to leave my big old variac on for a long time before the ice started to flake off in sections with the help of what little sunshine there was after a storm.

Additionally I had better results when I preemptively applied the variac current as the storm started. My ladder line is separated at about 600 ohms and is made of fine multi stranded 12gauge insulated wire with plastic spreaders at ~4foot intervals... It doesn't get clogged up with ice bad enough to degrade the output as it is insulated and does not ice bridge across the wire like the closer spaced webbed commercial stuff does. The variac does also clear the feedline to some degree anyway, though.

My variac weighs about 35lbs and has no ratings on it. I was concerned that it might burn up given that the current (about 20-25 amps) is displaced only among the few secondary turns that bring it up to 20-25vac rms... I could smell it beginning to cook!

So as a recommendation to you, the important thing is to power the wire with something very "hefty" and depending on your wire gauge you will need to determine the total resistance for the applied voltage and current. I figure that about a watt/foot applied to 12gauge wire will handily fight stubborn weather conditions if something else doesn't burn up first.... I have an old IBM transformer from the old days of giant computers that puts out about 35volts and judging from the wire gauge it appears to be able to handle 50 amps or more. So I may cannibalize that for the future given that we seem to be getting severe weather trends now...
The loop is worth the efforts though... It is an amazingly simple antenna that works well on all HF bands..
73 Hank N2MU ...-.- ..

4386. RE: WINTER FEEEZE - Heating a 160 meter horizontal loop antenna

Yahoo group: SkyWires
Date: 2014-02-25 02:31:21 UTC
From: <allenbh@...>
Topic: 4382 Message: 4386

Great idea, Hank. What you need is a big old step-down transformer, maybe 4:1, so you don't overload the variac. I once had some big transformers from an industrial voltage controller - several servo-driven triacs and step-down transformers, then step-up back to line voltage. Lost most of them in a move. A welder comes to mind. Interesting question about Teflon-coated wire, but I bet the ice would get it as well! Worth a try! If I ever get my loop built (and we have another ice storm in GA) I'll try the variac trick.
73,
Bill AJ4TX

4391. loop with coil??

Yahoo group: SkyWires
Date: 2014-04-19 14:48:00 UTC
From: <ve2zvz@...>
Topic: 4391 Message: 4391

Hi i have space for a 40 meter loop over the roof,now i am wandering if i instal a coil to acheive a 80 metre full wave lenth.do you thing i can manage to work 80 meter with this solution.does anyone have done it before
tnx for reading
Richard
ve2zvz

4392. Re: loop with coil??

Yahoo group: SkyWires
Date: 2014-04-19 17:52:52 UTC
From: <ve2zvz@...>
Topic: 4391 Message: 4392

yes to had some lenth to the original full wave lenth on 40 meter

4393. AW: [SkyWires] loop with coil??

Yahoo group: SkyWires
Date: 2014-04-19 18:01:45 UTC
From: siegfried jackstien
Topic: 4391 Message: 4393

Open up at opposite of feeding point and use your 40m loop as a 80m "bent" dipole

No lossy coil and can be used on higher bands without coil working like a trap/lowpass

Dg9bfc

sigi

> -----Ursprüngliche Nachricht-----
> Von: SkyWires@yahoogroups.com [mailto:SkyWires@yahoogroups.com] Im Auftrag
> von ve2zvz@...
> Gesendet: Samstag, 19. April 2014 14:48
> An: SkyWires@yahoogroups.com
> Betreff: [SkyWires] loop with coil??
>
>
>
> Hi
> i have space for a 40 meter loop over the roof,now i am wandering if i
> instal a coil to acheive a 80 metre full wave lenth.do you thing i can
> manage to work 80 meter with this solution.does anyone have done it before
> tnx for reading
> Richard
> ve2zvz
>
>

4394. Re: [SkyWires] loop with coil??

Yahoo group: SkyWires
Date: 2014-04-19 22:00:32 UTC
From: Don Sanders
Topic: 4391 Message: 4394

YES, but you have to make a choice of which compromise you are willing to live with.
If you open the loop at the point opposite the feed point and make it a bent dipole,
it will work well but have a very low impedance on 80. Perhaps 5 to 10 ohms.
This is because it is a bent 1/2 wave dipole.Your tuner will have to tune this low impedance.
However with open feed line, 450 or other, it will still be an all band antenna.

If you add a coil you increase losses and may prevent it from working on some frequencies.
If you add a 1/4 wave 40 meter open stub at the point opposite the feed point,
instead of leaving it open,It will automatically switch from a closed loop on 40 to a folded 200 ft
dipole and still work many bands with a tuner.

You have to decide what frequencies you want it to work on and then thew lowest loss possible.
But, good news is that it will work and any antenna is better than no antenna.

Don HC4/W4BWS

On Sat, Apr 19, 2014 at 9:48 AM, <ve2zvz@...> wrote:

>
>
> Hi
> i have space for a 40 meter loop over the roof,now i am wandering if i
> instal a coil to acheive a 80 metre full wave lenth.do you thing i can
> manage to work 80 meter with this solution.does anyone have done it before
> tnx for reading
> Richard
> ve2zvz
>
>
>

4396. Multi turn skywire

Yahoo group: SkyWires
Date: 2014-05-09 11:38:34 UTC
From: findsimongough@...
Topic: 4396 Message: 4396

Just wandering if anyone has played with multiple turn Skywire loops. I have a very small plot and the largest loop I can accomodate is 94 feet in circumference, this gives me a lower frequency limit of around 10.7 Mhz. In theory if I was to use two turns giving me 188 feet my lower limit would be 5.46 Mhz. Well that's the theory anyway. Has anyone on here tried this and if so how did it perform?

Simon

4397. Multiple turn loop

Yahoo group: SkyWires
Date: 2014-05-09 11:02:28 UTC
From: findsimongough@...
Topic: 4397 Message: 4397

Just wandering if anyone has played with multiple turn Skywire loops. I have a very small plot and the largest loop I can accomodate is 94 feet in circumference, this gives me a lower frequency limit of around 10.7 Mhz. In theory if I was to use two turns giving me 184 feet my lower limit would be 5.46 Mhz. Well that's the theory anyway. Has anyone on here tried this and if so how did it perform?

Simon

4398. Re: Multiple turn loop

Yahoo group: SkyWires
Date: 2014-05-09 16:18:43 UTC
From: findsimongough@...
Topic: 4397 Message: 4398

I forgot to mention, this is for receive only.

Simon

4399. RE: [SkyWires] Re: Multiple turn loop

Yahoo group: SkyWires
Date: 2014-05-10 01:49:01 UTC
From: tom armour
Topic: 4397 Message: 4399

I had a 270' two conductor loop fed with 67' of 450ohm ladder line that I recently modified. I had it configured for two turns of 270' for a total of 540'. It did not work well on 160m, but pretty good on 80m - 10m. I cut the connection making it a loop so I now have a 540' doublet using the two 270' conductors. it is still in the circular orientation but each of the two conductors is hooked to the two sides of the ladder line. It now works better on 160m and still works on the other bands. It works better than my 45' -90' OCF dipole (commercial Fritzel) on 80m-10m.
I transmit and receive on it.
Tom - wa4ta

To: SkyWires@yahoogroups.com
From: SkyWires@yahoogroups.com
Date: Fri, 9 May 2014 09:18:43 -0700
Subject: [SkyWires] Re: Multiple turn loop

I forgot to mention, this is for receive only.

Simon

4400. Re: [SkyWires] Re: Multiple turn loop

Yahoo group: SkyWires
Date: 2014-05-10 05:14:25 UTC
From: Andy
Topic: 4397 Message: 4400

(For some reason I haven't received the original question emails. Had to go on the web to see them.)

I recall some questions in the past about large multi-turn loops, and finding very little written about them. I recall an answer to an earlier inquiry stating that they don't work.

Two notes I wish to add to that:

(1) I tried modeling a large multi-turn loop in NEC a while back (where "large" means more than 1/10 wavelength total wire) and it did not look good at all. Of course NEC can have problems, so I'm not saying it is a 100% accurate indication of performance.

(2) Multi-turn loops work when they are small because the currents are pretty much the same (in-phase) in each turn, so you have each of the turns reinforcing one another. But if you try to make a full wavelength skywire out of two half-wavelength loops, that doesn't hold. The current reverses polarity (or phase) on the other half, so you have the two turns essentially fighting one another. The radiated field from each turn cancels the field from the other turn.

That may explain why Tom's loop was poor on 160. But on multiples of that frequency, each turn is a full wavelength delayed from the other turn, so they are back in-phase again, and they reinforce. But not on 160m.

I described this in terms of transmitting, but remember that reciprocity holds; so if an antenna sucks for TX, it also sucks for RX.

For a receive loop on HF, I wouldn't think it matters if it's "too short" with only one turn. It'll work anyway. You don't need it to be resonant, unless you need to match to it, to transmit.

Regards,
Andy

4401. Re: [SkyWires] Multi turn skywire

Yahoo group: SkyWires
Date: 2014-05-10 14:28:51 UTC
From: Don Sanders
Topic: 4396 Message: 4401

Well Cebik has info about multiturn loops.
However, you are about the same circumference as the renown 88 ft all band dipole.
Perhaps consider putting your 94 foot loop with a insulator opposite the feedpoint,
use open wire or 450 ladder line feed to a tuner and enjoy 80 thru 17 meters.
Yes 15 to 10 also but I havent tried it. I have another 15 to 10 antennas.
You will just have a large one turn "cob-web" without all the wires.
Omni coverage pattern and relatively Stealth.
I have my 88 footer in a almost square and hung as a diamond vertical and it performs very well.
Fed at the top and supported from a 12 meter bamboo pole.

Don HC4/W4BWS

On Fri, May 9, 2014 at 6:38 AM, findsimongough@... [SkyWires] <SkyWires@yahoogroups.com> wrote:

>
>
> Just wandering if anyone has played with multiple turn Skywire loops. I
> have a very small plot and the largest loop I can accomodate is 94 feet in
> circumference, this gives me a lower frequency limit of around 10.7 Mhz. In
> theory if I was to use two turns giving me 188 feet my lower limit would be
> 5.46 Mhz. Well that's the theory anyway. Has anyone on here tried this and
> if so how did it perform?
>
>
> Simon
>
>
>
>

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Dr. Don W4BWS

4402. Re: Multi turn skywire

Yahoo group: SkyWires
Date: 2014-05-13 13:56:16 UTC
From: Thomas W4HM
Topic: 4396 Message: 4402

A multi turn skywire loop will be electrically longer as far resonance BUT
will not transmit or receive any better than a single wire one.

73 & God Bless,
Thomas F. Giella W4HM
Lakeland, FL, USA
thomasfgiella@...

W4HM's Amateur & SWL Autobiography: http://www.w4hm.org

This email is free from viruses and malware because avast! Antivirus protection is active.
http://www.avast.com

4403. "Balun" or "No Balun"

Yahoo group: SkyWires
Date: 2014-07-30 22:19:07 UTC
From: i8yomama@...
Topic: 4403 Message: 4403

I’ve never made a loop before. Can get away without using a balun? I will be running 450 Ohm Ladder Line straight into a Palstar AT5K, then to the amp and then of course to the radio. I read about folks saying they use a 4:1 balun. I am thinking a 4:1 balun would be needed if I intended to use coax. Would I be ok without a balun?

Also, I am limited to a loop shape that will not be symmetrical. In order to accommodate my lot. If the legs are the same length, can it be nu-symmetrical?

4404. RE: [Bulk] [SkyWires] "Balun" or "No Balun"

Yahoo group: SkyWires
Date: 2014-07-30 23:08:24 UTC
From: Bill Husted
Topic: 4403 Message: 4404

I'm using a loop with ladder line and a 4-1 balun - works great. When I fed the loop with coax as a dedicated 40-meter loop I used a matching section and no balun. Now I use ladder line with balun and it works fine 40 meters and up. My loop is a lopsided mess - it's sure not symmetrical - and it works, it isn't as efficient but it's sure impressed me. I have it up very high - about 85 at the high point and it slopes down to about 40 feet - just did the best I could based on the trees in my yard.

Bill KQ4YA

From: SkyWires@yahoogroups.com [mailto:SkyWires@yahoogroups.com]
Sent: Wednesday, July 30, 2014 6:19 PM
To: SkyWires@yahoogroups.com
Subject: [Bulk] [SkyWires] "Balun" or "No Balun"

I’ve never made a loop before. Can get away without using a balun? I will be running 450 Ohm Ladder Line straight into a Palstar AT5K, then to the amp and then of course to the radio. I read about folks saying they use a 4:1 balun. I am thinking a 4:1 balun would be needed if I intended to use coax. Would I be ok without a balun?

Also, I am limited to a loop shape that will not be symmetrical. In order to accommodate my lot. If the legs are the same length, can it be nu-symmetrical?

4405. AW: [SkyWires] "Balun" or "No Balun"

Yahoo group: SkyWires
Date: 2014-07-31 00:04:54 UTC
From: siegfried jackstien
Topic: 4403 Message: 4405

If i remember right the at5k has a balanced output ... so you can run ladderline direct to your tuner

Dg9bfc

Sigi

> -----Ursprüngliche Nachricht-----
> Von: SkyWires@yahoogroups.com [mailto:SkyWires@yahoogroups.com]
> Gesendet: Mittwoch, 30. Juli 2014 22:19
> An: SkyWires@yahoogroups.com
> Betreff: [SkyWires] "Balun" or "No Balun"
>
>
>
> I□ve never made a loop before. Can get away without using a balun? I will
> be running 450 Ohm Ladder Line straight into a Palstar AT5K, then to the
> amp and then of course to the radio. I read about folks saying they use a
> 4:1 balun. I am thinking a 4:1 balun would be needed if I intended to use
> coax. Would I be ok without a balun?
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>
>
> Also, I am limited to a loop shape that will not be symmetrical. In order
> to accommodate my lot. If the legs are the same length, can it be nu-
> symmetrical?
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>
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>

4406. Re: [SkyWires] "Balun" or "No Balun"

Yahoo group: SkyWires
Date: 2014-07-31 00:31:46 UTC
From: CenturyLink Customer
Topic: 4403 Message: 4406

I run a 160 meter loop drive by an SCG 239. I have a 15' ladder line from the SCG 239 to the antenna itself.

Tunes every band on MARS-ALE. Very good performance. Happy with set-up.

Would I get better performance with a BALUN?

http://qrz.com/db/N0OQA

----- Original Message -----

From: "i8yomama@... [SkyWires]" <SkyWires@yahoogroups.com>
To: SkyWires@yahoogroups.com
Sent: Wednesday, July 30, 2014 5:19:07 PM
Subject: [SkyWires] "Balun" or "No Balun"

I've never made a loop before. Can get away without using a balun? I will be running 450 Ohm Ladder Line straight into a Palstar AT5K, then to the amp and then of course to the radio. I read about folks saying they use a 4:1 balun. I am thinking a 4:1 balun would be needed if I intended to use coax. Would I be ok without a balun?

Also, I am limited to a loop shape that will not be symmetrical. In order to accommodate my lot. If the legs are the same length, can it be nu-symmetrical?

4407. RE: [SkyWires] "Balun" or "No Balun"

Yahoo group: SkyWires
Date: 2014-07-31 03:13:57 UTC
From: Richard Schmuke
Topic: 4403 Message: 4407
Attachments: 2 described; binary payloads are missing from this source WARC

You are correct in running the ladder line direct to the back of the tuner. I have found with coax and a balun, shape is more important. You will be OK with all ladder line.

Rich, Kd0zz

From: SkyWires@yahoogroups.com [mailto:SkyWires@yahoogroups.com]
Sent: Wednesday, July 30, 2014 5:19 PM
To: SkyWires@yahoogroups.com
Subject: [SkyWires] "Balun" or "No Balun"

I’ve never made a loop before. Can get away without using a balun? I will be running 450 Ohm Ladder Line straight into a Palstar AT5K, then to the amp and then of course to the radio. I read about folks saying they use a 4:1 balun. I am thinking a 4:1 balun would be needed if I intended to use coax. Would I be ok without a balun?

Also, I am limited to a loop shape that will not be symmetrical. In order to accommodate my lot. If the legs are the same length, can it be nu-symmetrical?

4408. Balun" or "No Balun"

Yahoo group: SkyWires
Date: 2014-07-31 13:20:51 UTC
From: Thomas W4HM
Topic: 4408 Message: 4408

I have a horizontal loop square in shape that is 300 feet long with each corner up at 35 feet. I have used a 4:1 and 1:1 BALUNS to RG-8X and RG-213U coax to my Kenwood TS-590S. In my case I found that the 1:1 BALUN worked better than the 4:1 BALUN between 160-6 meters as far as RFI in the shack and matching capability of the built in antenna tuner in the TS-590S.

But I have found that matching was easier with no RFI in the radio shack by bringing 40 feet of 300 ohm window line into the radio shack to either a Palstar BT-1500A or MFJ-974HB balanced antenna tuner. I mostly use the MFJ-974HB more than the Palstar BT-1500A because I know longer use an amplifier and I found the MFJ-974B to have a wider matching range.

73 & God Bless,
Thomas F. Giella W4HM
Lakeland, FL, USA
thomasfgiella@...

W4HM's Amateur & SWL Autobiography: http://www.w4hm.org

This email is free from viruses and malware because avast! Antivirus protection is active.
http://www.avast.com

4409. Re: "Balun" or "No Balun"

Yahoo group: SkyWires
Date: 2014-07-31 19:41:48 UTC
From: i8yomama@...
Topic: 4403 Message: 4409

Thanks to all you guys. That helped me a lot. Well, Looks like I better start getting my wire strung up.

Best regards and thanks again,

Kirk / kv4zq

4410. Re: "Balun" or "No Balun"

Yahoo group: SkyWires
Date: 2014-08-01 13:44:01 UTC
From: i8yomama@...
Topic: 4403 Message: 4410

Update.... I put up a 300' loop yesterday. It runs through branches and is not symmetrical. I used 450 Ohm ladder line straight to the tuner. I am very surprised that it works so well, given the way I was forced to go through branches and all. I understand it's not long enough for 160m. But I tuned up there and gave it a try. It worked. I was able to tune it flat and have a qso from Atlanta to Pittsburgh with a good signal report. If I can get this antenna in the open, perhaps it will do even better.

thanks for the info guys.

4411. Balun for horizontal loop

Yahoo group: SkyWires
Date: 2014-08-05 03:25:50 UTC
From: k9sqg@...
Topic: 4411 Message: 4411

While not an expert on the topic, I've been experimenting with horizontal loop antennas for over 25 years. As to feeding the loop, I believe there are two important considerations when trying to decide how to feed the loop in terms of open wire line or window line, and the use of a balun. These are based upon my experimental findings and not a theoretical analysis; I leave that to the experts.

The first consideration is whether the loop will be used for monoband use or whether multi-band use is desired. For single band use, feeding the antenna with 300 ohm transmitting twinlead is a better choice than 450 ohm or 600 ohm line. A balanced tuner like the Johnson/Nye KW Matchbox or the Palstar BT-1500A works quite well. The antenna itself, if resonant on the fundamental frequency or close to it, will have a resistive component of approximately 120 ohms. If one desires to use a balun, to get coax into the shack or for other reasons, a 4:1 balun will bring the resistive component down to 30 ohms and most tuners are better at matching values 50 ohms and above much easier than values below that; this is a gross generalization. While a 4:1 current balun might work in a particular installation, why not just use a 1:1 balun since it is a better choice?

If a loop is used for multiband operation, things change dramatically. By multiband I'm referring to frequencies above the fundamental frequency of the loop; I've had very poor luck going much lower in frequency than the fundamental in spite of what some have reported and find that my 80 m loop will just not load anywhere near 160 meters. For multiband use, deciding the type of feedline really depends on the specific bands of interest and the impedance of the antenna for those respective bands; both the resistive and reactive components are relevant. Bringing the 300 ohm or 450 ohm line into the shack gives quite a bit of flexibility and have had no trouble with multiband performance of my 80 meter horizontal loop when using a balanced tuner in the shack. If one desires to use a balun at some point, and then use coax to the tuner, then it behooves one to measure the terminal impedance of the antenna, or where the balun will be inserted, and see whether a 1:1 or 4:1 balun would be appropriate. I don't subscribe to the notion that a 1:1 or a 4:1 will work for multiband operation in any and all applications. One person's experiences might not work for somebody else due to site specifics of a particular configuration.

My main reason for using a horizontal loop is due to low cost and the reduction in noise; on 40 meters, my 40 m horizontal loop had a two (2) S-unit reduction in noise compared to a 1/4 wave vertical antenna using an A-B comparison based upon almost 400 contacts or listening sessions.

As a side note, as an experiment I installed a 1:1 DX Engineering current balun about midway between my 40 meter horizontal loop at 14 ft high and the shack, with the transition being to RG-8U coax. Antenna still works fine and no dramatic difference in performance except maybe a little less RF in the shack, hi hi. With this NVIS (?) antenna at night, I have easily broken pileups into Italy, Bulgaria, etc. but I prefer swap net and technical net operations over DX.

Those are my experiences and perspectives. Hopefully they might benefit some readers. Too, I'd like to learn from your experiences as well.

Thanks for reading the posting.

73,

Evan, K9SQG
K9SQG@ARRL.net

4412. RE: [SkyWires] Balun for horizontal loop

Yahoo group: SkyWires
Date: 2014-08-05 12:36:13 UTC
From: Richard Schmuke
Topic: 4411 Message: 4412
Attachments: 2 described; binary payloads are missing from this source WARC

I agree with Evan about a loop and on some bands it might need a 1:1 while on others a 4:1 would be better using the loop on different bands. You can make your own switchable balun and have 1:1 or 4:1 with one current balun. It can be made with one large torrid, or two smaller ones or two rods, Here is a picture of mine final build. Mine sits on top of my tuner with a short run of coax to tunner.

http://s1102.photobucket.com/user/KD0ZZ/media/4to11to11.jpg.html

Here is a schematic for a QRP one , for more power just up the component size.

http://www.angelfire.com/electronic2/qrp/balun.html

Rich, Kd0zz

If a loop is used for multiband operation, things change dramatically. By multiband I'm referring to frequencies above the fundamental frequency of the loop; I've had very poor luck going much lower in frequency than the fundamental in spite of what some have reported and find that my 80 m loop will just not load anywhere near 160 meters. For multiband use, deciding the type of feedline really depends on the specific bands of interest and the impedance of the antenna for those respective bands; both the resistive and reactive components are relevant. Bringing the 300 ohm or 450 ohm line into the shack gives quite a bit of flexibility and have had no trouble with multiband performance of my 80 meter horizontal loop when using a balanced tuner in the shack. If one desires to use a balun at some point, and then use coax to the tuner, then it behooves one to measure the terminal impedance of the antenna, or where the balun will be inserted, and see whether a 1:1 or 4:1 balun would be appropriate. I don't subscribe to the notion that a 1:1 or a 4:1 will work for multiband operation in any and all applications. One person's experiences might not work for somebody else due to site specifics of a particular configuration.

Evan, K9SQG

K9SQG@...

4413. RE: [SkyWires] Balun for horizontal loop

Yahoo group: SkyWires
Date: 2014-08-08 16:43:09 UTC
From: k7abe@yahoo.com
Topic: 4411 Message: 4413

Using 574 feet of insulated wire I use no balun on 160m and 80m. And use a 4:1 balun on 40m through 10m. A tuner is always needed to get back into 160. But the digital portion of the rest of the band's seams to line up pretty good, without a tuner at some locations. The loop is primarily used for camping and field day and has been configured many ways at different heights. Part of my "to go box" in the Grumman is the spool of wire, baling twine to hold up the wire, a fishing pole to reel the baling twine up over the tree limbs, and a bow and arrow to get the fishing line over the tree limbs. I prefer the fishing arrows as they weigh more, they already have a hole in them for string, and the barb removes easily.
Abe K7ABE

Connected by DROID on Verizon Wireless

-----Original message-----
From: "'Richard Schmuke' rdj@... [SkyWires]"
<SkyWires@yahoogroups.com>
To: SkyWires@yahoogroups.com
Sent: Tue, Aug 5, 2014 12:36:19 GMT+00:00
Subject: RE: [SkyWires] Balun for horizontal loop

I agree with Evan about a loop and on some bands it might need a 1:1 while on others a 4:1 would be better using the loop on different bands. You can make your own switchable balun and have 1:1 or 4:1 with one current balun. It can be made with one large torrid, or two smaller ones or two rods, Here is a picture of mine final build. Mine sits on top of my tuner with a short run of coax to tunner.

http://s1102.photobucket.com/user/KD0ZZ/media/4to11to11.jpg.html

Here is a schematic for a QRP one , for more power just up the component size.

http://www.angelfire.com/electronic2/qrp/balun.html

Rich, Kd0zz

If a loop is used for multiband operation, things change dramatically. By multiband I'm referring to frequencies above the fundamental frequency of the loop; I've had very poor luck going much lower in frequency than the fundamental in spite of what some have reported and find that my 80 m loop will just not load anywhere near 160 meters. For multiband use, deciding the type of feedline really depends on the specific bands of interest and the impedance of the antenna for those respective bands; both the resistive and reactive components are relevant. Bringing the 300 ohm or 450 ohm line into the shack gives quite a bit of flexibility and have had no trouble with multiband performance of my 80 meter horizontal loop when using a balanced

tuner in the shack. If one desires to use a balun at some point, and then use coax to t

4414. 1 WL but not 2wl?

Yahoo group: SkyWires
Date: 2014-08-10 00:11:03 UTC
From: auto_row_tate@...
Topic: 4414 Message: 4414

Group good evening. I have everything I need to make my loop for the new QTH. I would like to hear from others before I start this project. First I was set on a 1wl 160m loop, then some people have told me that for a lower take off angle which DX is mostly what I do , that a 2wl would perform better... I have enough room to put up about 950 to maybe 1000 feet of wire in almost a perfect square shape at about 80-90 feet. I have already 450 ohm ladder line as my feed line direct to a Palstar at5k tuner. So I really can't do exactly 2wl on 160m and my question is would a 1wl loop work better then a random length? I would like to use this antenna on as many bands as I can not only 160m , all your advise would be greatly appreciated...

Jay KB8O

4415. Re: [SkyWires] 1 WL but not 2wl?

Yahoo group: SkyWires
Date: 2014-08-10 02:36:17 UTC
From: Evan Rolek
Topic: 4414 Message: 4415

Jay,

Well, first of all, you might want to look at some of the plots from the antenna models to see what you get for a 1 WL loop versus a 2 WL loop. You have to go to the third or fourth harmonic of the fundamental to get a "dramatic" reduction in radiation angle. You'll see it, for example, when using an 80 m horizontal loop on 20 or 15 meters. But wait (time for that infomertial)!!! There is no such thing as a free lunch, here or elsewhere. While you will see a lowering of radiation angle, the price you pay can be seen in the radiation patterns. On the fundamental, you'll have a basically omnidirectional pattern but, as you go higher and higher in frequency, you start developing deep nulls in the azimuth pattern.

In theory, yes, a 2 wl loop might work marginally better on 160 meters but you're not going to see a dramatic difference for working DX. Let me give you an approximate analogy. I have two horizontal loops. One is a 40 m variant at about 15 ft high, and the other is an 80 m variant about 25-40 ft high depending on which corner you're looking at. On 40 m I often switch between the two antennas and see how they compare for various propagation conditions. Sometimes the 40 m antenna is better. Sometimes the 80 m antenna is better. And sometimes they are both equal. In some cases, during poor propagation, and further out, the 80 m loop is slightly better than the 40m loop. BUT the results are not large nor consistent. But using the 80 m loop on 20 or 15 meters, that's a different story.

Don't be worried about resonance of a loop. I did some experiments on 40 and 80 meters and varied the lengths from resonance by as much as 5-10 ft, shortening or lengthening. To be hones, I found my tuner settings changed a bit, but performance changes could not be seen on the air.

To me, I'd doubt that you would see any difference between a 1 wl and a 2 wl loop on 160 meters. But, I'm not an expert, and I only have my own observations/tests to rely on. I'm sure some of the experts can provide much better guidance than I can. Please keep the group informed so we can all learn from your experiences.

73,

Evan, K9SQG

-----Original Message-----
From: auto_row_tate@... [SkyWires] <SkyWires@yahoogroups.com>
To: SkyWires <SkyWires@yahoogroups.com>
Sent: Sat, Aug 9, 2014 8:11 pm
Subject: [SkyWires] 1 WL but not 2wl?

Group good evening. I have everything I need to make my loop for the new QTH. I would like to hear from others before I start this project. First I was set on a 1wl 160m loop, then some people have told me that for a lower take off angle which DX is mostly what I do , that a 2wl would perform better... I have enough room to put up about 950 to maybe 1000 feet of wire in almost a perfect square shape at about 80-90 feet. I have already 450 ohm ladder line as my feed line direct to a Palstar at5k tuner. So I really can't do exactly

2wl on 160m and my question is would a 1wl loop work better then a random length? I would like to use this antenna on as many bands as I can not only 160m , all your advise would be greatly appreciated...

Jay KB8O

4416. Re: [SkyWires] 1 WL but not 2wl?

Yahoo group: SkyWires
Date: 2014-09-01 13:53:27 UTC
From: auto_row_tate@...
Topic: 4414 Message: 4416

Well yesterday was the day... The G5RV came down and the 2wl loop went up. So you can blame me for the horrible geomag storms that took place twice yesterday... The Loop is just over 1000 feet with 80% of it at near 100 feet high and one corner near 70 feet high. My legs are 200x300 , I used 3 inch garage door pulleys from Home Depot. The feed point is 40-55 feet of 450 ohm ladder line into a DX Engineering 10kw 1:1 balun and then about 10 feet of LMR400 coax to the Palstar AT5K. I could hardly believe it when I tuned to 1.825 and the swr was 1.1... Whats the odds , and seems to work and tune fine on all the other bands also. It's very quiet compared to the G5RV and maybe because the feed point is now 50 feet behind the house instead of the g4rv it was in the front of the house near the power lines. I'll play with it for awhile here and report again , but thanks to all who provided info for me...

Jay KB8O

4417. Re: [SkyWires] 1 WL but not 2wl?

Yahoo group: SkyWires
Date: 2014-09-02 02:56:12 UTC
From: Evan Rolek
Topic: 4414 Message: 4417

Jay,

Glad you had such good luck with your loop. I envy the size and height. I've been using horizontal loops for over 20 years and am quite pleased with them as well.

Not sure I would have used garage door pulleys though. Why? The ones I looked at years ago are not designed for outdoor service and eventually the rain, snow, and ice will do a number on the lubricant. In all my years of experimentation I have found that the Harken brand of sailboat pulleys work great. They have stainless steel sides, and the pulley and bearings are made of Lexan and are resistent to UV. Not sure what the life is but the ones I have up right now have been there for over 10 years and show no sign of deterioration.

Please keep the group informed of your experiences. We'd all like to learn and be encouraged.

73,

Evan, K9SQG

-----Original Message-----
From: auto_row_tate@... [SkyWires] <SkyWires@yahoogroups.com>
To: SkyWires <SkyWires@yahoogroups.com>
Sent: Mon, Sep 1, 2014 9:53 am
Subject: Re: [SkyWires] 1 WL but not 2wl?

Well yesterday was the day... The G5RV came down and the 2wl loop went up. So you can blame me for the horrible geomag storms that took place twice yesterday... The Loop is just over 1000 feet with 80% of it at near 100 feet high and one corner near 70 feet high. My legs are 200x300 , I used 3 inch garage door pulleys from Home Depot. The feed point is 40-55 feet of 450 ohm ladder line into a DX Engineering 10kw 1:1 balun and then about 10 feet of LMR400 coax to the Palstar AT5K. I could hardly believe it when I tuned to 1.825 and the swr was 1.1... Whats the odds , and seems to work and tune fine on all the other bands also. It's very quiet compared to the G5RV and maybe because the feed point is now 50 feet behind the house instead of the g4rv it was in the front of the house near the power lines. I'll play with it for awhile here and report again , but thanks to all who provided info for me...

Jay KB8O

4418. Re: [SkyWires] 1 WL but not 2wl?

Yahoo group: SkyWires
Date: 2014-09-04 23:33:52 UTC
From: auto_row_tate@...
Topic: 4414 Message: 4418

Evan , I'm not sure on the life... But the ones they sell now are 100% Galvanized and I used a good marine grade lubricant on them. I couldn't find anything close to 3 inch except for the garage door ones. Will see how they weather... It's no big deal for me to drop the loop , it totally open inside of the loop (all mowed grass) so no obstructions to work around. I have a sat picture of the layout on my QRZ webpage... So far it is kicking but on all bands...

Jay KB8O

4419. Delta Loop questions

Yahoo group: SkyWires
Date: 2014-09-12 13:23:06 UTC
From: i8yomama@...
Topic: 4419 Message: 4419

I am going to try a Delta Loop. I started looking at intenet sites on measurements and such. When I built my 300' horizontal loop, I had two legs that were separated by an insulator directly opposite of the feed point. The diagrams shown for delta loops don't show two legs. it looks as if its one piece of wire going all the way around and back to the feed point. Can anyone give me some insight on this?

Also, I will be using 450 Ohm twin lead. I have not seen any info on Delta loops with ladder line. So, that could effect the measurements? Or maybe not. Any info would be very helpful to me.

Thanks,

Kirk / WT4P

4420. Re: [SkyWires] Delta Loop questions

Yahoo group: SkyWires
Date: 2014-09-12 13:58:38 UTC
From: Don Sanders
Topic: 4419 Message: 4420

Yes, the delta loop is a continuous wire around the delta.
You can mount it apex up using one support pole with
horizontal near ground or apex down with horizontal high
and supported by 2 poles.
It can be fed at the center of the horizontal run or at the
apex for horizontal polarization. Fed at a corner will give
more vertical polarization. For true vertical it should be fed
1/4 wave down the sloping wire from the apex.

Fed with coax it is usually a one band antenna and the
loop length is resonant on that band. Length is between
1020 and 1040 divided bt frequency in MHz.
Old formula, 1005 divided by freq, for quad loops has been
wrong for 60 years. Proximity to ground, surrounding objects
and other factors will affect resonance.

Fed with open wire parallel feedline and a tuner at the shack
it can operate multibands. Actually, many install an auto-tuner
at the feed point for best operation all bands.

It can be installed horizontal and operated like any horizontal loop.
There are hundreds of different installations on the web.
If you want more info just ask.

Don W4BWS

Dr. Don W4BWS

On Fri, Sep 12, 2014 at 8:23 AM, i8yomama@... [SkyWires] <
SkyWires@yahoogroups.com> wrote:

>
>
> I am going to try a Delta Loop. I started looking at intenet sites on
> measurements and such. When I built my 300' horizontal loop, I had two
> legs that were separated by an insulator directly opposite of the feed
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>
> Also, I will be using 450 Ohm twin lead. I have not seen any info on Delta
> loops with ladder line. So, that could effect the measurements? Or maybe
> not. Any info would be very helpful to me.
>
>
> Thanks,

>
> Kirk / WT4P
>
>
>

4421. Re: [SkyWires] Delta Loop questions

Yahoo group: SkyWires
Date: 2014-09-12 14:17:41 UTC
From: Evan Rolek
Topic: 4419 Message: 4421

Kirk and other enthusiasts,

In actuality, your antenna is a bent dipole and thus would perform differently than a true loop. That insulator opposite the feed point should not be there if one wants a true loop with the respective performance characteristics. The same would hold true if you open a delta loop and put an insulator opposite the feedpoint; it will perform differently.

Not sure how to answer your questions since there seems to be interest in loops as well as bent dipoles and not sure which you want to pursue.

Ladder line and window line are, well, basically feedlines and with a properly designed (balanced) antenna they should not radiate; hence that should not affect the dimensions of the antenna itself. Ladder line is very useful for multi-band antennas due to the low loss under high SWR conditions that accompany multi-band situations.

There is a lot of information on the Internet about these antennas, and some of it is true, while some of it is myth. Not sure what else to say at this time because I'm not sure if your interest is in loop antennas or bent dipoles in the shape of a loop. Much information is available on both antenna configurations, especially the works by L. B. Cebik, W4RNL (SK).

Please keep the group informed of your experiments so we all can learn.

73,

Evan, K9SQG

-----Original Message-----
From: i8yomama@... [SkyWires] <SkyWires@yahoogroups.com>
To: SkyWires <SkyWires@yahoogroups.com>
Sent: Fri, Sep 12, 2014 9:23 am
Subject: [SkyWires] Delta Loop questions

I am going to try a Delta Loop. I started looking at intenet sites on measurements and such. When I built my 300' horizontal loop, I had two legs that were separated by an insulator directly opposite of the feed point. The diagrams shown for delta loops don't show two legs. it looks as if its one piece of wire going all the way around and back to the feed point. Can anyone give me some insight on this?

Also, I will be using 450 Ohm twin lead. I have not seen any info on Delta loops with ladder line. So, that could effect the measurements? Or maybe not. Any info would be very helpful to me.

Thanks,

Kirk / WT4P

4422. RE: [SkyWires] Delta Loop questions

Yahoo group: SkyWires
Date: 2014-09-12 15:20:44 UTC
From: Richard Schmuke
Topic: 4419 Message: 4422
Attachments: 2 described; binary payloads are missing from this source WARC

I have used a horizontal delta loop for a few years and like it. I had a 80M size loop and this year expanded it to a 160 size loop. I took into consideration on how many contacts I would make on each band and 40M won out so the antenna is adjusted to a good SWR in the middle of the 40M band. A 160 size delta loop is about a 200 ohm antenna on 80 and 40M so I feed it with a homemade 4:1 balun and coax. The balun is adjusted to have a low SWR between 40 & 80. The antenna works fine on 80M, 160 is a very wide band for antenna length so I take what I can get on 160 but my radio’s built in antenna tuner does not complain. My loops are one piece of wire, no insulator at the far point, that is a different antenna. On 20 and up I use a hex beam but the delta can do all well 160 thru 6 except no too good on 30M.

You might have better luck with ladder line feed on the higher bands because my balun falls of as the frequency increases, on the other hand more tuner adjustments with ladder line if you move around a lot as I do.

Rich, Kd0zz

From: SkyWires@yahoogroups.com [mailto:SkyWires@...m]
Sent: Friday, September 12, 2014 8:23 AM
To: SkyWires@yahoogroups.com
Subject: [SkyWires] Delta Loop questions

I am going to try a Delta Loop. I started looking at intenet sites on measurements and such. When I built my 300' horizontal loop, I had two legs that were separated by an insulator directly opposite of the feed point. The diagrams shown for delta loops don't show two legs. it looks as if its one piece of wire going all the way around and back to the feed point. Can anyone give me some insight on this?

Also, I will be using 450 Ohm twin lead. I have not seen any info on Delta loops with ladder line. So, that could effect the measurements? Or maybe not. Any info would be very helpful to me.

Thanks,

Kirk / WT4P

4423. Re: [SkyWires] Delta Loop questions

Yahoo group: SkyWires
Date: 2014-09-12 17:04:42 UTC
From: Manfred Müller
Topic: 4419 Message: 4423

I use a Delta Loop antenna and that antenna i working very well.
Using 83,5 meter wire / in 3 leggs. In 1 corner I use a Balun 1:2 and from there 52 Ohm Koax cable
to my Palstar Automatic Tuner and then to the radio.
With that installation I work all bands, no problem.
I know Ham´s there use a 1:4 Balun.
My loop is only 10 meter over the ground.

73 de LA9OCA
Manfred

12. sep. 2014 kl. 16:17 skrev Evan Rolek k9sqg@... [SkyWires] <SkyWires@yahoogroups.com>:

> Kirk and other enthusiasts,
>
>
> In actuality, your antenna is a bent dipole and thus would perform differently than a true loop. That insulator opposite the feed point should not be there if one wants a true loop with the respective performance characteristics. The same would hold true if you open a delta loop and put an insulator opposite the feedpoint; it will perform differently.
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> Not sure how to answer your questions since there seems to be interest in loops as well as bent dipoles and not sure which you want to pursue.
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> There is a lot of information on the Internet about these antennas, and some of it is true, while some of it is myth. Not sure what else to say at this time because I'm not sure if your interest is in loop antennas or bent dipoles in the shape of a loop. Much information is available on both antenna configurations, especially the works by L. B. Cebik, W4RNL (SK).
>
> Please keep the group informed of your experiments so we all can learn.
>
> 73,
>
> Evan, K9SQG
>
>
>
> -----Original Message-----
> From: i8yomama@... [SkyWires] <SkyWires@yahoogroups.com>
> To: SkyWires <SkyWires@yahoogroups.com>

> Sent: Fri, Sep 12, 2014 9:23 am
> Subject: [SkyWires] Delta Loop questions
>
>
> I am going to try a Delta Loop. I started looking at intenet sites on measurements and such. When I built my 300' horizontal loop, I had two legs that were separated by an insulator directly opposite of the feed point. The diagrams shown for delta loops don't show two legs. it looks as if its one piece of wire going all the way around and back to the feed point. Can anyone give me some insight on this?
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> Also, I will be using 450 Ohm twin lead. I have not seen any info on Delta loops with ladder line. So, that could effect the measurements? Or maybe not. Any info would be very helpful to me.
>
> Thanks,
> Kirk / WT4P
>
>

4424. Re: Delta Loop questions

Yahoo group: SkyWires
Date: 2014-09-12 17:16:31 UTC
From: i8yomama@...
Topic: 4419 Message: 4424

Good Info guys. I will take down the bent dipole (thanks W4RNL) I am going to put up a true loop. Perhaps I can get to it next month. I'll post the any difference that I notice between the two antennas. I will make a delta loop this month, as it is easier to install. Thanks again to all that answered.

4425. Re: [SkyWires] Re: Delta Loop questions

Yahoo group: SkyWires
Date: 2014-09-12 17:25:03 UTC
From: Evan Rolek
Topic: 4419 Message: 4425

What I have found to be a very useful characteristic of a loop is that it reduces atmospheric and local noise by 1-2 S units compared to a 1/4 wave vertical on 40 meters based upon my tests. That can make all the difference when copying weak stations or when QRM/QRN are present. To me, absolute signal strength readings are not as important as signal to noise ratio. In contrast, a bent dipole in a loop configuration seems to lack this trait to a significant degree.

Because I work multiple bands, I found that window line (either 450 ohm or 300 ohm transmitting twinlead) work out quite well for me. My XYL prefers the lower visual cross section of 300 ohm transmitting twinlead, hi hi. After some analysis, I determined that a balun at the feedpoint would be problematic. Why? For my antennas and the bands of interest, I could not find a balun (1:1, 2:1, or 4:1) where the resulting ratio would be reasonable for all bands. By using window line (300 ohm transmitting twinlead) I avoid the complications and my tuner in the shack is quite happy. For those that prefer to use coax, other alternatives must be pursued.

73,

Evan, K9SQG

-----Original Message-----
From: i8yomama@... [SkyWires] <SkyWires@yahoogroups.com>
To: SkyWires <SkyWires@yahoogroups.com>
Sent: Fri, Sep 12, 2014 1:17 pm
Subject: [SkyWires] Re: Delta Loop questions

Good Info guys. I will take down the bent dipole (thanks W4RNL) I am going to put up a true loop. Perhaps I can get to it next month. I'll post the any difference that I notice between the two antennas. I will make a delta loop this month, as it is easier to install. Thanks again to all that answered.

4426. Re: Delta Loop questions

Yahoo group: SkyWires
Date: 2014-09-13 13:47:12 UTC
From: Thomas W4HM
Topic: 4419 Message: 4426

Kirk,

I use a 300 foot long square in shape (not a delta loop) set up in the horizontal plane with each leg 75 feet long and each corner 35 feet up in oak trees, fed with 40 feet of 300 ohm window line to an MFJ-974HB balanced antenna tuner. It's a high angle radiator on 80 and 60 meters but becomes a decent DX antenna on 40 and 30 meters and a darned good DX antenna on 30-6 meters.

At first I tried a 300 foot long 3 sided delta loop also in the horizontal plane. It was fed with 40 feet of 450 ohm window line to a Palstar BT-1500A balanced antenna tuner. Because of nulls the delta loop did not perform as well in certain directions especially on the higher bands of 12, 10 and 6 meters. But the square loop has no noticeable nulls.

But of course every location is different as far as soil type and moisture content, nearby trees, buildings, power lines and of course other antennas. So for you you may not notice any nulls in a delta loop.

As far as the insulator opposite the feed point, by doing that you are not running a true loop but a bent dipole that would not work as well as a straight dipole would or square or delta loop. Also your bent dipole picks up more noise as compared to the closed loops.

By the way I do have a web page published on the square loop at
http://www.wcflunatall.com/w4hm15.htm

73 & God Bless,
Thomas F. Giella W4HM
Lakeland, FL, USA
thomasfgiella@...

W4HM's Amateur & SWL Autobiography: http://www.w4hm.org

This email is free from viruses and malware because avast! Antivirus protection is active.
http://www.avast.com

4427. Re: Delta Loop questions

Yahoo group: SkyWires
Date: 2014-09-19 02:42:20 UTC
From: i8yomama@...
Topic: 4419 Message: 4427

Thomas W4HM, Thank you. I'm going to connect my bent dipole, making it a true loop.

4428. Help! opinions please on delta loop balun

Yahoo group: SkyWires
Date: 2014-10-25 10:57:18 UTC
From: m6mrp@...
Topic: 4428 Message: 4428

Ok I will start by saying this all started when I started looking for a better match for my delta loop other than the 4:1 balun (this was a purchased loop kit) silly mistake as it was nasty inside wound with household table lamp twin flex still in its outer covering! and why use a 4:1 balun for an antenna which is "around" 125 ohms not 200 ohms which is 4:1 therefore 2:1 or even better 2.5 to 1 is the required target.
I am using a large verticaly mounted single turn multi band wire delta, corner fed due to a nasty local noise problem from a neighbors cheap 50 inch plasma TV which even wipes out my FT51r VHF handy when outside his house, swinging the loop on its axis I can find a sweet spot to null out the noise down to s5 from s9+ then my amazing BHI noise away gizmo does the rest, that has to be the best money my xyl has ever spent on me! I will never part with it.

As I will never pay for another sealed black box balun with only blind faith to go on the search began.
There is the talented balun by AG6IF which has good reports but is air core not what I am after.
Then I found an interesting web post about a trifilar wound 2.5 to 1 balun on a single toroid (not binocular) but this had 2 x 10 turns and 1 x 12.5 turns?
Now being new to all this toroid winding stuff I put my head on the block and brought the concept of a half turn up at my local radio club, needless to say I should be burned at the steak for witchcraft or voodoo for even mentioning such a thing but it is shown in the diagram in PDF here:-
1:2.5 Balun for multiband Deltaloop by dxzone.com
http://www.dxzone.com/cgi-bin/dir/jump2.cgi?ID=29519

And a half turn is also very briefly shown by the RA EMC studies and Ofcom:-

[URL=http://s1119.photobucket.com/user/Nightlife1/media/cablechok_zps23eff579.gif.html][IMG]http://i1119.photobucket.com/albums/k625/Nightlife1/cablechok_zps23eff579.gif[/IMG][/URL]

[URL=http://s1119.photobucket.com/user/Nightlife1/media/1andahalfturns_zpsf87d32fd.gif.html][IMG]http://i1119.photobucket.com/albums/k625/Nightlife1/1andahalfturns_zpsf87d32fd.gif[/IMG][/URL]

I have my thoughts on a half turn on a toroid ring and can measure a half turn as can Earl VE3AB in his test windings using the same L/C meter as myself:-
Ferrite Toroid Cores and Test Station http://www.earlandrews.com/tortest.html

I am probably way off the mark but my take on it is that as the magnetic field totally surrounds the toroid and both axial and radial currents flow on the externals of the profile of the ring therefore all part windings must also be taken into consideration?

I do not want to start another argument like at the club but would be interested in other peoples opinions on this half turn issue.
Please if the images from my photobucket do not come up could a mod. correct the link.

Any input from you lads?
73
Phil M6MRP

http://www.earlandrews.com/tortest.html

Ferrite Toroid Cores and Test Station http://www.earlandrews.com/tortest.html Ferrite Toroid Cores and Test Station. I have recently started testing my ferrite cores to ensure they are what they claim they are/were. Types 43 and type 61 ferr...

View on www.earlandrews.com http://www.earlandrews.com/tortest.html
Preview by Yahoo

1:2.5 Balun for multiband Deltaloop by dxzone.com
http://www.dxzone.com/cgi-bin/dir/jump2.cgi?ID=29519

View on www.dxzone.com http://www.dxzone.com/cgi-bin/dir/jump2.cgi?ID=29519
Preview by Yahoo

4429. Re: loop with coil??

Yahoo group: SkyWires
Date: 2014-10-25 11:06:42 UTC
From: m6mrp@...
Topic: 4391 Message: 4429

Hi Richard, I tried this at my last qth for 40m on a smaller loop, the diagram is easily found by a web search for the three band delta loop, it worked but I found the coil made the loop noisy which defeated my uses for a loop in the first place, I ended up removing the coil and using an inverted v for 40 and the once again quiet loop for 20m to 10m, your findings may differ?
good luck
Phil M6MRP

4430. Re: [SkyWires] Help! opinions please on delta loop balun

Yahoo group: SkyWires
Date: 2014-10-25 13:03:21 UTC
From: Rich Schmuke
Topic: 4428 Message: 4430

This is just my outlook, I am sure many "ex-spurts" will say I am wrong.
I have also used a 2.5:1 on a single band delta loop antenna as it is a
100 ohm antenna but at multiple frequencies it is a 200 ohm antenna, then I
use a 4:1 balun.
On my main delta 160 size loop I use a 4:1 duel rod Guanella , ref book by
Jerry Sevick, W2FMI.
Balun and antenna adjusted to low SWR at the center of the 40M band and
loop mainly used on the 3 lower bands. SWR is a little high on 160, but
fine on 80 & 40 because when used on the multiple frequencies it is a 200
ohm antenna. I could double the size of the loop and help on 160 but I
would have to cut down more trees than this old back want to mess with.

Here is a picture of my path I cut for the single loop.
http://s1102.photobucket.com/user/KD0ZZ/media/160%20Loop/trees010_zpse5180867.jpg.html

FYI a ex-spurt is , ex is a has been and a spurt is a drip under pressure

Rich, KdØzz

Rich, KdØzz

On Sat, Oct 25, 2014 at 5:57 AM, m6mrp@... [SkyWires] <
SkyWires@yahoogroups.com> wrote:

>
>
> Ok I will start by saying this all started when I started looking for a
> better match for my delta loop other than the 4:1 balun (this was a
> purchased loop kit) silly mistake as it was nasty inside wound with
> household table lamp twin flex still in its outer covering! and why use a
> 4:1 balun for an antenna which is "around" 125 ohms not 200 ohms which is
> 4:1 therefore 2:1 or even better 2.5 to 1 is the required target.
> I am using a large verticaly mounted single turn multi band wire delta,
> corner fed due to a nasty local noise problem from a neighbors cheap 50
> inch plasma TV which even wipes out my FT51r VHF handy when outside his
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> [URL=
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ttp://i1119.photobucket.com/albums/k625/Nightlife1/cablechok_zps23eff579.gif[/IMG][/URL
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> http://s1119.photobucket.com/user/Nightlife1/media/1andahalfturns_zpsf87d32fd.gif.html][
IMG]http://i1119.photobucket.com/albums/k625/Nightlife1/1andahalfturns_zpsf87d32fd.gif[/IM
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>
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> I am probably way off the mark but my take on it is that as the magnetic
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> interested in other peoples opinions on this half turn issue.
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> Any input from you lads?
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> Phil M6MRP
> [image: image] <http://www.earlandrews.com/tortest.html>
> Ferrite Toroid Cores and Test Station
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4431. Re: [SkyWires] Help! opinions please on delta loop balun

Yahoo group: SkyWires
Date: 2014-10-25 15:26:43 UTC
From: Evan Rolek
Topic: 4428 Message: 4431

I've found that feeding a multiband wire antenna with 300 ohm transmitting twinlead, 450 ohm window line, or 600 ohm open wire line, and using an antenna tuner in the shack greatly simplifies things for me...

-----Original Message-----
From: Rich Schmuke rdj@... [SkyWires] <SkyWires@yahoogroups.com>
To: SkyWires <SkyWires@yahoogroups.com>
Sent: Sat, Oct 25, 2014 9:03 am
Subject: Re: [SkyWires] Help! opinions please on delta loop balun

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Rich, KdØzz

Rich, KdØzz

On Sat, Oct 25, 2014 at 5:57 AM, m6mrp@... [SkyWires] <SkyWires@yahoogroups.com> wrote:

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Ferrite Toroid Cores and Test Station

I am probably way off the mark but my take on it is that as the magnetic field totally surrounds the toroid and both axial and radial currents flow on the externals of the profile of the ring therefore all part windings must also be taken into consideration?

I do not want to start another argument like at the club but would be interested in other peoples opinions on this half turn issue.
Please if the images from my photobucket do not come up could a mod. correct the link.

Any input from you lads?
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View on www.earlandrews.com

Preview by Yahoo

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4432. Re: [SkyWires] Help! opinions please on delta loop balun

Yahoo group: SkyWires
Date: 2014-10-25 16:12:59 UTC
From: abe
Topic: 4428 Message: 4432

Insulated wire (572 ft), 110 ft of 450 ohm window line, works for me. Its part of my mobile to go set up that works well at 8 ft or 120 ft, whatever the trees provide. It shows resistance about 1.7 MHz, 3.5 MHz, 7 MHz, and 14 MHz. A tuner is needed on 75 & 80 meter. When using the 4:1 air balun Ace has shared no tuner needed for digital on 20 & 40 meter. With a tuner all parts of all HF ham bands are usable.

Hoping the 2.5:1 balun will let me work without a tuner on 80 meter, thank you for sharing. Abe K7ABE

Connected by DROID on Verizon Wireless

-----Original message-----
From: "Evan Rolek k9sqg@aol.com [SkyWires]" <SkyWires@yahoogroups.com>
To: SkyWires@yahoogroups.com
Sent: Sat, Oct 25, 2014 15:26:47 GMT+00:00
Subject: Re: [SkyWires] Help! opinions please on delta loop balun

I've found that feeding a multiband wire antenna with 300 ohm transmitting twinlead, 450 ohm window line, or 600 ohm open wire line, and using an antenna tuner in the shack greatly simplifies things for me...

-----Original Message-----
From: Rich Schmuke rdj@wildblue.net [SkyWires] <SkyWires@yahoogroups.com>
To: SkyWires <SkyWires@yahoogroups.com>
Sent: Sat, Oct 25, 2014 9:03 am
Subject: Re: [SkyWires] Help! opinions please on delta loop balun

This is just my outlook, I am sure many "ex-spurts" will say I am wrong.
I have also used a 2.5:1 on a single band delta loop antenna as it is a 100 ohm antenna but at multiple frequencies it is a 200 ohm antenna, then I use a 4:1 balun.
On my main delta 160 size loop I use a 4:1 duel rod Guanella , ref book by Jerry Sevick, W2FMI.

Balun and antenna adjusted to low SWR at the center of the 40M band and loop mainly used on the 3 lower bands. SWR is a little high on 160, but fine on 80 & 40 because when used on the multiple frequencies it is a 200 ohm antenna. I could double the size of the loop and help on 160 but I would have to cut down more trees than this old back want to mess with.

Here is a picture of my path I cut for the single loop.
http://s1102.photobucket.com/user/KD0ZZ/media/160%20Loop/trees010_zpse5180867.jpg.html

FYI a ex-spurt is , ex is a has been and a spurt is a drip under pressure

Rich, KdØzz

4433. RE: [SkyWires] Help! opinions please on delta loop balun

Yahoo group: SkyWires
Date: 2014-10-25 16:42:20 UTC
From: D. Scott MacKenzie
Topic: 4428 Message: 4433

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Since I use it at multiple frequencies, ladder line works fine and avoids a lot of issues.

Scott

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Rich, KdØzz

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Preview by Yahoo

<http://www.dxzone.com/cgi-bin/dir/jump2.cgi?ID=29519> 1:2.5 Balun for multiband Deltaloop by dxzone.com

<http://www.dxzone.com/cgi-bin/dir/jump2.cgi?ID=29519> View on www.dxzone.com

Preview by Yahoo

4434. Re: [SkyWires] Help! opinions please on delta loop balun

Yahoo group: SkyWires
Date: 2014-10-25 17:11:07 UTC
From: Rich Schmuke
Topic: 4428 Message: 4434

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http://s1102.photobucket.com/user/KD0ZZ/media/4to11to12.jpg.html

Rich, KdØzz

On Sat, Oct 25, 2014 at 11:42 AM, 'D. Scott MacKenzie' kb0fhp@... [SkyWires] <SkyWires@yahoogroups.com> wrote:

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4435. RE: [SkyWires] Help! opinions please on delta loop balun

Yahoo group: SkyWires
Date: 2014-10-25 19:39:14 UTC
From: D. Scott MacKenzie
Topic: 4428 Message: 4435

That is very true if you have an unbalanced tuner. I am fortunate in that I have a balance tuner.

From: SkyWires@yahoogroups.com [mailto:SkyWires@yahoogroups.com]
Sent: Saturday, October 25, 2014 1:11 PM
To: SkyWires@yahoogroups.com
Subject: Re: [SkyWires] Help! opinions please on delta loop balun

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<http://www.dxzone.com/cgi-bin/dir/jump2.cgi?ID=29519> View on www.dxzone.com

Preview by Yahoo

4436. Re: loop with coil??

Yahoo group: SkyWires
Date: 2014-10-26 14:51:15 UTC
From: A
Topic: 4391 Message: 4436

Am very fortunate have Balanced Tuner w/ ImBalanced Operator .

4437. Re: Help! opinions please on delta loop balun

Yahoo group: SkyWires
Date: 2014-10-28 20:31:47 UTC
From: m6mrp@...
Topic: 4428 Message: 4437

Cheers lads lots to mull over there and lots of it helps me understand what I have seen in my trials with the delta loop, saying that Im no "ex-splurt" yet lol
As for the feed line instead of coax and keeping it balanced I did try that, (well sort of) my loop is in in a big loft above so I managed to get a plastic pipe down through the ceiling just below the feed point direct down into my small shack (large broom cupboard) so dropping twin feed down was easy but my tuner is not a "real tuner" its an MFJ945E and yes I know what MFJ stands for but after you swap out all the bad grade components on the metering circuit and re-calibrate its not that bad for what it is, and hey beggars cant be choosers when you are just starting out and get the hand-me-downs for cheap or for free! Next thing to build is a real BLT and I even have most the bits in hand from friendly donations, the last twin feeder attempt had to be terminated (due to the 945E only taking PL259 plugs) with a home brew attempt of the talented balun which didnt seem to help then a 4:1 balun which gave me a good match on some bands but not others which were problematic to tune but this is not surprising if the loop presents different ohms on different bands as you say.

Another question for you guys, would a 1:1 toroid common mode choke at either end of the coax be of any use on a delta loop? I only ask as I have noticed that a few of the big name balun makers are boxing up a 1:1 choke with their 2.5:1 or 2:1 loop baluns, and a few old pdf,s Ive read about loops say that when using coax it should be isolated from the loop?

Things are just not right here! I have just finished a magnetic loop build from a salvaged ali cycle wheel with two variable caps 1 for 10m to 20m and another bigger one for 40m and 80m it tunes all bands nicely with LEDs to show when its at max tune, this mag loop is hearing stations that my big delta loop in the loft does not hear even when on the same axis which is the null in the local noise? I have even tried the little mag loop in the loft on the same coax as the big loop and its ears are much better?

The saga continues.
73
Phil M6MRP

1:2.5 Balun for multiband Deltaloop by dxzone.com
http://www.dxzone.com/cgi-bin/dir/jump2.cgi?ID=29519

View on www.dxzone.com http://www.dxzone.com/cgi-bin/dir/jump2.cgi?ID=29519
Preview by Yahoo

4438. delta loop balun new results

Yahoo group: SkyWires
Date: 2014-10-29 14:04:30 UTC
From: m6mrp@...
Topic: 4428 Message: 4438

Hi guys, the xyl was out for the day so I decided to try a couple of CM 1:1 chokes on my loft mounted delta loop which was not working as it should, had a tune about on the FT817nd on the bicycle wheel mag loop and found IZ4NPE working 21.275MHz with his usual very strong signal here 5/9+ as clear as can be and I was hearing many of his outside EU contacts so all is well with that setup, moved over to the loft delta loop fed with about 10m of mini 8 coax down to the MFJ945E and my FT840 not so good! he was about 5/5 and in the noise and I was hearing none of his outside EU contacts?

After messing about with toroid fed mag loops for a while I had a couple of type 43 Ni/Zn cores lying about, one is about 1inch and one about 1 1/2 inches across and deeper so I quickly wrapped them as CM chokes and checked for any transformation resulting in 8 passes of mini RG174/U on the 1 inch and 7 passes of the same thin coax on the larger toroid, stuck the smaller one at the tuner input and nothing changed with the signals but the tuning changed, it became much smoother to tune and all bands are now within 3 notches on the 945E instead as being spread all over the dial?

Climbed into the loft with the other CM choke in pocket (not easy when you need a new knee and are having steroid injection into your hip to keep it going as long as possible) parted the delta feed point connection and hooked up the choke and instantly the delta loop came alive! even from in the loft I could hear the dramatic change in reception, the noise level had dropped again now S3 from S5 (inverted V dipole was S9+) and voices are very clear and strong.

All in all I have answered my own question, yes it is a benefit to add a couple of 1:1 CM chokes to a delta loop when feeding with coax and it makes tuning with a basic tuner (not a real BLT) very easy without any other baluns fitted.

Next thing to do is to purchase a couple of matching type 43 Ni/Zn toroidials big enough to make the chokes with some decent PTFE coax and encase them in plastic boxes with N type sockets.

I would never have believed a couple of 1:1 CM chokes could make such a vast difference so I am really glad I tried it, it just goes to show how coaxial feed can mess up what we all know is a great antenna.

73
and thanks for all the input.
Phil M6MRP

1:2.5 Balun for multiband Deltaloop by dxzone.com
http://www.dxzone.com/cgi-bin/dir/jump2.cgi?ID=29519

View on www.dxzone.com http://www.dxzone.com/cgi-bin/dir/jump2.cgi?ID=29519
Preview by Yahoo

4439. Re: delta loop balun new results

Yahoo group: SkyWires
Date: 2014-11-03 14:58:45 UTC
From: kp4md@...
Topic: 4428 Message: 4439

Dear Phil, Thanks for sharing the results of your A/B tests using the common mode chokes. You clearly demonstrate the benefit of this method to eliminate common mode noise/radiation on our antenna/transmission line systems. In Zip Cord Transmission Lines and Baluns http://www.qsl.net/kp4md/zipcord.htm#balun

http://www.qsl.net/kp4md/zipcord.htm#balun

Zip Cord Transmission Lines and Baluns http://www.qsl.net/kp4md/zipcord.htm#balun This article describes an application of a low cost speaker wire zip cord with common mode current chokes as an effective high frequency transmission line.

View on www.qsl.net http://www.qsl.net/kp4md/zipcord.htm#balun
Preview by Yahoo

I shared impedance measurements at the loop feed point and at the antenna tuning unit to explain the rationale of using simple common mode chokes on the transmission line . This can be accomplished with ferrites as you have done, or by winding an "Ugly balun" on a length of your coaxial cable.

In their articles Common-Mode Chokes http://www.yccc.org/Articles/W1HIS/CommonModeChokesW1HIS2006Apr06.pdf9 and A Ham's Guide to RFI, Ferrites, Baluns, and Audio Interfacing http://www.audiosystemsgroup.com/RFI-Ham.pdf10 Counselman and Brown discuss the use of common mode chokes to:

reduce undesired common mode radiation and noise pickup on transmission lines; serve as a transition between balanced and unbalanced sources and loads if needed; and, be configured to provide impedance transformation, if needed.When used to transition between a balanced load and an unbalanced source and vice versa, as Guanella11 described, they are sometimes called current baluns or choke baluns.
Figure 37 in reference 1 shows the feed point impedance variation between 80 and 350 ohms at the resonance frequencies of 7, 14, 21 and 28 MHz, presenting corresponding VSWRs of 1.3:1 to 3:1 to the 114 ohm zip cord. 4:1 impedance transformation at that point would increase the VSWR to 5.7:1 at 7 MHz; therefore no impedance transformation in needed at the feed point. Neither is a balun needed as both the antenna and zip cord are balanced. Therefore, a simple common mode choke is used there to reduce common mode radiation and noise. Likewise, figure 54 in reference 1 shows the impedance at resonance frequencies measured at the transmitter end of the 51 foot transmission line varying between 45 and 120 ohms. Therefore, a simple common mode choke would serve to reduce common mode noise and to transition the unbalanced antenna tuning unit (ATU) to the balanced zip cord, leaving the ATU to perform the impedance transformation to the 50 ohm radio.

Carol Milazzo, KP4MD/6

4440. Re: [SkyWires] Re: delta loop balun new results

Yahoo group: SkyWires
Date: 2014-11-03 16:03:36 UTC
From: Evan Rolek
Topic: 4428 Message: 4440

Though not for everybody, I use either a Johnson Kilowatt Matchbox or a Palstar BT-1500A balanced tuner to solve all my multiband matching issues with my 40 m and 80 m horizontal loops. The Matchbox doesn't need a balun and it has no direct connection between the primary and secondary of the coil thus reducing the influence of static buildup on the front end of my transceiver.

73,

Evan, K9SQG

-----Original Message-----
From: kp4md@cfmilazzo.com [SkyWires] <SkyWires@yahoogroups.com>
To: SkyWires <SkyWires@yahoogroups.com>
Sent: Mon, Nov 3, 2014 9:58 am
Subject: [SkyWires] Re: delta loop balun new results

Dear Phil,
Thanks for sharing the results of your A/B tests using the common mode chokes. You clearly demonstrate the benefit of this method to eliminate common mode noise/radiation on our antenna/transmission line systems. In Zip Cord Transmission Lines and Baluns

Zip Cord Transmission Lines and Baluns
This article describes an application of a low cost speaker wire zip cord with common mode current chokes as an effective hig h frequency transmission line.

View on www.qsl.net

Preview by Yahoo

I shared impedance measurements at the loop feed point and at the antenna tuning unit to explain the rationale of using simple common mode chokes on the transmission line . This can be accomplished with ferrites as you have done, or by winding an "Ugly balun" on a length of your coaxial cable.

In their articles Common-Mode Chokes9 and A Ham's Guide to RFI, Ferrites, Baluns, and Audio Interfacing10 Counselman and Brown discuss the use of common mode chokes to:

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Therefore, a simple common mode choke is used there to reduce common mode radiation and noise. Likewise, figure 54 in reference 1 shows the impedance at resonance frequencies measured at the transmitter end of the 51 foot transmission line varying between 45 and 120 ohms. Therefore, a simple common mode choke would serve to reduce common mode noise and to transition the unbalanced antenna tuning unit (ATU) to the balanced zip cord, leaving the ATU to perform the impedance transformation to the 50 ohm radio.

Carol Milazzo, KP4MD/6

4441. Re: [SkyWires] Help! opinions please on delta loop balun

Yahoo group: SkyWires
Date: 2014-11-03 19:04:29 UTC
From: Ken
Topic: 4428 Message: 4441

Scott,
do you feed the ladder line unbalanced (ground one side) or do you have a very rare balanced tuner?

Ken WA8JXM

On Oct 25, 2014, at 12:42 PM, 'D. Scott MacKenzie' kb0fhp@... [SkyWires] wrote:

> I just use ladder line and avoid the issue of baluns, coax and high losses. If I were using as a single frequency, and it was 100 ohms, then would use a 1/4 wave of 75 ohm to achieve matching. Then a 1:1 balun would work.
>
> Since I use it at multiple frequencies, ladder line works fine and avoids a lot of issues.
>

4442. RE: [SkyWires] Help! opinions please on delta loop balun

Yahoo group: SkyWires
Date: 2014-11-03 22:31:35 UTC
From: D. Scott MacKenzie
Topic: 4428 Message: 4442

I am using a MFJ Versa Tuner V, which I think grounds one side (I think). I have had no issues using the tuner or a loop on multiple bands. I think it is a lot easier and lower losses than coax and a lot more flexible.

From: SkyWires@yahoogroups.com [mailto:SkyWires@yahoogroups.com]
Sent: Monday, November 03, 2014 2:04 PM
To: SkyWires@yahoogroups.com
Subject: Re: [SkyWires] Help! opinions please on delta loop balun

Scott,

do you feed the ladder line unbalanced (ground one side) or do you have a very rare balanced tuner?

Ken WA8JXM

On Oct 25, 2014, at 12:42 PM, 'D. Scott MacKenzie' kb0fhp@...
[SkyWires] wrote:

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Since I use it at multiple frequencies, ladder line works fine and avoids a lot of issues.

4443. Re: [SkyWires] Help! opinions please on delta loop balun

Yahoo group: SkyWires
Date: 2014-11-04 03:40:16 UTC
From: Evan Rolek
Topic: 4428 Message: 4443

Balanced tuners are not rare at all. The 275 watt Johnson Matchbox, the Kilowatt Matchbox, the Nye versions of the Matchboxes, the Palstar BT-1500A, etc. etc. are available on Ebay almost all the time. I have several of these that I use quite successfully. Building a balanced tuner is quite easy as well.

73,

Evan, K9SQG

-----Original Message-----
From: Ken wa8jxm@... [SkyWires] <SkyWires@yahoogroups.com>
To: SkyWires <SkyWires@yahoogroups.com>
Sent: Mon, Nov 3, 2014 2:04 pm
Subject: Re: [SkyWires] Help! opinions please on delta loop balun

Scott,
do you feed the ladder line unbalanced (ground one side) or do you have a very rare balanced tuner?

Ken WA8JXM

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Since I use it at multiple frequencies, ladder line works fine and avoids a lot of issues.

4444. Re: [SkyWires] Help! opinions please on delta loop balun

Yahoo group: SkyWires
Date: 2014-11-04 09:27:47 UTC
From: Ken
Topic: 4428 Message: 4444

On Nov 3, 2014, at 10:40 PM, Evan Rolek k9sqg@... [SkyWires] wrote:

> Balanced tuners are not rare at all. The 275 watt Johnson Matchbox, the Kilowatt Matchbox, the Nye versions of the Matchboxes, the Palstar BT-1500A, etc. etc. are available on Ebay almost all the time. I have several of these that I use quite successfully. Building a balanced tuner is quite easy as well.

Yes but the Palstar is the only one in current production. True balanced tuners are rare in the current market. I'm pretty sure the MFJ Versa Tuner Scott mentioned has a balun inside it, so he isn't really avoiding balun "issues".

Now, is there any real difference between a balanced tuner and an unbalanced one with a balun? IDK. Personally I do tend to trust big open coils and wide spaced capacitors over cramped toroids, but that may be unfounded.

73,
Ken
WA8JXM

4445. extra Balanced full limit tuner FS

Yahoo group: SkyWires
Date: 2014-11-04 11:37:10 UTC
From: email4utoo@...
Topic: 4445 Message: 4445

A buddy of mine needed to sell his SA2060A Heathkit Tuner , the operator manual comes with , and you can download it online free, or Eham reviews to see how great it is ,(one Friend told me if you could hook up an SO239 to a Rock it would load ! hihi), all the Best Ones today copied this one , if interested email me , i am not gonna sell it to a fellow Ham for EBAY ripoff costs, so no worries on that , Good not mint but Very Good Condition . Will ship after payment clears , USA postal order or your Check is fine . 73s, AJ W5HEH

4446. Re: [SkyWires] Help! opinions please on delta loop balun

Yahoo group: SkyWires
Date: 2014-11-04 13:59:16 UTC
From: Evan Rolek
Topic: 4428 Message: 4446

Ken and other loop enthusiasts,

Yes, there is a big difference between an unbalanced tuner with balun and a true balanced tuner. Most tuners with baluns have the balun at the end connecting to the antenna. As a result, the balun is likely subjected to a very wide range of impedances both in terms of resistive components and reactive components; this is not the friendliest environment for a balun and it is likely that some conditions will be outside the matching range of the balun resulting in heating, voltage spikes, etc. which under some circumstances will destroy the balun. If you're lucky, the core will saturate and there will be no damage but at higher power levels, you might not be as lucky. An air core coil won't saturate in this way, thus the popularity of the Johnson/Nye Matchboxes. This is not to say all toroids are bad but, subjected to the wrong conditions outside the design parameters, they can and do fail.

Another reason I prefer air coils to toroids for tuners is that the toroids have a fixed ratio, e.g. 1:1, 2:1, 4:1, 9:1, etc. and multiband applications will often produce conditions where the ratio is right on for one band, too high for others, and yet too low for others. One size will not fit all. The Matchbox design has a wider matching range I've found. Yes, some will complain that the Matchbox has a "narrow" matching range, but I'm not sure what they really mean. Why? Well, most open wire or window line, multiband antennas have a high resistive and/or reactive component, exactly what the Matchbox was designed for. So if you have, for example, impedances below 50 ohms then you're starting to operate the tuner outside the design range. If I remember correctly, the manual states a matching range of something like 50-2,000 ohms and I've never had an antenna outside that range so I'm pleased with the Matchbox as well as the BT-1500A. Like anything, when you subject a piece of equipment to conditions outside the design parameters you run into problems but, for me, I've found the tuners that work best for me. Your mieage might vary...

73,

Evan, K9SQG

-----Original Message-----
From: Ken wa8jxm@gmail.com [SkyWires] <SkyWires@yahoogroups.com>
To: SkyWires <SkyWires@yahoogroups.com>
Sent: Tue, Nov 4, 2014 4:28 am
Subject: Re: [SkyWires] Help! opinions please on delta loop balun

On Nov 3, 2014, at 10:40 PM, Evan Rolek k9sqg@... [SkyWires] wrote:

Balanced tuners are not rare at all. The 275 watt Johnson Matchbox, the Kilowatt Matchbox, the Nye versions of the Matchboxes, the Palstar BT-1500A, etc. etc. are available on Ebay almost all the time. I have several of these that I use quite successfully. Building a balanced tuner is quite easy as well.

Yes but the Palstar is the only one in current production. True balanced tuners are rare in the current market. I'm pretty sure the MFJ Versa Tuner Scott mentioned has a balun inside it, so he isn't really avoiding balun "issues".

Now, is there any real difference between a balanced tuner and an unbalanced one with a balun? IDK. Personally I do tend to trust big open coils and wide spaced capacitors over cramped toroids, but that may be unfounded.

73,
Ken
WA8JXM

4449. Assistance modeling a simple antenna in EZNEC

Yahoo group: SkyWires
Date: 2014-12-10 18:07:09 UTC
From: kc8hps_2003@...
Topic: 4449 Message: 4449

Hi Guys,

Kc8hps Bryan here,

Im disabled and I need a hand modeling a simple wire antenna to see the radiation pattern and swr
for 2 meters at 145 mhz.

Ive had 2 strokes and over 175 seizures and my ability to understand this program just escapes me
it frustrates me to no end.

What I need is basically a Slim jim antenna that has a second element coming off of it to the right at the gap going back up as a 1/2 wave in phase with the other 2 1/2 waves that are already in phase that is all.

Thanks if anyone is able to help. My direct email is in my profile at qrz.com to avoid spam

thank you, Bryan kc8hps

4450. Re: extra Balanced full limit tuner FS

Yahoo group: SkyWires
Date: 2014-12-11 11:50:59 UTC
From: email4utoo@...
Topic: 4445 Message: 4450

SOLD unit , thanks for all the responses .

4451. Re: [SkyWires] Re: extra Balanced full limit tuner FS

Yahoo group: SkyWires
Date: 2014-12-11 15:16:00 UTC
From: denton sprague
Topic: 4445 Message: 4451

Can I get you to email me details and possibly pics of the balanced tuner you sold?
Thanks, de Denton WB7TDG
On Dec 11, 2014, at 3:50 AM, email4utoo@yahoo.com [SkyWires] <SkyWires@yahoogroups.com> wrote:

> SOLD unit , thanks for all the responses .
>
>

4452. need answers on Feed spreader distance and length

Yahoo group: SkyWires
Date: 2014-12-11 17:35:11 UTC
From: email4utoo@...
Topic: 4452 Message: 4452

Would help me to know, best measurement for twin lead spreader, thinking 3 inches for spreader lengths , Distance between spreaders ? 18 " ? , using 12ga, Full wave loop 160meters, thinking around 508 ft but have enough to go longer , distance from loop for Feed twin lead is about 110ft , , want to know best length for Feed , only Twin lead into Heath SA2060A has built in Balun, no Coax will be used . Height will be about 42-46ft , have all ready and two holes dug and filled , just would like any numbers that can be shared with this info.

Appreciate any Chime in on this , THank you , W5HEH 73s, AJ

4453. Re: [SkyWires] need answers on Feed spreader distance and length

Yahoo group: SkyWires
Date: 2014-12-11 17:58:31 UTC
From: Evan Rolek
Topic: 4452 Message: 4453

AJ,

Hard to know since proposed use of antenna is unknown. For example, 160 M monoband or multiband? This will determine the range of impedances that will be encountered which in turn will suggest the spacing of the feeders. It is likely to be non-critical since the loss will be small in most cases. Physical appearance, wind/ice loading, etc. will suggest what type of spacing might offer advantages.

In my loops, 40 M and 80 M horizontal loops, I switched from 450 ohm window line to 300 ohm transmitting twinlead to reduce the visual cross section, for the xyl. Both antennas continue to work well, 40 M as a monobander, and the 80 M loop as a multibander.

Spreaders are readily available from 73CNC, I believe, and they are UV resistant, Lexan (?) black for low visibility and won't break if dropped like glass ones, etc.

73,

Evan, K9SQG

-----Original Message-----
From: email4utoo@... [SkyWires] <SkyWires@yahoogroups.com>
To: SkyWires <SkyWires@yahoogroups.com>
Sent: Thu, Dec 11, 2014 12:35 pm
Subject: [SkyWires] need answers on Feed spreader distance and length

Would help me to know, best measurement for twin lead spreader, thinking 3 inches for spreader lengths , Distance between spreaders ? 18 " ? , using 12ga, Full wave loop 160meters, thinking around 508 ft but have enough to go longer , distance from loop for Feed twin lead is about 110ft , , want to know best length for Feed , only Twin lead into Heath SA2060A has built in Balun, no Coax will be used . Height will be about 42-46ft , have all ready and two holes dug and filled , just would like any numbers that can be shared with this info.

Appreciate any Chime in on this , THank you , W5HEH 73s, AJ

4454. Re: [SkyWires] need answers on Feed spreader distance and length

Yahoo group: SkyWires
Date: 2014-12-11 18:49:32 UTC
From: abe
Topic: 4452 Message: 4454

In Oregon, on one city lot, I still use an 80 40 meter inverted V fan (it gives me 10-80m). Following is my main antenna for field days and camping, it has went up and down many times at different heights and in different configurations with very similar results. I set my 160 loop up around 1.7MHz (best I remember about 574 ft of insulated 12ga wire). This gives me a pour match for 160m but a good match for the digital part of 10-80m. I remove a section of wire, maybe 50 feet, when I want to focus on 80 meter phone. It is fed with 110ft of 450 ohm ladder line. A 4:1 balun is used on 10 through 40 meter and no balun needed on 80 meter. Little or no tuning is needed for the digital portion of these bands. A good tuner is needed to make 160 usable.
Hope this is useful info,
Abe K7ABE

Connected by DROID on Verizon Wireless

-----Original message-----
From: "Evan Rolek k9sqg@... [SkyWires]" <SkyWires@yahoogroups.com>
To: SkyWires@yahoogroups.com
Sent: Thu, Dec 11, 2014 17:58:35 GMT+00:00
Subject: Re: [SkyWires] need answers on Feed spreader distance and length

AJ,

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73,

Evan, K9SQG

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From: email4utoo@... [SkyWires] <SkyWires@yahoogroups.com>
To: SkyWires <SkyWires@yahoogroups.com>

Sent: Thu, Dec 11, 2014 12:35 pm
Subject: [SkyWires] need answers on Feed spreader distance and length

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4455. Re: [SkyWires] need answers on Feed spreader distance and length

Yahoo group: SkyWires
Date: 2014-12-11 19:39:06 UTC
From: Rich Schmuke
Topic: 4452 Message: 4455

Us non-city boys go to the local farm supply for ladder line insulators.
http://www.ruralking.com/agriculture/fencing-supplies/electric-fencing/electric-fence-insulators-acce/dare-4-tube-insulator-50-pieces-per-bag-1718.html
50 pc of 4" spacers for the high price of $4.99 , if the link does not
work go to Rural King, SKU # 070040553. You can cut them in half and have
a 100 PC's for 5 bucks and a few tie-wraps. A tie wrap around the wire and
then thru the insulator and your are done. Also dipole ends, 50 cents for
porcelain and 25 cents for UV resistant plastic.
There are several name brand supply stores with fence parts and all parts
are made for sun proof and good with electricity

Rich, KdØzz

On Thu, Dec 11, 2014 at 11:58 AM, Evan Rolek k9sqg@... [SkyWires] <
SkyWires@yahoogroups.com> wrote:

>
>
> AJ,
>
> Hard to know since proposed use of antenna is unknown. For example, 160
> M monoband or multiband? This will determine the range of impedances that
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> Spreaders are readily available from 73CNC, I believe, and they are UV
> resistant, Lexan (?) black for low visibility and won't break if dropped
> like glass ones, etc.
>
> 73,
>
> Evan, K9SQG
>
> -----Original Message-----
> From: email4utoo@... [SkyWires] <SkyWires@yahoogroups.com>
> To: SkyWires <SkyWires@yahoogroups.com>
> Sent: Thu, Dec 11, 2014 12:35 pm
> Subject: [SkyWires] need answers on Feed spreader distance and length
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>
> Would help me to know, best measurement for twin lead spreader,
> thinking 3 inches for spreader lengths , Distance between spreaders ? 18
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> has built in Balun, no Coax will be used . Height will be about 42-46ft ,
> have all ready and two holes dug and filled , just would like any numbers
> that can be shared with this info.
>
> Appreciate any Chime in on this , THank you
> , W5HEH 73s, AJ
>
>
>

4456. AW: [SkyWires] need answers on Feed spreader distance and length

Yahoo group: SkyWires
Date: 2014-12-11 19:52:23 UTC
From: siegfried jackstien
Topic: 4452 Message: 4456
Attachments: 1 described; binary payloads are missing from this source WARC

Buy some "rozenclips" from amevo

They are use in green-houses to clamp a plant (tomato or roses or) to a wire

Works superb for making ladderline

Dg9bfc

Sigi

> -----Ursprüngliche Nachricht-----
> Von: SkyWires@yahoogroups.com [mailto:SkyWires@yahoogroups.com]
> Gesendet: Donnerstag, 11. Dezember 2014 19:39
> An: SkyWires@yahoogroups.com
> Betreff: Re: [SkyWires] need answers on Feed spreader distance and length
>
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>
> Us non-city boys go to the local farm supply for ladder line insulators.
> http://www.ruralking.com/agriculture/fencing-supplies/electric-
> fencing/electric-fence-insulators-acce/dare-4-tube-insulator-50-pieces-
> per-bag-1718.html
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> 50 pc of 4" spacers for the high price of $4.99 , if the link does not
> work go to Rural King, SKU # 070040553. You can cut them in half and have
> a 100 PC's for 5 bucks and a few tie-wraps. A tie wrap around the wire and
> then thru the insulator and your are done. Also dipole ends, 50 cents for
> porcelain and 25 cents for UV resistant plastic.
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> There are several name brand supply stores with fence parts and all parts
> are made for sun proof and good with electricity
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> Rich, KdØzz
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> On Thu, Dec 11, 2014 at 11:58 AM, Evan Rolek k9sqg@... [SkyWires]
> <SkyWires@yahoogroups.com> wrote:
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> AJ,
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> 160 M monoband or multiband? This will determine the range of impedances
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> Spreaders are readily available from 73CNC, I believe, and they are
> UV resistant, Lexan (?) black for low visibility and won't break if
> dropped like glass ones, etc.
>
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> 73,
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> Evan, K9SQG
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> -----Original Message-----
> From: email4utoo@... [SkyWires] <SkyWires@yahoogroups.com>
> To: SkyWires <SkyWires@yahoogroups.com>
> Sent: Thu, Dec 11, 2014 12:35 pm
> Subject: [SkyWires] need answers on Feed spreader distance and
> length
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> Would help me to know, best measurement for twin lead spreader,
> thinking 3 inches for spreader lengths , Distance between spreaders ? 18
> " ? , using 12ga, Full wave loop 160meters, thinking around 508 ft but
> have enough to go longer , distance from loop for Feed twin lead is about
> 110ft , , want to know best length for Feed , only Twin lead into Heath
> SA2060A has built in Balun, no Coax will be used . Height will be about
> 42-46ft , have all ready and two holes dug and filled , just would like
> any numbers that can be shared with this info.
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> Appreciate any Chime in on this , THank
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4457. Re: [SkyWires] need answers on Feed spreader distance and length [1 Attachment]

Yahoo group: SkyWires
Date: 2014-12-11 21:26:45 UTC
From: Don Sanders
Topic: 4452 Message: 4457

Sigi, do you have a URL for the AMEVO company.?
The info in the foto does not reference a URL.
Also, SOTA in England has plastic laser cut spacers for open wire line.
I have samples on the way to Ecuador to test.
Thanks for the info

Dr. Don W4BWS

On Thu, Dec 11, 2014 at 2:52 PM, 'siegfried jackstien'
siegfried.jackstien@... [SkyWires] <SkyWires@yahoogroups.com> wrote:

>
> [Attachment(s) <#14a3aeb5562426b6_TopText> from siegfried jackstien
> included below]
>
> Buy some "rozenclips" from amevo
>
> They are use in green-houses to clamp a plant (tomato or roses or) to a
> wire
>
> Works superb for making ladderline
>
> Dg9bfc
>
> Sigi
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> > -----Ursprüngliche Nachricht-----
> > Von: SkyWires@yahoogroups.com [mailto:SkyWires@yahoogroups.com]
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> > An: SkyWires@yahoogroups.com
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> > From: email4utoo@... [SkyWires] <SkyWires@yahoogroups.com>
> > To: SkyWires <SkyWires@yahoogroups.com>
> > Sent: Thu, Dec 11, 2014 12:35 pm

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4458. Re: [SkyWires] need answers on Feed spreader distance and length [1 Attachment]

Yahoo group: SkyWires
Date: 2014-12-11 21:29:16 UTC
From: Rich Schmuke
Topic: 4452 Message: 4458

Sigi, they are great clips and you can get then for 3 size wires but the quantity and overseas shipping was a little high for me, good for you. I could not find them over here.

Rich, KdØzz

On Thu, Dec 11, 2014 at 1:52 PM, 'siegfried jackstien' siegfried.jackstien@... [SkyWires] <SkyWires@yahoogroups.com> wrote:

>
> [Attachment(s) <#14a3aeb51903f6a3_TopText> from siegfried jackstien
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4459. Re: [SkyWires] need answers on Feed spreader distance and length

Yahoo group: SkyWires
Date: 2014-12-11 23:23:16 UTC
From: Ken
Topic: 4452 Message: 4459

Interesting, I had not thought of using those for feedline spreaders.

What I've used is to cut up plastic clothes hangers into 3-1/2" sections (about 7 per hanger) and drill holes near the ends for the wires to go through. It works fine.

Ken WA8JXM

> On Dec 11, 2014, at 2:39 PM, Rich Schmuke rdj@... [SkyWires] <SkyWires@yahoogroups.com> wrote:
>
> Us non-city boys go to the local farm supply for ladder line insulators.
> http://www.ruralking.com/agriculture/fencing-supplies/electric-fencing/electric-fence-insulators-acce/dare-4-tube-insulator-50-pieces-per-bag-1718.html <http://www.ruralking.com/agriculture/fencing-supplies/electric-fencing/electric-fence-insulators-acce/dare-4-tube-insulator-50-pieces-per-bag-1718.html>
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4460. Re: [SkyWires] need answers on Feed spreader distance and length

Yahoo group: SkyWires
Date: 2014-12-12 14:19:04 UTC
From: email4utoo@...
Topic: 4452 Message: 4460

Evan, loop will be horizontal 160m multiband, used mostly on 40m , with full tank Tuner has Balun in it Heathkit 2060A , i live in Rural area , and no issues on Visual details , XYL has Her Hobbies that i help with, Milk Cows, Making Cheese, Chickens , Growing Food organic methods, so She understands , might grumble , but at our age it is common anyways ! lol. I am using 1/2inch pvc for spreading, so wanted 2 cents from all here on distance between each spreader and length of them as well . This hobby is making me more active , so we both get benefits having me more healthy coming into spring when we need to do a lot of Garden preparations . Putting up EMT conduit pipes , instead of towers , Trees here are just not lined up well and then would have to deal with movement in winds , i do have long OCF Flat top between two trees now , so far so good , 1st season. Got Back into Ham Radio this year, was Ham as a Teen in the 60s, landlord gave me permission to put up a Tower , still can't believe it , Friends helped me and my Dad helped with cement after we poured it .
THanks to all who are, and still commenting , will read all and use advice carefully, 73s to all , "AJ" W5HEH

4461. Re: need answers on Feed spreader distance and length

Yahoo group: SkyWires
Date: 2014-12-12 14:49:04 UTC
From: email4utoo@...
Topic: 4452 Message: 4461

Rich, wow OM , this is a great tip on electric fencing tube insulators for spreaders ! These make more sense than cutting up PVC pipes and they are black better UV resistance . Really appreciate it , hope others will benefit from this , maybe put up a pic in Files section . Thank you again, 73s, AJ W5HEH

ps link worked fine .

4462. Re: [SkyWires] need answers on Feed spreader distance and length

Yahoo group: SkyWires
Date: 2014-12-12 14:51:24 UTC
From: Evan Rolek
Topic: 4452 Message: 4462

AJ,

Not being an antenna expert, I can only draw upon what research I've done and the test results that I have. A few comments are provided below.

I suspect the balun on you have on the tuner is on the output (antenna) side. This is problematic for multiband operation. Why? There will be a wide range of impedances presented to the balun. I'm assuming the balun is a 4:1 ratio, voltage style; however, the problems are there for any balun in that location. On the fundamental frequency, 160 M, the loop will have an impedance of around 110 ohms resistive, with some reactive component though not likely too high. A 4:1 balun will then transform that down to about 28 ohms, which might be below the capabilities of the tuner. Then, on other bands, one can see resistive components in the thousands of ohms and reactive components in the hundreds of ohms. Baluns have a limited impedance range over which they can operate properly. Outside that range, they heat up, develop high peak voltages, and experience high loss. A more efficient approach would be to use a balanced antenna tuner (Johnson Matchbox for 80-10, Palstar BT-1500A for 160-10, etc. etc.).

Hence, for multiband operation, no matter what feedline, balun, or tuner you use, there will be problems on one or more bands. Whether you operate those bands or not determines how lucky you are, hi hi. So the issue becomes one of optimizing the entire system for your particular needs. As a starting point, you could reference the modeling work of others (e.g. W4RNL website, the L. B. Cebik books published by MFJ, etc.) to find out what range of impedances you can expect to see for your installation. The Ho-Ho-HOPL articles by LB show the range of impedances for a horizontal loop at various frequencies. This in turn can then be used to select the type of window line or open wire line that best suits your needs. Many seem to rely on old wives' tales, hearsay, and emotion when picking feedlines with the 450 ohm window line and 600 ohm open wire choices being the most popular; but one size does not fill all. Too, any of the choices will work to varying degrees, it is just a matter of what's best, electrically, mechanically, and visual appearance for xyls, hi hi.

So then we come down to the tuner. If one has an "appropriate" tuner that is designed to handle a multiband antenna fed with "non-coax", then it can handle the impedance transformation and do so with low to reasonable loss. The tuners I use are the Johnson Kilowatt Matchbox, and the Palstar BT-1500A, which are best suited. However, for convenience, I've been known to use my Drake MN-2700 and even Millen 92200 (with external balun). The Johnson Matchbox can't have a saturated balun core because it uses air wound link coil arrangements; some say it has "limited" matching range but I've not had an antenna it couldn't match successfully. To assist with making a choice, there have been some review and test articles written in QST comparing the loss and matching range of various tuners. The ARRL "Antenna Tuner Book" specifically addresses the topic with some interesting test results.

Remember, perfect is the enemy of good enough. And the worst antenna and feedline will yield more enjoyment on the air than the best arrangement on paper. The approach I use is to select the best antenna, electrically for my purposes, and then modify the choice based

upon my site specifics (cost, space, xyl, etc.). And if one enjoys experimenting, trying multiple approaches can be fun. Besides it is good exercise, physically and mentally. I enjoy using my configuration, especially having a tuner in the shack to handle all the adjustments; feeding my 80 M horizontal loop as a top loaded vertical, fed against ground, works to my satisfaction on 160.

There are a lot of experts out there that can provide better guidance than I can and I hope they provide you with the input that you need.

73,

Evan

-----Original Message-----
From: email4utoo@... [SkyWires] <SkyWires@yahoogroups.com>
To: SkyWires <SkyWires@yahoogroups.com>
Sent: Fri, Dec 12, 2014 9:19 am
Subject: Re: [SkyWires] need answers on Feed spreader distance and length

Evan, loop will be horizontal 160m multiband, used mostly on 40m , with full tank Tuner has Balun in it Heathkit 2060A , i live in Rural area , and no issues on Visual details , XYL has Her Hobbies that i help with, Milk Cows, Making Cheese, Chickens , Growing Food organic methods, so She understands , might grumble , but at our age it is common anyways ! lol. I am using 1/2inch pvc for spreading, so wanted 2 cents from all here on distance between each spreader and length of them as well . This hobby is making me more active , so we both get benefits having me more healthy coming into spring when we need to do a lot of Garden preparations . Putting up EMT conduit pipes , instead of towers , Trees here are just not lined up well and then would have to deal with movement in winds , i do have long OCF Flat top between two trees now , so far so good , 1st season. Got Back into Ham Radio this year, was Ham as a Teen in the 60s, landlord gave me permission to put up a Tower , still can't believe it , Friends helped me and my Dad helped with cement after we poured it .
THanks to all who are, and still commenting , will read all and use advice carefully, 73s to all , "AJ" W5HEH

4463. Re: [SkyWires] Digest Number 1511[1 Attachment]

Yahoo group: SkyWires
Date: 2014-12-12 21:52:43 UTC
From: bob engle
Topic: 4463 Message: 4463

And then ,of course, there is a trip to the beauty supply house for "perm Rods"These are the right length for about 600 ohms down to 300 ohms. They have multiple holes in them depending on the mfgr and I pick the dark grey or brown ..I could use pink ones I guess but I would be taking a lot of time explaining what they are. The box full I have now(grey) was purchased at a yard sale.I like them because the holes are all the same and after threading them on the wire a drop of super glue holds them in place.
I Think you will find that the length is relatively non critical I use about 55 feet spaced about 1inch and a half and # 18 wire to feed my summer QTH 160 loop on all bands including 6 meters. Loop is about 575 feet long and 30 to 60 feet high. Strictly for esthetics I use 60 feet of 300 Ohm window line to feed my 80 meter loop in the back yard of our winter QTH(in a subdivision) It is very low viz and keeps the neighbors and XYL happy. I have no trouble feeding it on any band from 80 to 6.I like this option because I don't have to cut anything and drill holes...HI
73BobK9QLL

 Some days it isn't worth chewing through the restraints

On Friday, December 12, 2014 4:03 AM, "SkyWires@yahoogroups.com" <SkyWires@yahoogroups.com> wrote:

<!--#yiv0055490373 #yiv0055490373ygrp-mkp {border:1px solid #d8d8d8;font-family:Arial;margin:10px 0;padding:0 10px;}#yiv0055490373 #yiv0055490373ygrp-mkp hr {border:1px solid #d8d8d8;}#yiv0055490373 #yiv0055490373ygrp-mkp #yiv0055490373hd {color:#628c2a;font-size:85%;font-weight:700;line-height:122%;margin:10px 0;}#yiv0055490373 #yiv0055490373ygrp-mkp #yiv0055490373ads {margin-bottom:10px;}#yiv0055490373 #yiv0055490373ygrp-mkp .yiv0055490373ad {padding:0 0;}#yiv0055490373 #yiv0055490373ygrp-mkp .yiv0055490373ad p {margin:0;}#yiv0055490373 #yiv0055490373ygrp-mkp .yiv0055490373ad a {color:#0000ff;text-decoration:none;}#yiv0055490373 #yiv0055490373ygrp-sponsor #yiv0055490373ygrp-lc {font-family:Arial;}#yiv0055490373 #yiv0055490373ygrp-sponsor #yiv0055490373ygrp-lc #yiv0055490373hd {margin:10px 0px;font-weight:700;font-size:78%;line-height:122%;}#yiv0055490373 #yiv0055490373ygrp-sponsor #yiv0055490373ygrp-lc .yiv0055490373ad {margin-bottom:10px;padding:0 0;}--> SkyWire Loop Antennas SkyWire Loop Antennas Group
10 Messages
Digest #1511 1a Re: extra Balanced full limit tuner FS by w5heh 1b Re: extra Balanced full limit tuner FS by "denton sprague" dentonsp 2a need answers on Feed spreader distance and length by w5heh 2b Re: need answers on Feed spreader distance and length by "Evan Rolek" k9sqg 2c Re: need answers on Feed spreader distance and length by "abe" abemitchell777 2d Re: need answers on Feed spreader distance and length by "Rich Schmuke" richdjschmuke 2e AW: [SkyWires] need answers on Feed spreader distance and length by "siegfried jackstien" dg9bfc 2f Re: need answers on Feed spreader distance and length [1 Attachment] by "Don Sanders" w4bws 2g Re: need answers on Feed spreader distance and length [1 Attachment] by "Rich Schmuke" richdjschmuke 2h Re: need answers on Feed spreader distance and length by "Ken" wa8jxm
Messages

1a

Re: extra Balanced full limit tuner FS

Thu Dec 11, 2014 3:52 am (PST) . Posted by:

w5heh
SOLD unit , thanks for all the responses . Reply to sender . Reply to group . Reply via Web Post . All Messages (3) . Top ^
1b

Re: extra Balanced full limit tuner FS

Thu Dec 11, 2014 7:16 am (PST) . Posted by:

"denton sprague" dentonsp
Can I get you to email me details and possibly pics of the balanced tuner you sold?
Thanks, de Denton WB7TDG
On Dec 11, 2014, at 3:50 AM, email4utoo@... [SkyWires] <SkyWires@yahoogroups.com> wrote:

> SOLD unit , thanks for all the responses .
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>

Reply to sender . Reply to group . Reply via Web Post . All Messages (3) . Top ^
2a

need answers on Feed spreader distance and length

Thu Dec 11, 2014 9:35 am (PST) . Posted by:

w5heh
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Reply to sender . Reply to group . Reply via Web Post . All Messages (8) . Top ^
2b

Re: need answers on Feed spreader distance and length

Thu Dec 11, 2014 9:58 am (PST) . Posted by:

"Evan Rolek" k9sqg
AJ,

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Appreciate any Chime in on this , THank you , W5HEH 73s, AJ

Reply to sender . Reply to group . Reply via Web Post . All Messages (8) . Top ^
2c

Re: need answers on Feed spreader distance and length

Thu Dec 11, 2014 10:49 am (PST) . Posted by:

"abe" abemitchell777
In Oregon, on one city lot, I still use an 80 40 meter inverted V fan (it gives me 10-80m). Following is my main antenna for field days and camping, it has went up and down many times at different heights and in different configurations with very similar results. I set my 160 loop up around 1.7MHz (best I remember about 574 ft of insulated 12ga wire). This gives me a pour match for 160m but a good match for the digital part of 10-80m. I remove a section of wire, maybe 50 feet, when I want to focus on 80 meter phone. It is fed with 110ft of 450 ohm ladder line. A 4:1 balun is used on 10 through 40 meter and no balun needed on 80 meter. Little or no tuning is needed for the digital portion of these bands. A good tuner is needed to make 160 usable.
Hope this is useful info,
Abe K7ABE

Connected by DROID on Verizon Wireless

-----Original message-----
From: "Evan Rolek k9sqg@... [SkyWires]" <SkyWires@yahoogroups.com>
To: SkyWires@yahoogroups.com
Sent: Thu, Dec 11, 2014 17:58:35 GMT+00:00
Subject: Re: [SkyWires] need answers on Feed spreader distance and length

AJ,

Hard to know since proposed use of antenna is unknown. For example, 160 M monoband or multiband? This will determine the range of impedances that will be encountered which in turn will suggest the spacing of the feeders. It is likely to be non-critical since the loss will be small in most cases. Physical appearance, wind/ice loading, etc. will suggest what type of spacing might offer advantages.

In my loops, 40 M and 80 M horizontal loops, I switched from 450 ohm window line to 300 ohm transmitting twinlead to reduce the visual cross section, for the xyl. Both antennas continue to work well, 40 M as a monobander, and the 80 M loop as a multibander.

Spreaders are readily available from 73CNC, I believe, and they are UV resistant, Lexan (?) black for low visibility and won't break if dropped like glass ones, etc.

73,

Evan, K9SQG

-----Original Message-----
From: email4utoo@... [SkyWires] <SkyWires@yahoogroups.com>
To: SkyWires <SkyWires@yahoogroups.com>
Sent: Thu, Dec 11, 2014 12:35 pm
Subject: [SkyWires] need answers on Feed spreader distance and length

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Reply to sender . Reply to group . Reply via Web Post . All Messages (8) . Top ^ 2d

Re: need answers on Feed spreader distance and length

Thu Dec 11, 2014 11:39 am (PST) . Posted by:

"Rich Schmuke" richdjschmuke
Us non-city boys go to the local farm supply for ladder line insulators.
http://www.ruralking.com/agriculture/fencing-supplies/electric-fencing/electric-fence-insulators-acce/dare-4-tube-insulator-50-pieces-per-bag-1718.html
50 pc of 4" spacers for the high price of $4.99 , if the link does not work go to Rural King, SKU # 070040553. You can cut them in half and have a 100 PC's for 5 bucks and a few tie-wraps. A tie wrap around the wire and then thru the insulator and your are done. Also dipole ends, 50 cents for

porcelain and 25 cents for UV resistant plastic.
There are several name brand supply stores with fence parts and all parts
are made for sun proof and good with electricity

Rich, KdØzz

On Thu, Dec 11, 2014 at 11:58 AM, Evan Rolek k9sqg@... [SkyWires] <
SkyWires@yahoogroups.com> wrote:

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Reply to sender . Reply to group . Reply via Web Post . All Messages (8) . Top ^
2e

AW: [SkyWires] need answers on Feed spreader distance and length

Thu Dec 11, 2014 11:55 am (PST) . Posted by:

"siegfried jackstien" dg9bfc
Buy some "rozenclips" from amevo

They are use in green-houses to clamp a plant (tomato or roses or) to a wire

Works superb for making ladderline

Dg9bfc

Sigi

> -----Ursprüngliche Nachricht-----
> Von: SkyWires@yahoogroups.com [mailto:SkyWires@yahoogroups.com]
> Gesendet: Donnerstag, 11. Dezember 2014 19:39
> An: SkyWires@yahoogroups.com
> Betreff: Re: [SkyWires] need answers on Feed spreader distance and length
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> http://www.ruralking.com/agriculture/fencing-supplies/electric-
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Attachment(s) from siegfried jackstien 1 of 1 Photo(s) amevo_rozenclips.jpg Reply to sender . Reply to group . Reply via Web Post . All Messages (8) . Top ^ 2f

Re: need answers on Feed spreader distance and length [1 Attachment]

Thu Dec 11, 2014 1:26 pm (PST) . Posted by:

"Don Sanders" w4bws
Sigi, do you have a URL for the AMEVO company.?
The info in the foto does not reference a URL.
Also, SOTA in England has plastic laser cut spacers for open wire line.
I have samples on the way to Ecuador to test.
Thanks for the info

Dr. Don W4BWS

On Thu, Dec 11, 2014 at 2:52 PM, 'siegfried jackstien'
siegfried.jackstien@... [SkyWires] <SkyWires@yahoogroups.com> wrote:

>
> [Attachment(s) <#14a3aeb5562426b6_TopText> from siegfried jackstien
> included below]
>
> Buy some "rozenclips" from amevo
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> They are use in green-houses to clamp a plant (tomato or roses or) to a
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> Works superb for making ladderline
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> Dg9bfc
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Reply to sender . Reply to group . Reply via Web Post . All Messages (8) . Top ^
2g

Re: need answers on Feed spreader distance and length [1 Attachment]

Thu Dec 11, 2014 1:29 pm (PST) . Posted by:

"Rich Schmuke" richdjschmuke
Sigi, they are great clips and you can get then for 3 size wires but the
quantity and overseas shipping was a little high for me, good for you. I
could not find them over here.

Rich, KdØzz

On Thu, Dec 11, 2014 at 1:52 PM, 'siegfried jackstien'
siegfried.jackstien@... [SkyWires] <SkyWires@yahoogroups.com> wrote:

>
> [Attachment(s) <#14a3aeb51903f6a3_TopText> from siegfried jackstien
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2h

Re: need answers on Feed spreader distance and length

Thu Dec 11, 2014 3:23 pm (PST) . Posted by:

"Ken" wa8jxm
Interesting, I had not thought of using those for feedline spreaders.

What I've used is to cut up plastic clothes hangers into 3-1/2" sections (about 7 per hanger) and drill holes near the ends for the wires to go through. It works fine.

Ken WA8JXM

> On Dec 11, 2014, at 2:39 PM, Rich Schmuke rdj@... [SkyWires] <SkyWires@yahoogroups.com> wrote:
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• Privacy • Unsubscribe • Terms of Use

4464. Re: [SkyWires] Digest Number 1511[1 Attachment]

Yahoo group: SkyWires
Date: 2014-12-13 01:22:45 UTC
From: Evan Rolek
Topic: 4463 Message: 4464

As a side note, with window line, 450 ohm or 300 ohm transmitting twinlead, one can increase the hole size to reduce the effects of rain, snow, and ice on the feedline. I use a "siding notcher", bought at either Lowe's or Home Depot I believe, found in the section of the store that sells plastic and/or aluminum siding, molding, etc.

-----Original Message-----
From: bob engle wv6bwf@... [SkyWires] <SkyWires@yahoogroups.com>
To: No Reply <notify-dg-SkyWires@yahoogroups.com>; SkyWires <SkyWires@yahoogroups.com>
Sent: Fri, Dec 12, 2014 4:52 pm
Subject: Re: [SkyWires] Digest Number 1511[1 Attachment]

And then ,of course, there is a trip to the beauty supply house for "perm Rods"
These are the right length for about 600 ohms down to 300 ohms. They have multiple holes in them depending on the mfgr and I pick the dark grey or brown ..I could use pink ones I guess but I would be taking a lot of time explaining what they are. The box full I have now(grey) was purchased at a yard sale.I like them because the holes are all the same and after threading them on the wire a drop of super glue holds them in place.

I Think you will find that the length is relatively non critical I use about 55 feet spaced about 1inch and a half and # 18 wire to feed my summer QTH 160 loop on all bands including 6 meters. Loop is about 575 feet long and 30 to 60 feet high.
Strictly for esthetics I use 60 feet of 300 Ohm window line to feed my 80 meter loop in the back yard of our winter QTH(in a subdivision) It is very low viz and keeps the neighbors and XYL happy. I have no trouble feeding it on any band from 80 to 6.
I like this option because I don't have to cut anything and drill holes...HI

73
Bob
K9QLL

Some days it isn't worth chewing through the restraints

On Friday, December 12, 2014 4:03 AM, "SkyWires@yahoogroups.com"
<SkyWires@yahoogroups.com> wrote:

SkyWire Loop Antennas Group

10 Messages

Digest #1511

1a

Re: extra Balanced full limit tuner FS by w5heh

1b

Re: extra Balanced full limit tuner FS by "denton sprague" dentonsp

2a

need answers on Feed spreader distance and length by w5heh

2b

Re: need answers on Feed spreader distance and length by "Evan Rolek" k9sqg

2c

Re: need answers on Feed spreader distance and length by "abe" abemitchell777

2d

Re: need answers on Feed spreader distance and length by "Rich Schmuke" richdjschmuke

2e

AW: [SkyWires] need answers on Feed spreader distance and length by "siegfried jackstien" dg9bfc

2f

Re: need answers on Feed spreader distance and length [1 Attachment] by "Don Sanders" w4bws

2g

Re: need answers on Feed spreader distance and length [1 Attachment] by "Rich Schmuke" richdjschmuke

2h

Re: need answers on Feed spreader distance and length by "Ken" wa8jxm

Messages

1a

Re: extra Balanced full limit tuner FS

Thu Dec 11, 2014 3:52 am (PST) . Posted by:

w5heh

SOLD unit , thanks for all the responses .

Reply to sender . Reply to group . Reply via Web Post . All Messages (3) . Top ^

1b

Re: extra Balanced full limit tuner FS

Thu Dec 11, 2014 7:16 am (PST) . Posted by:

"denton sprague" dentonsp

Can I get you to email me details and possibly pics of the balanced tuner you sold? Thanks, de Denton WB7TDG

On Dec 11, 2014, at 3:50 AM, email4utoo@... [SkyWires] <SkyWires@yahoogroups.com> wrote:

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Reply to sender . Reply to group . Reply via Web Post . All Messages (3) . Top ^

2a

need answers on Feed spreader distance and length

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Re: need answers on Feed spreader distance and length

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"Evan Rolek" k9sqg

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Appreciate any Chime in on this , THank you , W5HEH 73s, AJ

Reply to sender . Reply to group . Reply via Web Post . All Messages (8) . Top ^

2c

Re: need answers on Feed spreader distance and length

Thu Dec 11, 2014 10:49 am (PST) . Posted by:

"abe" abemitchell777

In Oregon, on one city lot, I still use an 80 40 meter inverted V fan (it gives me 10-80m). Following is my main antenna for field days and camping, it has went up and down many times at different heights and in different configurations with very similar results. I set my 160 loop up around 1.7MHz (best I remember about 574 ft of insulated 12ga wire). This gives me a pour match for 160m but a good match for the digital part of 10-80m. I remove a section of wire, maybe 50 feet, when I want to focus on 80 meter phone. It is fed with 110ft of 450 ohm ladder line. A 4:1 balun is used on 10 through 40 meter and no balun needed on 80 meter. Little or no tuning is needed for the digital portion of these bands. A good tuner is needed to make 160 usable.
Hope this is useful info,
Abe K7ABE

Connected by DROID on Verizon Wireless

-----Original message-----
From: "Evan Rolek k9sqg@... [SkyWires]" <SkyWires@yahoogroups.com>
To: SkyWires@yahoogroups.com
Sent: Thu, Dec 11, 2014 17:58:35 GMT+00:00
Subject: Re: [SkyWires] need answers on Feed spreader distance and length

AJ,

Hard to know since proposed use of antenna is unknown. For example, 160 M monoband or multiband? This will determine the range of impedances that will be encountered which in turn will suggest the spacing of the feeders. It is likely to be non-critical since the loss will be small in most cases.

Physical appearance, wind/ice loading, etc. will suggest what type of spacing might offer advantages.

In my loops, 40 M and 80 M horizontal loops, I switched from 450 ohm window line to 300 ohm transmitting twinlead to reduce the visual cross section, for the xyl. Both antennas continue to work well, 40 M as a monobander, and the 80 M loop as a multibander.

Spreaders are readily available from 73CNC, I believe, and they are UV resistant, Lexan (?) black for low visibility and won't break if dropped like glass ones, etc.

73,

Evan, K9SQG

-----Original Message-----
From: email4utoo@... [SkyWires] <SkyWires@yahoogroups.com>
To: SkyWires <SkyWires@yahoogroups.com>
Sent: Thu, Dec 11, 2014 12:35 pm
Subject: [SkyWires] need answers on Feed spreader distance and length

Would help me to know, best measurement for twin lead spreader, thinking 3 inches for spreader lengths , Distance between spreaders ? 18 " ? , using 12ga, Full wave loop 160meters, thinking around 508 ft but have enough to go longer , distance from loop for Feed twin lead is about 110f

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2d

Re: need answers on Feed spreader distance and length

Thu Dec 11, 2014 11:39 am (PST) . Posted by:

"Rich Schmuke" richdjschmuke

Us non-city boys go to the local farm supply for ladder line insulators.
http://www.ruralking.com/agriculture/fencing-supplies/electric-fencing/electric-fence-insulators-acce/dare-4-tube-insulator-50-pieces-per-bag-1718.html
50 pc of 4" spacers for the high price of $4.99 , if the link does not work go to Rural King, SKU # 070040553. You can cut them in half and have a 100 PC's for 5 bucks and a few tie-wraps. A tie wrap around the wire and then thru the insulator and your are done. Also dipole ends, 50 cents for porcelain and 25 cents for UV resistant plastic.
There are several name brand supply stores with fence parts and all parts are made for sun proof and good with electricity

Rich, KdØzz

On Thu, Dec 11, 2014 at 11:58 AM, Evan Rolek k9sqg@... [SkyWires] <SkyWires@yahoogroups.com> wrote:

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> M monoband or multiband? This will determine the range of impedances that
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Reply to sender . Reply to group . Reply via Web Post . All Messages (8) . Top ^

2e

AW: [SkyWires] need answers on Feed spreader distance and length

Thu Dec 11, 2014 11:55 am (PST) . Posted by:

"siegfried jackstien" dg9bfc

Buy some "rozenclips" from amevo

They are use in green-houses to clamp a plant (tomato or roses or) to a wire

Works superb for making ladderline

Dg9bfc

Sigi

> -----Ursprüngliche Nachricht-----
> Von: SkyWires@yahoogroups.com [mailto:SkyWires@yahoogroups.com]
> Gesendet: Donnerstag, 11. Dezember 2014 19:39
> An: SkyWires@yahoogroups.com
> Betreff: Re: [SkyWires] need answers on Feed spreader distance and length
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> Us non-city boys go to the local farm supply for ladder line insulators.
> http://www.ruralking.com/agriculture/fencing-supplies/electric-
> fencing/electric-fence-insulators-acce/dare-4-tube-insulator-50-pieces-
> per-bag-1718.html
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> 50 pc of 4" spacers for the high price of $4.99 , if the link does not
> work go to Rural King, SKU # 070040553. You can cut them in half and have
> a 100 PC's for 5 bucks and a few tie-wraps. A tie wrap around the wire and
> then thru the insulator and your are done. Also dipole ends, 50 cents for
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Attachment(s) from siegfried jackstien

1 of 1 Photo(s)

amevo_rozenclips.jpg

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2f

Re: need answers on Feed spreader distance and length [1 Attachment]

Thu Dec 11, 2014 1:26 pm (PST) . Posted by:

"Don Sanders" w4bws

Sigi, do you have a URL for the AMEVO company.?
The info in the foto does not reference a URL.
Also, SOTA in England has plastic laser cut spacers for open wire line.
I have samples on the way to Ecuador to test.
Thanks for the info

Dr. Don W4BWS

On Thu, Dec 11, 2014 at 2:52 PM, 'siegfried jackstien'
siegfried.jackstien@freenet.de [SkyWires] <SkyWires@yahoogroups.com> wrote:

>
> [Attachment(s) <#14a3aeb5562426b6_TopText> from siegfried jackstien
> included below]
>
> Buy some "rozenclips" from amevo
>
> They are use in green-houses to clamp a plant (tomato or roses or) to a
> wire
>
> Works superb for making ladderline
>
> Dg9bfc
>
> Sigi
>
> > -----Ursprüngliche Nachricht-----
> > Von: SkyWires@yahoogroups.com [mailto:SkyWires@yahoogroups.com]
> > Gesendet: Donnerstag, 11. Dezember 2014 19:39
> > An: SkyWires@yahoogroups.com
> > Betreff: Re: [SkyWires] need answers on Feed spreader distance and length
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2g

Re: need answers on Feed spreader distance and length [1 Attachment]

Thu Dec 11, 2014 1:29 pm (PST) . Posted by:

"Rich Schmuke" richdjschmuke

Sigi, they are great clips and you can get then for 3 size wires but the quantity and overseas shipping was a little high for me, good for you. I could not find them over here.

Rich, KdØzz

On Thu, Dec 11, 2014 at 1:52 PM, 'siegfried jackstien'
siegfried.jackstien@... [SkyWires] <SkyWires@yahoogroups.com> wrote:

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2h

Re: need answers on Feed spreader distance and length

Thu Dec 11, 2014 3:23 pm (PST) . Posted by:

"Ken" wa8jxm

Interesting, I had not thought of using those for feedline spreaders.

What I’ve used is to cut up plastic clothes hangers into 3-1/2” sections (about 7 per hanger) and drill holes near the ends for the wires to go through. It works fine.

Ken WA8JXM

> On Dec 11, 2014, at 2:39 PM, Rich Schmuke rdj@wildblue.net [SkyWires] <SkyWires@yahoogroups.com> wrote:
>
> Us non-city boys go to the local farm supply for ladder line insulators.
> http://www.ruralking.com/agriculture/fencing-supplies/electric-fencing/electric-fence-insulators-acce/dare-4-tube-insulator-50-pieces-per-bag-1718.html <http://www.ruralking.com/agriculture/fencing-supplies/electric-fencing/electric-fence-insulators-acce/dare-4-tube-insulator-50-pieces-per-bag-1718.html>;
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New Members 2

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4465. Re: need answers on Feed spreader distance and length

Yahoo group: SkyWires
Date: 2014-12-13 01:35:55 UTC
From: email4utoo@...
Topic: 4452 Message: 4465

Sigi, the only seller i found here in the USA was this -
But they demand 50.00 minimum order, i did not want to mess with it, 15.60 or so for 100, pack , not bad, i went with the Finned wire fencing 4" tubes , 2.00 per 25, at Tracktor Supply , i can pick with near my Animal Feed store so better for my situation, you can order them online from many suppliers ,one listed in response on this thread . These Secure wire clips look ez to use , some here might want to order a bunch and pack them up so smaller users like myself would buy them .

Sigi thanks again for sharing , just wish these were more ready available here , 73s, AJ W5heh

Hummert International http://www.hummert.com/product-details/3471/securing-clips

http://www.hummert.com/product-details/3471/securing-clips

Hummert International http://www.hummert.com/product-details/3471/securing-clips Hummert International is your online store for all horticultural, lawn and garden supplies. Plants, fertilizers, greenhouses and landscaping equipment - we carry it...

View on www.hummert.com http://www.hummert.com/product-details/3471/securing-clips
Preview by Yahoo

4466. AW: [SkyWires] need answers on Feed spreader distance and length

Yahoo group: SkyWires
Date: 2014-12-13 01:35:11 UTC
From: siegfried jackstien
Topic: 4452 Message: 4466

http://www.amevo.nl/plantstokken_boomclips/

i bought a pack of those on a hamfest together with some end isolators
(plasic eggs) ... a ham bought those clips direct from amevo and then he
packed them in smaller packages ... reselling as ladderline insulators

dg9bfc

sigi

ps ... maybe you can make a group buy or also resell them?!?

> -----Ursprüngliche Nachricht-----
> Von: SkyWires@yahoogroups.com [mailto:SkyWires@yahoogroups.com]
> Gesendet: Donnerstag, 11. Dezember 2014 21:27
> An: SkyWires@yahoogroups.com
> Betreff: Re: [SkyWires] need answers on Feed spreader distance and length
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> > To: SkyWires <SkyWires@yahoogroups.com>
> > Sent: Thu, Dec 11, 2014 12:35 pm
> > Subject: [SkyWires] need answers on Feed spreader distance and
> > length
> >
> >
> >
> > Would help me to know, best measurement for twin lead spreader,
> > thinking 3 inches for spreader lengths , Distance between
> spreaders ? 18
> > " ? , using 12ga, Full wave loop 160meters, thinking around 508 ft
> but
> > have enough to go longer , distance from loop for Feed twin lead
> is about

> > 110ft , , want to know best length for Feed , only Twin lead into
> Heath
> > SA2060A has built in Balun, no Coax will be used . Height will be
> about
> > 42-46ft , have all ready and two holes dug and filled , just would
> like
> > any numbers that can be shared with this info.
> >
> >
> > Appreciate any Chime in on this , THank
> > you , W5HEH 73s, AJ
> >
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>

4467. Re: [SkyWires] Digest Number 1511[1 Attachment]

Yahoo group: SkyWires
Date: 2014-12-13 11:47:30 UTC
From: email4utoo@...
Topic: 4463 Message: 4467

THANKS ALL FOR ADVICE AND TIPS ! I WILL CONTINUE TO READ THESE , 73s, AJ W5HEH

4468. 2.5:1 Balun

Yahoo group: SkyWires
Date: 2015-01-03 01:05:09 UTC
From: everettsharp@...
Topic: 4468 Message: 4468

Hi All,

I an new to the group and am interested in building either a Sky Loop, or a Delra loop. I would like to feed it with 50 coax and use a 2.5:1 balun. So what I am looking for are plans to construct my own. I have a verity of ferrite core mixes, 61, 52, 43 and 31. I have Jerry Sevick's book on baluns, but did not find a 2.5:1. I did find a UNUN 2.25:1 and have built one. It looks good sweeping it with my MFJ259B, where it is just about flat from 1 to 30 MHz.

Any help,would br greatly appreciated.

Everett N8CNP

4469. Re: [SkyWires] 2.5:1 Balun

Yahoo group: SkyWires
Date: 2015-01-03 02:00:56 UTC
From: Rich Schmuke
Topic: 4468 Message: 4469

You have the right book , look at page 97 and it's reference to moving the tap on 2.25:1 and it is shown on page 67. I made one for a loop myself but later increased the size of the loop so I could use it as a multi-band loop with a 4:1. Now a delta loop.
I am surprised it is flat from 1 to 30 Mhz. What did you use as a dummy load for the test? I also swept mine with a 259B.

Rich, KdØzz

On Fri, Jan 2, 2015 at 7:05 PM, everettsharp@aol.com [SkyWires] <SkyWires@yahoogroups.com> wrote:

>
>
> Hi All,
>
>
> I an new to the group and am interested in building either a Sky Loop, or
> a Delra loop. I would like to feed it with 50 coax and use a 2.5:1 balun.
> So what I am looking for are plans to construct my own. I have a verity of
> ferrite core mixes, 61, 52, 43 and 31. I have Jerry Sevick's book on
> baluns, but did not find a 2.5:1. I did find a UNUN 2.25:1 and have built
> one. It looks good sweeping it with my MFJ259B, where it is just about flat
> from 1 to 30 MHz.
>
>
> Any help,would br greatly appreciated.
>
>
> Everett N8CNP
>
>
>

4470. Re: [SkyWires] 2.5:1 Balun

Yahoo group: SkyWires
Date: 2015-01-03 02:46:24 UTC
From: Everett Sharp
Topic: 4468 Message: 4470

Hi Rich,

I used a 112 ohm carbon resistor. I wound it on a different core than what was called for in Sevick's book and used a FT 140-61 instead. I may have exaggerated the flat part a bit, as it was 1:1 up to about 14 MHz and at 30 MHz it was 1.2:1, which is still not bad.

I want to be able to operate multi-band also, did you find the 4:1 better than the 2.5:1 for multi-band? Also is your 4:1 a current type, with two 1:1 toroids wired in series/ parallel. That is what I am using on my Windom.

Everett N8CNP

Sent from my iPad

> On Jan 2, 2015, at 8:00 PM, Rich Schmuke rdj@... [SkyWires] <SkyWires@yahoogroups.com> wrote:
>
> You have the right book , look at page 97 and it's reference to moving the tap on 2.25:1 and it is shown on page 67. I made one for a loop myself but later increased the size of the loop so I could use it as a multi-band loop with a 4:1. Now a delta loop.
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>> Any help,would br greatly appreciated.
>>
>>
>>
>> Everett N8CNP

>>
>
>

4471. Re: [SkyWires] 2.5:1 Balun

Yahoo group: SkyWires
Date: 2015-01-03 03:02:16 UTC
From: Evan Rolek
Topic: 4468 Message: 4471

For multiband use, I've never been happy with a balun of any ratio for my horizontal loops. Whatever the ratio, it is right on for some bands, too low for others, and yet too high for some. Using open wire line or window line, with a tuner in the shack, solved a lot of problems for me, not the least of which can be core saturation for the balun. I'm not anti-baluns but I've been happy with the simplicity of my installation that has worked well for me. You mileage might vary...

73,

Evan

-----Original Message-----
From: Everett Sharp everettsharp@... [SkyWires] <SkyWires@yahoogroups.com>
To: SkyWires <SkyWires@yahoogroups.com>
Sent: Fri, Jan 2, 2015 9:46 pm
Subject: Re: [SkyWires] 2.5:1 Balun

Hi Rich,

I used a 112 ohm carbon resistor. I wound it on a different core than what was called for in Sevick's book and used a FT 140-61 instead. I may have exaggerated the flat part a bit, as it was 1:1 up to about 14 MHz and at 30 MHz it was 1.2:1, which is still not bad.

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Everett N8CNP

Sent from my iPad

On Jan 2, 2015, at 8:00 PM, Rich Schmuke rdj@... [SkyWires] <SkyWires@yahoogroups.com> wrote:

You have the right book , look at page 97 and it's reference to moving the tap on 2.25:1 and it is shown on page 67. I made one for a loop myself but later increased the size of the loop so I could use it as a multi-band loop with a 4:1. Now a delta loop.

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Rich, KdØzz

On Fri, Jan 2, 2015 at 7:05 PM, everettsharp@... [SkyWires] <SkyWires@yahoogroups.com> wrote:

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Any help,would br greatly appreciated.

Everett N8CNP

4472. Re: [SkyWires] 2.5:1 Balun

Yahoo group: SkyWires
Date: 2015-01-03 03:24:29 UTC
From: Everett Sharp
Topic: 4468 Message: 4472

Evan,

My plan is to build a loop for 40 meters, cut to 7.1 MHz, which should work out for 14.2, 21.3 and 28.4 MHz. I do not want use open wire feed as it is too difficult to get to the shack. So a balun is my only option. I will only be operating 100 watts, so it should not cause any overheating problems with balun and based on my experiments, I will more than likely use 61 material, which has a perm of 125.

Everett

Sent from my iPad

> On Jan 2, 2015, at 9:02 PM, Evan Rolek k9sqg@... [SkyWires] <SkyWires@yahoogroups.com> wrote:
>
> For multiband use, I've never been happy with a balun of any ratio for my horizontal loops. Whatever the ratio, it is right on for some bands, too low for others, and yet too high for some. Using open wire line or window line, with a tuner in the shack, solved a lot of problems for me, not the least of which can be core saturation for the balun. I'm not anti-baluns but I've been happy with the simplicity of my installation that has worked well for me. You mileage might vary...
>
>
> 73,
>
> Evan
>
> -----Original Message-----
> From: Everett Sharp everettsharp@aol.com [SkyWires] <SkyWires@yahoogroups.com>
> To: SkyWires <SkyWires@yahoogroups.com>
> Sent: Fri, Jan 2, 2015 9:46 pm
> Subject: Re: [SkyWires] 2.5:1 Balun
>
>
> Hi Rich,
>
> I used a 112 ohm carbon resistor. I wound it on a different core than what was called for in Sevick's book and used a FT 140-61 instead. I may have exaggerated the flat part a bit, as it was 1:1 up to about 14 MHz and at 30 MHz it was 1.2:1, which is still not bad.
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> I want to be able to operate multi-band also, did you find the 4:1 better than the 2.5:1 for multi-band? Also is your 4:1 a current type, with two 1:1 toroids wired in series/ parallel. That is what I am using on my Windom.
>
> Everett N8CNP
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> Sent from my iPad
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> On Jan 2, 2015, at 8:00 PM, Rich Schmuke rdj@... [SkyWires] <SkyWires@...m> wrote:
>
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>>
>> Rich, KdØzz
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>>> On Fri, Jan 2, 2015 at 7:05 PM, everettsharp@... [SkyWires] <SkyWires@yahoogroups.com> wrote:
>>>
>>> Hi All,
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>>>
>>> Any help,would br greatly appreciated.
>>>
>>> Everett N8CNP
>>
>
>

4473. Re: [SkyWires] 2.5:1 Balun

Yahoo group: SkyWires
Date: 2015-01-03 03:38:19 UTC
From: Evan Rolek
Topic: 4468 Message: 4473

Everette,

I realize everybody has different constraints. I've been using window line, now 300 ohm transmitting style instead of the 450 ohm I used to use, and find that it works quite well for me even though I violate all the rules for its use. I have several 90 deg bends, some quite abrupt, run the line indoors through the basement where it runs close to water pipes and heating ducts, and so forth. Being able to tune things in the comfort in the shack is a real benefit to me. From my measurements in the shack, the line is almost perfectly balanced in spite of the rules violations. If there is a downside to my installation, I haven't found it yet, hi hi. But I can appreciate the fact that some installations might be impossible or extremely difficult.

Please keep the group informed of your progress.

73,

Evan

-----Original Message-----
From: Everett Sharp everettsharp@aol.com [SkyWires] <SkyWires@yahoogroups.com>
To: SkyWires <SkyWires@yahoogroups.com>
Sent: Fri, Jan 2, 2015 10:24 pm
Subject: Re: [SkyWires] 2.5:1 Balun

Evan,

My plan is to build a loop for 40 meters, cut to 7.1 MHz, which should work out for 14.2, 21.3 and 28.4 MHz. I do not want use open wire feed as it is too difficult to get to the shack. So a balun is my only option. I will only be operating 100 watts, so it should not cause any overheating problems with balun and based on my experiments, I will more than likely use 61 material, which has a perm of 125.

Everett

Sent from my iPad

On Jan 2, 2015, at 9:02 PM, Evan Rolek k9sqg@aol.com [SkyWires] <SkyWires@yahoogroups.com> wrote:

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-----Original Message-----
From: Everett Sharp everettsharp@... [SkyWires] <SkyWires@yahoogroups.com>
To: SkyWires <SkyWires@yahoogroups.com>
Sent: Fri, Jan 2, 2015 9:46 pm
Subject: Re: [SkyWires] 2.5:1 Balun

Hi Rich,

I used a 112 ohm carbon resistor. I wound it on a different core than what was called for in Sevick's book and used a FT 140-61 instead. I may have exaggerated the flat part a bit, as it was 1:1 up to about 14 MHz and at 30 MHz it was 1.2:1, which is still not bad.

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Everett N8CNP

Sent from my iPad

On Jan 2, 2015, at 8:00 PM, Rich Schmuke rdj@wildblue.net [SkyWires] <SkyWires@yahoogroups.com> wrote:

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Rich, KdØzz

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Any help,would br greatly appreciated.

Everett N8CNP

4474. Re: [SkyWires] 2.5:1 Balun

Yahoo group: SkyWires
Date: 2015-01-03 11:54:56 UTC
From: Rich Schmuke
Topic: 4468 Message: 4474

Everett, great reading on you set up.
My loop is a little smaller than I would like, it is a 160 size, 2X160 would be better but a lot of trees in the way. I put it up then adjusted for best SWR to the lower part of the 40M band.
My first balun build was a duel wind Guanella on a on a large single core, 2nd was with two torrid cores. The one I am using is two rods in a series/parallel like you mention.
I dont have a print out of my 160 size antenna but here are the final readings on a 80M size delta a multiband set to the 20M band. All is not perfect for all bands but workable with my internal tuner. So it can be used on more than one band.

http://i1102.photobucket.com/albums/g453/KD0ZZ/80MLoop_zpsa6e4cfe7.jpeg

As of today I use a 160 size loop on 160 thru 40, a Hex Beam on 20 thru 6, and a 30M vertical, tomorrow ?????

Rich, KdØzz

On Fri, Jan 2, 2015 at 8:46 PM, Everett Sharp everettsharp@... [SkyWires] <SkyWires@yahoogroups.com> wrote:

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> Hi Rich,
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>>
>> Everett N8CNP
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>

4475. Re: [SkyWires] 2.5:1 Balun

Yahoo group: SkyWires
Date: 2015-01-03 12:32:07 UTC
From: Everett Sharp
Topic: 4468 Message: 4475

Rich,

I took a look at your pictures and I can see that you like to build and experiment like I do. I noticed that some of your balun experiments were with iron core toroids, you might want to try ferrite. I like the 61 mix and 43 mix for most of the baluns that I have experimented with. On your 4:1, using rods, I noticed that you gave the diameter in mm, are they some of the Russian ones off ebay?

The SWR that you show on the chart for the 80 meter loop looked quite good, I would be happy with those numbers.

I did some more digging this morning on the web and found that Balun Designs make a 2.5:1 balun and they also have in the box a 1:1 balun which is between the 2.5:1 and the antenna. Baluns Designs claim to have custom mix toroids, I don't know if that is true, or not. They also give some recommendations for wire lengths for 40 and 80 meter loops, using their balun.

Everett N8CNP

Sent from my iPad

> On Jan 3, 2015, at 5:54 AM, Rich Schmuke rdj@wildblue.net [SkyWires] <SkyWires@yahoogroups.com> wrote:
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> Everett, great reading on you set up.
> My loop is a little smaller than I would like, it is a 160 size, 2X160 would be better but a lot of trees in the way. I put it up then adjusted for best SWR to the lower part of the 40M band.
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>>>> Everett N8CNP
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4476. Re: [SkyWires] 2.5:1 Balun

Yahoo group: SkyWires
Date: 2015-01-03 13:54:35 UTC
From: Rich Schmuke
Topic: 4468 Message: 4476

About the rods, yes and no. Yes the first rods were from a Lithuanian ham selling Russian military surplus on E-Bay size10MM x 200MM,
I also have some .5" x 8" flea market specials given to me by the kindness of K5EST. They were un-used in a shipping container but no markings. I notch them with a diamond saw for a clean snap off point.

http://i1102.photobucket.com/albums/g453/KD0ZZ/160%20Loop/TrimRod_zpsa847fe7a.jpg

In the above album you can see the trees I had to cut to make it a 160 loop. I would like to double the size to make it a better match on 160 but it is hard on my old fused back at 70.
Also my first windings were mag wire with monofiliament spacing as in W2FMI book. I later changed to speaker wire for built in spacing and use a dab of epoxy to hold in place plus the two toned color makes it easy to identify.
I did try one or two with Teflon covered wire but very springy and hard to hold in place. I don't run a lot of power so not really needed.
Check out Mega Loop by M0MCX, this is where I got started with the loop and balun and a 200 ohm antenna.

Rich, KdØzz

On Sat, Jan 3, 2015 at 6:32 AM, Everett Sharp everettsharp@...
[SkyWires] <SkyWires@...m> wrote:

>
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> Rich,
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> I took a look at your pictures and I can see that you like to build and
> experiment like I do. I noticed that some of your balun experiments were
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4477. RE 4:1 Balun in Tuners like mine

Yahoo group: SkyWires
Date: 2015-01-03 22:17:57 UTC
From: email4utoo@...
Topic: 4477 Message: 4477

We probably have gone over this , but humor me, i am about to finally lay out and raise over 550ft of wire on four EMT conduit masts up 36-42 ', this is just for backround info, 12 ga solid wire , already to go . made my own 150ft +- Ladder line 2-3.5 inch spread to Shack's Tuner , ok, now have a 2060A Hkit Tuner as a big Balun inside , now will be running 100 watts , but on the drawing board and collecting parts and boards for Solid State amp 900-1200 watts , will be backing it off to about 800 most of the time to conserve all and believe not needed most of the time .
Ok so your 3 cents on considering disconnecting Balun when i fired up amp eventually ??
Will use my Rig mostly on 40m, but will move to other bands for Nets and Fun , not a real DX chaser but i call them if i hear well. Nets and learning from others is where my interest lies ,but my ts930 will cover 160-10 m .

Thanks for all info , AJ W5HEH

4478. Re: [SkyWires] 2.5:1 Balun

Yahoo group: SkyWires
Date: 2015-01-04 13:02:44 UTC
From: Everett Sharp
Topic: 4468 Message: 4478

Hi Rich,

I am no young guy either, having just turned 72. I find it more difficult to do somethings, but I will try anyway. Here is the link to Balun Designs 2.25:1 balun, where he has sweep data on his balun and info on two different Sky Loops.
http://www.balundesigns.com/model-25112-2-5-1-balun-1-5-54-mhz-2kw/

My question is do you really need the 1:1 balun between the loop and the 2.5:1 balun?

In doing some research on the web there was a Cubical Quad antenna called "Lighting Bolt", it used a 2.25:1 UNUN balun, which from reviews was reported to be a very good performer. It was rated for 1 KW and used a very small ferrite core, FT140, or FT150. As I mentioned I wound a 2.25:1 on a FT140-61 core and it looked very on the sweep. I will take a look at it by adding a 1:1, using a bifilar winding on it, which would typically be 100 ohms, Balun Designs says theirs is 125 ohm, so it may take a little more spacing between the wires on the bifilar winding to get 125 ohms.

I would like to get my loop up while the leaves are off the trees in my yard. Here in Alabama, that give me till early April.

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4479. Re: [SkyWires] 2.5:1 Balun

Yahoo group: SkyWires
Date: 2015-01-04 14:45:54 UTC
From: Rich Schmuke
Topic: 4468 Message: 4479

Well I have never been a fan of needing a separate 1:1 before the transformer. I do have a "ugly choke" just under my 4:1.
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4480. Re: [SkyWires] 2.5:1 Balun

Yahoo group: SkyWires
Date: 2015-01-04 16:48:53 UTC
From: Everett Sharp
Topic: 4468 Message: 4480

The Balun Designs 2.5:1 balun has the 1:1 between the antenna and the 2.5:1, not after. It is good to use 1:1, just after your 4:1, or what ever balun, as it reduces, or eliminates the common mode currents. I am currently running a 80 through 6 Meter Windom, which uses a 4:1 and I have a 1:1, 10 turns of RG8X wound on a FT240-31 core and the 2 more 1:1 baluns after that in the line to the shack.

Everett

Sent from my iPad

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>>>>>>> I am surprised it is flat from 1 to 30 Mhz. What did you use as a dummy load for the test? I also swept mine with a 259B.
>>>>>>>
>>>>>>> Rich, KdØzz
>>>>>>>
>>>>>>>> On Fri, Jan 2, 2015 at 7:05 PM, everettsharp@... [SkyWires] <SkyWires@yahoogroups.com> wrote:
>>>>>>>>
>>>>>>>> Hi All,
>>>>>>>>
>>>>>>>>
>>>>>>>>
>>>>>>>> I an new to the group and am interested in building either a Sky Loop, or a Delra loop. I would like to feed it with 50 coax and use a 2.5:1 balun. So what I am looking for are plans to construct my own. I have a verity of ferrite core mixes, 61, 52, 43 and 31. I have Jerry Sevick's book on baluns, but did not find a 2.5:1. I did find a UNUN 2.25:1 and have built one. It looks good sweeping it with my MFJ259B, where it is just about flat from 1 to 30 MHz.
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>>>>>>>> Any help,would br greatly appreciated.
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>>>>>>>>
>>>>>>>> Everett N8CNP
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>

4481. 28th Annual NASWA Winter SWL Festival

Yahoo group: SkyWires
Date: 2015-01-16 21:12:06 UTC
From: ve2shw@...
Topic: 4481 Message: 4481

THE 28th ANNUAL NASWA Winter SWL Festival, Plymouth Meeting, Pennsylvania- February 27 & 28, 2015
The largest annual gathering of radio enthusiasts in north-eastern North America, bringing together shortwave listeners, DXers, AM/FM/TV DXers, scanner enthusiasts, radio broadcasters, Internet broadcasters, amateur radio operators, and others. Exhibits, workshops and lectures on all aspects of radio. 2 days of nothing but radio. If you love radio, you should be here! February 27 and 28, 2015. See www.swlfest.com http://l.facebook.com/l.php?u=http%3A%2F%2Fwww.swlfest.com%2F&h=cAQHgrdHS&enc=AZPt8HmjfsxwJyjTVUqIKyLQCwrmOTKtsiVez8qOI0a4s2v02ekttqv88l0ghGU5z1yHnVXQwTfjUOVGJA9_ji2_wTp47b2eDq4Rb2ddvwPyPPWRhanrfYnDHkZhuliCCX6pO3q3Rx50wjW3YGlZNQJs&s=1 for full details
Follow the event on Facebook at Winter SWL Festival

Sheldon Harvey
Greenfield Park, Quebec

4482. inside the loop

Yahoo group: SkyWires
Date: 2015-01-24 23:19:30 UTC
From: auto_row_tate@...
Topic: 4482 Message: 4482

wondering if anyone has played with the space inside of a loop? I have a 1100 foot loop up just about in a perfect sqaure and was thinking about putting a 160m dipole inside of it from diagonal corners... Anyone have further info?

Jay KB8O

4483. Re: [SkyWires] inside the loop

Yahoo group: SkyWires
Date: 2015-01-24 23:45:40 UTC
From: KENT
Topic: 4482 Message: 4483

Hello Jay
I have a 1000 ft + loop as well and have my inverted L with elevated radials inside the perimeter of the loop! I haven't noticed any negative interactions to date! (Both antennas have been up for over a year now.) I am however looking into de-tuning the inverted -l for noise reasons…i.e. re-radiation of vertically polarized local noise?

Gud Luck es 73
de Kent
N8ZRD
On Jan 24, 2015, at 6:19 PM, "auto_row_tate@... [SkyWires]" <SkyWires@yahoogroups.com> wrote:

>
> wondering if anyone has played with the space inside of a loop? I have a 1100 foot loop up just about in a perfect sqaure and was thinking about putting a 160m dipole inside of it from diagonal corners... Anyone have further info?
>
>
>
> Jay KB8O
>
>
>

4484. RE: [SkyWires] inside the loop

Yahoo group: SkyWires
Date: 2015-01-25 01:29:07 UTC
From: D. Scott MacKenzie
Topic: 4482 Message: 4484

You could model it with MMANA

From: SkyWires@yahoogroups.com [mailto:SkyWires@yahoogroups.com]
Sent: Saturday, January 24, 2015 6:20 PM
To: SkyWires@yahoogroups.com
Subject: [SkyWires] inside the loop

wondering if anyone has played with the space inside of a loop? I have a 1100 foot loop up just about in a perfect sqaure and was thinking about putting a 160m dipole inside of it from diagonal corners... Anyone have further info?

Jay KB8O

4485. Re: [SkyWires] inside the loop

Yahoo group: SkyWires
Date: 2015-01-25 01:56:16 UTC
From: Evan Rolek
Topic: 4482 Message: 4485

A faster approach is to tune up using either of the respective antennas. Then, ground the unused antenna and see if it "significantly" affects the other antenna. Then do this for the other antenna. Yes, coarse at best. Sure a lot faster than using analysis software by an order of magnitude.

-----Original Message-----
From: 'D. Scott MacKenzie' kb0fhp@... [SkyWires] <SkyWires@yahoogroups.com>
To: SkyWires <SkyWires@yahoogroups.com>
Sent: Sat, Jan 24, 2015 8:29 pm
Subject: RE: [SkyWires] inside the loop

You could model it with MMANA

From: SkyWires@yahoogroups.com [mailto:SkyWires@yahoogroups.com]
Sent: Saturday, January 24, 20156:20 PM
To: SkyWires@yahoogroups.com
Subject: [SkyWires] inside theloop

wonderingif anyone has played with the space inside of a loop? I have a 1100 foot loopup just about in a perfect sqaure and was thinking about putting a 160m dipoleinside of it from diagonal corners... Anyone have further info?

Jay KB8O

4486. RE: [SkyWires] inside the loop

Yahoo group: SkyWires
Date: 2015-01-25 02:04:39 UTC
From: D. Scott MacKenzie
Topic: 4482 Message: 4486

If the antenna isnt up - faster to model. It takes me forever to build and hoist in the trees.

From: SkyWires@yahoogroups.com [mailto:SkyWires@yahoogroups.com]
Sent: Saturday, January 24, 2015 8:56 PM
To: SkyWires@yahoogroups.com
Subject: Re: [SkyWires] inside the loop

A faster approach is to tune up using either of the respective antennas. Then, ground the unused antenna and see if it "significantly" affects the other antenna. Then do this for the other antenna. Yes, coarse at best. Sure a lot faster than using analysis software by an order of magnitude.

-----Original Message-----
From: 'D. Scott MacKenzie' kb0fhp@... [SkyWires]
<SkyWires@yahoogroups.com>
To: SkyWires <SkyWires@yahoogroups.com>
Sent: Sat, Jan 24, 2015 8:29 pm
Subject: RE: [SkyWires] inside the loop

You could model it with MMANA

From: SkyWires@yahoogroups.com [mailto:SkyWires@yahoogroups.com]
Sent: Saturday, January 24, 2015 6:20 PM
To: SkyWires@yahoogroups.com
Subject: [SkyWires] inside the loop

wondering if anyone has played with the space inside of a loop? I have a 1100 foot loop up just about in a perfect sqaure and was thinking about putting a 160m dipole inside of it from diagonal corners... Anyone have further info?

Jay KB8O

4487. Re: [SkyWires] inside the loop

Yahoo group: SkyWires
Date: 2015-01-25 04:23:38 UTC
From: Evan Rolek
Topic: 4482 Message: 4487

Yes, indeed. What I have experienced is that every antenna is a compromise. Factors include "performance", size, cost, site specifics, requirements/goals, etc. etc. Using analysis software is great for a yet to be installed antenna, and after that phase, it is a matter of dealing with constraints, site specifics, etc. etc. Sure is more fun than veging out in front of the TV!

-----Original Message-----
From: 'D. Scott MacKenzie' kb0fhp@verizon.net [SkyWires] <SkyWires@yahoogroups.com>
To: SkyWires <SkyWires@yahoogroups.com>
Sent: Sat, Jan 24, 2015 9:04 pm
Subject: RE: [SkyWires] inside the loop

If the antenna isnt up - faster to model. Ittakes me forever to build and hoist in the trees.

From: SkyWires@yahoogroups.com [mailto:SkyWires@yahoogroups.com]
Sent: Saturday, January 24, 20158:56 PM
To: SkyWires@yahoogroups.com
Subject: Re: [SkyWires] inside theloop

A faster approach is totune up using either of the respective antennas. Then, ground the unusedantenna and see if it "significantly" affects the other antenna. Then do this for the other antenna. Yes, coarse at best. Sure a lot faster than using analysis software by an order of magnitude.

-----OriginalMessage-----
From: 'D. Scott MacKenzie'kb0fhp@... [SkyWires] <SkyWires@yahoogroups.com>
To: SkyWires <SkyWires@yahoogroups.com>
Sent: Sat, Jan 24, 2015 8:29 pm
Subject: RE: [SkyWires] inside the loop

You could model it withMMANA

From: SkyWires@yahoogroups.com [mailto:SkyWires@yahoogroups.com]
Sent: Saturday, January 24, 20156:20 PM
To: SkyWires@yahoogroups.com
Subject: [SkyWires] inside theloop

wondering ifanyone has played with the space inside of a loop? I have a 1100 foot loop upjust about in a perfect sqaure and was thinking about putting a 160m dipoleinside of it from diagonal corners... Anyone have further info?

Jay KB8O

4488. Re: inside the loop

Yahoo group: SkyWires
Date: 2015-01-25 15:12:30 UTC
From: Thomas F. Giella W4HM
Topic: 4482 Message: 4488

I have a 300 foot long horizontal loop in a square with each leg 75 feet long. It's up at only 35 feet at each of the four corners and is fed with 41 feet of 300 ohm window line to an MFJ-974HB balanced antenna tuner.

Inside it I have a 129 foot long inverted L with a 60 foot vertical section. I see no appreciable interaction between the two when I do the grounding thing.

Inside it I also have a 60 foot tall wire vertical for 80 meters. I do see some interaction between the two 80 meter antennas when I do the grounding thing and the 60 foot vertical does impart some noise into the 300 foot long horizontal loop.

All three antennas work very well on DX.

73 & GUD DX,
Thomas F. Giella W4HM
Lakeland, FL, USA
thomasfgiella@...

W4HM's Amateur & SWL Autobiography: http://www.w4hm.org

This email has been checked for viruses by Avast antivirus software.
http://www.avast.com

4489. Re: [SkyWires] Re: inside the loop

Yahoo group: SkyWires
Date: 2015-01-25 16:18:43 UTC
From: Evan Rolek
Topic: 4482 Message: 4489

Thanks for your empirical observations Thomas! I for one always enjoy hearing about how a "practical installation" works in comparison with the "computer models". And like they say, the best antenna design on paper doesn't work as well as an installed antenna, hi hi. Similar to your experiences, I noticed no interaction between my GAP Challenger vertical and my 40 meter horizontal loop; vertical was "inside" the area encompassed by the loop, and the antennas were maybe 10 ft apart.

73,

Evan

-----Original Message-----
From: 'Thomas F. Giella W4HM' thomasfgiella@... [SkyWires] <SkyWires@yahoogroups.com>
To: SkyWires @ Yahoo <SkyWires@yahoogroups.com>
Sent: Sun, Jan 25, 2015 10:12 am
Subject: [SkyWires] Re: inside the loop

I have a 300 foot long horizontal loop in a square with each leg 75 feet long. It's up at only 35 feet at each of the four corners and is fed with 41 feet of 300 ohm window line to an MFJ-974HB balanced antenna tuner.

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All three antennas work very well on DX.

73 & GUD DX,
Thomas F. Giella W4HM
Lakeland, FL, USA
thomasfgiella@...

W4HM's Amateur & SWL Autobiography: http://www.w4hm.org

This email has been checked for viruses by Avast antivirus software.
http://www.avast.com

4490. AW: [SkyWires] inside the loop

Yahoo group: SkyWires
Date: 2015-01-25 17:01:40 UTC
From: siegfried jackstien
Topic: 4482 Message: 4490

Build yourself a tennis ball cannon and then antenna building is just fun

Dg9bfc

Sigi

Ps when not in use for antennas I play with my dog with my homebrewed
"cannon"

> -----Ursprüngliche Nachricht-----
> Von: SkyWires@yahoogroups.com [mailto:SkyWires@yahoogroups.com]
> Gesendet: Sonntag, 25. Januar 2015 02:05
> An: SkyWires@yahoogroups.com
> Betreff: RE: [SkyWires] inside the loop
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>
>
> If the antenna isnt up - faster to model. It takes me forever to build
> and hoist in the trees.
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> _____
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> From: SkyWires@yahoogroups.com [mailto:SkyWires@yahoogroups.com]
> Sent: Saturday, January 24, 2015 8:56 PM
> To: SkyWires@yahoogroups.com
> Subject: Re: [SkyWires] inside the loop
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> A faster approach is to tune up using either of the respective antennas.
> Then, ground the unused antenna and see if it "significantly" affects the
> other antenna. Then do this for the other antenna. Yes, coarse at best.
> Sure a lot faster than using analysis software by an order of magnitude.
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> -----Original Message-----
> From: 'D. Scott MacKenzie' kb0fhp@verizon.net [SkyWires]
> <SkyWires@yahoogroups.com>
> To: SkyWires <SkyWires@yahoogroups.com>
> Sent: Sat, Jan 24, 2015 8:29 pm
> Subject: RE: [SkyWires] inside the loop

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>
> You could model it with MMANA
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>
> _____
>
> From: SkyWires@yahoogroups.com [mailto:SkyWires@yahoogroups.com]
> Sent: Saturday, January 24, 2015 6:20 PM
> To: SkyWires@yahoogroups.com
> Subject: [SkyWires] inside the loop
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> wondering if anyone has played with the space inside of a loop? I have a
> 1100 foot loop up just about in a perfect sqaure and was thinking about
> putting a 160m dipole inside of it from diagonal corners... Anyone have
> further info?
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>
>
> Jay KB8O
>
>

4491. RE: [SkyWires] Re: inside the loop

Yahoo group: SkyWires
Date: 2015-01-25 17:09:32 UTC
From: D. Scott MacKenzie
Topic: 4482 Message: 4491

Computer models are just that - models. While "practical installations" trump counting atoms with silly models of dubious merit, it can save a great deal of time and effort. But that is just stupid egg-head science stuff - probably with some worthless liberal agenda

-----

From: SkyWires@yahoogroups.com [mailto:SkyWires@yahoogroups.com]
Sent: Sunday, January 25, 2015 11:19 AM
To: SkyWires@yahoogroups.com
Subject: Re: [SkyWires] Re: inside the loop

Thanks for your empirical observations Thomas! I for one always enjoy hearing about how a "practical installation" works in comparison with the "computer models". And like they say, the best antenna design on paper doesn't work as well as an installed antenna, hi hi. Similar to your experiences, I noticed no interaction between my GAP Challenger vertical and my 40 meter horizontal loop; vertical was "inside" the area encompassed by the loop, and the antennas were maybe 10 ft apart.

73,

Evan

-----Original Message-----
From: 'Thomas F. Giella W4HM' thomasfgiella@... [SkyWires]
<SkyWires@yahoogroups.com>
To: SkyWires @ Yahoo <SkyWires@yahoogroups.com>
Sent: Sun, Jan 25, 2015 10:12 am
Subject: [SkyWires] Re: inside the loop

I have a 300 foot long horizontal loop in a square with each leg 75 feet long. It's up at only 35 feet at each of the four corners and is fed with 41

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All three antennas work very well on DX.

73 & GUD DX,
Thomas F. Giella W4HM
Lakeland, FL, USA
thomasfgiella@...

W4HM's Amateur & SWL Autobiography: http://www.w4hm.org

This email has been checked for viruses by Avast antivirus software.
http://www.avast.com

4492. RE: [SkyWires] inside the loop

Yahoo group: SkyWires
Date: 2015-01-25 17:11:19 UTC
From: D. Scott MacKenzie
Topic: 4482 Message: 4492

Building something that in the US will put you on a terrorist watch list...

_____

From: SkyWires@yahoogroups.com [mailto:SkyWires@yahoogroups.com]
Sent: Sunday, January 25, 2015 12:02 PM
To: SkyWires@yahoogroups.com
Subject: AW: [SkyWires] inside the loop

Build yourself a tennis ball cannon and then antenna building is just fun

Dg9bfc

Sigi

Ps when not in use for antennas I play with my dog with my homebrewed
"cannon"

> -----Ursprüngliche Nachricht-----
> Von: SkyWires@yahoogroups.com [mailto:SkyWires@yahoogroups.com]
> Gesendet: Sonntag, 25. Januar 2015 02:05
> An: SkyWires@yahoogroups.com
> Betreff: RE: [SkyWires] inside the loop
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>
> If the antenna isnt up - faster to model. It takes me forever to build
> and hoist in the trees.
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> _____
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> From: SkyWires@yahoogroups.com [mailto:SkyWires@yahoogroups.com]
> Sent: Saturday, January 24, 2015 8:56 PM
> To: SkyWires@yahoogroups.com
> Subject: Re: [SkyWires] inside the loop
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> -----Original Message-----
> From: 'D. Scott MacKenzie' kb0fhp@... [SkyWires]
> <SkyWires@yahoogroups.com>
> To: SkyWires <SkyWires@yahoogroups.com>
> Sent: Sat, Jan 24, 2015 8:29 pm
> Subject: RE: [SkyWires] inside the loop
>
>
>
> You could model it with MMANA
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>
>
> _____
>
> From: SkyWires@yahoogroups.com [mailto:SkyWires@yahoogroups.com]
> Sent: Saturday, January 24, 2015 6:20 PM
> To: SkyWires@yahoogroups.com
> Subject: [SkyWires] inside the loop
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> wondering if anyone has played with the space inside of a loop? I have a
> 1100 foot loop up just about in a perfect sqaure and was thinking about
> putting a 160m dipole inside of it from diagonal corners... Anyone have
> further info?
>
>
>
> Jay KB8O
>
>

4493. AW: [SkyWires] inside the loop

Yahoo group: SkyWires
Date: 2015-01-25 17:34:56 UTC
From: siegfried jackstien
Topic: 4482 Message: 4493

A tennis ball launcher will put you on that list???

In some states in the us you can run around with a gun ... and a tennis ball launcher (with compressed air and no explosives) is counted as a teroorists weapon??? ... wow ... how complicated weapons law can be :-)

www.antennalaunchers.com

that is where I get the idea from

but ... I added such a sprinkler valve plus barrel to a garden sprayer

and so I have the tank with pressure gauge and pump included

easy to work with (and not as dangerous as using a bow and arrow or fishing weight plus sling-shot)

Slightly weighted tennis ball comes out with only 30-50 miles (roughly half the speed of a tennis serve) and so it is not dangerous even if you hit somebody with that ball

......

Greetz

Sigi

Dg9bfc

> -----Ursprüngliche Nachricht-----
> Von: SkyWires@yahoogroups.com [mailto:SkyWires@yahoogroups.com]
> Gesendet: Sonntag, 25. Januar 2015 17:11
> An: SkyWires@yahoogroups.com
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> Dg9bfc
>
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> Ps when not in use for antennas I play with my dog with my homebrewed
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> > -----Ursprüngliche Nachricht-----
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> > Gesendet: Sonntag, 25. Januar 2015 02:05
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> > From: 'D. Scott MacKenzie' kb0fhp@... [SkyWires]
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> > To: SkyWires <SkyWires@yahoogroups.com>
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> > further info?
> >
> >
> >
> > Jay KB8O
> >
> >
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>

4494. Re: [SkyWires] inside the loop

Yahoo group: SkyWires
Date: 2015-01-25 18:21:22 UTC
From: Evan Rolek
Topic: 4482 Message: 4494

It is a matter of interpretation with regard to local laws. Some of the "antenna launchers" fit within the definition of "zip gun" so it is hard to know what the results might be.

-----Original Message-----
From: 'siegfried jackstien' siegfried.jackstien@... [SkyWires] <SkyWires@yahoogroups.com>
To: SkyWires <SkyWires@yahoogroups.com>
Sent: Sun, Jan 25, 2015 12:37 pm
Subject: AW: [SkyWires] inside the loop

A tennis ball launcher will put you on that list???

In some states in the us you can run around with a gun ... and a tennis ball launcher (with compressed air and no explosives) is counted as a teroorists weapon??? ... wow ... how complicated weapons law can be :-)

www.antennalaunchers.com

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but ... I added such a sprinkler valve plus barrel to a garden sprayer

and so I have the tank with pressure gauge and pump included

easy to work with (and not as dangerous as using a bow and arrow or fishing weight plus sling-shot)

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Greetz

Sigi

Dg9bfc

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> Von: SkyWires@yahoogroups.com [mailto:SkyWires@yahoogroups.com]
> Gesendet: Sonntag, 25. Januar 2015 17:11
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> > From: SkyWires@yahoogroups.com [mailto:SkyWires@yahoogroups.com]
> > Sent: Saturday, January 24, 2015 8:56 PM
> > To: SkyWires@yahoogroups.com
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> > From: 'D. Scott MacKenzie' kb0fhp@... [SkyWires]
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> > To: SkyWires <SkyWires@yahoogroups.com>
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> > You could model it with MMANA
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> > From: SkyWires@yahoogroups.com [mailto:SkyWires@yahoogroups.com]
> > Sent: Saturday, January 24, 2015 6:20 PM
> > To: SkyWires@yahoogroups.com
> > Subject: [SkyWires] inside the loop
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> >
> > Jay KB8O
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4495. RE: [SkyWires] inside the loop

Yahoo group: SkyWires
Date: 2015-01-25 20:32:47 UTC
From: D. Scott MacKenzie
Topic: 4482 Message: 4495

But guns - and owning several hundred of them is fine and as American as apple pie. It is what makes America great

_____

From: SkyWires@yahoogroups.com [mailto:SkyWires@yahoogroups.com]
Sent: Sunday, January 25, 2015 1:21 PM
To: SkyWires@yahoogroups.com
Subject: Re: [SkyWires] inside the loop

It is a matter of interpretation with regard to local laws. Some of the "antenna launchers" fit within the definition of "zip gun" so it is hard to know what the results might be.

-----Original Message-----
From: 'siegfried jackstien' siegfried.jackstien@... [SkyWires] <SkyWires@yahoogroups.com>
To: SkyWires <SkyWires@yahoogroups.com>
Sent: Sun, Jan 25, 2015 12:37 pm
Subject: AW: [SkyWires] inside the loop

A tennis ball launcher will put you on that list???

In some states in the us you can run around with a gun ... and a tennis ball launcher (with compressed air and no explosives) is counted as a teroorists weapon??? ... wow ... how complicated weapons law can be :-)

www.antennalaunchers.com

that is where I get the idea from

but ... I added such a sprinkler valve plus barrel to a garden sprayer

and so I have the tank with pressure gauge and pump included

easy to work with (and not as dangerous as using a bow and arrow or fishing weight plus sling-shot)

Slightly weighted tennis ball comes out with only 30-50 miles (roughly half the speed of a tennis serve) and so it is not dangerous even if you hit somebody with that ball

.....

Greetz

Sigi

Dg9bfc

> -----Ursprüngliche Nachricht-----
> Von: SkyWires@yahoogroups.com [mailto:SkyWires@yahoogroups.com
<mailto:SkyWires@yahoogroups.com?>]
> Gesendet: Sonntag, 25. Januar 2015 17:11
> An: SkyWires@yahoogroups.com
> Betreff: RE: [SkyWires] inside the loop
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> Building something that in the US will put you on a terrorist watch
> list...
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> _____
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<mailto:SkyWires@yahoogroups.com?>]
> Sent: Sunday, January 25, 2015 12:02 PM
> To: SkyWires@yahoogroups.com
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>
> Build yourself a tennis ball cannon and then antenna building is just fun
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> Dg9bfc
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> Sigi
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> Ps when not in use for antennas I play with my dog with my homebrewed
> "cannon"
>
> > -----Ursprüngliche Nachricht-----
> > Von: SkyWires@yahoogroups.com [mailto:SkyWires@yahoogroups.com
<mailto:SkyWires@yahoogroups.com?>]
> > Gesendet: Sonntag, 25. Januar 2015 02:05
> > An: SkyWires@...m
> > Betreff: RE: [SkyWires] inside the loop
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> > If the antenna isnt up - faster to model. It takes me forever to build
> > and hoist in the trees.
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> > _____
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> > From: SkyWires@yahoogroups.com [mailto:SkyWires@yahoogroups.com
<mailto:SkyWires@yahoogroups.com?>]
> > Sent: Saturday, January 24, 2015 8:56 PM
> > To: SkyWires@yahoogroups.com
> > Subject: Re: [SkyWires] inside the loop
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> > -----Original Message-----
> > From: 'D. Scott MacKenzie' kb0fhp@... [SkyWires]
> > <SkyWires@yahoogroups.com>
> > To: SkyWires <SkyWires@yahoogroups.com>
> > Sent: Sat, Jan 24, 2015 8:29 pm
> > Subject: RE: [SkyWires] inside the loop
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<mailto:SkyWires@yahoogroups.com?>]
> > Sent: Saturday, January 24, 2015 6:20 PM
> > To: SkyWires@yahoogroups.com
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4496. RE: [SkyWires] inside the loop

Yahoo group: SkyWires
Date: 2015-01-25 20:44:05 UTC
From: D. Scott MacKenzie
Topic: 4482 Message: 4496

One thing that simple empirical testing can not, is distortions to pattern. You may not see any interactions with the SWR, but the pattern could be distorted or enhanced.

_____

From: SkyWires@yahoogroups.com [mailto:SkyWires@yahoogroups.com]
Sent: Sunday, January 25, 2015 1:21 PM
To: SkyWires@yahoogroups.com
Subject: Re: [SkyWires] inside the loop

It is a matter of interpretation with regard to local laws. Some of the "antenna launchers" fit within the definition of "zip gun" so it is hard to know what the results might be.

-----Original Message-----
From: 'siegfried jackstien' siegfried.jackstien@... [SkyWires]
<SkyWires@...m>
To: SkyWires <SkyWires@yahoogroups.com>
Sent: Sun, Jan 25, 2015 12:37 pm
Subject: AW: [SkyWires] inside the loop

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that is where I get the idea from

but ... I added such a sprinkler valve plus barrel to a garden sprayer

and so I have the tank with pressure gauge and pump included

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Slightly weighted tennis ball comes out with only 30-50 miles (roughly half the speed of a tennis serve) and so it is not dangerous even if you hit somebody with that ball

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Greetz

Sigi

Dg9bfc

> -----Ursprüngliche Nachricht-----
> Von: SkyWires@yahoogroups.com [mailto:SkyWires@yahoogroups.com
<mailto:SkyWires@yahoogroups.com?>]
> Gesendet: Sonntag, 25. Januar 2015 17:11
> An: SkyWires@yahoogroups.com
> Betreff: RE: [SkyWires] inside the loop
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> To: SkyWires@yahoogroups.com
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> > Von: SkyWires@yahoogroups.com [mailto:SkyWires@yahoogroups.com
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> > An: SkyWires@yahoogroups.com
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4497. Re: [SkyWires] inside the loop

Yahoo group: SkyWires
Date: 2015-01-25 22:04:47 UTC
From: Evan Rolek
Topic: 4482 Message: 4497

Absolutely. That is why the empirical test is a coarse estimate.

-----Original Message-----
From: 'D. Scott MacKenzie' kb0fhp@... [SkyWires] <SkyWires@yahoogroups.com>
To: SkyWires <SkyWires@yahoogroups.com>
Sent: Sun, Jan 25, 2015 3:44 pm
Subject: RE: [SkyWires] inside the loop

One thing that simple empirical testing cannot, is distortions to pattern. You may not see any interactions with the SWR,but the pattern could be distorted or enhanced.

From: SkyWires@yahoogroups.com [mailto:SkyWires@yahoogroups.com]
Sent: Sunday, January 25, 20151:21 PM
To: SkyWires@yahoogroups.com
Subject: Re: [SkyWires] inside theloop

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From: 'siegfried jackstien' siegfried.jackstien@... [SkyWires] <SkyWires@yahoogroups.com>
To: SkyWires <SkyWires@yahoogroups.com>
Sent: Sun, Jan 25, 2015 12:37 pm
Subject: AW: [SkyWires] inside the loop

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Greetz

Sigi

Dg9bfc

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> Von: SkyWires@yahoogroups.com[mailto:SkyWires@yahoogroups.com]
> Gesendet: Sonntag, 25. Januar 2015 17:11
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> > Von: SkyWires@yahoogroups.com[mailto:SkyWires@yahoogroups.com]
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> > Jay KB8O
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4498. Question about ground a loop antenna

Yahoo group: SkyWires
Date: 2015-01-26 18:49:10 UTC
From: joel1847@...
Topic: 4498 Message: 4498

I've got a 1550'-ish size loop, not quite a rectangle cause I had to go around some buildings and tried to get away from some power lines. The loop is run through the olive trees and averages about 10 feet off the ground. Wire is 10 and 12 gauge THHN and insulated from the trees using electric fence insulators. Feedline is a crazy idea I had using 12-2 Romex as a parallel feeder and I made two chokes at either end of the feeder using the black and white wires wrapped around an 8 inch bolt and then wrapped the whole thing in electrical tape to keep the wires intact. Kinda of a hairbrained idea, but it does work well.

My question is, has anyone used a separate ground wire under the loop to minimize ground losses and then just feed the loop as an end fed? I've got a big roll of aluminum electrical fence wire that I could string along under the loop if it would make a difference.

The main reason I went with a loop was because I've got two 12.5kva high voltage lines on two side of the property and during the dry months, the noise is absolutely horrid.

Thanks

Joel
kj6dif
norcal

4499. Re: [SkyWires] Question about ground a loop antenna

Yahoo group: SkyWires
Date: 2015-01-26 19:15:14 UTC
From: Evan Rolek
Topic: 4498 Message: 4499

Joel,

As a user of horizontal loops, and having done some research, I'm not an expert but I'll afford some observations/experiences.

The effect of a ground wire under the loop depends on the ground conductivity in the area. If it is good, you might see minimal to no effect. If the conductivity is poor, then you might see an improvement but, if you do, it depends on the frequency you are operating on and the percentage of wavelength spacing between the loop and the ground wire.

My guess is that you have some feedline loss there. The Romex has spacing that is less than 300 ohm transmitting twinlead and so you have some degree of mismatch depending on what bands you operate. Feedline chokes are typically used with coax, not parallel feedlines and I suspect the chokes at either end are quite lossy and may be upsetting the balance of the feedline conductors.

I'm sure some experts can offer their guidance which will be more informed than what I can provide.

73,

Evan, K9SQG

-----Original Message-----
From: joel1847@... [SkyWires] <SkyWires@yahoogroups.com>
To: SkyWires <SkyWires@yahoogroups.com>
Sent: Mon, Jan 26, 2015 1:49 pm
Subject: [SkyWires] Question about ground a loop antenna

I've got a 1550'-ish size loop, not quite a rectangle cause I had to go around some buildings and tried to get away from some power lines. The loop is run through the olive trees and averages about 10 feet off the ground. Wire is 10 and 12 gauge THHN and insulated from the trees using electric fence insulators. Feedline is a crazy idea I had using 12-2 Romex as a parallel feeder and I made two chokes at either end of the feeder using the black and white wires wrapped around an 8 inch bolt and then wrapped the whole thing in electrical tape to keep the wires intact. Kinda of a hairbrained idea, but it does work well.

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The main reason I went with a loop w as because I've got two 12.5kva high voltage lines on two side of the property and during the dry months, the noise is absolutely horrid.

Thanks

Joel
kj6dif
norcal

4500. Re: [SkyWires] Question about ground a loop antenna

Yahoo group: SkyWires
Date: 2015-01-26 23:57:23 UTC
From: joel1847@...
Topic: 4498 Message: 4500

Looks like Yahoo ate my other response so here's another.

I originally fed this loop with a long chunk of RG-6, which at HF should have been fairly low loss at QRP levels. When I tried the Romex, there was a significant increase in signals heard, so I assumed it was a lower loss. I messed up though and didn't test before and after using the chokes, so I can't say anything about the usefullness of them without cutting them out of the system. I've got some other testing I'd like to do before I do that though. I went with Romex as I was trying to go for low loss and was trying to match the impedance of the loop as best I could without using a lossy balun. I read somewhere that the lower to the ground the loop is the lower the impedance, but you end up with more ground losses which is why I was hoping to limit that somehow.

Joel
kj6dif
norcal

4501. Antenna interactions

Yahoo group: SkyWires
Date: 2015-01-27 15:08:58 UTC
From: Evan Rolek
Topic: 4498 Message: 4501

Forgot to mention an observation which I believe is common knowledge. However, sometimes we need refreshing, I know I do, hi hi.

I have two antennas currently, basically a 40 m and 80 m horizontal loop. Even if the unused antenna is on a non-resonant band/frequency, it still picks up RF energy; it is, after all an antenna. An issue arises when the feedline of the unused antenna comes into the shack. It will be bringing RF into the station and going to an antenna tuner, possibly to a balun (which has a terminal connected to "ground"), or left hanging by being unterminated. Depending on station specifics, this may or may not cause problems like RF on transmitted audio, causing meter deflection on the tuner for the unused antenna, etc. Hence, whether the unused antenna affects the radiation pattern of the antenna in use, there is still the possible issue with RF in the shack. How it manifests itself depends on site specifics.
I've had my share of experiences with the above issue but not sure how widespread it is. At any rate, I enjoy using my horizontal loop antennas.

73,

Evan, K9SQG

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Reply to group

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•

Messages in this topic (3)

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4502. Re: [SkyWires] Question about ground a loop antenna

Yahoo group: SkyWires
Date: 2015-01-27 22:31:17 UTC
From: Andy
Topic: 4498 Message: 4502

If I read correctly, you are asking about using your loop as a monopole, or as a top hat capacitive load on a vertical wire in the vicinity of the loop.

Those who love loops might wonder why you would do that. Surely your loop is big enough to cover even 160 meters. And I think you would lose the balanced loop's ability to reject QRM from the power lines (though that ability might be compromised with it being so close to the HV lines). Feeding the loop against the reflector wire on the ground, makes your antenna unbalanced, and more susceptible to some kinds of noise.

From what I have seen on the 'net, there doesn't seem to be nearly as much experience from people using a "ground" or reflector wire under a loop, as there is people asking or talking about trying it. People doing NVIS talk about trying it, but that would be using the loop as a loop, not as an end-fed monopole.

Romex might have somewhat higher loss than an open wire feedline because more of the environment around the wires is filled with plastic. The beauty of open wire feedline is that the dielectric around it is 95-100% low-loss air. Coax replaces much of that air with plastic, which is why it has more loss. But other than that, Romex might not be such a bad idea. You may have seen the criticism about using zip cord as feedline; it seems it makes a good antenna but might be a poor feedline.

I don't see your choke baluns being a problem either. They are transmission line transformers and the bolt used as the core is energized only by common-mode signals, so if the core gets lossy to those signals, that should be seen as a good thing. The normal differential-mode signal shouldn't "see" the bolt.

Andy

4504. Re: [SkyWires] Question about ground a loop antenna

Yahoo group: SkyWires
Date: 2015-01-31 03:58:48 UTC
From: Evan Rolek
Topic: 4498 Message: 4504

It seems that iron/steel are used as cores for transformers in the 60 hz region. However, none of the commercial manufacturers that I know of use iron, only ferrite. Is there some hidden advantage to using a steel bolt as a balun core? Inquiring minds want to know...

73,

Evan, K9SQG

-----Original Message-----
From: Andy ai.egrps@... [SkyWires] <SkyWires@yahoogroups.com>
To: SkyWires <SkyWires@yahoogroups.com>
Sent: Tue, Jan 27, 2015 5:32 pm
Subject: Re: [SkyWires] Question about ground a loop antenna

If I read correctly, you are asking about using your loop as a monopole, or as a top hat capacitive load on a vertical wire in the vicinity of the loop.

Those who love loops might wonder why you would do that. Surely your loop is big enough to cover even 160 meters. And I think you would lose the balanced loop's ability to reject QRM from the power lines (though that ability might be compromised with it being so close to the HV lines). Feeding the loop against the reflector wire on the ground, makes your antenna unbalanced, and more susceptible to some kinds of noise.

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Andy

4505. Re: [SkyWires] Question about ground a loop antenna

Yahoo group: SkyWires
Date: 2015-01-31 20:08:53 UTC
From: joel1847@...
Topic: 4498 Message: 4505

No hidden reason that I know of. It was just an experiment with what I had on hand really. I try to use what I have on hand or can get locally so that I can obtain spare parts easily. I really don't like to have to rely on mail order stuff to build or complete projects and I like to have redundant backups. 5 years 10 months of Navy training really hammered that home. The homebrew "baluns" or chokes might be lossy or they might not. I should have tested them before installing them so I would know for sure. Unfortunately it's part of the feedline so doing it after the fact might not be possible without cutting the line. I was thinking that I wanted to keep out any common mode currents and possibly keep out as much powerline noise as possible. And the bolt had these nice threads that helped me to keep the wires spaced just right. A larger diameter bolt with different pitch might be better to keep the impedance more uniform with the close spacing of the Romex. Part of the low lossness (is that a word?) of ladderline has to do with the diameter of the conductors, so I figured with a 12 or 10 gauge Romex, it should be close to ladderline losses. Plus it was free and I wouldn't want to use it for electrical as the outer jacket had some cracks in it which didn't really matter to me if I used it for a feedline as long as the two inner conductor jackets were okay. I need to do some testing, but so far it works smoking hot on 30 and 20. I should probably put up a reference antenna to compare it to (again). It's way better than the G5RV and the 40-10 vertical I had up, although the vertical was better than the G5RV. It's been fun and the only cost I have in this huge loop is the fence insulators. Everything else was free.

Joel
norcal
kj6dif

4506. Wire supports

Yahoo group: SkyWires
Date: 2015-02-01 19:02:34 UTC
From: D. Scott MacKenzie
Topic: 4506 Message: 4506

Looking at putting up a loop again. Tried putting in trees, but keeps coming down. Looking over my small yard, I came to the conclusion that my fence is just the right size for a loop, with a nearly square circumference of 260 feet. So, putting up a loop at each of the four corners would work nicely. What I was looking at doing, was making some supports about 25-35 feet tall using PVC pipe. If I pick the sizes carefully for proper nesting, I can split the ends and use muffler clamps to hold them together. I can paint them a forest green or similar to hide them although there is no reason to do so as my community encourages ham radio. Even on my small lot I can put up to a 90' tower with out permits.

Any downside to using PVC as a support?

Scott

4507. AW: [SkyWires] Wire supports

Yahoo group: SkyWires
Date: 2015-02-01 20:12:23 UTC
From: siegfried jackstien
Topic: 4506 Message: 4507

Will get brittle ... why not use fibre glass tent poles?!? (milgrade ... used for camouflage nets .... already in dark green hi hi)

I would not use pvc tubing for 35 feet height

You can use that for maybe 25 feet but the tubes will break after a short time

And you have to use some guy wires/ropes ... your loop will pull the poles (regardless if pvc or fibre glass) innerwards ... so some guying is needed anyway

Good luck :-)

Dg9bfc

Sigi

> -----Ursprüngliche Nachricht-----
> Von: SkyWires@yahoogroups.com [mailto:SkyWires@yahoogroups.com]
> Gesendet: Sonntag, 1. Februar 2015 19:03
> An: SkyWires@yahoogroups.com
> Betreff: [SkyWires] Wire supports
>
>
>
> Looking at putting up a loop again. Tried putting in trees, but keeps
> coming down. Looking over my small yard, I came to the conclusion that my
> fence is just the right size for a loop, with a nearly square
> circumference of 260 feet. So, putting up a loop at each of the four
> corners would work nicely. What I was looking at doing, was making some
> supports about 25-35 feet tall using PVC pipe. If I pick the sizes
> carefully for proper nesting, I can split the ends and use muffler clamps
> to hold them together. I can paint them a forest green or similar to hide
> them although there is no reason to do so as my community encourages ham
> radio. Even on my small lot I can put up to a 90' tower with out permits.
>
>
>
> Any downside to using PVC as a support?
>
>
>
> Scott
>
>

4508. Re: [SkyWires] Wire supports

Yahoo group: SkyWires
Date: 2015-02-01 22:12:13 UTC
From: Evan Rolek
Topic: 4506 Message: 4508

Scott,

My experience is that PVC pipe bends over time due to UV exposure and/or sustained pressure/pulling. Have had much better luck with fiberglass masts that I have been using for almost 20 years.

73,

Evan, K9SQG

-----Original Message-----
From: 'D. Scott MacKenzie' kb0fhp@verizon.net [SkyWires] <SkyWires@yahoogroups.com>
To: SkyWires <SkyWires@yahoogroups.com>
Sent: Sun, Feb 1, 2015 2:02 pm
Subject: [SkyWires] Wire supports

Looking at putting up a loop again. Tried putting intrees, but keeps coming down. Looking over my small yard, I came to theconclusion that my fence is just the right size for a loop, with a nearly squarecircumference of 260 feet. So, putting up a loop at each of the four cornerswould work nicely. What I was looking at doing, was making some supportsabout 25-35 feet tall using PVC pipe. If I pick the sizes carefully forproper nesting, I can split the ends and use muffler clamps to hold themtogether. I can paint them a forest green or similar to hide themalthough there is no reason to do so as my community encourages ham radio. Evenon my small lot I can put up to a 90' tower with out permits.

Any downside to using PVC as a support?

Scott

4509. RE: [SkyWires] Wire supports

Yahoo group: SkyWires
Date: 2015-02-01 23:57:08 UTC
From: D. Scott MacKenzie
Topic: 4506 Message: 4509

I agree that fiberglass is a much better solution. The advantage is that PVC is cheap, and I can make each support for about $10-15. Since only going up about 25-35 feet, easy to replace and nothing lost if it doesnt work. If I am satisfied with the antenna performance I can then look at upgrading the supports.

From: SkyWires@yahoogroups.com [mailto:SkyWires@yahoogroups.com]
Sent: Sunday, February 01, 2015 5:12 PM
To: SkyWires@yahoogroups.com
Subject: Re: [SkyWires] Wire supports

Scott,

My experience is that PVC pipe bends over time due to UV exposure and/or sustained pressure/pulling. Have had much better luck with fiberglass masts that I have been using for almost 20 years.

73,

Evan, K9SQG

-----Original Message-----
From: 'D. Scott MacKenzie' kb0fhp@... [SkyWires]
<SkyWires@yahoogroups.com>
To: SkyWires <SkyWires@yahoogroups.com>
Sent: Sun, Feb 1, 2015 2:02 pm
Subject: [SkyWires] Wire supports

Looking at putting up a loop again. Tried putting in trees, but keeps coming down. Looking over my small yard, I came to the conclusion that my fence is just the right size for a loop, with a nearly square circumference of 260 feet. So, putting up a loop at each of the four corners would work nicely. What I was looking at doing, was making some supports about 25-35 feet tall using PVC pipe. If I pick the sizes carefully for proper nesting, I can split the ends and use muffler clamps to hold them together. I can paint them a forest green or similar to hide them although there is no reason to do so as my community encourages ham radio. Even on my small lot I can put up to a 90' tower with out permits.

Any downside to using PVC as a support?

Scott

4510. Re: [SkyWires] Wire supports

Yahoo group: SkyWires
Date: 2015-02-02 03:49:39 UTC
From: Rich Schmuke
Topic: 4506 Message: 4510

I tried a PVC support and found two sections that would nest together. I inserted the smaller one into the larger with the slight natural curve in opposite direction so it would be as straight as possible. Glued the parts together but it only took a few months for it to bend in the wind just holding up a J-Pole. The PVC will last no time with a side load from a loop, IMHO.
Here is a sketch of the support I use for 20 to 30 ft needs.
http://i1102.photobucket.com/albums/g453/KD0ZZ/Tilt2.jpg
A larger and simpler to make one for 40 to 50ft needs can be found in album. I use it for the feed support for my 160M size delta loop.
http://i1102.photobucket.com/albums/g453/KD0ZZ/TiltOverB-1.jpg
The other two points are in trees with a counter balance on pulleys .

Rich, KdØzz

On Sun, Feb 1, 2015 at 1:02 PM, 'D. Scott MacKenzie' kb0fhp@...
[SkyWires] <SkyWires@yahoogroups.com> wrote:

>
>
> Looking at putting up a loop again. Tried putting in trees, but keeps
> coming down. Looking over my small yard, I came to the conclusion that my
> fence is just the right size for a loop, with a nearly square circumference
> of 260 feet. So, putting up a loop at each of the four corners would work
> nicely. What I was looking at doing, was making some supports about 25-35
> feet tall using PVC pipe. If I pick the sizes carefully for proper
> nesting, I can split the ends and use muffler clamps to hold them
> together. I can paint them a forest green or similar to hide them although
> there is no reason to do so as my community encourages ham radio. Even on
> my small lot I can put up to a 90' tower with out permits.
>
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>
> Any downside to using PVC as a support?
>
>
>
> Scott
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>

4511. AW: [SkyWires] Wire supports

Yahoo group: SkyWires
Date: 2015-02-02 09:27:11 UTC
From: siegfried jackstien
Topic: 4506 Message: 4511

Here in dl you can get the used camouflage net poles for around 3 dollar each (military surplus)... makes25-30 bucks for your needed height (and will last forever)

Dg9bfc

Sigi

Ps ... buy cheap, buy twice ...

> -----Ursprüngliche Nachricht-----
> Von: SkyWires@yahoogroups.com [mailto:SkyWires@yahoogroups.com]
> Gesendet: Sonntag, 1. Februar 2015 23:57
> An: SkyWires@yahoogroups.com
> Betreff: RE: [SkyWires] Wire supports
>
>
>
> I agree that fiberglass is a much better solution. The advantage is that
> PVC is cheap, and I can make each support for about $10-15. Since only
> going up about 25-35 feet, easy to replace and nothing lost if it doesnt
> work. If I am satisfied with the antenna performance I can then look at
> upgrading the supports.
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> _____
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> From: SkyWires@yahoogroups.com [mailto:SkyWires@yahoogroups.com]
> Sent: Sunday, February 01, 2015 5:12 PM
> To: SkyWires@yahoogroups.com
> Subject: Re: [SkyWires] Wire supports
>
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>
> Scott,
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>
> My experience is that PVC pipe bends over time due to UV exposure and/or
> sustained pressure/pulling. Have had much better luck with fiberglass
> masts that I have been using for almost 20 years.
>
>

>
> 73,
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>
> Evan, K9SQG
>
>
>
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>
> -----Original Message-----
> From: 'D. Scott MacKenzie' kb0fhp@verizon.net [SkyWires]
> <SkyWires@yahoogroups.com>
> To: SkyWires <SkyWires@yahoogroups.com>
> Sent: Sun, Feb 1, 2015 2:02 pm
> Subject: [SkyWires] Wire supports
>
>
>
> Looking at putting up a loop again. Tried putting in trees, but keeps
> coming down. Looking over my small yard, I came to the conclusion that my
> fence is just the right size for a loop, with a nearly square
> circumference of 260 feet. So, putting up a loop at each of the four
> corners would work nicely. What I was looking at doing, was making some
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> to hold them together. I can paint them a forest green or similar to hide
> them although there is no reason to do so as my community encourages ham
> radio. Even on my small lot I can put up to a 90' tower with out permits.
>
>
>
> Any downside to using PVC as a support?
>
>
>
> Scott
>
>

4512. Re: AW: [SkyWires] Wire supports

Yahoo group: SkyWires
Date: 2015-02-02 18:53:03 UTC
From: mibalienhunter@...
Topic: 4506 Message: 4512

Here is what I used, their light gray color blends right into the sky and back ground, no painting needed, just unscrew the brass ball off the top. plus it already has connectors for the flags that I used for hanging my wire. and real easy to raise and lower if wire repair or changes need an being aluminum it last of ever !

Good luck ! http://www.harborfreight.com/20-ft-telescoping-flag-pole-kit-95600.html
http://www.harborfreight.com/20-ft-telescoping-flag-pole-kit-95600.html

4513. Re: Wire supports

Yahoo group: SkyWires
Date: 2015-02-04 22:54:55 UTC
From: mibalienhunter@...
Topic: 4506 Message: 4513

Here is what I used, their light gray color (aluminum) blends right into the sky and back ground, no painting needed, just unscrew the brass ball off the top. plus it already has connectors for the flags that I used for hanging my wire. and real easy to raise and lower if wire repair or changes need an being aluminum it last of ever !

Good luck ! http://www.harborfreight.com/20-ft-telescoping-flag-pole-kit-95600.html
http://www.harborfreight.com/20-ft-telescoping-flag-pole-kit-95600.html

4514. Alpha Delta DX-B for 160, 80, 40, 30m

Yahoo group: SkyWires
Date: 2015-02-05 22:10:15 UTC
From: pa0tbr@...
Topic: 4514 Message: 4514

Hi,
I want to expand my activity to 160, 80, 40, and 30m but have not much space to put up much of an antenna for these bands. I laid my eyes on the Alpha Delta DX-B which matches the space I have available.
I have a pole with Hex beam on my concrete roof and could mount the DX-B about 4m above the roof. I am interested in working DX, not local rag chew.

Before I order I like to hear of any experience, good or bad, with this antenna.

I know that bigger and higher is better but I don't have space for bigger and legislation restricts the height.

73,
Ton PA0TBR

4515. AW: [SkyWires] Alpha Delta DX-B for 160, 80, 40, 30m

Yahoo group: SkyWires
Date: 2015-02-05 23:45:34 UTC
From: siegfried jackstien
Topic: 4514 Message: 4515

It will work for these bands ... but on the lower bands it sure will be a cloudburner (not very good for dx)

Greetz

Sigi

Dg9bfc

> -----Ursprüngliche Nachricht-----
> Von: SkyWires@yahoogroups.com [mailto:SkyWires@yahoogroups.com]
> Gesendet: Donnerstag, 5. Februar 2015 22:10
> An: SkyWires@yahoogroups.com
> Betreff: [SkyWires] Alpha Delta DX-B for 160, 80, 40, 30m
>
>
>
> Hi,
>
> I want to expand my activity to 160, 80, 40, and 30m but have not much
> space to put up much of an antenna for these bands. I laid my eyes on the
> Alpha Delta DX-B which matches the space I have available.
>
> I have a pole with Hex beam on my concrete roof and could mount the DX-B
> about 4m above the roof. I am interested in working DX, not local rag
> chew.
>
>
>
>
>
> Before I order I like to hear of any experience, good or bad, with this
> antenna.
>
>
>
>
> I know that bigger and higher is better but I don't have space for bigger
> and legislation restricts the height.
>
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>
>
> 73,
>
> Ton PA0TBR

>
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>

4516. Re: AW: [SkyWires] Alpha Delta DX-B for 160, 80, 40, 30m

Yahoo group: SkyWires
Date: 2015-02-06 20:41:48 UTC
From: pa0tbr@...
Topic: 4514 Message: 4516

Thank you Sigi,

My interest is to use the DX-B for 160 - 30m. The Hex beam covers 20 - 6m very well.

73,
Ton PA0TBR

4517. AW: AW: [SkyWires] Alpha Delta DX-B for 160, 80, 40, 30m

Yahoo group: SkyWires
Date: 2015-02-06 22:40:37 UTC
From: siegfried jackstien
Topic: 4514 Message: 4517

Youre welcome :-)

For dx on the low bands you need a vertical (a low hanging dipole is a cloudburner)

What about an inverted l antenna?!? .. what you need is a low radiation angle ... and that does not work with a dipole close to ground (and for 160 any height is close to ground cause you can not lift the dipole up to 80m height)

So ... faor ragchewing to the next states your dipole will work fine ... for dx not cause it is just hanging tooo low over ground

Greetz

Sigi

Dg9bfc

> -----Ursprüngliche Nachricht-----
> Von: SkyWires@yahoogroups.com [mailto:SkyWires@yahoogroups.com]
> Gesendet: Freitag, 6. Februar 2015 20:42
> An: SkyWires@yahoogroups.com
> Betreff: Re: AW: [SkyWires] Alpha Delta DX-B for 160, 80, 40, 30m
>
>
>
> Thank you Sigi,
>
> My interest is to use the DX-B for 160 - 30m. The Hex beam covers 20 - 6m
> very well.
>
> 73,
> Ton PA0TBR
>
>
>

4518. Re: Alpha Delta DX-B for 160, 80, 40, 30m

Yahoo group: SkyWires
Date: 2015-02-08 20:56:02 UTC
From: pa0tbr@...
Topic: 4514 Message: 4518

ok sIGI,

I now understand what you said in your first message.
Back to the drawing board then....
I am looking into
http://www.iw5edi.com/wp-content/uploads/2012/12/InvertedL-160-80-40mG0CSK.pdf
http://www.iw5edi.com/wp-content/uploads/2012/12/InvertedL-160-80-40mG0CSK.pdf which is an inverted L, but shaped in a way which I might be able to accommodate at my QTH. In addition, I can put up something else for 30m.

73,
Ton PA0TBR

4519. Sharing what i built recently Full size 160 loop

Yahoo group: SkyWires
Date: 2015-02-09 11:40:30 UTC
From: email4utoo@...
Topic: 4519 Message: 4519

Ok, Just built 160 meter Full Loop, 550ft square , fed with homemade ladder line with 3 " spreaders - about 150ft long feed , no Coax, into oldie but goodie, Heathkit 2060A Tuner .

Four Poles up about 38ft - are those EMT conduit pipes from 2 1/4 " down to 3/4 inch , so 5 total x 10ft sections , slid together about 22", can be bolted or MIG weld nuts with set screw as i did , then short PVC shoved and grounded to fit and screw in, , with T to run Paracord or rope to pulley then to insulator to hold wire ,these Poles are flexable and bend some , so do not let it worry yahs, used a clete like on boat masts to tie each individual line , (you can use these lines as a guy, as i did on a couple) ,, used 12 GA , but i would use 14 ga next time, due to snap spreaders available for 14GA wire , easier and faster to make your own ladder line .

Working fine so far on 160 ,80, 40, 20 meters ,with SWRs 1.1- 1.25 , a friend is coming over with Antenna Analyzer to check it all out .
I do notice it loads much easier when wet from rain , so any suggestions would be helpful .
Getting Great Reports , and it is quiet and has very good ears .

With all that said, i am studying other Wire Antennas, like a Double Horizontal Delta Loop one over another feed the top and reflect from the bottom , one will fit inside the other , This Operator had a very strong signal .
The other is a Wire Beam , and Joe Carr's Diamond with ladderline goes thru the center . I have not used Antenna Software would be fun to use once mastered .

Hope this helps someone considering a long Loop, simple brief , any questions , i am good on QRZ d . 73s, AJ W5HEH

4520. AW: [SkyWires] Re: Alpha Delta DX-B for 160, 80, 40, 30m

Yahoo group: SkyWires
Date: 2015-02-09 22:14:30 UTC
From: siegfried jackstien
Topic: 4514 Message: 4520

Can you lay down a few dozens of radials?!?

The inverted l (and all other antennas that are fed against ground) needs a GOOD radialfield below it to work good (otherwise you are cooking the worms in your garden)

Greetz

Sigi

Ps good luck with any antenna project :-)

> -----Ursprüngliche Nachricht-----
> Von: SkyWires@yahoogroups.com [mailto:SkyWires@yahoogroups.com]
> Gesendet: Sonntag, 8. Februar 2015 20:56
> An: SkyWires@yahoogroups.com
> Betreff: [SkyWires] Re: Alpha Delta DX-B for 160, 80, 40, 30m
>
>
>
> ok sIGI,
>
> I now understand what you said in your first message.
> Back to the drawing board then....
> I am looking into http://www.iw5edi.com/wp-
> content/uploads/2012/12/InvertedL-160-80-40mG0CSK.pdf which is an inverted
> L, but shaped in a way which I might be able to accommodate at my QTH. In
> addition, I can put up something else for 30m.
>
> 73,
> Ton PA0TBR
>
>

4521. Re: Sharing what i built recently Full size 160 loop

Yahoo group: SkyWires
Date: 2015-02-11 01:14:42 UTC
From: w4hkl@...
Topic: 4519 Message: 4521

Sweet antenna!

4522. Re: Sharing what i built recently Full size 160 loop

Yahoo group: SkyWires
Date: 2015-02-11 11:09:18 UTC
From: email4utoo@...
Topic: 4519 Message: 4522

YAh Steve , each day is different EARS WITH IT and tuning is becoming easier ,wrote down the Induction Coil settings on three different bands so far , will have to make copies of the sheet in the Heathkit Tuner Manual , helps a lot as a cheat sheet !
Can't wait to finish my Amp and put some power thru it on hard to hear stations ,will not need it for most , i switch back and forth on Antenna switch from OCF Dipole and there is a Huge Difference most of the time , very few stations stronger on Dipole , surprises me sometimes , lol . 73s, Have Fun building Antennas , AJ W5HEH

4530. New file uploaded to SkyWires

Yahoo group: SkyWires
Date: 2015-03-22 15:10:44 UTC
From: SkyWires@yahoogroups.com
Topic: 1641 Message: 4530

Hello,

This email message is a notification to let you know that
a file has been uploaded to the Files area of the SkyWires
group.

File : /80 Meter horizontal loop.pdf
Uploaded by : everettsharp74 <everettsharp@...>
Description : 80 Meter Loop using a Balun Designs 2.5:1 Balun

You can access this file at the URL:
https://groups.yahoo.com/neo/groups/SkyWires/files/80%20Meter%20horizontal%20loop.pdf

To learn more about file sharing for your group, please visit:
https://help.yahoo.com/kb/index?page=content&y=PROD_GRPS&locale=en_US&id=SLN15398

Regards,

everettsharp74 <everettsharp@...>

4531. Just Installed a loop

Yahoo group: SkyWires
Date: 2015-03-22 15:45:45 UTC
From: everettsharp@...
Topic: 4531 Message: 4531

Yesterday, 3/21/15, I installed a 80 Meter Horizontal Loop that is 264' long, average height of 30', roughly in a rectangle of 50' X 82', with the feed point in one corner, using a Balun Design's, Model 25112 - 2.5:1 Balun 1.5 - 54 MHz - 2kW.
The Balun Design's website recommends using 247' to 251', height dependent. However, this is for a triangle, Delta configuration, but as can be seen from the above I had to use 264' for my rectangle configuration. I used a Rigexpert AA-170 antenna analyzer to help with the tuning process. The antenna works on all bands with the exception of 30 meters. The only disappointing result was how narrow the band width is on 80 meters, with a 3:1 SWR window of 3.5 to 3.876 MHz. The lowest SWR was on the 80 meter band, which was 1.12:1 on 3.678 MHz. One of the very noticeable things about the antenna, is how quite it is over the Windom antenna that I was using. Also I now have a lot more bands available to me with this antenna, than I had with the windom.

Band Bandwidth window@ 2:1 Bandwidth window@ 3:1 Lowest SWR
80M 3.579-3810 3.5-3.876 3.678 1.12:1
40M 7.176-7.44 6.978-7638 7.341 1.83:1
20M 14,463-14.667 13.941-15.063 14.535 1.93:1
17M 17.934-18.165 17.472-18.627 18.0 1.97:1
15M 21.366-21.828 20.937-22.290 21.597 1.69:1
10M 28.527-28.932 27.5-30.045 28.725 1.88:1

Everett N8CNP

4532. Re: [SkyWires] Just Installed a loop

Yahoo group: SkyWires
Date: 2015-03-22 16:03:10 UTC
From: Don Sanders
Topic: 4531 Message: 4532

The loop seems to be working very well. The bandwidth 80 is about normal
and almost 2 X what a dipole will allow. 80 meters is a broad band as
percentages of frequency goes and is the hardest to have full band coverage
without a tuner.
As with most multiband antennas you will probably need a matchbox for
working higher on 80 and for 30 meters. One thing you can do is install a
30 meter inverted vee at the feed point or separately with its own coax
feedline..
Don't fret too much, enjoy your new skyloop.

Dr. Don HC4/W4BWS

On Sun, Mar 22, 2015 at 10:45 AM, everettsharp@... [SkyWires] <
SkyWires@yahoogroups.com> wrote:

>
>
> Yesterday, 3/21/15, I installed a 80 Meter Horizontal Loop that is 264'
> long, average height of 30', roughly in a rectangle of 50' X 82', with the
> feed point in one corner, using a Balun Design's, Model 25112 - 2.5:1
> Balun 1.5 - 54 MHz - 2kW.
>
> The Balun Design's website recommends using 247' to 251', height
> dependent. However, this is for a triangle, Delta configuration, but as can
> be seen from the above I had to use 264' for my rectangle configuration. I
> used a Rigexpert AA-170 antenna analyzer to help with the tuning process.
> The antenna works on all bands with the exception of 30 meters. The only
> disappointing result was how narrow the band width is on 80 meters, with a
> 3:1 SWR window of 3.5 to 3.876 MHz. The lowest SWR was on the 80 meter
> band, which was 1.12:1 on 3.678 MHz. One of the very noticeable things
> about the antenna, is how quite it is over the Windom antenna that I was
> using. Also I now have a lot more bands available to me with this antenna,
> than I had with the windom.
>
>
> Band Bandwidth window@ 2:1 Bandwidth window@ 3:1
> Lowest SWR
>
> 80M 3.579-3810
> 3.5-3.876 3.678 1.12:1
>
> 40M 7.176-7.44
> 6.978-7638 7.341 1.83:1
>
> 20M 14,463-14.667
> 13.941-15.063 14.535 1.93:1

>
> 17M 17.934-18.165
> 17.472-18.627 18.0 1.97:1
>
> 15M 21.366-21.828
> 20.937-22.290 21.597 1.69:1
>
> 10M 28.527-28.932 27.5-30.045
> 28.725 1.88:1
>
> Everett N8CNP
>
>
>
>

4533. Re: [SkyWires] Just Installed a loop

Yahoo group: SkyWires
Date: 2015-03-22 16:18:53 UTC
From: everettsharp@...
Topic: 4531 Message: 4533

Don,

Thanks for the reply and comments. I may trim a little more off of the length after I use it for awhile. Also I have constructed a 2.25:1 balun, copy of the Sevick design, on a F150-K core and will try it on the loop to see if will work as well. I think that the Balun Design's balun uses the same F150 core, wound in the same 2.25:1 configuration, but has a 10 turn bifilar winding on a FT240K core, between the antenna and the 2.25:1 balun.

Everett N8CNP

In a message dated 3/22/2015 11:03:15 A.M. Central Daylight Time, SkyWires@yahoogroups.com writes:

The loop seems to be working very well. The bandwidth 80 is about normal and almost 2 X what a dipole will allow. 80 meters is a broad band as percentages of frequency goes and is the hardest to have full band coverage without a tuner.
As with most multiband antennas you will probably need a matchbox for working higher on 80 and for 30 meters. One thing you can do is install a 30 meter inverted vee at the feed point or separately with its own coax feedline..
Don't fret too much, enjoy your new skyloop.

Dr. Don HC4/W4BWS

On Sun, Mar 22, 2015 at 10:45 AM, _everettsharp@..._ (mailto:everettsharp@...) [SkyWires] <_SkyWires@yahoogroups.com_ (mailto:SkyWires@yahoogroups.com) > wrote:

Yesterday, 3/21/15, I installed a 80 Meter Horizontal Loop that is 264' long, average height of 30', roughly in a rectangle of 50' X 82', with the feed point in one corner, using a Balun Design's, Model 25112 - 2.5:1 Balun 1.5 - 54 MHz - 2kW.
The Balun Design's website recommends using 247' to 251', height dependent. However, this is for a triangle, Delta configuration, but as can be seen from the above I had to use 264' for my rectangle configuration. I used a Rigexpert AA-170 antenna analyzer to help with the tuning process. The antenna works on all bands with the exception of 30 meters. The only disappointing result was how narrow the band width is on 80 meters, with a 3:1 SWR window of 3.5 to 3.876 MHz. The lowest SWR was on the 80 meter band, which was 1.12:1 on 3.678 MHz. One of the very noticeable things about the antenna, is how quite it is over the Windom antenna that I was using. Also I now have a lot more bands available to me with this antenna, than I had with the windom.

Band Bandwidth window@ 2:1 Bandwidth window@ 3:1
Lowest SWR
80M 3.579-3810 3.5-3.876
3.678 1.12:1
40M 7.176-7.44 6.978-7638
7.341 1.83:1
20M 14,463-14.667 13.941-15.063
14.535 1.93:1
17M 17.934-18.165 17.472-18.627
18.0 1.97:1
15M 21.366-21.828 20.937-22.290
21.597 1.69:1
10M 28.527-28.932 27.5-30.045
28.725 1.88:1

Everett N8CNP

4534. Re: [SkyWires] Just Installed a loop

Yahoo group: SkyWires
Date: 2015-03-22 16:24:32 UTC
From: Evan Rolek
Topic: 4531 Message: 4534

From my experiments with horizontal loops for the past 20+ years on 75 and 40 meters, I've not seen any performance differences between a loop that is operated on a resonant frequency as opposed to one that is "off frequency". I just adjust the antenna tuner for a match and go with it.

In the past, I used 450 ohm window line but a couple of years ago I switched to 300 ohm transmitting twinlead. It was a better "match" to the impedances of the two loops I have, for the bands that I operate. From my measurements and analysis, there was no single ratio of balun that would be what I consider to be an acceptable solution to my operations on all bands of interest; in addition there might be some extra loss from the coax had I opted to go with that approach. With the transmitting twinlead, and the tuner in the shack, I'm very pleased with both the 40 meter horizontal loop (at 12 ft above ground) and my 80 m loop at about 20 ft above ground.

On 160 meters, I bring the feedline from the 80 m loop straight down, tie the conductors together, and feed it against ground. This is described in many ARRL publications but I've never found anybody that has used it other than myself. Obviously, it is not popular but I'm very pleased with the configuration.

As a side note, I use some weatherproof quick disconnects so I can get the feedlines away from the house when storms approach.

Let's all enjoy the hobby. If your wish, I hope you have a safe, enjoyable visit to Dayton for Hamvention 2015.

73,

Evan, K9SQG

-----Original Message-----
From: Don Sanders w4bws1@... [SkyWires] <SkyWires@yahoogroups.com>
To: SkyWires <SkyWires@yahoogroups.com>
Sent: Sun, Mar 22, 2015 12:03 pm
Subject: Re: [SkyWires] Just Installed a loop

The loop seems to be working very well. The bandwidth 80 is about normal and almost 2 X what a dipole will allow. 80 meters is a broad band as percentages of frequency goes and is the hardest to have full band coverage without a tuner.
As with most multiband antennas you will probably need a matchbox for working higher on 80 and for 30 meters. One thing you can do is install a 30 meter inverted vee at the feed point or separately with its own coax feedline..

Don't fret too much, enjoy your new skyloop.

Dr. Don HC4/W4BWS

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Band Bandwidth window@ 2:1 Bandwidth window@ 3:1 Lowest SWR

80M 3.579-3810 3.5-3.876 3.678 1.12:1

40M 7.176-7.44 6.978-7638 7.341 1.83:1

20M 14,463-14.667 13.941-15.063 14.535 1.93:1

17M 17.934-18.165 17.472-18.627 18.0 1.97:1

15M 21.366-21.828 20.937-22.290 21.597 1.69:1

10M 28.527-28.932 27.5-30.045 28.725 1.88:1

Everett N8CNP

4535. RE: [SkyWires] Just Installed a loop

Yahoo group: SkyWires
Date: 2015-03-22 17:04:08 UTC
From: D. Scott MacKenzie
Topic: 4531 Message: 4535

I agree - I have had much better luck with ladder line than with using baluns. Will be putting another loop up this Spring (Will it ever arrive?) and have it in the air about 25 feet or so. Mostly I will use it for Field Day and Sweepstakes and that is about it - only turn on the rig about once or twice a year anymore...

From: SkyWires@yahoogroups.com [mailto:SkyWires@yahoogroups.com]
Sent: Sunday, March 22, 2015 12:25 PM
To: SkyWires@yahoogroups.com
Subject: Re: [SkyWires] Just Installed a loop

From my experiments with horizontal loops for the past 20+ years on 75 and 40 meters, I've not seen any performance differences between a loop that is operated on a resonant frequency as opposed to one that is "off frequency". I just adjust the antenna tuner for a match and go with it.

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On 160 meters, I bring the feedline from the 80 m loop straight down, tie the conductors together, and feed it against ground. This is described in many ARRL publications but I've never found anybody that has used it other than myself. Obviously, it is not popular but I'm very pleased with the configuration.

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To: SkyWires <SkyWires@yahoogroups.com>

Sent: Sun, Mar 22, 2015 12:03 pm
Subject: Re: [SkyWires] Just Installed a loop

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Don't fret too much, enjoy your new skyloop.

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Lowest SWR

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3.678 1.12:1

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Everett N8CNP

4536. Re: [SkyWires] Just Installed a loop

Yahoo group: SkyWires
Date: 2015-03-22 17:05:44 UTC
From: Don Sanders
Topic: 4531 Message: 4536

Everett, from the info you put on the files section of the group, it appears your loop is too short.
The frequencies of lowest SWR are too high. If you take the standard formula for loops, 1005 divided by frequency, then 1005 divided by 3.6 MHz is 279-280 feet. While this formula is a "ballpark" it is not accurate. In reality the size of the wire, location, height above ground, and more all affect the length. So you may need more wire not less.
Many builders have found 1020 to 1040 divided by freq is a better length for their location and installation.

Often the published / recommended lengths are for the phone bands not CW or multi-mode operations, For instance, 1005 divided by 3.9 MHz is 257 feet, closer to your 264 feet. Short length will cause all bands above the fundamental to show lowest SWR at much higher than even integer multiples due lack of end effect.

Loops should be fed with baluns with two cores, one at 4 to 1 or 6 to 1 and a second with a 1 to 1 balun connected to the feed line. This will not only do the impedance matching but also reduce the currents on the outside of the coax. Careful with Sevick's designs as many were UN-UN designs not balanced to un-balanced. Also he did not use separate cores.

My loop is 274 feet but I feed with parallel feed line, a 1 to 1 balun and short coax to matchbox. So my length is not so critical as would be with coax feed line. Actually I just added wire connecting the ends of my 80 meter Inverted Vee and raised the whole antenna as high as possible above ground. Mine is at top of 12 meter bamboo poles.

Dr. Don HC4/W4BWS

On Sun, Mar 22, 2015 at 11:18 AM, everettsharp@aol.com [SkyWires] <SkyWires@yahoogroups.com> wrote:

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> Don,
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> Thanks for the reply and comments. I may trim a little more off of the
> length after I use it for awhile. Also I have constructed a 2.25:1 balun,
> copy of the Sevick design, on a F150-K core and will try it on the loop to
> see if will work as well. I think that the Balun Design's balun uses the
> same F150 core, wound in the same 2.25:1 configuration, but has a 10 turn
> bifilar winding on a FT240K core, between the antenna and the 2.25:1 balun.
>
> Everett N8CNP
>

> In a message dated 3/22/2015 11:03:15 A.M. Central Daylight Time,
> SkyWires@yahoogroups.com writes:
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> working higher on 80 and for 30 meters. One thing you can do is install a
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>> Lowest SWR
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>> 80M 3.579-3810
>> 3.5-3.876 3.678 1.12:1
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>> Everett N8CNP
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>>
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>

4537. Re: [SkyWires] Just Installed a loop

Yahoo group: SkyWires
Date: 2015-03-22 19:04:05 UTC
From: everettsharp@...
Topic: 4531 Message: 4537

Don,

The Balun Designs 2.5:1 does use a UN-UN 2.25:1 balun in the box along with a 1:1, with bifilar turns between the antenna and the UN-UN balun.

I also thought that the length was short based on the calculations, however, here is what I got in real life:
282' 3.54 MHz, 275' 3.62 MHz, 268' 3.67 MHz and 264' 3.678 MHz. So the question is why do I have the 3.67 MHz resonant frequency at that wire length, with the calculated wire length of 273' and if you take into account the velocity factor for the insulation on the wire, which would be 95%, than you would end up with a length of 259.5', which is shorter.

Now if I use the 1020 divided by 3.678 = 277' X .95 = 263.5', which is very close to the length that I arrived at through trial and error. I have a two core 4:1 current balun that I built and I will try it and will run the same scan on with my antenna tantalizer. Also as I mentioned before I also have a 2.5:1 UN-UN balun that I built that I will try too. I have a MFJ -854 and will check the current on the outside of the coax with each balun.

I know that open wire is the best way to feed a loop antenna, however, there is no way to get it into my shack. I have read where some use ladder line to a 4:1 balun and then coax into the shack, but the length of coax must be very short. I can't do that either, as the coax run through my house to the shack is about 55 to 60'.

Once I have evaluated all of the baluns, I will post the results.

Everett N8CNP

In a message dated 3/22/2015 12:05:46 P.M. Central Daylight Time, SkyWires@yahoogroups.com writes:

Everett, from the info you put on the files section of the group, it appears your loop is too short.
The frequencies of lowest SWR are too high. If you take the standard formula for loops, 1005 divided by frequency, then 1005 divided by 3.6 MHz is 279-280 feet. While this formula is a "ballpark" it is not accurate. In reality the size of the wire, location, height above ground, and more all affect the length. So you may need more wire not less.
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Often the published / recommended lengths are for the phone bands not CW or multi-mode operations, For instance, 1005 divided by 3.9 MHz is 257 feet, closer to your 264 feet. Short length will cause all bands above the fundamental to show lowest SWR at much higher than even integer multiples due

lack of end effect.

Loops should be fed with baluns with two cores, one at 4 to 1 or 6 to 1 and a second with a 1 to 1 balun connected to the feed line. This will not only do the impedance matching but also reduce the currents on the outside of the coax. Careful with Sevick's designs as many were UN-UN designs not balanced to un-balanced. Also he did not use separate cores.

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Everett N8CNP

4538. Re: [SkyWires] Just Installed a loop

Yahoo group: SkyWires
Date: 2015-03-22 19:50:26 UTC
From: DC
Topic: 4531 Message: 4538

Everett:

My 80 meter vertical loop is about 40' off the ground and resonate at about 3.1 MHz. I Feed it with about 200' of 450 ohm ladder line, a 4:1 10kw balum and about 3' of coax into a MFJ 1.5 kw auto turner. Even with the less than ideal tuner, it tunes all bands. It is set up so that one of the clover leaf patterns should be pointed at Europe on 40.

Works well, although I would not run 1.5kw on 160 into it.

Not too worried about resonate frequency, I use it as a non-resonant antenna. If it is tunable, use it! Low on some bands, high on others -- still within the range of the tuner. Also, the tuner in my rig tunes it okay.

Richard
K7SD

On 3/22/2015 12:04 PM, everettsharp@... [SkyWires] wrote:
>
> Don,
> The Balun Designs 2.5:1 does use a UN-UN 2.25:1 balun in the box along
> with a 1:1, with bifilar turns between the antenna and the UN-UN balun.
> I also thought that the length was short based on the calculations,
> however, here is what I got in real life:
> 282' *3.54 MHz*, 275'*3.62 MHz*, 268' *3.67 MHz* and 264' *3.678* MHz.
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> run through my house to the shack is about 55 to 60'.
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> Dr. Don HC4/W4BWS
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> On Sun, Mar 22, 2015 at 11:18 AM, everettsharp@...
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> the above I had to use 264' for my rectangle
> configuration. I used a Rigexpert AA-170 antenna
> analyzer to help with the tuning process. The antenna
> works on all bands with the exception of 30 meters.
> The only disappointing result was how narrow the band
> width is on 80 meters, with a 3:1 SWR window of 3.5 to
> 3.876 MHz. The lowest SWR was on the 80 meter band,
> which was 1.12:1 on 3.678 MHz. One of the very
> noticeable things about the antenna, is how quite it
> is over the Windom antenna that I was using. Also I
> now have a lot more bands available to me with this
> antenna, than I had with the windom.
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> Band Bandwidth window@ 2:1 Bandwidth window@ 3:1
> Lowest SWR
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> 80M 3.579-3810 3.5-3.876 3.678 1.12:1
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> 40M 7.176-7.44 6.978-7638 7.341 1.83:1

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> 10M 28.527-28.932 27.5-30.045
> 28.725 1.88:1
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> Everett N8CNP
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4539. Re: [SkyWires] Just Installed a loop

Yahoo group: SkyWires
Date: 2015-03-22 20:49:42 UTC
From: Don Sanders
Topic: 4531 Message: 4539

Yes, as I stated the formulas are ballpark and every real installation is unique.
The reason I said it was short was not the freq of low SWR but the fact that the lowest SWR on all the higher bands are way above the ham bands. This says the antenna may be too short. If the SWR on 80 was at 3.550, the other bands would be lower SWR closer to the ham band.
However when I used coax to the loop I adjusted so all the SWRs were under 3 to 1 at the band center, except 80 as I only operate 3.5 to 3.8. Then the tuner would take care of the final tuning.
Yes the long coax run would be difficult for 450 line. Though the losses on the higher frequencies will be noticed with coax. Maybe a remote tuner where the coax enters the house and 450 line to the antenna from there. That may make as much as 6 db improvement on some bands. The coax loss would be minimal and more RF would reach the antenna.

Dr. Don HC4/W4BWS

On Sun, Mar 22, 2015 at 2:04 PM, everettsharp@... [SkyWires] <SkyWires@yahoogroups.com> wrote:

>
>
> Don,
>
> The Balun Designs 2.5:1 does use a UN-UN 2.25:1 balun in the box along
> with a 1:1, with bifilar turns between the antenna and the UN-UN balun.
>
> I also thought that the length was short based on the calculations,
> however, here is what I got in real life:
> 282' *3.54 MHz*, 275'* 3.62 MHz*, 268' *3.67 MHz* and 264' *3.678* MHz.
> So the question is why do I have the 3.67 MHz resonant frequency at that
> wire length, with the calculated wire length of 273' and if you take into
> account the velocity factor for the insulation on the wire, which would be
> 95%, than you would end up with a length of 259.5', which is shorter.
>
> Now if I use the 1020 divided by 3.678 = 277' X .95 = 263.5', which is
> very close to the length that I arrived at through trial and error. I have
> a two core 4:1 current balun that I built and I will try it and will run
> the same scan on with my antenna tantalizer. Also as I mentioned before I
> also have a 2.5:1 UN-UN balun that I built that I will try too. I have a
> MFJ -854 and will check the current on the outside of the coax with each
> balun.
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> I know that open wire is the best way to feed a loop antenna, however,
> there is no way to get it into my shack. I have read where some use ladder
> line to a 4:1 balun and then coax into the shack, but the length of coax

> must be very short. I can't do that either, as the coax run through my
> house to the shack is about 55 to 60'.
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> Once I have evaluated all of the baluns, I will post the results.
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> Everett N8CNP
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> In a message dated 3/22/2015 12:05:46 P.M. Central Daylight Time,
> SkyWires@yahoogroups.com writes:
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> Everett, from the info you put on the files section of the group, it
> appears your loop is too short.
> The frequencies of lowest SWR are too high. If you take the standard
> formula for loops, 1005 divided by frequency, then 1005 divided by 3.6 MHz
> is 279-280 feet. While this formula is a "ballpark" it is not accurate. In
> reality the size of the wire, location, height above ground, and more all
> affect the length. So you may need more wire not less.
> Many builders have found 1020 to 1040 divided by freq is a better length
> for their location and installation.
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> Often the published / recommended lengths are for the phone bands not CW
> or multi-mode operations, For instance, 1005 divided by 3.9 MHz is 257
> feet, closer to your 264 feet. Short length will cause all bands above the
> fundamental to show lowest SWR at much higher than even integer multiples
> due lack of end effect.
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> Loops should be fed with baluns with two cores, one at 4 to 1 or 6 to 1
> and a second with a 1 to 1 balun connected to the feed line. This will not
> only do the impedance matching but also reduce the currents on the outside
> of the coax. Careful with Sevick's designs as many were UN-UN designs not
> balanced to un-balanced. Also he did not use separate cores.
>
> My loop is 274 feet but I feed with parallel feed line, a 1 to 1 balun and
> short coax to matchbox. So my length is not so critical as would be with
> coax feed line. Actually I just added wire connecting the ends of my 80
> meter Inverted Vee and raised the whole antenna as high as possible above
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>> see if will work as well. I think that the Balun Design's balun uses the
>> same F150 core, wound in the same 2.25:1 configuration, but has a 10 turn
>> bifilar winding on a FT240K core, between the antenna and the 2.25:1 balun.
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>> The loop seems to be working very well. The bandwidth 80 is about normal
>> and almost 2 X what a dipole will allow. 80 meters is a broad band as
>> percentages of frequency goes and is the hardest to have full band coverage
>> without a tuner.
>> As with most multiband antennas you will probably need a matchbox for
>> working higher on 80 and for 30 meters. One thing you can do is install a
>> 30 meter inverted vee at the feed point or separately with its own coax
>> feedline..
>> Don't fret too much, enjoy your new skyloop.
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>> Dr. Don HC4/W4BWS
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>> On Sun, Mar 22, 2015 at 10:45 AM, everettsharp@... [SkyWires] <
>> SkyWires@yahoogroups.com> wrote:
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>>> Yesterday, 3/21/15, I installed a 80 Meter Horizontal Loop that is
>>> 264' long, average height of 30', roughly in a rectangle of 50' X 82', with
>>> the feed point in one corner, using a Balun Design's, Model 25112 -
>>> 2.5:1 Balun 1.5 - 54 MHz - 2kW.
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>>> The Balun Design's website recommends using 247' to 251', height
>>> dependent. However, this is for a triangle, Delta configuration, but as can
>>> be seen from the above I had to use 264' for my rectangle configuration. I
>>> used a Rigexpert AA-170 antenna analyzer to help with the tuning process.
>>> The antenna works on all bands with the exception of 30 meters. The only
>>> disappointing result was how narrow the band width is on 80 meters, with a
>>> 3:1 SWR window of 3.5 to 3.876 MHz. The lowest SWR was on the 80 meter
>>> band, which was 1.12:1 on 3.678 MHz. One of the very noticeable things
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>>> using. Also I now have a lot more bands available to me with this antenna,
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>>> Everett N8CNP
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4540. Re: [SkyWires] Just Installed a loop

Yahoo group: SkyWires
Date: 2015-03-22 21:00:20 UTC
From: Jhallender
Topic: 4531 Message: 4540

I have had good luck w 295 ft of wire fed with 450 ohm ladder line into elekraft t1 tuner. Loop is strung around back yard about 10 to 20 ft high. With k2 xcvr I am mostly a cw op on 40, 30, 20, 15 m with 10 to 12 w. Antenna also will tuneup fine all across 75-80 m band. I open a sliding window to shack and fill the opening with a narrow wood strip that fits snugly into window frame with weather stripping on either side. I cut a narrow slot for the ladder line to pass through and stuff some steel wool into the slot to make it airtight. Quick and easy.

Jim, K8YIB

> On Mar 22, 2015, at 12:04 PM, everettsharp@... [SkyWires] <SkyWires@yahoogroups.com> wrote:
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> Don,
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> The Balun Designs 2.5:1 does use a UN-UN 2.25:1 balun in the box along with a 1:1, with bifilar turns between the antenna and the UN-UN balun.
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> Many builders have found 1020 to 1040 divided by freq is a better length for their location and installation.
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> Loops should be fed with baluns with two cores, one at 4 to 1 or 6 to 1 and a second with a 1 to 1 balun connected to the feed line. This will not only do the impedance matching but also reduce the currents on the outside of the coax. Careful with Sevick's designs as many were UN-UN designs not balanced to un-balanced. Also he did not use separate cores.
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>>>
>>>
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>>> Everett N8CNP
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>

4541. Re: [SkyWires] Just Installed a loop

Yahoo group: SkyWires
Date: 2015-03-23 07:18:29 UTC
From: Tom Hatton
Topic: 4531 Message: 4541

Hi Don,I have been using a 283 meter loop fed with 300ohm ribbon all the way to my MFJ 989c Coupler for the last 10-12 years with out any Balun or choke in the system at all.? And the loop will tune from 80m -10m with no problems You only have to watch out for any METAL very near to the feeder just make sure it dose not touch the metal. I replace the feeder every couple on years or so. With 400w, I also use the loop as a top loaded Vertical on 160m as well, Just connect the two feeder wires together and feed it as a single wire thru the Coupler, A 20m vertical with a 80m top hat Capacitor Too easy..
Tom VK4ATH -.-
From: "everettsharp@aol.com [SkyWires]" <SkyWires@yahoogroups.com>
To: SkyWires@...m
Sent: Monday, 23 March 2015, 5:04
Subject: Re: [SkyWires] Just Installed a loop

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28.725 1.88:1 Everett N8CNP			

4542. Re: [SkyWires] Just Installed a loop

Yahoo group: SkyWires
Date: 2015-03-23 14:48:51 UTC
From: Don Sanders
Topic: 4531 Message: 4542

Hi Tom, VK4ATH,
Yes that is a good setup with your loop. I also have 300 ohm line which I use but my Dentron Tuner had no Balun so I use the external balun and a 10 foot RG-213 coax to the tuner. The loop is on a 10 meter bamboo pole at the top of a 60 foot hill and the loop runs down over the hill, which is a steep drop off, to 3 12 meter bamboo poles on the lower land area. The loop is pointed North from the feed at the top of the hill. Works very well.
I also have an 88 foot inverted "L" fed with 300 ohm line,at the top of the hill also on a 12 meter bamboo pole, with the center feed at the top of the pole. Bottom of the vertical section is horizontal about 8 feet. Some times the "L" is better than the loop and other times the loop is better. Nice to have the choice. I use it for 80 to 20 meters.

Dr. Don HC4/W4BWS

On Mon, Mar 23, 2015 at 2:18 AM, Tom Hatton vk4ath@... [SkyWires] <SkyWires@yahoogroups.com> wrote:

>
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> Hi Don,
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> You only have to watch out for any METAL very near to the feeder just make
> sure it dose not touch the metal. I replace the feeder every couple on
> years or so. With 400w, I also use the loop as a top loaded Vertical on
> 160m as well, Just connect the two feeder wires together and feed it as a
> single wire thru the Coupler, A 20m vertical with a 80m top hat Capacitor
> Too easy..
> Tom VK4ATH -.-
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> *To:* SkyWires@yahoogroups.com
> *Sent:* Monday, 23 March 2015, 5:04
> *Subject:* Re: [SkyWires] Just Installed a loop
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> Everett, from the info you put on the files section of the group, it
> appears your loop is too short.
> The frequencies of lowest SWR are too high. If you take the standard
> formula for loops, 1005 divided by frequency, then 1005 divided by 3.6 MHz
> is 279-280 feet. While this formula is a "ballpark" it is not accurate. In
> reality the size of the wire, location, height above ground, and more all
> affect the length. So you may need more wire not less.
> Many builders have found 1020 to 1040 divided by freq is a better length
> for their location and installation.
>
> Often the published / recommended lengths are for the phone bands not CW
> or multi-mode operations, For instance, 1005 divided by 3.9 MHz is 257
> feet, closer to your 264 feet. Short length will cause all bands above the
> fundamental to show lowest SWR at much higher than even integer multiples
> due lack of end effect.

>
> Loops should be fed with baluns with two cores, one at 4 to 1 or 6 to 1
> and a second with a 1 to 1 balun connected to the feed line. This will not
> only do the impedance matching but also reduce the currents on the outside
> of the coax. Careful with Sevick's designs as many were UN-UN designs not
> balanced to un-balanced. Also he did not use separate cores.
>
> My loop is 274 feet but I feed with parallel feed line, a 1 to 1 balun and
> short coax to matchbox. So my length is not so critical as would be with
> coax feed line. Actually I just added wire connecting the ends of my 80
> meter Inverted Vee and raised the whole antenna as high as possible above
> ground. Mine is at top of 12 meter bamboo poles.
>
> Dr. Don HC4/W4BWS
>
> On Sun, Mar 22, 2015 at 11:18 AM, everettsharp@... [SkyWires] <
> SkyWires@yahoogroups.com> wrote:
>
>
> Don,
>
> Thanks for the reply and comments. I may trim a little more off of the
> length after I use it for awhile. Also I have constructed a 2.25:1 balun,
> copy of the Sevick design, on a F150-K core and will try it on the loop to
> see if will work as well. I think that the Balun Design's balun uses the
> same F150 core, wound in the same 2.25:1 configuration, but has a 10 turn
> bifilar winding on a FT240K core, between the antenna and the 2.25:1 balun.
>
> Everett N8CNP
>
> In a message dated 3/22/2015 11:03:15 A.M. Central Daylight Time,
> SkyWires@yahoogroups.com writes:
>
>
> The loop seems to be working very well. The bandwidth 80 is about normal
> and almost 2 X what a dipole will allow. 80 meters is a broad band as
> percentages of frequency goes and is the hardest to have full band coverage
> without a tuner.
> As with most multiband antennas you will probably need a matchbox for
> working higher on 80 and for 30 meters. One thing you can do is install a
> 30 meter inverted vee at the feed point or separately with its own coax
> feedline..
> Don't fret too much, enjoy your new skyloop.
>
> Dr. Don HC4/W4BWS
>
> On Sun, Mar 22, 2015 at 10:45 AM, everettsharp@... [SkyWires] <
> SkyWires@yahoogroups.com> wrote:
>
>
>

> Yesterday, 3/21/15, I installed a 80 Meter Horizontal Loop that is
> 264' long, average height of 30', roughly in a rectangle of 50' X 82', with
> the feed point in one corner, using a Balun Design's, Model 25112 - 2.5:1
> Balun 1.5 - 54 MHz - 2kW.
> The Balun Design's website recommends using 247' to 251', height
> dependent. However, this is for a triangle, Delta configuration, but as can
> be seen from the above I had to use 264' for my rectangle configuration. I
> used a Rigexpert AA-170 antenna analyzer to help with the tuning process.
> The antenna works on all bands with the exception of 30 meters. The only
> disappointing result was how narrow the band width is on 80 meters, with a
> 3:1 SWR window of 3.5 to 3.876 MHz. The lowest SWR was on the 80 meter
> band, which was 1.12:1 on 3.678 MHz. One of the very noticeable things
> about the antenna, is how quite it is over the Windom antenna that I was
> using. Also I now have a lot more bands available to me with this antenna,
> than I had with the windom.
>
> Band Bandwidth window@ 2:1 Bandwidth window@ 3:1
> Lowest SWR
> 80M 3.579-3810
> 3.5-3.876 3.678 1.12:1
> 40M 7.176-7.44
> 6.978-7638 7.341 1.83:1
> 20M 14,463-14.667
> 13.941-15.063 14.535 1.93:1
> 17M 17.934-18.165
> 17.472-18.627 18.0 1.97:1
> 15M 21.366-21.828
> 20.937-22.290 21.597 1.69:1
> 10M 28.527-28.932 27.5-30.045
> 28.725 1.88:1
> Everett N8CNP
>
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>

4543. Re: [SkyWires] Just Installed a loop

Yahoo group: SkyWires
Date: 2015-03-24 00:06:41 UTC
From: Everett Sharp
Topic: 4531 Message: 4543

Hi Don,

I thought about what you said about the higher bands not being in resonance with the 264' length that I am currently using. So I went back and looked at the saved sweeps I did with the different lengths. After looking over the data, it looks like the 275' length might be a better choice. Here is the data:

Band MHz SWR
80M 3.579 1.12
40M. 7.176 1.77
20M. 14.122 1.97
17M. 17.67 1.92
15M. 21.201 1.71
12M 24.666 1.83
10M. 28.32. 1.84

Based on the data above that puts everything in band, with the exception of 17 and 12 meters, which I will use very little anyway. One other thing that noticed is that the impedance at all of the points of resonance varied from about 24 to 38 ohms. So before I do anything else I will see what I get by changing the 2.5:1 (50 to 125 ohms) balun to a 4:1 current balun (50 to 200 ohms).

I will be out of town most of the week, but will dive into looking at the various options I have over the week-end. I will report back once I find the best options.

Everett N8CNP

Sent from my iPad

> On Mar 22, 2015, at 3:49 PM, Don Sanders w4bws1@... [SkyWires.32] <SkyWires@yahoogroups.com> wrote:
>
> Yes, as I stated the formulas are ballpark and every real installation is unique.
> The reason I said it was short was not the freq of low SWR but the fact that the lowest SWR on all the higher bands are way above the ham bands. This says the antenna may be too short. If the SWR on 80 was at 3.550, the other bands would be lower SWR closer to the ham band.
> However when I used coax to the loop I adjusted so all the SWRs were under 3 to 1 at the band center, except 80 as I only operate 3.5 to 3.8. Then the tuner would take care of the final tuning.
> Yes the long coax run would be difficult for 450 line. Though the losses on the higher frequencies will be noticed with coax. Maybe a remote tuner where the coax enters the house and 450 line to the antenna from there. That may make as much as 6 db improvement on some bands. The coax loss would be minimal and more RF would reach the antenna.
>
> Dr. Don HC4/W4BWS
>

>> On Sun, Mar 22, 2015 at 2:04 PM, everettsharp@... [SkyWires] <SkyWires@yahoogroups.com> wrote:
>>
>>
>> Don,
>>
>> The Balun Designs 2.5:1 does use a UN-UN 2.25:1 balun in the box along with a 1:1, with bifilar turns between the antenna and the UN-UN balun.
>>
>> I also thought that the length was short based on the calculations, however, here is what I got in real life:
>> 282' 3.54 MHz, 275' 3.62 MHz, 268' 3.67 MHz and 264' 3.678 MHz. So the question is why do I have the 3.67 MHz resonant frequency at that wire length, with the calculated wire length of 273' and if you take into account the velocity factor for the insulation on the wire, which would be 95%, than you would end up with a length of 259.5', which is shorter.
>>
>> Now if I use the 1020 divided by 3.678 = 277' X .95 = 263.5', which is very close to the length that I arrived at through trial and error. I have a two core 4:1 current balun that I built and I will try it and will run the same scan on with my antenna tantalizer. Also as I mentioned before I also have a 2.5:1 UN-UN balun that I built that I will try too. I have a MFJ -854 and will check the current on the outside of the coax with each balun.
>>
>> I know that open wire is the best way to feed a loop antenna, however, there is no way to get it into my shack. I have read where some use ladder line to a 4:1 balun and then coax into the shack, but the length of coax must be very short. I can't do that either, as the coax run through my house to the shack is about 55 to 60'.
>>
>> Once I have evaluated all of the baluns, I will post the results.
>>
>> Everett N8CNP
>>
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>>
>> In a message dated 3/22/2015 12:05:46 P.M. Central Daylight Time, SkyWires@yahoogroups.com writes:
>>
>> Everett, from the info you put on the files section of the group, it appears your loop is too short.
>> The frequencies of lowest SWR are too high. If you take the standard formula for loops, 1005 divided by frequency, then 1005 divided by 3.6 MHz is 279-280 feet. While this formula is a "ballpark" it is not accurate. In reality the size of the wire, location, height above ground, and more all affect the length. So you may need more wire not less.
>> Many builders have found 1020 to 1040 divided by freq is a better length for their location and installation.
>>
>> Often the published / recommended lengths are for the phone bands not CW or multi-mode

operations, For instance, 1005 divided by 3.9 MHz is 257 feet, closer to your 264 feet. Short length will cause all bands above the fundamental to show lowest SWR at much higher than even integer multiples due lack of end effect.
>>
>> Loops should be fed with baluns with two cores, one at 4 to 1 or 6 to 1 and a second with a 1 to 1 balun connected to the feed line. This will not only do the impedance matching but also reduce the currents on the outside of the coax. Careful with Sevick's designs as many were UN-UN designs not balanced to un-balanced. Also he did not use separate cores.
>>
>> My loop is 274 feet but I feed with parallel feed line, a 1 to 1 balun and short coax to matchbox. So my length is not so critical as would be with coax feed line. Actually I just added wire connecting the ends of my 80 meter Inverted Vee and raised the whole antenna as high as possible above ground. Mine is at top of 12 meter bamboo poles.
>>
>> Dr. Don HC4/W4BWS
>>
>>> On Sun, Mar 22, 2015 at 11:18 AM, everettsharp@... [SkyWires] <SkyWires@yahoogroups.com> wrote:
>>>
>>>
>>> Don,
>>>
>>> Thanks for the reply and comments. I may trim a little more off of the length after I use it for awhile. Also I have constructed a 2.25:1 balun, copy of the Sevick design, on a F150-K core and will try it on the loop to see if will work as well. I think that the Balun Design's balun uses the same F150 core, wound in the same 2.25:1 configuration, but has a 10 turn bifilar winding on a FT240K core, between the antenna and the 2.25:1 balun.
>>>
>>> Everett N8CNP
>>>
>>> In a message dated 3/22/2015 11:03:15 A.M. Central Daylight Time, SkyWires@yahoogroups.com writes:
>>>
>>> The loop seems to be working very well. The bandwidth 80 is about normal and almost 2 X what a dipole will allow. 80 meters is a broad band as percentages of frequency goes and is the hardest to have full band coverage without a tuner.
>>> As with most multiband antennas you will probably need a matchbox for working higher on 80 and for 30 meters. One thing you can do is install a 30 meter inverted vee at the feed point or separately with its own coax feedline..
>>> Don't fret too much, enjoy your new skyloop.
>>>
>>> Dr. Don HC4/W4BWS
>>>
>>>> On Sun, Mar 22, 2015 at 10:45 AM, everettsharp@... [SkyWires] <SkyWires@yahoogroups.com> wrote:
>>>>
>>>> Yesterday, 3/21/15, I installed a 80 Meter Horizontal Loop that is 264' long, average height of 30', roughly in a rectangle of 50' X 82', with the feed point in one corner, using a Balun Design's, Model 25112 - 2.5:1 Balun 1.5 - 54 MHz - 2kW.
>>>>

>>>> The Balun Design's website recommends using 247' to 251', height dependent. However, this is for a triangle, Delta configuration, but as can be seen from the above I had to use 264' for my rectangle configuration. I used a Rigexpert AA-170 antenna analyzer to help with the tuning process. The antenna works on all bands with the exception of 30 meters. The only disappointing result was how narrow the band width is on 80 meters, with a 3:1 SWR window of 3.5 to 3.876 MHz. The lowest SWR was on the 80 meter band, which was 1.12:1 on 3.678 MHz. One of the very noticeable things about the antenna, is how quite it is over the Windom antenna that I was using. Also I now have a lot more bands available to me with this antenna, than I had with the windom.
>>>>
>>>>
>>>>
>>>> Band Bandwidth window@ 2:1 Bandwidth window@ 3:1 Lowest SWR
>>>>
>>>> 80M 3.579-3810 3.5-3.876 3.678 1.12:1
>>>>
>>>> 40M 7.176-7.44 6.978-7638 7.341 1.83:1
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>>>>
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>>>>
>>>> 10M 28.527-28.932 27.5-30.045 28.725 1.88:1
>>>>
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>>>> Everett N8CNP
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>

4546. Re: [SkyWires] Re: Just Installed a loop

Yahoo group: SkyWires
Date: 2015-03-24 15:17:33 UTC
From: Evan Rolek
Topic: 4531 Message: 4546

Fellow enthusiasts,

I use fiberglass poles to support my loop antennas in some of the corners. They are attached to trees, and have marine (Harken) pulleys at the top. I also have some HV hotsticks that I use for antenna work, they're all 40 ft long. I paint the poles flat black to resist UV, and then sometimes some camo colors to blend in. Some have been up over 10 years. Only failures are due to trees coming down in a storm. The telescoping sections that I use are from Max Gain Systems, a great company.

73,

Evan, K9SQG

-----Original Message-----
From: tthiewes@...t [SkyWires] <SkyWires@yahoogroups.com>
To: SkyWires <SkyWires@yahoogroups.com>
Sent: Tue, Mar 24, 2015 8:58 am
Subject: [SkyWires] Re: Just Installed a loop

Dr. Don

You mentioned using 12 meter bamboo poles. Can you tell us more about them?

- What diameter did you acquire?

- What method did you use to plant them in the ground? cement?

Bamboo might be difficult here in Minneapolis Minnesota USA. I'd have to research bamboo at -25F.

I see you are an expatriate in Ecuador running a clinic . . . Thanks,

Terry KD0UTQ

4547. Re: [SkyWires] Just Installed a loop

Yahoo group: SkyWires
Date: 2015-03-24 23:49:46 UTC
From: Don Sanders
Topic: 4531 Message: 4547

Terry,
I have the poles here in Ecuador but it would be very costly to ship to MINN.
They use the poles here to do all kinds of construction, as scaffolding and as supporting structures.
Complete houses are made of bamboo and last for many years and have low cost upkeep. They also split the bamboo into thin strips but still connected to make a flat sheet. They use this for walls. Many cover them with chicken wire and cement then paint. Many buildings have been up over 50 years using this construction method.
Standard pole length is 10 to 11 meters. They are about 5 to 6 inch diameter at the base and 4 to 5 at the end.

Bamboo is actually a grass. Very strong and weathers well but subject to rotting if not able to dry.
Therefore, I use 4 inch drain PVC pipe 3 meters long with one meter+ in ground filled with a long piece
of steel re-bar and concrete. I also have concrete in hole around the PVC. The bamboo is mounted on the PVC, after curing for a week, using Monel adjustable hose clamps. They are available at marine stores. Stainless may be better but not available here in Ecuador. The monel resists rusting. I place a small rock under the bottom to permit drainage and coat the poles with 2 good coats of UV resistant varnish. You could also coat them with polyurethane or glass and epoxy. I also put a PVC cap on the end of the PVC and the top of the poles.

I mount pulleys at the top of the poles with ropes so I can pull up antennas. Mine have been up 5 years and still look good and function very well.
You may be able to find them in Alabama or other southern states. I used to buy smaller poles for making quad antennas in Alabama back in the 1970 and 80s.
But for the cost and long life I would check with the fiberglass supplier near Atlanta, I believe, as he has poles that telescope and go to 40 feet. Max Gain or something like that is the company. They make the fiberglass poles for the hex beams also.
Thanks for the note about our clinic here. It is very rewarding to help people regain and stay healthy with out drugs and at low cost using local herbs and foods. They average family here lives on $350 to $500 a month which does not leave much in the budget for Doctors or drugs. However food here is very reasonable and healthy, no GMO and right from the field to the table.
My wife and I live very well here on $900 to $1200 a month including building our home over 4 years. 1150 SF (12 X 9 meters) for about $40000.
We live on Soc Security very well here. The donations we get from the

patients helps keep the clinic open and clean. I wrote a book 3 years ago which I sell on the internet and shortly on Amazon, Retire in Ecuador on $30 a Day. It explains much of the reasoning for the many folks moving to Ecuador and how to do the planning for such a move.

I hope this has been helpful.

73 and God Bless

Dr. Don HC4/W4BWS

On Tue, Mar 24, 2015 at 7:41 AM, tthiewes@... [SkyWires] <SkyWires@yahoogroups.com> wrote:

>
>
> Dr. Don
>
>
> I don't mean to veer off topic to far but you mentioned using 12 meter
> bamboo poles. It dawned on me that 12 meters would fit into a 40 foot truck
> trailer nicely for shipping but can you tell me more about the poles?
>
>
> - What diameter did you acquire?
>
>
> - What method did you use to plant them in the ground? cement?
>
>
> Bamboo might not work for me here in Minneapolis winters but it's worth
> asking you. I'd have to research this a bit further.
>
>
> I notice that you are an expatriate in Ecuador. Thanks for operating a
> clinic there . . .
>
>
> Terry KD0UTQ
>
>
>

4548. Re: Just Installed a loop

Yahoo group: SkyWires
Date: 2015-03-25 00:14:11 UTC
From: wv6bwf@...
Topic: 4531 Message: 4548

Hi Group,
here is a look at the difference of an 80 meter loop fed with and without a balun(4to10)
300OHM ladder line.
73
Bob K9QLL

4549. Re: [SkyWires] Re: Just Installed a loop

Yahoo group: SkyWires
Date: 2015-03-25 03:26:14 UTC
From: Andy
Topic: 4531 Message: 4549

wv6bwf, try that one again, please?

4550. Fiberglass poles for supporting horizontal loop antennas

Yahoo group: SkyWires
Date: 2015-03-25 04:41:39 UTC
From: Evan Rolek
Topic: 4531 Message: 4550

In response to some off-list inquiries, let me make a few comments about why I use fiberglass poles attached to trees for supporting my horizontal loop antennas.

By proper attachment, I can now do all lowering and maintenance activities from ground level. In addition, I can lower the pole itself from ground level should that ever be required.

The poles are virtually impervious to weather conditions. Rain, ice, and snow have no effect on the material. Painting them reduces the effect of UV rays and I've seen no deterioration in over 10 years of use.

They can sustain a large amount of flexing so that, even with stretchable truck tie-downs (and bungee cords) easing the load on the support cords, they resume their pre-flex shape after the source of the flexing is removed.

The fiberglass is easy to work with and, should one section break, it alone can be replaced without sustaining the added cost of replacing the entire length; I had to do this once when a tree fell down on one of my installations.

They are readily available (Max Gain Systems) and reasonably priced, even with shipping charges.

They are electrical insulators and have higher insulation resistance than wood, bamboo, etc. and have no observable effect on RF in the 1.8 to 30 mhz region.

By using stainless steel hardware exclusively, and marine grade pulleys (Harken brand), I consider the installation to be permanent to the extent that Mother Nature allows.

They can be easily painted to blend in with surroundings and thus result in "happy wife, happy life". I've not seen any deterioration of the paint and thus have not had any maintenance issues.

But here again, one size does not fit all. While fiberglass poles have worked well for me, they may or may not meet your requirements. I basically use telescoped poles, with ends slit and stainless steel hose clamps applied, for the basic installation. For assistance with stringing the wire, I sometimes use the fiberglass hotsticks which can also be used to trim tree branches. Since they are designed for rapid extension and retraction, they make excellent Field Day antenna supports as well.

Overall, I'm very pleased with my horizontal loop antennas and I hope that you are too. Let's all enjoy ham radio.

73,

Evan, K9SQG

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•

Reply to sender

•

Reply to group

•

Start a New Topic

•

Messages in this topic (17)

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4551. Re: Just Installed a loop

Yahoo group: SkyWires
Date: 2015-03-25 13:47:27 UTC
From: bob engle
Topic: 4531 Message: 4551
Attachments: 1 described; binary payloads are missing from this source WARC

let me try this as an attachment
Scans of 80 meter loop fed with 300 Ohm ladder line fed direct and with a 4 to 1 balun
if this doesnt work I will post as a picture pleas let me know

Note: I would love to have access to 12 meter Bamboo!But I make do with the fiberglass poles which support the loop and double as my flag poles.73Bob

4552. Re: Fiberglass poles for supporting horizontal loop antennas

Yahoo group: SkyWires
Date: 2015-03-25 15:20:35 UTC
From: tthiewes@...
Topic: 4531 Message: 4552

Thanks guys for the excellent comments on antenna poles. It'll keep my hobby moving forward.

Terry KD0UTQ

4553. Re: [SkyWires] Fiberglass poles for supporting horizontal loop antennas

Yahoo group: SkyWires
Date: 2015-03-25 18:19:35 UTC
From: Adrian Flynn
Topic: 4531 Message: 4553

Hi Evan,

Could you post some photos of how you are using the fiberglass poles?
I am not deciphering what you are saying as to how they are installed.

Thanks for your time.

72/73
Adrian KF7DYU
On Mar 25, 2015 12:41 AM, "Evan Rolek k9sqg@... [SkyWires]" <
SkyWires@yahoogroups.com> wrote:

>
>
> In response to some off-list inquiries, let me make a few comments
> about why I use fiberglass poles attached to trees for supporting my
> horizontal loop antennas.
>
> By proper attachment, I can now do all lowering and maintenance
> activities from ground level. In addition, I can lower the pole itself
> from ground level should that ever be required.
>
> The poles are virtually impervious to weather conditions. Rain, ice,
> and snow have no effect on the material. Painting them reduces the effect
> of UV rays and I've seen no deterioration in over 10 years of use.
>
> They can sustain a large amount of flexing so that, even with
> stretchable truck tie-downs (and bungee cords) easing the load on the
> support cords, they resume their pre-flex shape after the source of the
> flexing is removed.
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> The fiberglass is easy to work with and, should one section break, it
> alone can be replaced without sustaining the added cost of replacing the
> entire length; I had to do this once when a tree fell down on one of my
> installations.
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> They are readily available (Max Gain Systems) and reasonably priced,
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> They are electrical insulators and have higher insulation resistance
> than wood, bamboo, etc. and have no observable effect on RF in the 1.8 to
> 30 mhz region.
>
> By using stainless steel hardware exclusively, and marine grade pulleys
> (Harken brand), I consider the installation to be permanent to the extent
> that Mother Nature allows.

>
> They can be easily painted to blend in with surroundings and thus result
> in "happy wife, happy life". I've not seen any deterioration of the paint
> and thus have not had any maintenance issues.
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> But here again, one size does not fit all. While fiberglass poles have
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> basically use telescoped poles, with ends slit and stainless steel hose
> clamps applied, for the basic installation. For assistance with stringing
> the wire, I sometimes use the fiberglass hotsticks which can also be used
> to trim tree branches. Since they are designed for rapid extension and
> retraction, they make excellent Field Day antenna supports as well.
>
> Overall, I'm very pleased with my horizontal loop antennas and I hope
> that you are too. Let's all enjoy ham radio.
>
> 73,
>
> Evan, K9SQG
>
>
> Reply via web post
> <https://groups.yahoo.com/neo/groups/SkyWires/conversations/messages/4549;_ylc=X3oDMTJxb
HQ4aTdsBF9TAzk3MzU5NzE0BGdycElkAzEwOTQ2MTE5BGdycHNwSWQDMTcwNTA2MzEwOARtc2dJZAM0NTQ5BHNlYwN
mdHIEc2xrA3JwbHkEc3RpbWUDMTQyNzI1NDAxNg--?act=reply&messageNum=4549>
> * Reply to sender
> <ai.egrps@...?subject=Re%3A%20%5BSkyWires%5D%20Re%3A%20Just%20Installed%20a%20loop>
> * Reply to group
> <SkyWires@yahoogroups.com?subject=Re%3A%20%5BSkyWires%5D%20Re%3A%20Just%20Installed%20a%
20loop>
> * Start a New Topic
> <https://groups.yahoo.com/neo/groups/SkyWires/conversations/newtopic;_ylc=X3oDMTJmZmphcG
dnBF9TAzk3MzU5NzE0BGdycElkAzEwOTQ2MTE5BGdycHNwSWQDMTcwNTA2MzEwOARzZWMDZnRyBHNsawNudHBjBHN0
aW1lAzE0MjcyNTQwMTY->
> * Messages in this topic
> <https://groups.yahoo.com/neo/groups/SkyWires/conversations/topics/4531;_ylc=X3oDMTM1NTZ
kNHA0BF9TAzk3MzU5NzE0BGdycElkAzEwOTQ2MTE5BGdycHNwSWQDMTcwNTA2MzEwOARtc2dJZAM0NTQ5BHNlYwNmd
HIEc2xrA3Z0cGMEc3RpbWUDMTQyNzI1NDAxNgR0cGNJZAM0NTMx>
> (17)
> Visit Your Group
> <https://groups.yahoo.com/neo/groups/SkyWires/info;_ylc=X3oDMTJmMzBubTA4BF9TAzk3MzU5NzE0
BGdycElkAzEwOTQ2MTE5BGdycHNwSWQDMTcwNTA2MzEwOARzZWMDdnRsBHNsawN2Z2hwBHN0aW1lAzE0MjcyNTQwMT
Y->
>
> - New Members
> <https://groups.yahoo.com/neo/groups/SkyWires/members/all;_ylc=X3oDMTJnczAxbGExBF9TAzk3M
zU5NzE0BGdycElkAzEwOTQ2MTE5BGdycHNwSWQDMTcwNTA2MzEwOARzZWMDdnRsBHNsawN2bWJycwRzdGltZQMxNDI
3MjU0MDE2>
> 2
>

> [image: Yahoo! Groups]
> <https://groups.yahoo.com/neo;_ylc=X3oDMTJlODA3cGQ4BF9TAzk3NDc2NTkwBGdycElkAzEwOTQ2MTE5BGdycHNwSWQDMTcwNTA2MzEwOARzZWMDZnRyBHNsawNnZnAEc3RpbWUDMTQyNzI1NDAxNg-->
> * Privacy <https://info.yahoo.com/privacy/us/yahoo/groups/details.html> *
> Unsubscribe <SkyWires-unsubscribe@yahoogroups.com?subject=Unsubscribe> * Terms
> of Use <https://info.yahoo.com/legal/us/yahoo/utos/terms/>
>
> .
>
>
>

4554. Re: [SkyWires] Fiberglass poles for supporting horizontal loop antennas

Yahoo group: SkyWires
Date: 2015-03-25 20:17:12 UTC
From: Evan Rolek
Topic: 4531 Message: 4554

Adrian,

Now that winter might be over, I'll try to take some pics this weekend. Too, I'll check my archives and see if anything might be suitable.

73,

Evan, K9SQG

-----Original Message-----
From: Adrian Flynn ADRIANJAMESFLYNN@... [SkyWires] <SkyWires@yahoogroups.com>
To: SkyWires <SkyWires@yahoogroups.com>
Sent: Wed, Mar 25, 2015 2:19 pm
Subject: Re: [SkyWires] Fiberglass poles for supporting horizontal loop antennas

Hi Evan,

Could you post some photos of how you are using the fiberglass poles?
I am not deciphering what you are saying as to how they are installed.

Thanks for your time.

72/73
Adrian KF7DYU

4555. Re: [SkyWires] Fiberglass poles for supporting horizontal loop antennas

Yahoo group: SkyWires
Date: 2015-03-25 21:00:05 UTC
From: Adrian Flynn
Topic: 4531 Message: 4555

Thank you Even.
Winter? What's that ?
I think it depends on where you are at, 60 years in AZ WITH 30 in Phoenix and 30 up on high desert near Petrified Forest.
Very different worlds in same state.
I now am living in warm winter Michigan, I prefer winters here to winters in northern Arizona as it is MUCH warmer even with (for the most part) more snow. (I did get stuck in Flagstaff Hospital for 6 days in 2010 when 5 feet of snow fell in about 9 hours!)
On Mar 25, 2015 4:18 PM, "Evan Rolek k9sqg@... [SkyWires]" <SkyWires@yahoogroups.com> wrote:

>
>
> Adrian,
>
> Now that winter might be over, I'll try to take some pics this weekend.
> Too, I'll check my archives and see if anything might be suitable.
>
> 73,
>
> Evan, K9SQG
>
>
> -----Original Message-----
> From: Adrian Flynn ADRIANJAMESFLYNN@... [SkyWires] <SkyWires@yahoogroups.com>
> To: SkyWires <SkyWires@yahoogroups.com>
> Sent: Wed, Mar 25, 2015 2:19 pm
> Subject: Re: [SkyWires] Fiberglass poles for supporting horizontal loop antennas
>
>
> Hi Evan,
> Could you post some photos of how you are using the fiberglass poles?
> I am not deciphering what you are saying as to how they are installed.
> Thanks for your time.
> 72/73
> Adrian KF7DYU
>
>

4559. Re: [SkyWires] Fiberglass poles for supporting horizontal loop antennas

Yahoo group: SkyWires
Date: 2015-03-27 16:47:33 UTC
From: Evan Rolek
Topic: 4531 Message: 4559
Attachments: 4 described; binary payloads are missing from this source WARC

Adrian and the group,

Attached to this email are four pictures of how I attach fiberglass poles to trees, along with a close-up of some hardware alternatives. Due to AOL formatting issues, the pictures will not likely come through. Hence, if you contact me off-list, I would be happy to send them to you directly. I apologize for the inconvenience.

Too, I'd like to hear of your experiences and how the techniques could be improved.

73,

Evan, K9SQG

4560. Re: [SkyWires] Fiberglass poles for supporting horizontal loop antennas [4 Attachments]

Yahoo group: SkyWires
Date: 2015-03-27 19:43:13 UTC
From: Van Lincoln
Topic: 4531 Message: 4560

Id like to take a look-see of these photo's..
Thanks
WD8AAM
Van
vlincoln@...

At 11:47 3/27/2015, you wrote:
>[Attachment(s) from Evan Rolek included below]
>
>Adrian and the group,
>
>Attached to this email are four pictures of how I attach fiberglass
>poles to trees, along with a close-up of some hardware
>alternatives. Due to AOL formatting issues, the pictures will not
>likely come through. Hence, if you contact me off-list, I would be
>happy to send them to you directly. I apologize for the inconvenience.
>
>Too, I'd like to hear of your experiences and how the techniques
>could be improved.
>
>73,
>
>Evan, K9SQG

4561. 40m - 10m Delta Loop skywire

Yahoo group: SkyWires
Date: 2015-03-28 19:47:05 UTC
From: helectrojo@...
Topic: 4561 Message: 4561

Hello everyone,
Great to find this group! Hope to get some answers to my questions related to a horizontally placed Delta Loop antenna

Together with some friends we want to experiment with a Delta Loop with all three of the corners attached at around 9m above ground - I guess this is what is called a skywire delta loop antenna - :)

I found this plan for a Delta Loop
https://rsars.files.wordpress.com/2013/01/40m-10m-delta-loop-antenna-gu3whn-iss-1-3.pdf
https://rsars.files.wordpress.com/2013/01/40m-10m-delta-loop-antenna-gu3whn-iss-1-3.pdf
and I was wondering if the geometry and the way it functions will be the same in case we transfer the design fully to the horizontal plane. We plan to use a 4:1 balun.

My questions are:

a) Does a skywire antenna changes polarization depending on the position of the feed, the way a Delta Loop does?

b) Are 9m a good height for this antenna?

c) Can you suggest of any similar design that we could implement -without the use of ladder line if possible-

Many thanks in advance
iordanis
73 de sv2qqz

4562. Re: [SkyWires] 40m - 10m Delta Loop skywire

Yahoo group: SkyWires
Date: 2015-03-28 21:14:41 UTC
From: Don Sanders
Topic: 4561 Message: 4562

Iordanis, welcome to the group.
I am sure there many on the list that can answer your questions.
My answers are:
1. Horizontal the antenna will be basically omni-directional with minor lobe distortions.
2. The feed point does not make much difference whether it is at a corner or middle of one side of loop when horizontal.
Feed location may make some small changes in the minor lobes.
3. The antenna pictured is vertical mounted but horizontal polarity due to the feed point. It is bidirectional some what at right angle to the plane of the antenna. But due to the low height above ground it tends to be more omni-directional at the lower frequencies. When mounted horizontal it becomes more omni-directional.
4. You will need a matchbox to tune out the reactance in the coax. The coax may see high impedance at the antenna on some bands, therefore losses will be higher on the higher frequencies.
5. The varying impedance and high loss in coax is why these antennas are usually fed with parallel feed lines for multi-band use.
6. 9 meters is a good height, 15 meters would be better of course. You have to do with what you have. On 80, 40 and 30 meters it will have a high azimuth angle for max lobe. But it will still produce some DX contacts.
7. There are many various loop installations. But basically all are similar to the one shown on the web page.
Some use automatic tuners at the feed point, no balun needed and thus lower coax loss. Others use parallel feed line to a tuner for lower losses. Which compromise you must decide that fits your needs.
8. A 142 foot loop may not do well on 80 meters since it is close to a half wave loop. Thus it may have very high impedance and some tuners may not match the feed line to the transmitter. However if the coax is a odd multiple of a quarter wave X velocity factor at 3.6 MHz it may bring the impedance down to a impedance the matchbox can handle.

I hope this is helpful

Dr. Don HC4/W4BWS

On Sat, Mar 28, 2015 at 2:47 PM, helectrojo@... [SkyWires] <SkyWires@yahoogroups.com> wrote:

>
>
> Hello everyone,
> Great to find this group! Hope to get some answers to my questions related
> to a horizontally placed Delta Loop antenna
>
> Together with some friends we want to experiment with a Delta Loop with

> all three of the corners attached at around 9m above ground - I guess this
> is what is called a skywire delta loop antenna - :)
>
> I found this plan for a Delta Loop
> https://rsars.files.wordpress.com/2013/01/40m-10m-delta-loop-antenna-gu3whn-iss-1-3.pdf
> and I was wondering if the geometry and the way it functions will be the
> same in case we transfer the design fully to the horizontal plane. We plan
> to use a 4:1 balun.
>
> My questions are:
>
> a) Does a skywire antenna changes polarization depending on the position
> of the feed, the way a Delta Loop does?
>
> b) Are 9m a good height for this antenna?
>
> c) Can you suggest of any similar design that we could implement -without
> the use of ladder line if possible-
>
>
> Many thanks in advance
> iordanis
> 73 de sv2qqz
>
>
>
>

4563. Re: [SkyWires] 40m - 10m Delta Loop skywire

Yahoo group: SkyWires
Date: 2015-03-29 00:32:31 UTC
From: Rich Schmuke
Topic: 4561 Message: 4563

I built one with out ladder line and love it. Here is a u-tube of the idea.
www.youtube.com/watch?v=SOvhetU1_ps
I made it 80M size then tuned it to the center of the 20M phone band, here
are the numbers
http://i1102.photobucket.com/albums/g453/KD0ZZ/80MLoop_zpsa6e4cfe7.jpeg
I also used a 4:1 balun and here is a little information on the development
of it.
http://i1102.photobucket.com/albums/g453/KD0ZZ/Balunjpeg_zps41dd0ff6.jpg

Rich, KdØzz

On Sat, Mar 28, 2015 at 2:47 PM, helectrojo@... [SkyWires] <
SkyWires@yahoogroups.com> wrote:

>
>
> Hello everyone,
> Great to find this group! Hope to get some answers to my questions related
> to a horizontally placed Delta Loop antenna
>
> Together with some friends we want to experiment with a Delta Loop with
> all three of the corners attached at around 9m above ground - I guess this
> is what is called a skywire delta loop antenna - :)
>
> I found this plan for a Delta Loop
> https://rsars.files.wordpress.com/2013/01/40m-10m-delta-loop-antenna-gu3whn-iss-1-3.pdf
> and I was wondering if the geometry and the way it functions will be the
> same in case we transfer the design fully to the horizontal plane. We plan
> to use a 4:1 balun.
>
> My questions are:
>
> a) Does a skywire antenna changes polarization depending on the position
> of the feed, the way a Delta Loop does?
>
> b) Are 9m a good height for this antenna?
>
> c) Can you suggest of any similar design that we could implement -without
> the use of ladder line if possible-
>
>
> Many thanks in advance
> iordanis
> 73 de sv2qqz
>
>

>
>

4564. New Operator, first antenna

Yahoo group: SkyWires
Date: 2015-03-31 04:08:36 UTC
From: slr_65@...
Topic: 4564 Message: 4564

Hi Guys,

New operator here, I took my Tech test in Feb and my General in March. I have an Icom IC-730 but haven't got an antenna up yet. I've been pacifying myself with some local QSOs on 70cm with a HT.

I need to get an antenna up, but a tower isn't feasible right now. On offset feed Windom style would fit, but I've heard/read good things about the loops.

I do have room for an 80 meter loop, I'll probably only get it about 25' high though.

The feedline path would be 75-100'.

I recently purchased a Dentron MT-2000A antenna tuner.

The specs say:
Input impedance: 50 ohms (resistive)
Output impedance:
Coax - 50 ohms nominal; may range from a few ohms to a high impedance.
Long wire - either high or low impedance
Balanced line - 75 to 600 ohms

I notice it has a balun on the schematic and indeed there is one in the unit encased in a plastic container.

I don't know whether it's a voltage or current balun though and I don't know it's ratio.

Sooooo....

Set four poles so 65' of wire is on each side.

What type of wire for a long term installation?

What to use to fasten the wire to the poles, just your basic ceramic egg insulators?

How to join the ends to the feedline?

External balun, or use the one in the tuner?

Feedline, I'm assuming 450 ohm twin lead?

Any help, direction would be appreciated...it's time to get an antenna hung and get the HF rig fired up!

73's

Steve
KE0DBH

4565. Re: 40m - 10m Delta Loop skywire

Yahoo group: SkyWires
Date: 2015-03-31 10:18:12 UTC
From: helectrojo@...
Topic: 4561 Message: 4565

Many thanks to both of you for the quick reply!

Probably early next week I will be able to test my setting and find out how it actually behaves on the air, one more question on what should I expect in case I will feed the antenna through a 4:1 balun, you think it will ease a bit the tuning through the antenna tuner or should I use ladder line?

Best regards and many thanks again,
iordanis

4566. Re: [SkyWires] New Operator, first antenna

Yahoo group: SkyWires
Date: 2015-03-31 10:23:19 UTC
From: WA8JXM
Topic: 4564 Message: 4566

Steve, first of all, welcome to HF.

FWIW, I operated several years with dipoles with the center only up 20' and the ends just head high. That worked out decently.

Last summer I finally put up a tower and several 40' utility poles and put up 650' loop. It worked okay but no better than the inverted vee up on the tower. So I cut it down to a 160m OCFD..

As for the loop, some sources say use a balun, others like the ARRL Handbook say do not use a balun. Try it either way.

Some loop designs say feed it directly with coax and no balun, others say to use ladder line or open wire. Take your choice.

That's the great thing about antennas, they are still one way that we can homebrew and experiment.

Antenna wire? 14 or 16 gauge hard-drawn copper, copper clad steel wire, or buy a 500' roll of THHN (12 or 14 ga) at Lowes or Home Depot.

Insulators? Although the egg insulators will work, I would use regular antenna insulators not the egg type.

Connecting feedline to the antenna? Use an insulator, secure both wires securely and either use crimp terminals or solder the connection or both (bare crimp terminals and then solder. However, when you are first putting it up and may be adjusting it, I would use either the crimp terminals or the twist terminals used for household wiring.

There are no hard and fast rules for antennas they are a great area to experiment with. That 20' high dipole I mentioned? I even used it on 160 and made some contacts and I've worked Australia on 30m with a 20' high 40m dipole, coax fed. I will mention that for poor, compromise antennas, digital modes or CW work best.

73, Ken WA8JXM

4567. Re: [SkyWires] Re: 40m - 10m Delta Loop skywire

Yahoo group: SkyWires
Date: 2015-03-31 12:30:19 UTC
From: Rich Schmuke
Topic: 4561 Message: 4567

I dont remember, what type of radio do you have?? If it has a built in tuner it should be OK as is if balun is at feed point and you use coax. With ladder line you need a 4:1 at the indoor tuner . Some people have a problem feeding ladder line into the shack.

Rich, KdØzz

On Tue, Mar 31, 2015 at 5:18 AM, helectrojo@... [SkyWires] <SkyWires@yahoogroups.com> wrote:

>
>
> Many thanks to both of you for the quick reply!
>
> Probably early next week I will be able to test my setting and find out
> how it actually behaves on the air, one more question on what should I
> expect in case I will feed the antenna through a 4:1 balun, you think it
> will ease a bit the tuning through the antenna tuner or should I use ladder
> line?
>
>
> Best regards and many thanks again,
> iordanis
>
>

4568. Re: [SkyWires] New Operator, first antenna

Yahoo group: SkyWires
Date: 2015-03-31 12:50:10 UTC
From: Rich Schmuke
Topic: 4564 Message: 4568

For you size loop , as has been said any 12 or 14 gauge wire will be fine.
If you can find some scrap plastic, (polycarbonate) it is easy to make
you own center insulator.

http://i1102.photobucket.com/albums/g453/KD0ZZ/300OhmMount.jpg

My picture show a 300 ohm one but just adjust the clamp screws for 450 ohm.
Check out some of the other pictures and you I use split bolts for attach
adjustment. You can get them at any home depot type store or local hardware
and make adjustment very easy,
The balun in you tuner should be fine, if it cant go down to 1:1 SWR you
can build your own. Looking at my album you can see how easy it is.
Don't worry about height of the wire, just so you don't knock you hat off
while cutting the grass it will work, but then higher is better.

Rich, KdØzz

On Mon, Mar 30, 2015 at 11:08 PM, slr_65@... [SkyWires] <
SkyWires@yahoogroups.com> wrote:

>
>
> Hi Guys,
>
> New operator here, I took my Tech test in Feb and my General in March. I
> have an Icom IC-730 but haven't got an antenna up yet. I've been pacifying
> myself with some local QSOs on 70cm with a HT.
>
> I need to get an antenna up, but a tower isn't feasible right now. On
> offset feed Windom style would fit, but I've heard/read good things about
> the loops.
>
> I do have room for an 80 meter loop, I'll probably only get it about 25'
> high though.
>
> The feedline path would be 75-100'.
>
> I recently purchased a Dentron MT-2000A antenna tuner.
>
> The specs say:
> Input impedance: 50 ohms (resistive)
> Output impedance:
> Coax - 50 ohms nominal; may range from a few ohms to a high impedance.
> Long wire - either high or low impedance
> Balanced line - 75 to 600 ohms
>

> I notice it has a balun on the schematic and indeed there is one in the
> unit encased in a plastic container.
>
> I don't know whether it's a voltage or current balun though and I don't
> know it's ratio.
>
> Sooooo....
>
> Set four poles so 65' of wire is on each side.
>
> What type of wire for a long term installation?
>
> What to use to fasten the wire to the poles, just your basic ceramic egg
> insulators?
>
> How to join the ends to the feedline?
>
> External balun, or use the one in the tuner?
>
> Feedline, I'm assuming 450 ohm twin lead?
>
> Any help, direction would be appreciated...it's time to get an antenna
> hung and get the HF rig fired up!
>
> 73's
>
> Steve
> KE0DBH
>
>
>
>

4569. Re: [SkyWires] Re: 40m - 10m Delta Loop skywire

Yahoo group: SkyWires
Date: 2015-03-31 14:57:29 UTC
From: Evan Rolek
Topic: 4561 Message: 4569

I prefer to use ladder (window) line with a link coupled tuner, or dual roller inductor tuner, in the shack. With a balun at the antenna, the ratio will not be correct for all bands. If it is ok for the bands of interest, then yes, it could be used. But, for example, if the antenna is 110 ohms resistive on the fundamental, that brings it down to 27.5 ohm, outside the range of some tuners. Using window line to the shack solves a lot of problems. Too, for me, I find 300 ohm transmitting twinlead is a better match for my bands of operation. Lower visual cross section which xyl likes.

73,

Evan, K9SQG

-----Original Message-----
From: helectrojo@... [SkyWires] <SkyWires@yahoogroups.com>
To: SkyWires <SkyWires@yahoogroups.com>
Sent: Tue, Mar 31, 2015 6:18 am
Subject: [SkyWires] Re: 40m - 10m Delta Loop skywire

Many thanks to both of you for the quick reply!

Probably early next week I will be able to test my setting and find out how it actually behaves on the air, one more question on what should I expect in case I will feed the antenna through a 4:1 balun, you think it will ease a bit the tuning through the antenna tuner or should I use ladder line?

Best regards and many thanks again,
iordanis

4570. Re: [SkyWires] New Operator, first antenna

Yahoo group: SkyWires
Date: 2015-03-31 14:59:02 UTC
From: Evan Rolek
Topic: 4564 Message: 4570

I have found in over 20 years of experimenting with loops that #13 stranded copperweld, insulated, is about the best antenna wire I have ever used!

73,

Evan, K9SQG

4571. Re: 40m - 10m Delta Loop skywire

Yahoo group: SkyWires
Date: 2015-03-31 17:53:43 UTC
From: helectrojo@...
Topic: 4561 Message: 4571

Thanks for your reply Evan!

iordanis

4572. New file uploaded to SkyWires

Yahoo group: SkyWires
Date: 2015-03-31 18:11:50 UTC
From: SkyWires@yahoogroups.com
Topic: 1641 Message: 4572

Hello,

This email message is a notification to let you know that
a file has been uploaded to the Files area of the SkyWires
group.

File : /80Meterhorizontalloop.pdf
Uploaded by : everettsharp74 <everettsharp@...>
Description : 80 meter loop using a 2.5:1 vs 4:1 Balun

You can access this file at the URL:
https://groups.yahoo.com/neo/groups/SkyWires/files/80Meterhorizontalloop.pdf

To learn more about file sharing for your group, please visit:
https://help.yahoo.com/kb/index?page=content&y=PROD_GRPS&locale=en_US&id=SLN15398

Regards,

everettsharp74 <everettsharp@...>

4573. 80 meter loop using a 2.5:1 vs a 4:1 balun

Yahoo group: SkyWires
Date: 2015-03-31 18:17:09 UTC
From: everettsharp@...
Topic: 4573 Message: 4573

I just removed a file that I posted on 3/22/15 and replaced it with a new article with data compairing a 2.5:1 vs a 4:1 balun. Based on this experiment it looks like the 4:1 balun is a better way to go, as it improved every band, with the exception of 80 Meters. I will later add more wire to bring it to 275'

Everett N8CNP

4574. AW: [SkyWires] New Operator, first antenna

Yahoo group: SkyWires
Date: 2015-03-31 19:48:02 UTC
From: siegfried jackstien
Topic: 4564 Message: 4574

Ladderline down to shack

Window line works good and is easy to work with

Upper few inches changed to some added speaker cable (soldered to the window line and heat shriked) ... reason ... more flexible at the point were the line may flap around in the wind

Homebrewed centre insulator (made from some plastic I had laying around

Egg insulatos in the edges

....

Do not use the best wire .. use the cheapest ... and make your tests with scrap wire ... then when you found your permanent installation you can change to some real good antenna wire

....

Make the ladderline several feet longer as needed ... and you have trouble with tuning on some of the higher bands you can change the ladderline length

MAKE NOTES!!!!!!!!!!!!!

....

With changing ladderline and loop length I could find a "sweet spot where no tuner is needed on several bands (just the balun inside the tuner but the other parts are bridged)

Welcome abord :-)

Dg9bfc

Sigi

Ps ... what about topband???

> -----Ursprüngliche Nachricht-----
> Von: SkyWires@yahoogroups.com [mailto:SkyWires@yahoogroups.com]
> Gesendet: Dienstag, 31. März 2015 04:09
> An: SkyWires@yahoogroups.com
> Betreff: [SkyWires] New Operator, first antenna
>
>
>
> Hi Guys,
>

> New operator here, I took my Tech test in Feb and my General in March. I
> have an Icom IC-730 but haven't got an antenna up yet. I've been
> pacifying myself with some local QSOs on 70cm with a HT.
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> I need to get an antenna up, but a tower isn't feasible right now. On
> offset feed Windom style would fit, but I've heard/read good things about
> the loops.
>
> I do have room for an 80 meter loop, I'll probably only get it about 25'
> high though.
>
> The feedline path would be 75-100'.
>
> I recently purchased a Dentron MT-2000A antenna tuner.
>
> The specs say:
> Input impedance: 50 ohms (resistive)
> Output impedance:
> Coax - 50 ohms nominal; may range from a few ohms to a high impedance.
> Long wire - either high or low impedance
> Balanced line - 75 to 600 ohms
>
> I notice it has a balun on the schematic and indeed there is one in the
> unit encased in a plastic container.
>
> I don't know whether it's a voltage or current balun though and I don't
> know it's ratio.
>
> Sooooo....
>
> Set four poles so 65' of wire is on each side.
>
> What type of wire for a long term installation?
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> What to use to fasten the wire to the poles, just your basic ceramic egg
> insulators?
>
> How to join the ends to the feedline?
>
> External balun, or use the one in the tuner?
>
> Feedline, I'm assuming 450 ohm twin lead?
>
> Any help, direction would be appreciated...it's time to get an antenna
> hung and get the HF rig fired up!
>
> 73's
>
> Steve
> KE0DBH

>
>
>
>
>
>

4575. AW: [SkyWires] 80 meter loop using a 2.5:1 vs a 4:1 balun

Yahoo group: SkyWires
Date: 2015-03-31 19:56:18 UTC
From: siegfried jackstien
Topic: 4573 Message: 4575

Just looked in the pdf ... good work

Dg9bfc

Sigi

> -----Ursprüngliche Nachricht-----
> Von: SkyWires@yahoogroups.com [mailto:SkyWires@yahoogroups.com]
> Gesendet: Dienstag, 31. März 2015 18:17
> An: SkyWires@yahoogroups.com
> Betreff: [SkyWires] 80 meter loop using a 2.5:1 vs a 4:1 balun
>
>
>
> I just removed a file that I posted on 3/22/15 and replaced it with a new
> article with data compairing a 2.5:1 vs a 4:1 balun. Based on this
> experiment it looks like the 4:1 balun is a better way to go, as it
> improved every band, with the exception of 80 Meters. I will later add
> more wire to bring it to 275'
>
>
>
>
> Everett N8CNP
>
>

4576. Re: [SkyWires] Re: 40m - 10m Delta Loop skywire

Yahoo group: SkyWires
Date: 2015-03-31 21:50:45 UTC
From: Don Sanders
Topic: 4561 Message: 4576

You haven't stated the length of the feed line from your tuner to the loop.
If more than 50 feet, I would use parallel feed line from the loop to just outside the ham room. Then the 4 to 1 balun and a short coax into the tuner. Your losses in the feed line will be much lower in the parallel line than in the coax.
Depending on your tuner being able to, on 40 and 30, match the transmitter to the coax, the loop should work well 40 to 10 meters.
At low height 1000 miles on 40 and longer on other bands should be normal.
Some nights depending on noise and propagation you should be able to work DX. Dx on 20 to 10 should be regular depending on propagation.

Bona Fortuna

Dr. Don HC4/W4BWS

On Tue, Mar 31, 2015 at 5:18 AM, helectrojo@... [SkyWires] <SkyWires@yahoogroups.com> wrote:

>
>
> Many thanks to both of you for the quick reply!
>
> Probably early next week I will be able to test my setting and find out
> how it actually behaves on the air, one more question on what should I
> expect in case I will feed the antenna through a 4:1 balun, you think it
> will ease a bit the tuning through the antenna tuner or should I use ladder
> line?
>
>
> Best regards and many thanks again,
> iordanis
>
>

4577. Re: [SkyWires] 80 meter loop using a 2.5:1 vs a 4:1 balun

Yahoo group: SkyWires
Date: 2015-03-31 22:09:43 UTC
From: Don Sanders
Topic: 4573 Message: 4577

It appears the 4 to 1 balun brought 30 meters down close to 3 to 1 and thus
it is usable with a tuner.
Thanks for the data dump.

Dr. Don HC4/W4BWS

On Tue, Mar 31, 2015 at 1:17 PM, everettsharp@... [SkyWires] <
SkyWires@yahoogroups.com> wrote:

>
>
> I just removed a file that I posted on 3/22/15 and replaced it with a new
> article with data compairing a 2.5:1 vs a 4:1 balun. Based on this
> experiment it looks like the 4:1 balun is a better way to go, as it
> improved every band, with the exception of 80 Meters. I will later add more
> wire to bring it to 275'
>
>
> Everett N8CNP
>
>
>

4578. Re: [SkyWires] Re: 40m - 10m Delta Loop skywire

Yahoo group: SkyWires
Date: 2015-03-31 22:11:08 UTC
From: Everett Sharp
Topic: 4561 Message: 4578

Don,

Unfortunately I have about 40' of RG8X coax that runs from my attic to my ham shack and another 40' of RG8X to the 4:1 balun, so ladder line, or 300 ohm wire to, the 40' run to the shack might not be the best way to go. However, I will increase the length from the current 264' to 275' based on a previous scan that shows 40 meters and above bands closer to resonance at, or near the center of each band. It doesn't help 80 meters, but I don't use it much anyway.

Everett N8CNP

Sent from my iPad

> On Mar 31, 2015, at 4:50 PM, Don Sanders w4bws1@... [SkyWires] <SkyWires@yahoogroups.com> wrote:
>
> You haven't stated the length of the feed line from your tuner to the loop. If more than 50 feet, I would use parallel feed line from the loop to just outside the ham room. Then the 4 to 1 balun and a short coax into the tuner. Your losses in the feed line will be much lower in the parallel line than in the coax.
> Depending on your tuner being able to, on 40 and 30, match the transmitter to the coax, the loop should work well 40 to 10 meters.
> At low height 1000 miles on 40 and longer on other bands should be normal. Some nights depending on noise and propagation you should be able to work DX. Dx on 20 to 10 should be regular depending on propagation.
>
> Bona Fortuna
>
> Dr. Don HC4/W4BWS
>
>> On Tue, Mar 31, 2015 at 5:18 AM, helectrojo@... [SkyWires] <SkyWires@yahoogroups.com> wrote:
>>
>> Many thanks to both of you for the quick reply!
>>
>> Probably early next week I will be able to test my setting and find out how it actually behaves on the air, one more question on what should I expect in case I will feed the antenna through a 4:1 balun, you think it will ease a bit the tuning through the antenna tuner or should I use ladder line?
>>
>>
>> Best regards and many thanks again,
>> iordanis
>>
>
>

4579. Re: [SkyWires] 80 meter loop using a 2.5:1 vs a 4:1 balun

Yahoo group: SkyWires
Date: 2015-03-31 22:13:46 UTC
From: Everett Sharp
Topic: 4573 Message: 4579

Don,

Once I add the additional wire to increase the length to 275' I will post the the sweep data.

Everett N8CNP

Sent from my iPad

> On Mar 31, 2015, at 5:09 PM, Don Sanders w4bws1@... [SkyWires] <SkyWires@yahoogroups.com> wrote:
>
> It appears the 4 to 1 balun brought 30 meters down close to 3 to 1 and thus it is usable with a tuner.
> Thanks for the data dump.
>
> Dr. Don HC4/W4BWS
>
>> On Tue, Mar 31, 2015 at 1:17 PM, everettsharp@... [SkyWires] <SkyWires@yahoogroups.com> wrote:
>>
>> I just removed a file that I posted on 3/22/15 and replaced it with a new article with data compairing a 2.5:1 vs a 4:1 balun. Based on this experiment it looks like the 4:1 balun is a better way to go, as it improved every band, with the exception of 80 Meters. I will later add more wire to bring it to 275'
>>
>>
>>
>> Everett N8CNP
>>
>
>

4580. Re: [SkyWires] Re: 40m - 10m Delta Loop skywire

Yahoo group: SkyWires
Date: 2015-03-31 22:23:17 UTC
From: Don Sanders
Topic: 4561 Message: 4580

Well 300 ohm, or better open wire parallel feed line, from antenna to the 4 to 1 balun and the 40 foot coax to the shack would reduce the loss in the coax to one-half . That could be 3 to 6 db depending on the band and the impedance at the loop feed point. Of course the loss in the 40 feet can't be avoided but it can be reduced as much as possible. Remember the high SWR in the coax at the antenna is repeated every half-wave along the total coax run.
I will be glad to see the next results you get by adding the short wire to the loop.

Dr. Don HC4/W4BWS

On Tue, Mar 31, 2015 at 5:11 PM, Everett Sharp everettsharp@... [SkyWires] <SkyWires@yahoogroups.com> wrote:

>
>
> Don,
>
> Unfortunately I have about 40' of RG8X coax that runs from my attic to my ham shack and another 40' of RG8X to the 4:1 balun, so ladder line, or 300 ohm wire to, the 40' run to the shack might not be the best way to go. However, I will increase the length from the current 264' to 275' based on a previous scan that shows 40 meters and above bands closer to resonance at, or near the center of each band. It doesn't help 80 meters, but I don't use it much anyway.
>
> Everett N8CNP
>
> Sent from my iPad
>
> On Mar 31, 2015, at 4:50 PM, Don Sanders w4bws1@... [SkyWires] <SkyWires@yahoogroups.com> wrote:
>
>
>
>
> You haven't stated the length of the feed line from your tuner to the loop. If more than 50 feet, I would use parallel feed line from the loop to just outside the ham room. Then the 4 to 1 balun and a short coax into the tuner. Your losses in the feed line will be much lower in the parallel line than in the coax.
> Depending on your tuner being able to, on 40 and 30, match the transmitter to the coax, the loop should work well 40 to 10 meters.
> At low height 1000 miles on 40 and longer on other bands should be normal.
> Some nights depending on noise and propagation you should be able to work DX. Dx on 20 to 10 should be regular depending on propagation.

>
> Bona Fortuna
>
> Dr. Don HC4/W4BWS
>
> On Tue, Mar 31, 2015 at 5:18 AM, helectrojo@... [SkyWires] <
> SkyWires@yahoogroups.com> wrote:
>
>>
>>
>> Many thanks to both of you for the quick reply!
>>
>> Probably early next week I will be able to test my setting and find out
>> how it actually behaves on the air, one more question on what should I
>> expect in case I will feed the antenna through a 4:1 balun, you think it
>> will ease a bit the tuning through the antenna tuner or should I use ladder
>> line?
>>
>>
>> Best regards and many thanks again,
>> iordanis
>>
>
>
>

4581. Re: New Operator, first antenna

Yahoo group: SkyWires
Date: 2015-04-01 04:09:14 UTC
From: slr_65@...
Topic: 4564 Message: 4581

Thanks Guys! Both for the advice and the welcome!

I should clarify, I'm a returning amateur - I had my novice ticket at 13, my Tech at 15 and my General at 17. Unfortunately as I went to college, the service, got married, etc. I got away from radio and let my license expire. When I was a teen my brother was also an amateur, we had a full Yaesu FT-101E station but only ran 20 and 10 meter, the DX was GREAT in those bands in the late 70s / early 80s!

So, this is my first foray into a multiband wire antenna, though I have experimented with dipoles in the early '80s.

OK, it looks like it's shaping up to be a square about 65' to a side. Normal insulators on the corners. What to use for the four poles I've yet to decide. I'm thinking 2" plumbing pipe, or possibly even emt conduit or exhaust tube may work. For the first run I'll use some 12 THHN copper I have, if I'm liking how it works I'll switch to the Wireman 13awg wire. To feed I'm thinking 450 ohm window line. For a center insulator I'm thinking a Ladder-loc center. I'm having some vision issues so working around saws and stuff probably isn't a good idea and the ladder-loc is only $15. Run the 450 ohm to the tuner. Doing some research it seems these tuners had 4:1 voltage baluns in them, I may look at putting in a 4:1 current balun. Then a short piece of coax to the rig...sound like a plan?

The only real question is what to use for the support poles. I have a friend with a 30' extension ladder, so I'm thinking something at about 25' is in order, if we keep the ladder fairly vertical then the force on the pole won't be as much, so 2" pipe should suffice...may have to just put one in and see.

Thanks!

Steve
Currently KE0DBH, formerly (circa 1983) KA0JXR

4582. Re: New Operator, first antenna

Yahoo group: SkyWires
Date: 2015-04-01 04:12:08 UTC
From: slr_65@...
Topic: 4564 Message: 4582

Hi Sigi,

The top band I'm looking at is 10 meter. I want to have access to all of them (I've worked hard for my license, I want to take advantage of every privilege it extends me), which is why I bought the Dentron tuner, they appear to be good units that can tune most anything.

/Steve
KE0DBH.

4583. Re: [SkyWires] Re: New Operator, first antenna

Yahoo group: SkyWires
Date: 2015-04-01 04:19:30 UTC
From: Don Sanders
Topic: 4564 Message: 4583

If you use plastic pipe, 3 ten foot sections, overlapped about 2 feet and bolted together should work. Start with 3 inch at the base. Consider a wood plug at the top with a PVC cap on the top section. Then you can install a pulley to hoist up the antenna and a eye screw for the back guy. A set of three guys at the top of the 20 foot level, actually 18 feet, and a back guy at the top to offset the antenna wires should support the mast. Above 20 feet the pole will certainly sway in the wind.65 feet of wire will pull the mast a good bit.

Dr. Don HC4/W4BWS

On Tue, Mar 31, 2015 at 11:09 PM, slr_65@... [SkyWires] <SkyWires@yahoogroups.com> wrote:

>
>
> Thanks Guys! Both for the advice and the welcome!
>
> I should clarify, I'm a returning amateur - I had my novice ticket at 13,
> my Tech at 15 and my General at 17. Unfortunately as I went to college,
> the service, got married, etc. I got away from radio and let my license
> expire. When I was a teen my brother was also an amateur, we had a full
> Yaesu FT-101E station but only ran 20 and 10 meter, the DX was GREAT in
> those bands in the late 70s / early 80s!
>
> So, this is my first foray into a multiband wire antenna, though I have
> experimented with dipoles in the early '80s.
>
> OK, it looks like it's shaping up to be a square about 65' to a side.
> Normal insulators on the corners. What to use for the four poles I've yet
> to decide. I'm thinking 2" plumbing pipe, or possibly even emt conduit or
> exhaust tube may work. For the first run I'll use some 12 THHN copper I
> have, if I'm liking how it works I'll switch to the Wireman 13awg wire. To
> feed I'm thinking 450 ohm window line. For a center insulator I'm thinking
> a Ladder-loc center. I'm having some vision issues so working around saws
> and stuff probably isn't a good idea and the ladder-loc is only $15. Run
> the 450 ohm to the tuner. Doing some research it seems these tuners had
> 4:1 voltage baluns in them, I may look at putting in a 4:1 current balun.
> Then a short piece of coax to the rig...sound like a plan?
>
> The only real question is what to use for the support poles. I have a
> friend with a 30' extension ladder, so I'm thinking something at about 25'
> is in order, if we keep the ladder fairly vertical then the force on the
> pole won't be as much, so 2" pipe should suffice...may have to just put one
> in and see.
>

> Thanks!
>
> Steve
> Currently KE0DBH, formerly (circa 1983) KA0JXR
>
>

4584. Re: [SkyWires] Re: New Operator, first antenna

Yahoo group: SkyWires
Date: 2015-04-01 05:20:24 UTC
From: slr_65@...
Topic: 4564 Message: 4584

I don't have the room or desire to guy the poles, I'd rather pay a little more and have them self support.

This site shows a 2" sch 40 base with 1-1/2" top section that self supports at 35 feet. I would think I could drop the height back to 25 feet and keep it all 2" and be sturdy enough to put a ladder against.

http://www.wv7u.com/mast/mast.html http://www.wv7u.com/mast/mast.html

4585. AW: [SkyWires] Re: New Operator, first antenna

Yahoo group: SkyWires
Date: 2015-04-01 08:56:40 UTC
From: siegfried jackstien
Topic: 4564 Message: 4585

I would not want to climb a ladder that is standing against a plastic tubing ... no way ... but if you add some pull-eyes at the top you do not need to climb a ladder ...

The rest seems to be a good plan

... I do not like the ladder lock thingy ... reason is that the line may break at the entry point of that ladder lock ...

The window line (and the antenna) WILL swing in the wind and so I added some very flexible speaker cable at the upper end

Greetz

Sigi

Dg9bfc

> -----Ursprüngliche Nachricht-----
> Von: SkyWires@yahoogroups.com [mailto:SkyWires@yahoogroups.com]
> Gesendet: Mittwoch, 1. April 2015 05:20
> An: SkyWires@yahoogroups.com
> Betreff: Re: [SkyWires] Re: New Operator, first antenna
>
>
>
> I don't have the room or desire to guy the poles, I'd rather pay a little
> more and have them self support.
>
> This site shows a 2" sch 40 base with 1-1/2" top section that self
> supports at 35 feet. I would think I could drop the height back to 25
> feet and keep it all 2" and be sturdy enough to put a ladder against.
>
> http://www.wv7u.com/mast/mast.html
>
>

4586. AW: [SkyWires] Re: New Operator, first antenna

Yahoo group: SkyWires
Date: 2015-04-01 08:57:55 UTC
From: siegfried jackstien
Topic: 4564 Message: 4586

I meant 160 when asking for topband ...

Dg9bfc

Sigi

> -----Ursprüngliche Nachricht-----
> Von: SkyWires@yahoogroups.com [mailto:SkyWires@yahoogroups.com]
> Gesendet: Mittwoch, 1. April 2015 04:12
> An: SkyWires@yahoogroups.com
> Betreff: [SkyWires] Re: New Operator, first antenna
>
>
>
> Hi Sigi,
>
> The top band I'm looking at is 10 meter. I want to have access to all of
> them (I've worked hard for my license, I want to take advantage of every
> privilege it extends me), which is why I bought the Dentron tuner, they
> appear to be good units that can tune most anything.
>
> /Steve
> KE0DBH.
>
>

4587. Re: AW: [SkyWires] Re: New Operator, first antenna

Yahoo group: SkyWires
Date: 2015-04-01 12:23:31 UTC
From: slr_65@...
Topic: 4564 Message: 4587

Hi Sigi,

I have an Icom IC-730 for an HF radio and it only goes to 80 meter, and my lot size only allows an 80 meter loop, so it'll be 80-10 I'm looking for.

I agree, I haven't seriously looked at pvc, it was a member suggestion here. The link I gave uses 2" sch 40 steel pipe with 1-1/2" for the last section to make a 36' tilt up self supporting pole. That design is pretty common, I've found it on several sites and in several forums and no one seems to have had any trouble with it, though they are tilting it to install the antenna where I'll probably be keeping it shorter and working off a ladder, though there is a tree trimming place in town with a bucket truck that other amateurs in town have used for antenna work.

73's

Steve

4588. Re: [SkyWires] Re: New Operator, first antenna

Yahoo group: SkyWires
Date: 2015-04-01 14:51:33 UTC
From: WA8JXM
Topic: 4564 Message: 4588

Put a ladder against a 1-1/2" pipe and climb it? You must have a death wish, sir. A ladder against a single narrow support like that will likely twist sideways once you get up it. Not that I would trust the strength of the mast to support me on a ladder either.

The design of that mast looks good except the use of black iron pipe. Water pipe, etc. is soft iron and should not be used structurally. Structural steel tubing (DOM) is much stronger. It's also available in different thicknesses so that you can get a good fit slipping one piece inside the other.

I have a somewhat similar design made out of wood, a 24' 6x6 cradled between a pair of 4x6's and a 16' 4x4 spliced on top

Ken WA8JXM

On 01/04/2015 01:20, slr_65@... [SkyWires] wrote:
>
>
> I don't have the room or desire to guy the poles, I'd rather pay a
> little more and have them self support.
>
> This site shows a 2" sch 40 base with 1-1/2" top section that self
> supports at 35 feet. I would think I could drop the height back to 25
> feet and keep it all 2" and be sturdy enough to put a ladder against.
>
> http://www.wv7u.com/mast/mast.html

4589. Re: [SkyWires] Re: New Operator, first antenna

Yahoo group: SkyWires
Date: 2015-04-01 15:59:01 UTC
From: Rich Schmuke
Topic: 4564 Message: 4589

Black iron will work but why bother with a inferior product. Use just standard steel and a coat of paint. Scd 40 steel is strong enough for any wire even a small beam.

http://i1102.photobucket.com/albums/g453/KD0ZZ/TiltOverB.jpg

This is a picture of mine , it now supports one leg of a 160 delta loop and a hex beam. Other pictures show a yagi but now is a hex. Also is a sketch on a smaller tilt over in my album. Plain steel is stronger and with paint you don't need the expense of galvanized and if you want to weld on it you don't have the problem of galvanized. My larger tiltover requires no welding and can be scaled down for 2" pipe.
When you order stock make sure you know the difference between 2" pipe and 2" tubing.

Rich, KdØzz

On Wed, Apr 1, 2015 at 9:51 AM, WA8JXM wa8jxm@... [SkyWires] <SkyWires@yahoogroups.com> wrote:

>
>
> Put a ladder against a 1-1/2" pipe and climb it? You must have a death
> wish, sir. A ladder against a single narrow support like that will likely
> twist sideways once you get up it. Not that I would trust the strength of
> the mast to support me on a ladder either.
>
> The design of that mast looks good except the use of black iron pipe.
> Water pipe, etc. is soft iron and should not be used structurally.
> Structural steel tubing (DOM) is much stronger. It's also available in
> different thicknesses so that you can get a good fit slipping one piece
> inside the other.
>
> I have a somewhat similar design made out of wood, a 24' 6x6 cradled
> between a pair of 4x6's and a 16' 4x4 spliced on top
>
> Ken WA8JXM
>
>
> On 01/04/2015 01:20, slr_65@... [SkyWires] wrote:
>
>
>
>
> I don't have the room or desire to guy the poles, I'd rather pay a little
> more and have them self support.
>

> This site shows a 2" sch 40 base with 1-1/2" top section that self
> supports at 35 feet. I would think I could drop the height back to 25 feet
> and keep it all 2" and be sturdy enough to put a ladder against.
>
> http://www.wv7u.com/mast/mast.html
>
>
>
>

4590. AW: [SkyWires] Re: New Operator, first antenna

Yahoo group: SkyWires
Date: 2015-04-01 16:34:18 UTC
From: siegfried jackstien
Topic: 4564 Message: 4590

Hi Rich

How do you paint the inner side of the tubing??

Dg9bfc

Sigi

> -----Ursprüngliche Nachricht-----
> Von: SkyWires@yahoogroups.com [mailto:SkyWires@yahoogroups.com]
> Gesendet: Mittwoch, 1. April 2015 15:59
> An: SkyWires@yahoogroups.com
> Betreff: Re: [SkyWires] Re: New Operator, first antenna
>
>
>
> Black iron will work but why bother with a inferior product. Use just
> standard steel and a coat of paint. Scd 40 steel is strong enough for
> any wire even a small beam.
>
> http://i1102.photobucket.com/albums/g453/KD0ZZ/TiltOverB.jpg
>
>
> This is a picture of mine , it now supports one leg of a 160 delta loop
> and a hex beam. Other pictures show a yagi but now is a hex. Also is a
> sketch on a smaller tilt over in my album. Plain steel is stronger and
> with paint you don't need the expense of galvanized and if you want to
> weld on it you don't have the problem of galvanized. My larger tiltover
> requires no welding and can be scaled down for 2" pipe.
>
> When you order stock make sure you know the difference between 2" pipe and
> 2" tubing.
>
>
> Rich, KdØzz
>
>
> On Wed, Apr 1, 2015 at 9:51 AM, WA8JXM wa8jxm@... [SkyWires]
> <SkyWires@yahoogroups.com> wrote:
>
>
>
>
>
>
> Put a ladder against a 1-1/2" pipe and climb it? You must have a
> death wish, sir. A ladder against a single narrow support like that will

> likely twist sideways once you get up it. Not that I would trust the
> strength of the mast to support me on a ladder either.
>
> The design of that mast looks good except the use of black iron
> pipe. Water pipe, etc. is soft iron and should not be used structurally.
> Structural steel tubing (DOM) is much stronger. It's also available in
> different thicknesses so that you can get a good fit slipping one piece
> inside the other.
>
> I have a somewhat similar design made out of wood, a 24' 6x6 cradled
> between a pair of 4x6's and a 16' 4x4 spliced on top
>
> Ken WA8JXM
>
>
>
>
> On 01/04/2015 01:20, slr_65@... [SkyWires] wrote:
>
>
>
>
> I don't have the room or desire to guy the poles, I'd rather
> pay a little more and have them self support.
>
> This site shows a 2" sch 40 base with 1-1/2" top section
that
> self supports at 35 feet. I would think I could drop the height back to
> 25 feet and keep it all 2" and be sturdy enough to put a ladder against.
>
> http://www.wv7u.com/mast/mast.html
>
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4591. Re[2]: [SkyWires] Re: New Operator, first antenna

Yahoo group: SkyWires
Date: 2015-04-01 17:05:25 UTC
From: Chris Wilson
Topic: 4564 Message: 4591

Hello 'siegfried,

Wednesday, April 1, 2015

>
>
>
>
>
> Hi Rich
>
> How do you paint the inner side of the tubing??
>
> Dg9bfc
>
> Sigi

Rag soaked in paint on a pull through string? Run paint down it whilst rotating it? Most tube from the steel mill is covered in oil, so it would need a thorough internal de-greasing first fo there to be much point in it. Even left bare it would take a LONG time to internally rust significantly though.

--
Best regards,
Chris mailto:chris@...

4592. AW: Re[2]: [SkyWires] Re: New Operator, first antenna

Yahoo group: SkyWires
Date: 2015-04-01 18:12:21 UTC
From: siegfried jackstien
Topic: 4564 Message: 4592

I had a steel tubing mast years ago (when i was young in cbers days) ...

In around 25 years it was rusted from inner to outer wall (outside looked
like brand new)

And hwne cutting it down it was VERY THIN on some areas!!!

No not an aprils joke

Was a galvanized steel tubing but the inner side rusted away still the wall
was thin like paper

Dg9bfc

Sigi

> -----Ursprüngliche Nachricht-----
> Von: SkyWires@yahoogroups.com [mailto:SkyWires@yahoogroups.com]
> Gesendet: Mittwoch, 1. April 2015 17:05
> An: 'siegfried jackstien' siegfried.jackstien@... [SkyWires]
> Betreff: Re[2]: [SkyWires] Re: New Operator, first antenna
>
>
>
> Hello 'siegfried,
>
> Wednesday, April 1, 2015
>
> >
> >
> >
> >
> >
> > Hi Rich
> >
> > How do you paint the inner side of the tubing??
> >
> > Dg9bfc
> >
> > Sigi
>
> Rag soaked in paint on a pull through string? Run paint down it whilst
> rotating it? Most tube from the steel mill is covered in oil, so it
> would need a thorough internal de-greasing first fo there to be much
> point in it. Even left bare it would take a LONG time to internally
> rust significantly though.
>

> --
> Best regards,
> Chris mailto:chris@...
>
>
>
>

4593. painting inside of metal tubing

Yahoo group: SkyWires
Date: 2015-04-01 18:22:23 UTC
From: Evan Rolek
Topic: 4564 Message: 4593

I have had situations where I needed to paint the inside of a long piece of pipe. I had some rubber caps that fit over the ends. I capped one end, with the plastic cap and duct tape. Then at the other end, I poured in a quart (?) can of Gunk degreaser. Capped that end again using duct tape. Then I tilted the pipe back and forth while rotating it a few degrees each time. Then I drained off the used Gunk, opened both ends, and flushed the pipe with a water from a garden hose. After letting it dry a day or so, I capped one end like before, poured in a quart of Rustoleom paint designed for rusty surfaces, and sloshed it around back and forth repeatedly. Drained off the paint, saved it, let the first coat dry, and then repeated the process twice more. Did it work? Not sure, but the pipe was used outdoors to support an antenna and it lasted 25 or so with no sign of degradation when I cut it down due to changing QTHs. Your mileage might vary.

73,

Evan, K9SQG

4594. Re: painting inside of metal tubing

Yahoo group: SkyWires
Date: 2015-04-01 21:55:36 UTC
From: slr_65@...
Topic: 4564 Message: 4594

Hi Guys,

The choice of materials is simply what's available easily in town, and I live in a small town so the selection isn't big, basically galvanized and black iron pipe, sch 40 up to 2-1/2". They also stock a small supply of flat iron, angle iron and some square and rectangular tubing.

They said the galvanized is plumbing pipe and the black iron is gas and steam pipe (many houses here still have boilers), they both conform to the normal sch 40 dimensions. They are both available in 10' and 21' sections.

Climbing isn't a big issue for me, my Dad was a lineman and I played with his hooks climbing a security light pole in the backyard all the time when I was a kid and up until a couple years ago I worked in a power plant with 30' catwalks accessed by straight up ladders.

I'm sure 20' or so of 2" sch 40 would stand up to having a ladder put against it, remember most of the weight is going down on the ladder, not sideways on the pole.

The ladder could twist on the pole, but if one kept it fairly vertical it would minimize that and one could even add a couple arms to the top of the pole to support the width of the ladder. The ladder I have access to also has out riggers you can pivot out to help stabilize it, so choose a calm day and I'm not too concerned with climbing it.

There's also a tree trimming service in town with a bucket truck and a couple other operators in town have hired them for tower work and they're reasonable. All four posts would be easily accessible for a bucket truck, so I may see what they'd charge for a couple hours of bucket time.

4595. AW: [SkyWires] Re: painting inside of metal tubing

Yahoo group: SkyWires
Date: 2015-04-01 23:52:14 UTC
From: siegfried jackstien
Topic: 4564 Message: 4595

Ask on Friday ... fill bucket with bottles of beer (and maybe some steaks?!?) ... have it free over the weekend :-)

Dg9bfc

Sigi

> -----Ursprüngliche Nachricht-----
> Von: SkyWires@yahoogroups.com [mailto:SkyWires@yahoogroups.com]
> Gesendet: Mittwoch, 1. April 2015 21:56
> An: SkyWires@yahoogroups.com
> Betreff: [SkyWires] Re: painting inside of metal tubing
>
>
>
> Hi Guys,
>
> The choice of materials is simply what's available easily in town, and I
> live in a small town so the selection isn't big, basically galvanized and
> black iron pipe, sch 40 up to 2-1/2". They also stock a small supply of
> flat iron, angle iron and some square and rectangular tubing.
>
> They said the galvanized is plumbing pipe and the black iron is gas and
> steam pipe (many houses here still have boilers), they both conform to the
> normal sch 40 dimensions. They are both available in 10' and 21'
> sections.
>
> Climbing isn't a big issue for me, my Dad was a lineman and I played with
> his hooks climbing a security light pole in the backyard all the time when
> I was a kid and up until a couple years ago I worked in a power plant with
> 30' catwalks accessed by straight up ladders.
>
> I'm sure 20' or so of 2" sch 40 would stand up to having a ladder put
> against it, remember most of the weight is going down on the ladder, not
> sideways on the pole.
>
> The ladder could twist on the pole, but if one kept it fairly vertical it
> would minimize that and one could even add a couple arms to the top of the
> pole to support the width of the ladder. The ladder I have access to also
> has out riggers you can pivot out to help stabilize it, so choose a calm
> day and I'm not too concerned with climbing it.
>
> There's also a tree trimming service in town with a bucket truck and a
> couple other operators in town have hired them for tower work and they're
> reasonable. All four posts would be easily accessible for a bucket truck,
> so I may see what they'd charge for a couple hours of bucket time.

>
>

4596. New file uploaded to SkyWires

Yahoo group: SkyWires
Date: 2015-04-03 17:47:05 UTC
From: SkyWires@yahoogroups.com
Topic: 1641 Message: 4596

Hello,

This email message is a notification to let you know that
a file has been uploaded to the Files area of the SkyWires
group.

File : /80Meterhorizontalloop.pdf
Uploaded by : everettsharp74 <everettsharp@...>
Description : 80 Meter Horizontal Loop Experiment

You can access this file at the URL:
https://groups.yahoo.com/neo/groups/SkyWires/files/80Meterhorizontalloop.pdf

To learn more about file sharing for your group, please visit:
https://help.yahoo.com/kb/index?page=content&y=PROD_GRPS&locale=en_US&id=SLN15398

Regards,

everettsharp74 <everettsharp@...>

4597. 80 Meter loop experiment

Yahoo group: SkyWires
Date: 2015-04-03 17:53:09 UTC
From: everettsharp@...
Topic: 4597 Message: 4597

Guys,

I just deleted the file that I had posted in the files section "80 Meter Horizontal Loop" and replaced it with a revised version that includes my final addition with a length of 275' and a 4:1 balun. I am very please with the results and hope the information will be of some value to the members on this list.

Everett N8CNP

4598. Re: [SkyWires] 80 Meter loop experiment

Yahoo group: SkyWires
Date: 2015-04-03 19:13:17 UTC
From: Don Sanders
Topic: 4597 Message: 4598

Looks great and definately a all band antenna.

Dr. Don HC4/W4BWS

On Fri, Apr 3, 2015 at 12:53 PM, everettsharp@... [SkyWires] <
SkyWires@yahoogroups.com> wrote:

>
>
> Guys,
>
> I just deleted the file that I had posted in the files section "80 Meter
> Horizontal Loop" and replaced it with a revised version that includes my
> final addition with a length of 275' and a 4:1 balun. I am very please with
> the results and hope the information will be of some value to the members
> on this list.
>
> Everett N8CNP
>
>
>
>

4599. AW: [SkyWires] 80 Meter loop experiment

Yahoo group: SkyWires
Date: 2015-04-03 22:57:41 UTC
From: siegfried jackstien
Topic: 4597 Message: 4599

In your last "sweep" is a typo

You wrote 80 40 20 30 17m etc

It should be

80 40 30 20 17 etc

Accidently 20 and 30m are interchanged

Dg9bfc

Sigi

Ps ... I have same setup but with a 160m loop

> -----Ursprüngliche Nachricht-----
> Von: SkyWires@yahoogroups.com [mailto:SkyWires@...m]
> Gesendet: Freitag, 3. April 2015 17:53
> An: SkyWires@yahoogroups.com
> Betreff: [SkyWires] 80 Meter loop experiment
>
>
>
> Guys,
>
> I just deleted the file that I had posted in the files section "80 Meter
> Horizontal Loop" and replaced it with a revised version that includes my
> final addition with a length of 275' and a 4:1 balun. I am very please
> with the results and hope the information will be of some value to the
> members on this list.
>
> Everett N8CNP
>
>
>
>
>

4600. Re: AW: [SkyWires] 80 Meter loop experiment

Yahoo group: SkyWires
Date: 2015-04-03 23:14:59 UTC
From: Everett Sharp
Topic: 4597 Message: 4600

Thanks, I do stuff like that every now and then.

Sent from my iPad

> On Apr 3, 2015, at 5:57 PM, 'siegfried jackstien' siegfried.jackstien@freenet.de [SkyWires] <SkyWires@yahoogroups.com> wrote:
>
> In your last "sweep" is a typo
>
> You wrote 80 40 20 30 17m etc
>
> It should be
>
> 80 40 30 20 17 etc
>
> Accidently 20 and 30m are interchanged
>
> Dg9bfc
>
> Sigi
>
> Ps ... I have same setup but with a 160m loop
>
> > -----Ursprüngliche Nachricht-----
> > Von: SkyWires@yahoogroups.com [mailto:SkyWires@yahoogroups.com]
> > Gesendet: Freitag, 3. April 2015 17:53
> > An: SkyWires@yahoogroups.com
> > Betreff: [SkyWires] 80 Meter loop experiment
> >
> >
> >
> > Guys,
> >
> > I just deleted the file that I had posted in the files section "80 Meter
> > Horizontal Loop" and replaced it with a revised version that includes my
> > final addition with a length of 275' and a 4:1 balun. I am very please
> > with the results and hope the information will be of some value to the
> > members on this list.
> >
> > Everett N8CNP
> >
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> >
> >

>
>

4601. Re: 40m - 10m Delta Loop skywire

Yahoo group: SkyWires
Date: 2015-04-04 08:36:22 UTC
From: helectrojo@...
Topic: 4561 Message: 4601

Hi everyone again!
Couldn't wait till early next week, so I experimented a bit with the antenna setting by following some of your advices with the below results.

The readings are from my BlueVNA PRO and shows the lowest point on each band.

Total length of the loop 45m (147.6 feet), 9m above ground, no matching (neither BALUN or ladder line)
Band MHZ Z SWR
40m 6.8 61 1.26
30m 10.4 15.2 8.4
20m 13.6 105 4.28
17m 18.9 5.5 10
15m 20.1 55 2.8
12m 26 14.5 7
10m 27 27.1 3.58

After the first readings we cut 110cm (3.6ft) of the loop wire, added a 4:1 BALUN and run the test on the VNA again

Total length of the loop 43.9m (144 feet), 9m above ground, 4:1 BALUN
Band MHZ Z SWR
40m 7.1 22 2.8
30m 8.5 18.8 10
20m 14.2 49.3 1.09
17m 16 326 7.3
15m 21 55 1.3
12m 23 15.8 3.2
10m 27.8 74 1.74

Now, the next question would be, should I cut the wire even more in my try to bring more to the center the 15m and 10m bands, or that will create more problems to the 40m and the 20m bands?
In any case I can tune the antenna on all the 4 bands by using the MFJ-962D, so do you believe is worth trying to adjust further the length of the loop wire?

In my tests I had easy contacts on 10m with AA1FB, KD8ZTO, N8EHP, CT5KJE from all of them I had good reports over 58 to 59 +20, with 80w on my side. If it wasn't the noise from the long range radar -most probably IRAN- I would be able to work many more stations.

73
Iordanis, sv2qqz

4602. Re: [SkyWires] Re: 40m - 10m Delta Loop skywire

Yahoo group: SkyWires
Date: 2015-04-04 15:52:06 UTC
From: Don Sanders
Topic: 4561 Message: 4602

As long as the transmitter will make a tuning match to the coax I would just use it and have fun.
The 4 to 1 balun is probably why 40 SWR is higher, but the antenna is quite usable as is.

Dr. Don HC4/W4BWS

On Sat, Apr 4, 2015 at 3:36 AM, helectrojo@... [SkyWires] <SkyWires@yahoogroups.com> wrote:

>
>
>
> Hi everyone again!
> Couldn't wait till early next week, so I experimented a bit with the
> antenna setting by following some of your advices with the below results.
>
> The readings are from my BlueVNA PRO and shows the lowest point on each
> band.
>
>
> Total length of the loop 45m (147.6 feet), 9m above ground, no matching
> (neither BALUN or ladder line)
> Band MHZ Z SWR
> 40m 6.8 61 1.26
> 30m 10.4 15.2 8.4
> 20m 13.6 105 4.28
> 17m 18.9 5.5 10
> 15m 20.1 55 2.8
> 12m 26 14.5 7
> 10m 27 27.1 3.58
>
>
> After the first readings we cut 110cm (3.6ft) of the loop wire, added a
> 4:1 BALUN and run the test on the VNA again
>
>
> Total length of the loop 43.9m (144 feet), 9m above ground, 4:1 BALUN
> Band MHZ Z SWR
> 40m 7.1 22 2.8
> 30m 8.5 18.8 10
> 20m 14.2 49.3 1.09
> 17m 16 326 7.3
> 15m 21 55 1.3
> 12m 23 15.8 3.2
> 10m 27.8 74 1.74

>
> Now, the next question would be, should I cut the wire even more in my try
> to bring more to the center the 15m and 10m bands, or that will create more
> problems to the 40m and the 20m bands?
> In any case I can tune the antenna on all the 4 bands by using the
> MFJ-962D, so do you believe is worth trying to adjust further the length of
> the loop wire?
>
> In my tests I had easy contacts on 10m with AA1FB, KD8ZTO, N8EHP, CT5KJE
> from all of them I had good reports over 58 to 59 +20, with 80w on my side.
> If it wasn't the noise from the long range radar -most probably IRAN- I
> would be able to work many more stations.
>
> 73
> Iordanis, sv2qqz
>
>
>
>
>
>

4603. Re: [SkyWires] Re: 40m - 10m Delta Loop skywire

Yahoo group: SkyWires
Date: 2015-04-04 17:19:59 UTC
From: Evan Rolek
Topic: 4561 Message: 4603

My experience has been that a horizontal loop, as well as some other configurations, are not critically dependent upon SWR on any given band, fundamental or otherwise. With a loop antenna that is "way out of resonance" on the fundamental frequency, I've not been able to see any performance differences between that configuration and one that is resonant either on the fundamental or harmonic. This is based upon field strength readings in my shack as well as on the air reports. If there are differences, they would appear to be minor. Hence, if my tuner can transfer power to the antenna without much loss, it seems to be acceptable to my operations.

However, for those that are searching for the Holy Grail of antennas then yes, experimenting to find an all-band antenna that produces a 1:1 SWR on all bands, and all frequencies within a band, with no loss, can be fed with coax, doesn't need an antenna tuner, can be an educational experience that is also fun. Or one can just buy a commercial antenna that is advertised to have these characteristics (ooops, I was only supposed to say that on April 1).

Let's share our experiences and have fun with the hobby. I hope everybody has a safe, enjoyable Easter weekend.

73,

Evan, K9SQG

-----Original Message-----
From: Don Sanders w4bws1@... [SkyWires] <SkyWires@yahoogroups.com>
To: SkyWires <SkyWires@yahoogroups.com>
Sent: Sat, Apr 4, 2015 11:52 am
Subject: Re: [SkyWires] Re: 40m - 10m Delta Loop skywire

As long as the transmitter will make a tuning match to the coax I would just use it and have fun.
The 4 to 1 balun is probably why 40 SWR is higher, but the antenna is quite usable as is.

Dr. Don HC4/W4BWS

On Sat, Apr 4, 2015 at 3:36 AM, helectrojo@gmail.com [SkyWires] <SkyWires@yahoogroups.com> wrote:

Hi everyone again!
Couldn't wait till early next week, so I experimented a bit with the antenna setting by following some of your advices with the below results.

The readings are from my BlueVNA PRO and shows the lowest point on each band.

Total length of the loop 45m (147.6 feet), 9m above ground, no matching (neither BALUN or ladder line)
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40m 6.8 61 1.26

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20m 13.6 105 4.28
17m 18.9 5.5 10
15m 20.1 55 2.8
12m 26 14.5 7
10m 27 27.1 3.58

After the first readings we cut 110cm (3.6ft) of the loop wire, added a 4:1 BALUN and run the test on the VNA again

Total length of the loop 43.9m (144 feet), 9m above ground, 4:1 BALUN
Band MHZ Z SWR
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30m 8.5 18.8 10
20m 14.2 49.3 1.09
17m 16 326 7.3
15m 21 55 1.3
12m 23 15.8 3.2
10m 27.8 74 1.74

Now, the next question would be, should I cut the wire even more in my try to bring more to the center the 15m and 10m bands, or that will create more problems to the 40m and the 20m bands?
In any case I can tune the antenna on all the 4 bands by using the MFJ-962D, so do you believe is worth trying to adjust further the length of the loop wire?

In my tests I had easy contacts on 10m with AA1FB, KD8ZTO, N8EHP, CT5KJE from all of them I had good reports over 58 to 59 +20, with 80w on my side. If it wasn't the noise from the long range radar -most probably IRAN- I would be able to work many more stations.

73
Iordanis, sv2qqz

4604. 80 Meter Horizontal Loop Antenna

Yahoo group: SkyWires
Date: 2015-04-04 17:31:42 UTC
From: everettsharp@...
Topic: 4604 Message: 4604

Guys,

I deleted and replace the article "80 Meter Horizontal Loop Antenna" with a corrected version, had to clean up some mistakes.

Everett N8CNP

4605. Ladder Fed 160m 80m FWL with TS-590S internal ATU

Yahoo group: SkyWires
Date: 2015-04-20 02:41:29 UTC
From: contact001@...
Topic: 4605 Message: 4605

I recently acquired a TS-590S (just before Christmas) and was interested in how the internal ATU would handle the ladder fed 550' 160m FWL that I had up. Turns out the answer was "very well".

Previously, I had been using the balanced wire connection on an MFJ-941D Versa-tuner to connect an old Yaesu FT-707 with the homebrew 4" ladder line (made with 14 AWG THHN) that ran from there all the way to the loop feed point about 70' up (about 140' of ladder line). I knew I needed an alternative for interfacing the ladder line with the TS-590S' coax connector so I did a series of full range SWR sweeps with a Rigexpert AA-170 using various current baluns I had on hand connected to the ladder line , looking for a reasonable fit. The ratios tried were 9:1, 4:1 and 1:1, all Guanella type designs wrapped on ferrite toroid cores. The best single "all band" fit was the 9:1 three core current balun - not best for any one band, but best compromise for multiple bands with the aim of having "tunable" SWR for as much bandwidth as possible.

The 9:1 connects to the TS-590S via about 2' of 8x coax. The 4" open line goes from there across the basement ceiling, through a masonry wall & then up to the feed point. The internal tuner is able to find a 1:1 (or close to it) match for the vast majority of 160m -> 6m with only a couple of trouble spots in the 10m & 6m bands. I did experience some RF in the nearby computer speakers at some higher freqs, but wrapping their power & audio lines on a couple of ferrite toroids took care of that.

I later added a 290' 80m loop, hung slightly lower than the 160m loop fed by about 70' of 4" ladder line connecting to about 30' of 8x coax via a current balun. Trying different ratios led me to go with a 4:1 dual core current balun on that loop for best compromise for 80m - 6m. Between the two loops, the internal tuner provides full coverage of the amateur bands, no gaps. I have been very impressed with the TS-590S internal tuner. It consistantly arrives at good solutions very quickly.

Both loops were constructed from 14 AWG THHN/THWN and hung from tree mounted suspension points.

Nick
KK4WMX

4609. Series antenna tuners?

Yahoo group: SkyWires
Date: 2015-06-01 05:35:15 UTC
From: slr_65@...
Topic: 4609 Message: 4609

Hi Guys,

My world is a bit turned upside down, due to an eye disease called Non-Arteritic Ischemic Optic Neuropathy I've been left with very low vision. I had it in one eye and it was only a 15% chance it would hit the other, but my luck didn't hold out, it struck and devastated the other eye a week and a half ago.

I was in the middle of refurbing an Icom IC-730 and getting a station put together.

With BIG fonts and Windows high contrast settings I can run a pc, and I can read somethings given some time.

I've decided to carry on with amateur radio. I bought a Kenwood TS-590SG on HRO's Dayton sale (just before this hit! I wanted to return it, but my wife said no - she'll learn to run it for me if I can't...I love that woman!), so I have it and I have a Dentron Super Tuner antenna tuner.

I was going to put up a horizontal loop, so I have the wire and center insulator plus some 450 ladder line. I didn't get the supports up before this hit though.

I have a 10 meter dipole up under the eaves of the house and with the Icom and Dentron I can tune to 20 meters with it, though I haven't tried the Kenwood yet.

We're still in shock, I'm taking a controversial high dose steroid treatment hoping to gain some vision back, so big projects are on hold right now, we may not stay at this location.

The perimeter of the house eaves would make a loop about 210', I'm thinking that would make the loop resonant around 4.8mhz. That's probably further out than the Kenwood's internal tuner can handle for 40 meter and higher, but I was wondering if I'd use the Dentron to get it resonant on 40 meter and then if the Kenwood's internal tuner would be able to match the harmonic bands? Is running two antenna tuners in series a problem if one is left set to tune the lowest band?

The loop will run parallel and near an rg6 quadshield cable tv line on the back of the house, so it may interfere, but I thought I would try it and see. If it does, then the backup plan is to cut the wire off the back of the house and run the antenna as a doublet, the legs would fold around the corners of the house though, however I would think the tuner should be able to still get a good match. Again, here it would be nice if I could set the Dentron to get a good match on 40 meter and then have the rig's internal tuner match the harmonics.

Not ideal, but I've been dealt a bad hand and am just trying to get on the air.

Any thoughts, suggestions, etc. welcomed...thanks guys!

Steve, KA0NEB

4610. Re: Series antenna tuners?

Yahoo group: SkyWires
Date: 2015-06-02 00:12:41 UTC
From: contact001@...
Topic: 4609 Message: 4610

I have had good luck with the TS-590S tuner capabilites all by itself, working 160, 80 and 40 meter full wave loops. I think you probably want to use either internal or external by themselves. If the internal is not up to the task, you might want to consider an auto tuner like LDG for broader capability without needing to see dial or readout values.

Nick

4611. Re: Series antenna tuners?

Yahoo group: SkyWires
Date: 2015-06-02 01:14:34 UTC
From: slr_65@...
Topic: 4609 Message: 4611

Thanks Nick,

It may do it, I guess I just need to see.

I just have the Dentron with it's internal balun, if I skip it I'll need to see about a balun.

I'm really thinking this should work. The antenna and Dentron should just look like a tuned antenna I would think. Wouldn't it be akin to portable antennas with loading coils? I'm sure I've read where people have used tuners on loaded antennas.

It would just be nice to use what I have, guess I"ll just have to give it a shot and report back!

Thanks!

Steve KA0NEB

4612. Re: [SkyWires] Re: Series antenna tuners?

Yahoo group: SkyWires
Date: 2015-06-02 02:14:25 UTC
From: Skip Guenter
Topic: 4609 Message: 4612

I think as you tweak one you have to re-tune the other. Remember that part of what the tuner is doing is matching up capacitance and inductance. When the "tuned" antenna (Dentron) change the other has to compensate. Likely a reiterative process that is a waste. Again, Why do you wanna run two tuners?

On 06/01/2015 08:14 PM, slr_65@... [SkyWires] wrote:
>
> Thanks Nick,
>
> It may do it, I guess I just need to see.
>
> I just have the Dentron with it's internal balun, if I skip it I'll
> need to see about a balun.
>
> I'm really thinking this should work. The antenna and Dentron should
> just look like a tuned antenna I would think. Wouldn't it be akin to
> portable antennas with loading coils? I'm sure I've read where people
> have used tuners on loaded antennas.
>
> It would just be nice to use what I have, guess I"ll just have to give
> it a shot and report back!
>
> Thanks!
>
> Steve KA0NEB
>
>

--
S. R. 'Skip' Guenter, K5SRG
/3905cc 40m SSB Late Coord
Alt Dir, 5th Call Area
/

4613. Re: [SkyWires] Re: Series antenna tuners?

Yahoo group: SkyWires
Date: 2015-06-02 03:13:47 UTC
From: slr_65@...
Topic: 4609 Message: 4613

Hi Skip,

I've been hit by a devastating eye disease, I'm nearly blind. I can see big things and a computer with BIG fonts, but that's about it.

Trying to manually tune a tuner each band change would suck.

I want to run a loop around the house eaves, but since I can't vary the size of the loop it won't be resonant on a particular band, I think it would be resonant about 4.8mhz.

The loop would be 450 ladder line fed, so needs a balun, plus it's far enough out of resonance I doubt the Kenwood's internal tuner could tune it.

The Dentron has an internal balun, plus I'm sure it could tune the loop to 40 meter.

My hope is that I could tune the Dentron such that the loop is resonant on 40 meter, and then that resonance would carry through to the harmonic bands, if a slight touch up is needed I'm thinking the SWR would be close enough that it would be in range of the Kenwood's internal tuner so I woudn't have to manually tune for band changes.

I'm thinking it should work, I guess we'll just have to try and see.

4614. Re: [SkyWires] Re: Series antenna tuners?

Yahoo group: SkyWires
Date: 2015-06-02 04:22:38 UTC
From: Evan Rolek
Topic: 4609 Message: 4614

Sometimes two tuners are warranted. Why? Because one tuner lacks the matching range needed and can "get things close" but not "right on". However, this is an emergency or quick fix until a proper tuner can be pressed into service.

73,

Evan, K9SQG

-----Original Message-----
From: Skip Guenter sguenter@... [SkyWires] <SkyWires@yahoogroups.com>
To: SkyWires <SkyWires@yahoogroups.com>
Sent: Mon, Jun 1, 2015 10:14 pm
Subject: Re: [SkyWires] Re: Series antenna tuners?

I think as you tweak one you have to re-tune the other. Remember that part of what the tuner is doing is matching up capacitance and inductance. When the "tuned" antenna (Dentron) change the other has to compensate. Likely a reiterative process that is a waste. Again, Why do you wanna run two tuners?

On 06/01/2015 08:14 PM, slr_65@... [SkyWires] wrote:

Thanks Nick,

It may do it, I guess I just need to see.

I just have the Dentron with it's internal balun, if I skip it I'll need to see about a balun.

I'm really thinking this should work. The antenna and Dentron should just look like a tuned antenna I would think. Wouldn't it be akin to portable antennas with loading coils? I'm sure I've read where people have used tuners on loaded antennas.

It would just be nice to use what I have, guess I"ll just have to give it a shot and report back!

Thanks!

Steve KA0NEB

--
S. R. 'Skip' Guenter, K5SRG
3905cc 40m SSB Late Coord
Alt Dir, 5th Call Area

4615. Re: [SkyWires] Re: Series antenna tuners?

Yahoo group: SkyWires
Date: 2015-06-02 04:28:21 UTC
From: Evan Rolek
Topic: 4609 Message: 4615

I doubt that the situation described would be practical. On the 40 m ("resonant") band, if the tuner was doing it's job, it would NOT necessarily do that on harmonically related bands. On 40, it is compensating for the resistive and reactive components of the antenna being away from 50 ohms, pure resistive. On harmonic bands, or any other band, the resistive and reactive components of the antenna itself would change, thus invalidating the tuner's settings for compensating them on the other bands.

To look at it another way, let's say a rig has an internal, automatic tuner and it has tuned an antenna for a 1:1 SWR. Changing bands to another, harmonically related band, would mean that it would have to readjust the settings to get that same SWR value. Try it, you'll see what I mean.

Trust me, I'm no antenna guru. Maybe the real experts can correct the faulty logic above...

73,

Evan, K9SQG

-----Original Message-----
From: slr_65@... [SkyWires] <SkyWires@yahoogroups.com>
To: SkyWires <SkyWires@yahoogroups.com>
Sent: Mon, Jun 1, 2015 11:13 pm
Subject: Re: [SkyWires] Re: Series antenna tuners?

Hi Skip,

I've been hit by a devastating eye disease, I'm nearly blind. I can see big things and a computer with BIG fonts, but that's about it.

Trying to manually tune a tuner each band change would suck.

I want to run a loop around the house eaves, but since I can't vary the size of the loop it won't be resonant on a particular band, I think it would be resonant about 4.8mhz.

The loop would be 450 ladder line fed, so needs a balun, plus it's far enough out of resonance I doubt the Kenwood's internal tuner could tune it.

The Dentron has an internal balun, plus I'm sure it could tune the loop to 40 meter.

My hope is that I could tune the Dentron such that the loop is resonant on 40 meter, and then that resonance would carry through to the harmonic bands, if a slight touch up is needed I'm thinking the SWR would be close enough that it would be in range of the Kenwood's internal tun er so I woudn't have to manually tune for band changes.

I'm thinking it should work, I guess we'll just have to try and see.

4616. Re: [SkyWires] Re: Series antenna tuners?

Yahoo group: SkyWires
Date: 2015-06-05 06:06:29 UTC
From: slr_65@...
Topic: 4609 Message: 4616

Thanks for the feedback guys! Sorry to be slow responding, I'm taking an experimental high dose steroid treatment for my eye problems and they're kicking my butt!

A friend loaned me a MFJ SWR analyzer, it's a lower end model, but you can hook a frequency counter up to it to find your resonant frequency, so I did some testing.

It sort of works. If I set my 10 meter dipole resonant with the Dentron on 40 meters it does carry through to the harmonics, but not well. Not near what using a tuned antenna would.

I found the spec in the new rig, it should match SWR from 10:1 down. I think with the Dentron set to resonate the loop the rest would be less than 10, so it may work.

However, I don't think it's the best approach I would like the loop for it's quieter characteristics, but I also don't like to have the SWR so far out and make the tuner work so hard. I think a doublet or something similar that I can get more resonant and that will stay reasonably resonant through the harmonics is a much better idea.

Thanks!

4617. Re: [SkyWires] Re: Series antenna tuners?

Yahoo group: SkyWires
Date: 2015-06-05 13:23:56 UTC
From: Evan Rolek
Topic: 4609 Message: 4617

When it comes to SWR, especially manufacture specs, "it depends". Almost without exception, the specs talk about an SWR of 10:1, 5:1, or whatever, but that is only PART of the spec, and not necessarily the most important one a that. They typically talk about matching the resistive component of the antenna, NOT the reactive component, whether it be inductive or capacitive. Hence, selecting a tuner almost becomes a trial and error process. And when you ask them about the reactive specs, you'll often get a response akin to a pig looking at a wristwatch. So even if you know the resistive and reactive components of an antenna, for the bands of interest, it is still a chore to find out which tuner(s) will work for your particular installation. Sometimes asking other users can be informative.

My experiences have been that horizontal loops are much more forgiving of installation irregularities and are vastly easier to match on a broad range of bands. Then again, pursuing the Holy Grail of antennas (which doesn't exist, you know, an all band antenna that can be fed with coax, doesn't require a tuner, and works great for DX and local contacts, and is broad banded) can be quite educational and enjoyable through experimentation. Then again, if one is time limited, then doing some research to find out what is already known can be informative. It depends on one's circumstances and preferences. L. B. Cebik's (W4RNL, SK) writings relate computer analysis comparing a range of antennas including loops and dipoles, etc.; I'll let the data speak for itself.

73,

Evan, K9SQG

-----Original Message-----
From: slr_65@yahoo.com [SkyWires] <SkyWires@yahoogroups.com>
To: SkyWires <SkyWires@yahoogroups.com>
Sent: Fri, Jun 5, 2015 2:06 am
Subject: Re: [SkyWires] Re: Series antenna tuners?

Thanks for the feedback guys! Sorry to be slow responding, I'm taking an experimental high dose steroid treatment for my eye problems and they're kicking my butt!

A friend loaned me a MFJ SWR analyzer, it's a lower end model, but you can hook a frequency counter up to it to find your resonant frequency, so I did some testing.

It sort of works. If I set my 10 meter dipole resonant with the Dentron on 40 meters it does carry through to the harmonics, but not well. Not near what using a tuned antenna would.

I found the spec in the new rig, it should match SWR from 10:1 down. I think with the Dentron set to resonate the loop the rest would be less than 10, so it may work.

However, I don't think it's the best approach I would like the loop for it's quieter characteristics, but I also don't like to have the SWR so far out and make the tuner work so hard. I think a doublet or somethi ng similar that I can get more resonant and that will stay reasonably resonant through the harmonics is a much better idea.

Thanks!

4618. Re: [SkyWires] Re: Series antenna tuners?

Yahoo group: SkyWires
Date: 2015-06-05 19:43:09 UTC
From: slr_65@...
Topic: 4609 Message: 4618

I would love to play, but my vision isn't cooperating. Depending if I recover some I may or may not be able to keep working and keep the house. Until I know if we're staying here I don't want to do any large antenna projects. I just want on the air in HF.

I'm in a 1,100 square foot single story ranch house with attached garage and have decided to just run something around the eaves. That's not a lot of height and it's not a lot of length, though a 10 meter dipole I have up on it works well and the Dentron can match it to 20 meter (I haven't tried the Kenwood on it yet).

I liked the characteristics of a loop, which is why I was looking at putting up supports in the yard for one before my eye issues unexpectedly flared up. In that instance I could tailor the loop diameter to get resonance, but now that I can just basically loop the house I'm stuck with that diameter, which isn't going to resonate on a particular band, so I was hoping I could crutch the resonance with the Dentron. The testing with the MFJ was interesting, using the Dentron to set a resonance does carry through to the harmonics, sort of. You can definitely get points of lower SWR somewhere near the harmonics, but they're not great, they're just lower, and who says they'll behave the same when more power is pushed through. The MFJ says I can get a match on 40 meter with my dipole, but when tried with the radio it doesn't work. There's just a lot involved here and I think no hard and fast rules, trial and error is probably the only real way to know, but I'm not really up to it.

I do have the length for a dipole type antenna, though the legs will be folded around the house corners. I think the rig tuner should be able to handle that though.

A fellow amateur in town has a spiffy MFJ analyzer that tells you everything. I think I just need to put something up, analyze it and adjust. i.e. I think use 450 ladder line and center insulator, string as much wire as I can up, analyze it and see where I resonate, then adjust the length to get the resonance to a band I can harmonic off of. The analyzer should also be able to tell me the impedance so I know what ratio balun to get (this may be hard to calculate do to the low height and attachment to a structure from what I gather, so measuring it is probably the best approach). From what I gather, running the ladder line inside and then just a short jumper between the balun and rig is best, and it appears current baluns are preferred.

Sound like a plan?

4619. Re: [SkyWires] Re: Series antenna tuners?

Yahoo group: SkyWires
Date: 2015-06-05 22:17:13 UTC
From: Evan Rolek
Topic: 4609 Message: 4619

Plans are good. But the poorest installed antenna give more QSOs than the best antenna on paper.

I like to do research and understand things but I'm a pragmatist as well. From my experiments, with stations within 2 miles, as well as those at distances up to 1,000 miles, I have observed no change in transmitted signal reports nor received signal reports between resonent and non-resonent horizontal loop antennas on the 40 meter band. At 12 ft off the ground, in the evenings on SSB, I've worked into Italy regularly, Canary Islands, France, former Soviet Union countries, South America, Alaska, etc. etc. The antenna is not supposed to work at all, let alone for DX, but I didn't tell the antenna that so it keeps on working. Yes, some antennas are sensitive to resonence, but the horizontal loop isn't one of them. Then again, I only have 25 years or of experience with this particular antenna so the jury is still out on this one, hi hi.

73,

Evan, K9SQG

-----Original Message-----
From: slr_65@... [SkyWires] <SkyWires@yahoogroups.com>
To: SkyWires <SkyWires@yahoogroups.com>
Sent: Fri, Jun 5, 2015 3:43 pm
Subject: Re: [SkyWires] Re: Series antenna tuners?

I would love to play, but my vision isn't cooperating. Depending if I recover some I may or may not be able to keep working and keep the house. Until I know if we're staying here I don't want to do any large antenna projects. I just want on the air in HF.

I'm in a 1,100 square foot single story ranch house with attached garage and have decided to just run something around the eaves. That's not a lot of height and it's not a lot of length, though a 10 meter dipole I have up on it works well and the Dentron can match it to 20 meter (I haven't tried the Kenwood on it yet).

I liked the characteristics of a loop, which is why I was looking at putting up supports in the yard for one before my eye issues unexpectedly flared up. In that instance I could tailor the loop diameter to get resonance, but now that I can just basically loop the house I'm stuck with that diameter, which isn't going to re sonate on a particular band, so I was hoping I could crutch the resonance with the Dentron. The testing with the MFJ was interesting, using the Dentron to set a resonance does carry through to the harmonics, sort of. You can definitely get points of lower SWR somewhere near the harmonics, but they're not great, they're just lower, and who says they'll behave the same when more power is pushed through. The MFJ says I can get a match on 40 meter with my dipole, but when tried with the radio it doesn't work. There's just a lot involved here and I think no hard and fast rules, trial and error is probably the only real way to know, but I'm not really up to it.

I do have the length for a dipole type antenna, though the legs will be folded around the house corners. I think the rig tuner should be able to handle that though.

A fellow amateur in town has a spiffy MFJ analyzer that tells you everything. I think I just need to put something up, analyze it and adjust. i.e. I think use 450 ladder line and center insulator, string as much wire as I can up, analyze it and see where I resonate, then adjust the length to get the resonance to a band I can harmonic off of. The analyzer should also be able to tell me the impedance so I know what ratio balun to get (this may be hard to calculate do to the low height and attachment to a structure from what I gather, so measuring it is probably the best approach). From what I gather, running the ladder line inside and then just a short jumper between the balun and rig is best, and it appears current baluns are preferred.

Sound like a plan?

4620. Re: [SkyWires] Series antenna tuners?

Yahoo group: SkyWires
Date: 2015-06-05 22:30:03 UTC
From: kent
Topic: 4609 Message: 4620

Hello Evan and all..

I also have quite a few years using a horizontal open-wire fed loop.(1100 feet long and =or- 35 feet above ground and I am continuously amazed at the performance be it local or dx. It is totally tree supported and at times can be quite maintenance intensive, but I still keep coming back to it as my goto antenna for the marginal signal contacts! The best part is that even with internal tuners in my radios it rarely will go unmatched , which continues to surprise me!!

Best 73
Kent
N8ZRD

PS..Evan..we should get on hf sometime and chat!! I bet I could hear you on most any band!! hi Also..the Valiant has been a stellar performer!! Tnx agn!!

> On Jun 5, 2015, at 6:17 PM, Evan Rolek k9sqg@... [SkyWires] <SkyWires@yahoogroups.com> wrote:
>
> Plans are good. But the poorest installed antenna give more QSOs than the best antenna on paper.
>
>
> I like to do research and understand things but I'm a pragmatist as well. From my experiments, with stations within 2 miles, as well as those at distances up to 1,000 miles, I have observed no change in transmitted signal reports nor received signal reports between resonent and non-resonent horizontal loop antennas on the 40 meter band. At 12 ft off the ground, in the evenings on SSB, I've worked into Italy regularly, Canary Islands, France, former Soviet Union countries, South America, Alaska, etc. etc. The antenna is not supposed to work at all, let alone for DX, but I didn't tell the antenna that so it keeps on working. Yes, some antennas are sensitive to resonence, but the horizontal loop isn't one of them. Then again, I only have 25 years or of experience with this particular antenna so the jury is still out on this one, hi hi.
>
> 73,
>
> Evan, K9SQG
>
> -----Original Message-----
> From: slr_65@... <mailto:slr_65@...> [SkyWires] <SkyWires@yahoogroups.com <mailto:SkyWires@yahoogroups.com>>
> To: SkyWires <SkyWires@yahoogroups.com <mailto:SkyWires@yahoogroups.com>>
> Sent: Fri, Jun 5, 2015 3:43 pm
> Subject: Re: [SkyWires] Re: Series antenna tuners?
>
>

> I would love to play, but my vision isn't cooperating. Depending if I recover some I may or may not be able to keep working and keep the house. Until I know if we're staying here I don't want to do any large antenna projects. I just want on the air in HF.
>
> I'm in a 1,100 square foot single story ranch house with attached garage and have decided to just run something around the eaves. That's not a lot of height and it's not a lot of length, though a 10 meter dipole I have up on it works well and the Dentron can match it to 20 meter (I haven't tried the Kenwood on it yet).
>
> I liked the characteristics of a loop, which is why I was looking at putting up supports in the yard for one before my eye issues unexpectedly flared up. In that instance I could tailor the loop diameter to get resonance, but now that I can just basically loop the house I'm stuck with that diameter, which isn't going to re sonate on a particular band, so I was hoping I could crutch the resonance with the Dentron. The testing with the MFJ was interesting, using the Dentron to set a resonance does carry through to the harmonics, sort of. You can definitely get points of lower SWR somewhere near the harmonics, but they're not great, they're just lower, and who says they'll behave the same when more power is pushed through. The MFJ says I can get a match on 40 meter with my dipole, but when tried with the radio it doesn't work. There's just a lot involved here and I think no hard and fast rules, trial and error is probably the only real way to know, but I'm not really up to it.
>
> I do have the length for a dipole type antenna, though the legs will be folded around the house corners. I think the rig tuner should be able to handle that though.
>
> A fellow amateur in town has a spiffy MFJ analyzer that tells you everything. I think I just need to put something up, analyze it and adjust. i.e. I think use 450 ladder line and center insulator, string as much wire as I can up, analyze it and see where I resonate, then adjust the length to get the resonance to a band I can harmonic off of. The analyzer should also be able to tell me the impedance so I know what ratio balun to get (this may be hard to calculate do to the low height and attachment to a structure from what I gather, so measuring it is probably the best approach). From what I gather, running the ladder line inside and then just a short jumper between the balun and rig is best, and it appears current baluns are preferred.
>
> Sound like a plan?
>
>

4621. Re: [SkyWires] Re: Series antenna tuners?

Yahoo group: SkyWires
Date: 2015-06-05 23:38:50 UTC
From: Skip Guenter
Topic: 4609 Message: 4621

What I've read suggests that on window line fed loops you can tune it to something above (in freq) what it's cut for but going the other way doesn't work well.

Here's an idea...

I think the dipole with the bent corners is fine and with a total of only 120' and can cover 75m and higher. You could use the same feed point and run another pair of wires 65' (total) 5" away from the original and you have a parallel dipole that can be trimmed to be resonance on 2 bands. Go another 4" away with a 33' wire and you have 20m also. This can be fed with a single coax and no balun and single tuner.

Look out for gutters and edge flashing metal.

On 06/05/2015 02:43 PM, slr_65@... [SkyWires] wrote:
>
> I would love to play, but my vision isn't cooperating. Depending if I
> recover some I may or may not be able to keep working and keep the
> house. Until I know if we're staying here I don't want to do any
> large antenna projects. I just want on the air in HF.
>
> I'm in a 1,100 square foot single story ranch house with attached
> garage and have decided to just run something around the eaves.
> That's not a lot of height and it's not a lot of length, though a 10
> meter dipole I have up on it works well and the Dentron can match it
> to 20 meter (I haven't tried the Kenwood on it yet).
>
> I liked the characteristics of a loop, which is why I was looking at
> putting up supports in the yard for one before my eye issues
> unexpectedly flared up. In that instance I could tailor the loop
> diameter to get resonance, but now that I can just basically loop the
> house I'm stuck with that diameter, which isn't going to resonate on a
> particular band, so I was hoping I could crutch the resonance with the
> Dentron. The testing with the MFJ was interesting, using the Dentron
> to set a resonance does carry through to the harmonics, sort of. You
> can definitely get points of lower SWR somewhere near the harmonics,
> but they're not great, they're just lower, and who says they'll behave
> the same when more power is pushed through. The MFJ says I can get a
> match on 40 meter with my dipole, but when tried with the radio it
> doesn't work. There's just a lot involved here and I think no hard and
> fast rules, trial and error is probably the only real way to know, but
> I'm not really up to it.
>
> I do have the length for a dipole type antenna, though the legs will
> be folded around the house corners. I think the rig tuner should be

> able to handle that though.
>
> A fellow amateur in town has a spiffy MFJ analyzer that tells you
> everything. I think I just need to put something up, analyze it and
> adjust. i.e. I think use 450 ladder line and center insulator, string
> as much wire as I can up, analyze it and see where I resonate, then
> adjust the length to get the resonance to a band I can harmonic off
> of. The analyzer should also be able to tell me the impedance so I
> know what ratio balun to get (this may be hard to calculate do to the
> low height and attachment to a structure from what I gather, so
> measuring it is probably the best approach). From what I gather,
> running the ladder line inside and then just a short jumper between
> the balun and rig is best, and it appears current baluns are preferred.
>
> Sound like a plan?
>
>

--
S. R. 'Skip' Guenter, K5SRG
/3905cc 40m SSB Late Coord
Alt Dir, 5th Call Area
/

4622. Re: [SkyWires] Re: Series antenna tuners?

Yahoo group: SkyWires
Date: 2015-06-05 23:41:52 UTC
From: Skip Guenter
Topic: 4609 Message: 4622

I like this!

On 06/05/2015 05:17 PM, Evan Rolek k9sqg@... [SkyWires] wrote:
>
> Plans are good. But the poorest installed antenna give more QSOs than
> the best antenna on paper.
>
>
> I like to do research and understand things but I'm a pragmatist as
> well. From my experiments, with stations within 2 miles, as well as
> those at distances up to 1,000 miles, I have observed no change in
> transmitted signal reports nor received signal reports between
> resonent and non-resonent horizontal loop antennas on the 40 meter
> band. At 12 ft off the ground, in the evenings on SSB, I've worked
> into Italy regularly, Canary Islands, France, former Soviet Union
> countries, South America, Alaska, etc. etc. The antenna is not
> supposed to work at all, let alone for DX, but I didn't tell the
> antenna that so it keeps on working. Yes, some antennas are sensitive
> to resonence, but the horizontal loop isn't one of them. Then again,
> I only have 25 years or of experience with this particular antenna so
> the jury is still out on this one, hi hi.
>
> 73,
>
> Evan, K9SQG
>
> -----Original Message-----
> From: slr_65@... [SkyWires] <SkyWires@yahoogroups.com>
> To: SkyWires <SkyWires@yahoogroups.com>
> Sent: Fri, Jun 5, 2015 3:43 pm
> Subject: Re: [SkyWires] Re: Series antenna tuners?
>
> I would love to play, but my vision isn't cooperating. Depending if I
> recover some I may or may not be able to keep working and keep the
> house. Until I know if we're staying here I don't want to do any
> large antenna projects. I just want on the air in HF.
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> I'm in a 1,100 square foot single story ranch house with attached
> garage and have decided to just run something around the eaves.
> That's not a lot of height and it's not a lot of length, though a 10
> meter dipole I have up on it works well and the Dentron can match it
> to 20 meter (I haven't tried the Kenwood on it yet).
>
> I liked the characteristics of a loop, which is why I was looking at
> putting up supports in the yard for one before my eye issues

> unexpectedly flared up. In that instance I could tailor the loop
> diameter to get resonance, but now that I can just basically loop the
> house I'm stuck with that diameter, which isn't going to re sonate on
> a particular band, so I was hoping I could crutch the resonance with
> the Dentron. The testing with the MFJ was interesting, using the
> Dentron to set a resonance does carry through to the harmonics, sort
> of. You can definitely get points of lower SWR somewhere near the
> harmonics, but they're not great, they're just lower, and who says
> they'll behave the same when more power is pushed through. The MFJ
> says I can get a match on 40 meter with my dipole, but when tried with
> the radio it doesn't work. There's just a lot involved here and I
> think no hard and fast rules, trial and error is probably the only
> real way to know, but I'm not really up to it.
>
> I do have the length for a dipole type antenna, though the legs will
> be folded around the house corners. I think the rig tuner should be
> able to handle that though.
>
> A fellow amateur in town has a spiffy MFJ analyzer that tells you
> everything. I think I just need to put something up, analyze it and
> adjust. i.e. I think use 450 ladder line and center insulator, string
> as much wire as I can up, analyze it and see where I resonate, then
> adjust the length to get the resonance to a band I can harmonic off
> of. The analyzer should also be able to tell me the impedance so I
> know what ratio balun to get (this may be hard to calculate do to the
> low height and attachment to a structure from what I gather, so
> measuring it is probably the best approach). From what I gather,
> running the ladder line inside and then just a short jumper between
> the balun and rig is best, and it appears current baluns are preferred.
>
> Sound like a plan?

4623. Re: [SkyWires] Re: Series antenna tuners?

Yahoo group: SkyWires
Date: 2015-06-07 06:41:42 UTC
From: slr_65@...
Topic: 4609 Message: 4623

OK, got play time tonight...it works on a 10 meter dipole!

I have a 10 meter dipole up on the side of the house, no balun and coax fed, only about 12' high.

Using an MFJ SWR analyzer I found I could get it to match on 20 meter and testing with my old Icom it did work.

Tonight I hooked up the new Kenwood. With the antenna hooked directly to it it couldn't find a match. BUT with the Dentron hooked up and set resonant on 20 meter and hooked to the Kenwood the Kenwood's tuner WAS able to easily find a match for every band below 20!

In fact my very first contact was with the CZECH REPUBLIC! It wasn't pretty, but I did make it through the pile up and got a confirmation! I was thrilled!

If I can do that on 16' of wire I'm encouraged that running more wire will only get better.

It's not working as I had originally thought, getting resonant on a lower band doesn't carry good resonance through to all the harmonics, but evidently on the 10 meter antenna at least, it does carry through well enough to make the internal tuner work!

I can live with the way it works now, 20 through 10 with no manual retuning. I hope adding more wire will get more signal through and improve performance, and if I can maintain the no manual retuning that will be huge.

I'm thinking I'm going to run the loop around the house and see what happens. If that doesn't work we'll shorten it up until it does work, hopefully I can get 40 meter and down working this way.

Oh, though I'm still figuring it all out, which is hard with low vision, I'm LOVING the new Kenwood!!!

4624. New file uploaded to SkyWires

Yahoo group: SkyWires
Date: 2015-06-07 21:14:18 UTC
From: SkyWires@yahoogroups.com
Topic: 1641 Message: 4624

Hello,

This email message is a notification to let you know that
a file has been uploaded to the Files area of the SkyWires
group.

File : /loop balun experiment.pdf
Uploaded by : everettsharp74 <everettsharp@...>
Description : Experiments with Baluns on a Loop Antenna, lots of good information

You can access this file at the URL:
https://groups.yahoo.com/neo/groups/SkyWires/files/loop%20balun%20experiment.pdf

To learn more about file sharing for your group, please visit:
https://help.yahoo.com/kb/index?page=content&y=PROD_GRPS&locale=en_US&id=SLN15398

Regards,

everettsharp74 <everettsharp@...>

4625. Re: Series antenna tuners?

Yahoo group: SkyWires
Date: 2015-06-08 00:25:08 UTC
From: atm_ken_hunter@...
Topic: 4609 Message: 4625

I have a horizontal loop (somewhere around 500 feet of wire) fed with about 35 feet of 450 ohm window line to a home made 4:1 balun at the shack end of the window line. From there maybe 20 feet of coax to the TS-590.

It is NOT resonant on any band. It tunes well on ALL bands. It works DX like no other antenna I've had including some expensive tri-banders at 72 feet. Plus I don't have to wait for a rotator to stop on target.

I do have a TH6-DXX somewhere in the bushes behind the house, a nice tower to put it on, rotator, wires etc... Not worth the trouble to put it up. My "temporary" loop does it all.

My advice : Try the loop around your house, feed it with 450 ohm window line, assume that it wont be 200 ohm but use the 4:1 balun to get it down to within a reasonable tuning range for the TS-590.
Don't believe anything you read about it being a "cloud burner" or "not good for DX". I'm working on my 5th band DXCC and have over 300 countries confirmed on this antenna without a linear amp.

By the way, a tuner doesn't "work" any harder on a 10:1 mismatch than it does on a 2:1.

Ken - KB7H

4626. Re: [SkyWires] Re: Series antenna tuners?

Yahoo group: SkyWires
Date: 2015-06-08 01:04:04 UTC
From: Evan Rolek
Topic: 4609 Message: 4626

Ken,

I've had good experiences with my horizontal loop antennas also.

73,

Evan, K9SQG

-----Original Message-----
From: atm_ken_hunter@yahoo.com [SkyWires] <SkyWires@yahoogroups.com>
To: SkyWires <SkyWires@yahoogroups.com>
Sent: Sun, Jun 7, 2015 8:25 pm
Subject: [SkyWires] Re: Series antenna tuners?

I have a horizontal loop (somewhere around 500 feet of wire) fed with about 35 feet of 450 ohm window line to a home made 4:1 balun at the shack end of the window line. From there maybe 20 feet of coax to the TS-590.

It is NOT resonant on any band. It tunes well on ALL bands. It works DX like no other antenna I've had including some expensive tri-banders at 72 feet. Plus I don't have to wait for a rotator to stop on target.

I do have a TH6-DXX somewhere in the bushes behind the house, a nice tower to put it on, rotator, wires etc... Not worth the trouble to put it up. My "temporary" loop does it all.

My advice : Try the loop around your house, feed it with 450 ohm window line, assume that it wont be 200 ohm but use the 4:1 balun to get it down to within a reasonable tuning range for the TS-590.

Don't believe anything you read about it being a "cloud burner& quot; or "not good for DX". I'm working on my 5th band DXCC and have over 300 countries confirmed on this antenna without a linear amp.

By the way, a tuner doesn't "work" any harder on a 10:1 mismatch than it does on a 2:1.

Ken - KB7H

4627. Re: Series antenna tuners?

Yahoo group: SkyWires
Date: 2015-06-08 07:32:28 UTC
From: slr_65@...
Topic: 4609 Message: 4627

Hi Ken,

That IS encouraging!

Today my son and I installed a 40 meter doublet, it just fit on the front of the house.

Kind of a funny thing here. I told my son WE needed to do this, and the stress and steroids have me on edge, so just like when he was a kid three things would get us through this - do what you're told, when you're told and shut up! He countered by pouring me a toddy and saying "Piss me off too much and I'm outta this!" LOL! We met somewhere in the middle...

It's a 40 meter doublet constructed with #10 thhn stranded copper (overkill, but I had it), fence post electric fence insulators, a Ladder Loc center insulator and about 35' of 450 ladder line. The whole thing is only about 12-15' off the ground, under the house eaves, centered on the eave to stay away from the metal gutters and flashing as much as possible.

I don't have a standalone balun, so I have to use the one in the Dentron Super Tuner. I beleive it's a 4:1 voltage balun.

Unfortunately the balun can't be used separate from the tuner, so the tuner is always part of the equation, and I can get a 1:1 on 40 meters, but that resonance doesn't carry through well enough to allow the Kenwood to auto tune the harmonics like it does on the 10 meter dipole, so for now I'm stuck manually tuning it for each band change. I can deal with that as writing down the settings is close enough, once I dial in the Kenwood's tuner touches up. I don't like doing that though as the Kenwood writes that data to nvram and high use could eventually wear it out (probably not though).

So, I'm thinking a stand alone balun is what's needed, and it seems current rather than voltage baluns are suggested these days. Hopefully a stand alone would allow the Kenwood's tuner to work.

I'm not up on all the antenna theory and my vision issues are hindering study. Basically with the 450 ladder line, we're seeing 450 ohms on an equal length radiator antenna such as a dipole? If so, then a 9:1 balun would give the 50 ohms, but are hard to find pre-made and I'm not up to making one. I see Balun Designs has a 6:1 current balun, as well as the 4:1 baluns. 6:1 would step down to 75 ohm. The Kenwood's range is 16 to 150 ohms, so maybe a 6:1 would give it a little more range since it's more in the middle?

I may have to run the loop around the house now just to see if it works!

THANKS for your input, please let me know what you think about the 6:1 balun, I'd like to get one ordered soon.

73's

Steve, KA0NEB

4628. Re: [SkyWires] Re: Series antenna tuners?

Yahoo group: SkyWires
Date: 2015-06-08 13:11:58 UTC
From: Evan Rolek
Topic: 4609 Message: 4628

Steve,

I wouldn't use any of those baluns. Why? Well, first of all, you don't know what you need. Without measuring the resistive and reactive components of the antenna for the bands of interest, you have no idea what ratio balun is needed. Typically, no single ratio will be correct for ALL of the bands of interest. Any given ratio might be good for one band, too high for others, and yet too low for some. Too, current baluns are generally preferred over voltage baluns for most applications. You could do some research and find out what some free space analysis or actual installations have revealed so that you have a good starting point for what might be needed. Then again, you could just believe what the ads say for the various baluns; makes life a lot simpler, it's not correct, but it's simpler and you can learn by experience why the ads might be misleading.

As a side note, there is likely to be significant loss in the balun. A balun is basically designed to convert a balanced line to an unbalanced line, or vice versa. It is NOT well suited for doing this transformation when reactive components are present in the load, your antenna. And you will have inductive or reactive components present in your antenna on the various bands. The best place for the balun is between the transmitter and the tuner, not between the tuner and the antenna. Yes, most tuners do the wrong thing, and thus, most tuners have higher losses and a variety of other issues unless you hit it lucky.

To simplify things, it is better to use a tuner designed for balanced feedline. See Richard Measures' articles about balanced tuners, get a Johnson Viking Matchbox, a Palstar BT-1500A, or build a suitable tuner with the balun at the input, not the output. Of course none of these tuners, or any tuner for that matter, will be set and forget across all bands since the resistive and/or the reactive components of the load will vary thus the compensating components of the antenna tuner network will need to be adjusted. You might be able to violate what theory says in this instance and find out that the tuner is dissipating more energy than the antenna is radiating; depending on SWR readings alone can easily take you down that path.

Finally, if you ever do get to try a horizontal loop, you might find that it reduces noise pickup. At my QTH, my horizontal loop reduced noise pickup by 1-2 s-units compared to a 1/4 wave vertical.

73,

Evan, K9SQG

-----Original Message-----
From: slr_65@... [SkyWires] <SkyWires@yahoogroups.com>
To: SkyWires <SkyWires@yahoogroups.com>
Sent: Mon, Jun 8, 2015 3:32 am
Subject: [SkyWires] Re: Series antenna tuners?

Hi Ken,

That IS encouraging!

Today my son and I installed a 40 meter doublet, it just fit on the front of the house.

Kind of a funny thing here. I told my son WE needed to do this, and the stress and steroids have me on edge, so just like when he was a kid three things would get us through this - do what you're told, when you're told and shut up! He countered by pouring me a toddy and saying "Piss me off too much and I'm outta this!" LOL! We met somewhere in the middle...

It's a 40 meter doublet constructed with #10 thhn stranded copper (overkill, but I had it), fence post electric fence insulators, a Ladder Loc center insulator and about 35' of 450 ladder line. The whole thing is only about 12-15' off the ground, under the house eaves, centered on the eave to stay away from the metal gutters and flashing as much as possible.

I don't have a standalone balun, so I ha ve to use the one in the Dentron Super Tuner. I beleive it's a 4:1 voltage balun.

Unfortunately the balun can't be used separate from the tuner, so the tuner is always part of the equation, and I can get a 1:1 on 40 meters, but that resonance doesn't carry through well enough to allow the Kenwood to auto tune the harmonics like it does on the 10 meter dipole, so for now I'm stuck manually tuning it for each band change. I can deal with that as writing down the settings is close enough, once I dial in the Kenwood's tuner touches up. I don't like doing that though as the Kenwood writes that data to nvram and high use could eventually wear it out (probably not though).

So, I'm thinking a stand alone balun is what's needed, and it seems current rather than voltage baluns are suggested these days. Hopefully a stand alone would allow the Kenwood's tuner to work.

I'm not up on all the antenna theor y and my vision issues are hindering study. Basically with the 450 ladder line, we're seeing 450 ohms on an equal length radiator antenna such as a dipole? If so, then a 9:1 balun would give the 50 ohms, but are hard to find pre-made and I'm not up to making one. I see Balun Designs has a 6:1 current balun, as well as the 4:1 baluns. 6:1 would step down to 75 ohm. The Kenwood's range is 16 to 150 ohms, so maybe a 6:1 would give it a little more range since it's more in the middle?

I may have to run the loop around the house now just to see if it works!

THANKS for your input, please let me know what you think about the 6:1 balun, I'd like to get one ordered soon.

73's

Steve, KA0NEB

4629. Re: [SkyWires] Re: Series antenna tuners?

Yahoo group: SkyWires
Date: 2015-06-08 14:19:21 UTC
From: Don Sanders
Topic: 4609 Message: 4629

Steve , I believe EVAN has given you sage sound advice for feeding your antenna.
In the tween time you might try a simple choke coil balun, known as an UGLY Balun,
between the 450 line and your Kenwood.
Just wrap 20 feet of RG8 type or RG8X on a 4 to 6 inch form and secure it.
I use plastic drain pipe for mine. then a short coax from balun to transceiver.
I have fed 450 and 300 ohm line this way and my transceiver tunes it well 40 to 10 meters on a 66 foot dipole.
If not satisfied then you can order a different balun.

Dr. Don HC4/W4BWS

On Mon, Jun 8, 2015 at 2:32 AM, slr_65@... [SkyWires] <SkyWires@yahoogroups.com> wrote:

>
>
> Hi Ken,
>
> That IS encouraging!
>
> Today my son and I installed a 40 meter doublet, it just fit on the front
> of the house.
>
> Kind of a funny thing here. I told my son WE needed to do this, and the
> stress and steroids have me on edge, so just like when he was a kid three
> things would get us through this - do what you're told, when you're told
> and shut up! He countered by pouring me a toddy and saying "Piss me off
> too much and I'm outta this!" LOL! We met somewhere in the middle...
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> (overkill, but I had it), fence post electric fence insulators, a Ladder
> Loc center insulator and about 35' of 450 ladder line. The whole thing is
> only about 12-15' off the ground, under the house eaves, centered on the
> eave to stay away from the metal gutters and flashing as much as possible.
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> Super Tuner. I beleive it's a 4:1 voltage balun.
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> Unfortunately the balun can't be used separate from the tuner, so the
> tuner is always part of the equation, and I can get a 1:1 on 40 meters, but
> that resonance doesn't carry through well enough to allow the Kenwood to
> auto tune the harmonics like it does on the 10 meter dipole, so for now I'm
> stuck manually tuning it for each band change. I can deal with that as

> writing down the settings is close enough, once I dial in the Kenwood's
> tuner touches up. I don't like doing that though as the Kenwood writes
> that data to nvram and high use could eventually wear it out (probably not
> though).
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> So, I'm thinking a stand alone balun is what's needed, and it seems
> current rather than voltage baluns are suggested these days. Hopefully a
> stand alone would allow the Kenwood's tuner to work.
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> study. Basically with the 450 ladder line, we're seeing 450 ohms on an
> equal length radiator antenna such as a dipole? If so, then a 9:1 balun
> would give the 50 ohms, but are hard to find pre-made and I'm not up to
> making one. I see Balun Designs has a 6:1 current balun, as well as the
> 4:1 baluns. 6:1 would step down to 75 ohm. The Kenwood's range is 16 to
> 150 ohms, so maybe a 6:1 would give it a little more range since it's more
> in the middle?
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> I may have to run the loop around the house now just to see if it works!
>
> THANKS for your input, please let me know what you think about the 6:1
> balun, I'd like to get one ordered soon.
>
> 73's
>
> Steve, KA0NEB
>
>

4630. Re: [SkyWires] Re: Series antenna tuners?

Yahoo group: SkyWires
Date: 2015-06-08 14:27:46 UTC
From: Don Sanders
Topic: 4609 Message: 4630

One additional note. Your Kenwood tuner may not have enough tuning range to handle more than a 3:1 to 4:1 SWR.
This will necessitate using an external tuner. Most internal tuners are designed to allow a resonant dipole mid band to be used at higher or lower band limits- except maybe 80 meters.
So while it is desirable to have the internal tuner working, it often is not possible with a non-resonant antenna like using a 40 meter dipole on other bands.
Thus an external tuner is usually necessary.

Dr. Don HC4/W4BWS

On Mon, Jun 8, 2015 at 9:19 AM, Don Sanders <w4bws1@...> wrote:

> Steve , I believe EVAN has given you sage sound advice for feeding your
> antenna.
> In the tween time you might try a simple choke coil balun, known as an
> UGLY Balun,
> between the 450 line and your Kenwood.
> Just wrap 20 feet of RG8 type or RG8X on a 4 to 6 inch form and secure it.
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> On Mon, Jun 8, 2015 at 2:32 AM, slr_65@... [SkyWires] <
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>> Hi Ken,
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>> and shut up! He countered by pouring me a toddy and saying "Piss me off
>> too much and I'm outta this!" LOL! We met somewhere in the middle...
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>> balun, I'd like to get one ordered soon.
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>> 73's
>>
>> Steve, KA0NEB
>>
>>
>
>

4631. Re: [SkyWires] Re: Series antenna tuners?

Yahoo group: SkyWires
Date: 2015-06-08 16:43:26 UTC
From: enkitec@...
Topic: 4609 Message: 4631

Any recommendations about this balanced automatic tuner?

http://www.hamware.de/hardware/tuner502/at502-e.htm

73, Mark Jordan PY3SS

On 08-Jun-15 11:27, Don Sanders w4bws1@... [SkyWires] wrote:
> One additional note. Your Kenwood tuner may not have enough tuning
> range to handle more than a 3:1 to 4:1 SWR.
> This will necessitate using an external tuner. Most internal tuners
> are designed to allow a resonant dipole mid band to be used at higher
> or lower band limits- except maybe 80 meters.
> So while it is desirable to have the internal tuner working, it often
> is not possible with a non-resonant antenna like using a 40 meter
> dipole on other bands.
> Thus an external tuner is usually necessary.
>
> Dr. Don HC4/W4BWS
>

4632. Re: [SkyWires] Re: Series antenna tuners?

Yahoo group: SkyWires
Date: 2015-06-08 17:37:43 UTC
From: Evan Rolek
Topic: 4609 Message: 4632

Please see the review in the latest issue of QST or read review comments on the eHam website.

73,

Evan, K9SQG

-----Original Message-----
From: enkitec@... [SkyWires] <SkyWires@yahoogroups.com>
To: SkyWires <SkyWires@yahoogroups.com>
Sent: Mon, Jun 8, 2015 12:43 pm
Subject: Re: [SkyWires] Re: Series antenna tuners?

Any recommendations about this balanced automatic tuner?

http://www.hamware.de/hardware/tuner502/at502-e.htm

73, Mark Jordan PY3SS

On 08-Jun-15 11:27, Don Sanders w4bws1@... [SkyWires] wrote:

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So while it is desirable to have the internal tuner working, it often is not possible with a non-resonant antenna like using a 40 meter dipole on other bands.

Thus an external tuner is usually necessary.

Dr. Don HC4/W4BWS

4633. Re: [SkyWires] Re: Series antenna tuners?

Yahoo group: SkyWires
Date: 2015-06-08 19:24:24 UTC
From: slr_65@...
Topic: 4609 Message: 4633

Hi Don,

The Kenwood's manual says it will handle SWRs of 10:1 or less, and the messages here tend to show the 590 tuner is pretty robust. One never knows though, as mfgs frequently embellish and there are soooo many variables here. I'm waaay too low to the ground, waaay too close to a structure, etc.. I think the best thing is to simply do the phsycial analysis with an analyzer, just takes the guessing and assumptions out.

It's interesting my 10 meter coax fed dipole matched on 20 meter with the Dentron will allow the internal tuner to do 20 through 10 with just the upper half of 10 dropping off, but the ladder line fed doublet won't.

The reason I did the ladder line fed doublet was because it was my understanding that it was a type of antenna that allowed multi-band usage on the harmonics.

A club member in town has a fancy dancy analyzer, I'll give him a call.

Along these lines, I'm not adverse to buying an analyzer though once my antenna is set up I doubt I'll be playing much more, my vision just won't allow it. The SARK 100 Mini60s look capable and affordable from the Chinese vendors on fleaBay, but reviews on them are few and far between on the net, anyone have/use one? I'd love one of the Aussie Kit analyzers, but I'm not up to kit building these days adn they aren't offered assembled. The MJFs are 300 bucks for a good one, just too high.

Thanks!

Steve

4634. Re: [SkyWires] Re: Series antenna tuners?

Yahoo group: SkyWires
Date: 2015-06-09 02:30:33 UTC
From: slr_65@...
Topic: 4609 Message: 4634

My Buddy's analyzer is an MFJ and it won't do ladder line without a balun attachment, however he has a spare 4:1 current balun so I think over the weekend we'll just toss it on the shack end of the ladder line and see if the Kenwood is happy or not. If it is I think I'll run a wire around the house to make a loop and see what happens, if that doesn't work I think I'll cut it and then see if an 80 meter doublet will work. I'll post back after we play a bit.

4635. Re: [SkyWires] Re: Series antenna tuners?

Yahoo group: SkyWires
Date: 2015-06-09 03:06:52 UTC
From: Evan Rolek
Topic: 4609 Message: 4635

I've never had a doublet/dipole outperform a horizontal loop antenna on any band. The 1-2 S-unit reduction in noise was an added benefit of the loop.

73,

Evan, K9SQG

-----Original Message-----
From: slr_65@... [SkyWires] <SkyWires@yahoogroups.com>
To: SkyWires <SkyWires@yahoogroups.com>
Sent: Mon, Jun 8, 2015 10:30 pm
Subject: Re: [SkyWires] Re: Series antenna tuners?

My Buddy's analyzer is an MFJ and it won't do ladder line without a balun attachment, however he has a spare 4:1 current balun so I think over the weekend we'll just toss it on the shack end of the ladder line and see if the Kenwood is happy or not. If it is I think I'll run a wire around the house to make a loop and see what happens, if that doesn't work I think I'll cut it and then see if an 80 meter doublet will work. I'll post back after we play a bit.

4636. Re: [SkyWires] Re: Series antenna tuners?

Yahoo group: SkyWires
Date: 2015-06-09 04:44:17 UTC
From: slr_65@...
Topic: 4609 Message: 4636

Yep, everything I've read Evan is very positive on the loop, which is why I was looking at putting four tilt up poles in the backyard for one, but then my vision issues crept up, so that's not in the immediate future.

I hope running a non-resonant loop around the house with the 4:1 current balun will allow the Kenwood auto tuner to do what I need. I'm sure the Dentron would work, but again, I'm newly low vision and manual setting up isn't so easy.

The nice thing about wire is it's relatively cheap and doesn't need much for construction skills, so even with my impaired vision I can get some hands on time with the help of my son.

I'm sure we will try the loop this weekend, I'll report back when we dol

73s

Steve

4637. AW: [SkyWires] Re: Series antenna tuners?

Yahoo group: SkyWires
Date: 2015-06-09 05:53:03 UTC
From: siegfried jackstien
Topic: 4609 Message: 4637

http://www.ldgelectronics.com/c/252/products/12/14/1

http://www.eham.net/reviews/detail/4937

maybe that is for you???

If you make notes about tune settings in the manual tuner ... then you
should be very close

And fine-tuning could be done with that talking swr metre

Dg9bfc

Sigi

> -----Ursprüngliche Nachricht-----
> Von: SkyWires@yahoogroups.com [mailto:SkyWires@yahoogroups.com]
> Gesendet: Dienstag, 9. Juni 2015 04:44
> An: SkyWires@yahoogroups.com
> Betreff: Re: [SkyWires] Re: Series antenna tuners?
>
>
>
> Yep, everything I've read Evan is very positive on the loop, which is why
> I was looking at putting four tilt up poles in the backyard for one, but
> then my vision issues crept up, so that's not in the immediate future.
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> balun will allow the Kenwood auto tuner to do what I need. I'm sure the
> Dentron would work, but again, I'm newly low vision and manual setting up
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> hands on time with the help of my son.
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> 73s
>
> Steve
>
>

4638. Re: AW: [SkyWires] Re: Series antenna tuners?

Yahoo group: SkyWires
Date: 2015-06-09 06:54:56 UTC
From: slr_65@...
Topic: 4609 Message: 4638

Hey, that is pretty cool!

I gotta see what the talking module for the radio all does, I think it will do swr and power.

I played with the Kenwood and Dentron tonight, it seems the Kenwood has a decent tuner in it. If I get the Dentron purposely set to around a 3:! swr, which is the extreme right edge of the meter on the MFJ I'm using to set it up, and then hookup the Kenwood and have it tune it always does find a match. In fact giving each cap a tweak beyond so it's well above 3:! and it still seems to find a match, the Dentron can be set quite coarsely and the Kenwood is happy, so that gives hope that either a loop or doublet with it's own balun will work with the Kenwood tuner.

Playing with the Kenwood tonight...I continue to be impressed with it! 8-)

4639. Re: AW: [SkyWires] Re: Series antenna tuners?

Yahoo group: SkyWires
Date: 2015-06-09 18:50:41 UTC
From: slr_65@...
Topic: 4609 Message: 4639

Just playing, this isn't exaclty loop related, but I think interesting none the less, so I hope I'm not boring the group.

It's easy enough to compare the 10 meter dipole to the doublet on 10 meter as I have two antenna hookups to the new rig so I can easy switch between the doublet/tuner and dipole and compare reception within seconds.
.
It's hard for me to see the little notches on the meter, but it appears the signal to noise ratio is greater on the dipole, it seems about double. Not that the dipole is pure noise, it's just twice as much noise as the doublet. I found a couple beacons and that held true, switching antennas basically doubled the signal strength coming from the beacons, so more wire DOES equal more signal!

4640. Low, non-resonant loop is UP!

Yahoo group: SkyWires
Date: 2015-06-10 01:33:58 UTC
From: slr_65@...
Topic: 4640 Message: 4640

OK, hot bright day, fat blind guy suffering steroid jitters on a ladder...nothing could possibly go wrong here, right?

RIGHT!

I ran a wire the rest of the way around the perimeter of the house and hooked it on to the end of the doublet to make a horizontal loop antenna.

It's working well, the Dentrpn can match it easily from 80 to 10 meter!

It's about half again as quiet as the doublet for background noise and a good gain for signals over the doublet.

I can't read the lcd meter on the Kenwood too well, it's got several scales though and one I can read fairly well. There's a 10 meter beacon I was playing with. On the dipole it was on 5, on the doublet it was on 10. When I got the ends tied together I came back in, the dipole is still at 5 but the loop is at 18! 8-)

Ran near the cable tv for a bit, but no interference issues.

I think it's a keeper!

The Dentron is matching it easily. When it's configured as a doublet the Dentron can match it, but some bands are touchy, it seems with the loop they're not nearly as touchy.

The Dentron has a 4:1 voltage balun in it, I'm hoping to get to play with a stand alone 4:! current balun this weekend, I really hope the Kenwood's tuner will be happy with a balun and will be able to tune the loop it's self.

The saga continues...and it's an absolute hoot, I LOVE this kinda stuff!

I usually monitor the KC0SWG repeater around 10 pm most nights, if you Echolink and want to try and hookup on HF give me a yell on the repeater sometimes....I'm starting on my Worked All States award though, so if we hookup on HF I'll need a QSL card! 8-)

73s!

Steve KA0NEB

4641. Re: [SkyWires] Low, non-resonant loop is UP!

Yahoo group: SkyWires
Date: 2015-06-10 03:44:49 UTC
From: Evan Rolek
Topic: 4640 Message: 4641

Congratulations Steve! Now you know why those of us that have been using such an antenna are so enthusiastic about it!!!!! Please keep us posted.

73,

Evan, K9SQG

-----Original Message-----
From: slr_65@... [SkyWires] <SkyWires@yahoogroups.com>
To: SkyWires <SkyWires@yahoogroups.com>
Sent: Tue, Jun 9, 2015 9:34 pm
Subject: [SkyWires] Low, non-resonant loop is UP!

OK, hot bright day, fat blind guy suffering steroid jitters on a ladder...nothing could possibly go wrong here, right?

RIGHT!

I ran a wire the rest of the way around the perimeter of the house and hooked it on to the end of the doublet to make a horizontal loop antenna.

It's working well, the Dentrpn can match it easily from 80 to 10 meter!

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I think it's a keeper!

The Dentron is matching it easily. When it's configured as a doublet the Dentron can match it, but some bands are touchy, it seems with the loop they're not nearly as touchy.

The Dentron has a 4:1 voltage balun in it, I'm hoping to get to play with a stand alone 4:! current balun this weekend, I really hope the Kenwood's tuner will be happy with a balun and will be able to tune the loop it's self.

The saga continues...and it's an absolute hoot, I LOVE this kinda stuff!

I usually monitor the KC0SWG repeater around 10 pm most nights, if you Echolink and want to try and hookup on HF give me a yell on the repeater sometimes....I'm starting on my Worked All States award though, so if we hookup on HF I'll need a QSL card! 8-)

73s!

Steve KA0NEB

4642. Re: [SkyWires] Low, non-resonant loop is UP!

Yahoo group: SkyWires
Date: 2015-06-10 04:11:58 UTC
From: slr_65@...
Topic: 4640 Message: 4642

Thanks Evan!

As you can tell, I'm not shy and I'm wordy, so I'll keep ya all posted on how it works out.

For this application though it really looks like the best solution, I've got the house for support so might as well run as much wire around it as I can, and it appears the more wire the better signal to noise ratio. I dunno on transmit, I haven't played that much.

I'm thinking I want to get the Kenwood's sound card hooked up to my laptop. Hopefully the WSPR software will play nice with the big fonts and high contrast colors I need to use as I'd like to do WSPR with the dipole, the doublet and then the loop and compare the reception reports, I think that would be kind of interesting to look at.

Thanks for everything guys, I'll report back after I play more.

Steve, KA0NEB

4643. Re: [SkyWires] Low, non-resonant loop is UP!

Yahoo group: SkyWires
Date: 2015-06-10 05:41:01 UTC
From: slr_65@...
Topic: 4640 Message: 4643

Tuned the loop up on 80 meter tonight and found there was a fair amount of activity there for midnight on a weekday!

Got in on a OK/MO/IL qso, they could hear me, but I was light. They were all running dipoles at 30 feet or better and kw amps. Still, at 100 watts out of a 200' 12' high loop I got back to them! 8-)

4644. AW: [SkyWires] Low, non-resonant loop is UP!

Yahoo group: SkyWires
Date: 2015-06-10 10:49:28 UTC
From: siegfried jackstien
Topic: 4640 Message: 4644

Now you know hwy some guys say "if you ever tried a loop you will never use any other antenna again"

What counts most (in my view) is the low noise (or high signal to noise ratio)

And my findings her about matching ... a big loop can be used nearly on any frequency ... impedance is always in midrange (so easy to match with a tuner)

On fundamental frequency a dipole has low impedance and on next harmonic it has very high impedance .. a loop always is in mid impedance

Even between the resonance spots the impedance does not bounce skyhigh (like on a dipole on 2nd harmonic) ...

You sure found a keeper :-)

Dg9bfc

Sigi

> -----Ursprüngliche Nachricht-----
> Von: SkyWires@yahoogroups.com [mailto:SkyWires@yahoogroups.com]
> Gesendet: Mittwoch, 10. Juni 2015 05:41
> An: SkyWires@yahoogroups.com
> Betreff: Re: [SkyWires] Low, non-resonant loop is UP!
>
>
>
> Tuned the loop up on 80 meter tonight and found there was a fair amount of
> activity there for midnight on a weekday!
>
> Got in on a OK/MO/IL qso, they could hear me, but I was light. They were
> all running dipoles at 30 feet or better and kw amps. Still, at 100 watts
> out of a 200' 12' high loop I got back to them! 8-)
>
>

4645. Re: [SkyWires] Low, non-resonant loop is UP!

Yahoo group: SkyWires
Date: 2015-06-10 14:55:43 UTC
From: Evan Rolek
Topic: 4640 Message: 4645

Steve,

For your particular installation, you home and shack are in the midst of the antenna. If you use a linear it might induce some RFI etc. Curious to see how you'll be using the antenna in the weeks ahead.

73,

Evan, K9SQG

-----Original Message-----
From: slr_65@... [SkyWires] <SkyWires@yahoogroups.com>
To: SkyWires <SkyWires@yahoogroups.com>
Sent: Wed, Jun 10, 2015 12:12 am
Subject: Re: [SkyWires] Low, non-resonant loop is UP!

Thanks Evan!

As you can tell, I'm not shy and I'm wordy, so I'll keep ya all posted on how it works out.

For this application though it really looks like the best solution, I've got the house for support so might as well run as much wire around it as I can, and it appears the more wire the better signal to noise ratio. I dunno on transmit, I haven't played that much.

I'm thinking I want to get the Kenwood's sound card hooked up to my laptop. Hopefully the WSPR software will play nice with the big fonts and high contrast colors I need to use as I'd like to do WSPR with the dipole, the doublet and then the loop and compare the reception reports, I think that would be kind of interesting to look at.

Thanks for everything guys, I'll report back after I play more.

Steve, KA0NEB

4647. Re: [SkyWires] Low, non-resonant loop is UP! [2 Attachments]

Yahoo group: SkyWires
Date: 2015-06-10 15:50:59 UTC
From: Andy
Topic: 4640 Message: 4647

I think for the most part the fields inside the loop are reinforcing, not canceling. I think the field is most intense in the middle. Think what happens with an electromagnet or solenoid.

"I don't think there is any antenna modelling program that can make a in the loop pattern ya know?"

I believe NEC calculates the fields inside a loop. NEC does do near-fields too. It's just that most people don't bother to look at the near-field results; they only look at the far-field patterns.

Even EZNEC can generate near-field tables.

Andy

4652. Re: [SkyWires] Low, non-resonant loop is UP!

Yahoo group: SkyWires
Date: 2015-06-10 18:51:22 UTC
From: slr_65@...
Topic: 4640 Message: 4652

Hi Evan,

I don't think a linear or anything is in the immediate future. My vision issues were fast coming and probably permanent, so working and the occasional overtime for extras is probably a thing of the past. We're seriously just hoping to hold on to the house, so that's why no major antenna support structures are even being considered.

I'm sticking with what I have for now, a Kenwood TS-590SG and an old Icom IC-730 I was in the midst of refurbing when this all hit. I also have a Dentron Super Tuner and Dentron Jr tuner. But that is it, I was just returning to amateur radio after a 30 year hiatus (formerly KA0JXR, novice at 13 in 1978, Tech in 1979 and General at 15 in 1980, but I let it expire as I got older).

I plan on using the station for general qsoing, I'm hoping to play with PSK31 and weak signal propogation reporting if the program will play nice with the huge high contrast fonts my vision requires.

If things settle down for me and we stay here, then the antenna will be the first order of business for upgrade, till then, I'm stuck with low things that can mount to the structure of the house.

So far, no rfi problems on any band at full power...well, one...the touch lamp in our bedroom will turn on occasionally when transmitting, but a CB in the driveway will do that to it too, so we're getting a new lamp!

4653. Re: AW: [SkyWires] Low, non-resonant loop is UP! [1 Attachment]

Yahoo group: SkyWires
Date: 2015-06-10 19:46:01 UTC
From: beargyrils@...
Topic: 4653 Message: 4653

I have been keeping an eye on this topic.
I think this wire loop is indoors?
I'm on the 4th floor with severe antenna restrictions.
I use a standard mag loop with steel above and below me and have worked DX over 10,000 miles with 5 watts.
I can install a 20 x 20 foot square wire loop.
Will this work for me?
Any information is much appreciated
BOB AF2Q

In a message dated 6/10/2015 11:28:14 A.M. Pacific Daylight Time, SkyWires@yahoogroups.com writes:

[_Attachment(s)_ (mip://022297a0/default.html#TopText) from Joe included below]
Very true, I guess ya can run low power and use a field strength meter and walk around the house and look at the varying strengths.

Joe WB9SBD

4654. Re: AW: [SkyWires] Low, non-resonant loop is UP! [1 Attachment]

Yahoo group: SkyWires
Date: 2015-06-10 20:18:24 UTC
From: slr_65@...
Topic: 4653 Message: 4654

Hi Bob,

My loop is installed on the outside of the house, my roof overhangs my house walls by a couple feet so it's installed under that overhang between the outside wall of the house and the metal rain gutter.

I can tune 80 meters and up with around 200' of wire, and it seems the more wire the better, so I'd think your 400' would definitely be usable.

As far as installing it inside, in/near a building, with steel above and below, etc. I'd say no one can give you an answer, there's just a LOT of variables there, if you can install it cheaply then I'd say just give it a try and then you'll know for sure, anything else is guessing and it's not even educated guessing as sooo much is in play.

I know, not a good answer, I had similar questions about my install and in the end simply ran the experiment to find out.

Take care, 73s,

Steve KA0NEB

4655. Re: AW: [SkyWires] Low, non-resonant loop is UP!

Yahoo group: SkyWires
Date: 2015-06-10 20:24:41 UTC
From: beargyrils@...
Topic: 4640 Message: 4655

Hi Steve,
The loop I am thinking about will be a total of 80 feet of wire.
I have worked as far as Texas with just a wire hanging out the window and never have a problem getting over the pond with a 3 foot mag loop.
Well,it's all about experimenting so I will see how it works.
I usually just work 40 and 20 meters.
73 es Tnx for responding
BOB AF2Q

In a message dated 6/10/2015 1:18:27 P.M. Pacific Daylight Time, SkyWires@yahoogroups.com writes:

I know, not a good answer, I had similar questions about my install and in the end simply ran the experiment to find out.

Take care, 73s,

Steve KA0NEB

4656. Re: AW: [SkyWires] Low, non-resonant loop is UP!

Yahoo group: SkyWires
Date: 2015-06-10 20:44:38 UTC
From: slr_65@...
Topic: 4640 Message: 4656

Hi Bob,

I've looked at mag loop briefly, but if I recall it required an expensive vacuum cap for tuning?

4657. Steve's install strategy, thinking out loud

Yahoo group: SkyWires
Date: 2015-06-10 20:46:10 UTC
From: slr_65@...
Topic: 4657 Message: 4657

Hi Guys,

OK, the wheels are turning on how to get this up higher. I really don't want to do any major projects, but my condition can take months to heal to whatever state it's going to, and fortunately I've never abused sick time so I have almost a year's leave time before I either have to get back to work or go on disability. Even at that, we may get something figured to keep the house, so I'm cautiously exploring options. Oh, I have an old truck I won't be using any more that the neighbor is interested in, so I may sell it to fund the antenna project.

First is economics, second is location and of course zoning and stuff comes into play.

Economics, as cheap as possible of course! That rules out four towers but it also rules out cheap iffy pfc and expensive fiberglass too. It appears that Rohn makes a 35' telescoping mast that's UPS shippable, about $150 each. $600, ouch, but then again...not really, figure the cost over the time of use... There are other makers, for a few bucks less, but I think Rohn has a good reputation and product.

Location may play into zoning a bit. The rules on antennas, towers, masts and even flag poles are kind of murky here. Basically an antenna on a house can't exceed 60' off the ground, but a tripod and guys to the roof suffice, no real size of roof is required. Kind of interesting. Towers have rules, setbacks, etc.. Probably not an option. A mast doesn't really have rules though, as long as it's securely attached to the structure, which again could be a tripod, guys, etc, OR set in the ground and bolted to the side of the structure. A tower usually consists of more than one element, i.e. it is triangular or square where as a mast is usually one element, i.e. a pipe or collapsable pipe. A mast that stands alone or is guyed is murky area, the Inpsector thought for guidance the flag pole criteria may apply.

Soooo, I think four Rohn 35' telescoping masts attached to each corner of the house would be fine.

That leaves me with the same size loop. I'll know if that's what I want to do soon when I see if the stand alone balun lets the Kenwood's tuner work standalone.

My thought is one of those on each corner, so attached to the house at around 12'. Then I'm thinking just two guys to a corner coming off at right angles around 25' as the antenna wire will connect the four corners of the rectangle and help spread load?

This keeps the antenna over the house though, so the house and shack are within the antenna. It's not an issue now, so probably not one later either.

I can move into the back yard, but then I get into masts that aren't connected to a structure issues. I'm sure it's doable though. The only issue there is that the power feed to the house would drop through the middle of the rectangle, no way around it.

35' enough? Does it have to be all 35'? Two 35' corners sloping down to 15' corners do ok?

Just kicking around ideas. I've even considered maybe a Windom or something, but fitting an 80 meter in would be hard and though I can tune the 40 meter doublet to 80, I dunno how a Windom would do.

Any thoughts, comments, etc.. I'm not thrilled with doing a big project, but this isn't that big or expensive and I think would increase the enjoyment a lot, antennas are the best bang for the buck!

Steve KA0NEB

4658. Re: [SkyWires] Steve's install strategy, thinking out loud

Yahoo group: SkyWires
Date: 2015-06-10 20:59:03 UTC
From: beargyrils@...
Topic: 4657 Message: 4658

Steve,many hams run nothing more then a random wire and work the world. Spending all that money to support a wire just does not make much sense to me. Use the loop you have now for a while and see how well it works. Bob AF2Q
Sent from my BlackBerry® by Boost Mobile

-----Original Message-----
From: "slr_65@yahoo.com [SkyWires]" <SkyWires@yahoogroups.com>
Sender: SkyWires@yahoogroups.com
Date: 10 Jun 2015 13:46:10
To: <SkyWires@yahoogroups.com>
Reply-To: SkyWires@yahoogroups.com
Subject: [SkyWires] Steve's install strategy, thinking out loud

Hi Guys,

OK, the wheels are turning on how to get this up higher. I really don't want to do any major projects, but my condition can take months to heal to whatever state it's going to, and fortunately I've never abused sick time so I have almost a year's leave time before I either have to get back to work or go on disability. Even at that, we may get something figured to keep the house, so I'm cautiously exploring options. Oh, I have an old truck I won't be using any more that the neighbor is interested in, so I may sell it to fund the antenna project.

First is economics, second is location and of course zoning and stuff comes into play.

Economics, as cheap as possible of course! That rules out four towers but it also rules out cheap iffy pfc and expensive fiberglass too. It appears that Rohn makes a 35' telescoping mast that's UPS shippable, about $150 each. $600, ouch, but then again...not really, figure the cost over the time of use... There are other makers, for a few bucks less, but I think Rohn has a good reputation and product.

Location may play into zoning a bit. The rules on antennas, towers, masts and even flag poles are kind of murky here. Basically an antenna on a house can't exceed 60' off the ground, but a tripod and guys to the roof suffice, no real size of roof is required. Kind of interesting. Towers have rules, setbacks, etc.. Probably not an option. A mast doesn't really have rules though, as long as it's securely attached to the structure, which again could be a tripod, guys, etc, OR set in the ground and bolted to the side of the structure. A tower usually consists of more than one element, i.e. it is triangular or square where as a mast is usually one element, i.e. a pipe or collapsable pipe. A mast that stands alone or is guyed is murky area, the Inpsector thought for guidance the flag pole criteria may apply.

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This keeps the antenna over the house though, so the house and shack are within the antenna. It's not an issue now, so probably not one later either.

I can move into the back yard, but then I get into masts that aren't connected to a structure issues. I'm sure it's doable though. The only issue there is that the power feed to the house would drop through the middle of the rectangle, no way around it.

35' enough? Does it have to be all 35'? Two 35' corners sloping down to 15' corners do ok?

Just kicking around ideas. I've even considered maybe a Windom or something, but fitting an 80 meter in would be hard and though I can tune the 40 meter doublet to 80, I dunno how a Windom would do.

Any thoughts, comments, etc.. I'm not thrilled with doing a big project, but this isn't that big or expensive and I think would increase the enjoyment a lot, antennas are the best bang for the buck!

Steve KA0NEB

4659. RE: AW: [SkyWires] Low, non-resonant loop is UP!

Yahoo group: SkyWires
Date: 2015-06-10 21:01:53 UTC
From: Rick - DJ0IP / NJ0IP
Topic: 4653 Message: 4659

Bob,

You are comparing different kinds of loops here.
They work completely different.

Your mag loop is probably the best antenna you are going to find for indoor use in most households, unless you live in the country in a wooden house and have very little consumer products inside your house.

The SkyLoop is generally one wavelength or longer on the lowest frequency you plan to use it, and works on the electrical component of the signal. The Mag Loop, if built properly, does not. It works on the magnetic component of the signal.

Noise generated inside the house will be picked up by a 20□ by 20□ wire loop, but not nearly as much so by a magnetic loop.
It might be that someone far away will hear you on the 20x20 loop but you probably won□t be able to hear them.

Having said that, be aware that all Mag Loop antennas were NOT created equal. There night and day differences between really good ones and most of the loops most people are using. Trouble is, the really good ones cost big time bucks!

73 - Rick, DJ0IP
(Nr. Frankfurt am Main)

From: SkyWires@yahoogroups.com [mailto:SkyWires@...m]
Sent: Wednesday, June 10, 2015 9:46 PM
To: SkyWires@yahoogroups.com
Subject: Re: AW: [SkyWires] Low, non-resonant loop is UP!

I have been keeping an eye on this topic.
I think this wire loop is indoors?
I'm on the 4th floor with severe antenna restrictions.
I use a standard mag loop with steel above and below me and have worked DX over 10,000 miles with 5 watts.
I can install a 20 x 20 foot square wire loop.
Will this work for me?
Any information is much appreciated
BOB AF2Q

In a message dated 6/10/2015 11:28:14 A.M. Pacific Daylight Time, SkyWires@yahoogroups.com writes:

Very true, I guess ya can run low power and use a field strength meter and walk around the house and look at the varying strengths.

Joe WB9SBD

4660. Re: AW: [SkyWires] Low, non-resonant loop is UP!

Yahoo group: SkyWires
Date: 2015-06-10 20:59:34 UTC
From: Richard Gagnon
Topic: 4640 Message: 4660

i use a homebrew butterfly capacitor and it is working well!!

Le mercredi 10 juin 2015 16h44, "slr_65@... [SkyWires]" <SkyWires@yahoogroups.com> a écrit :

Hi Bob,

I've looked at mag loop briefly, but if I recall it required an expensive vacuum cap for tuning?

4661. Re: [SkyWires] Low, non-resonant loop is UP!

Yahoo group: SkyWires
Date: 2015-06-10 20:48:46 UTC
From: Andy
Topic: 4640 Message: 4661

Rich wrote:

"I know my 160 size delta loop has to have corner angles close to 120 degree so have a good SWR on the higher bands."

How did you get 120 degree corner angles in a delta loop?

I must not be understanding something here.

Andy

4662. Re: AW: [SkyWires] Low, non-resonant loop is UP!

Yahoo group: SkyWires
Date: 2015-06-10 21:07:48 UTC
From: beargyrils@...
Topic: 4640 Message: 4662

I made many mag loops and used caps from old boat anchors and never had no problems. Bob AF2Q
Sent from my BlackBerry® by Boost Mobile

-----Original Message-----
From: "Richard Gagnon ve2zvz@yahoo.ca [SkyWires]" <SkyWires@yahoogroups.com>
Sender: SkyWires@yahoogroups.com
Date: Wed, 10 Jun 2015 20:59:34
To: SkyWires@yahoogroups.com<SkyWires@yahoogroups.com>
Reply-To: SkyWires@yahoogroups.com
Subject: Re: AW: [SkyWires] Low, non-resonant loop is UP!

i use a homebrew butterfly capacitor and it is working well!!

Le mercredi 10 juin 2015 16h44, "slr_65@yahoo.com [SkyWires]" <SkyWires@yahoogroups.com> a écrit :

  Hi Bob,

I've looked at mag loop briefly, but if I recall it required an expensive vacuum cap for tuning?

4663. AW: [SkyWires] Low, non-resonant loop is UP!

Yahoo group: SkyWires
Date: 2015-06-10 21:38:09 UTC
From: siegfried jackstien
Topic: 4640 Message: 4663

Hmm .. sum in a triangle is 180 ... right??

He sure meant each corner 60 degrees

Dg9bfc

Sigi

> -----Ursprüngliche Nachricht-----
> Von: SkyWires@yahoogroups.com [mailto:SkyWires@yahoogroups.com]
> Gesendet: Mittwoch, 10. Juni 2015 20:49
> An: SkyWires@yahoogroups.com
> Betreff: Re: [SkyWires] Low, non-resonant loop is UP!
>
>
>
> Rich wrote:
>
> "I know my 160 size delta loop has to have corner angles close to 120
> degree so have a good SWR on the higher bands."
>
> How did you get 120 degree corner angles in a delta loop?
>
> I must not be understanding something here.
>
> Andy
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>

4664. Re: AW: [SkyWires] Low, non-resonant loop is UP!

Yahoo group: SkyWires
Date: 2015-06-10 22:09:00 UTC
From: Everett Sharp
Topic: 4640 Message: 4664

3 X 120 = 360

Everett N8CNP

Sent from my iPad

> On Jun 10, 2015, at 4:38 PM, 'siegfried jackstien' siegfried.jackstien@... [SkyWires] <SkyWires@yahoogroups.com> wrote:
>
> Hmm .. sum in a triangle is 180 ... right??
>
> He sure meant each corner 60 degrees
>
> Dg9bfc
>
> Sigi
>
> > -----Ursprüngliche Nachricht-----
> > Von: SkyWires@yahoogroups.com [mailto:SkyWires@yahoogroups.com]
> > Gesendet: Mittwoch, 10. Juni 2015 20:49
> > An: SkyWires@yahoogroups.com
> > Betreff: Re: [SkyWires] Low, non-resonant loop is UP!
> >
> >
> >
> > Rich wrote:
> >
> > "I know my 160 size delta loop has to have corner angles close to 120
> > degree so have a good SWR on the higher bands."
> >
> > How did you get 120 degree corner angles in a delta loop?
> >
> > I must not be understanding something here.
> >
> > Andy
> >
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>

4665. Re: AW: [SkyWires] Low, non-resonant loop is UP!

Yahoo group: SkyWires
Date: 2015-06-10 22:11:18 UTC
From: Everett Sharp
Topic: 4640 Message: 4665

Sigi,

After thinking about that again, 60 deg is correct.

Everett N8CNP

Sent from my iPad

> On Jun 10, 2015, at 4:38 PM, 'siegfried jackstien' siegfried.jackstien@... [SkyWires] <SkyWires@yahoogroups.com> wrote:
>
> Hmm .. sum in a triangle is 180 ... right??
>
> He sure meant each corner 60 degrees
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>
> Sigi
>
> > -----Ursprüngliche Nachricht-----
> > Von: SkyWires@yahoogroups.com [mailto:SkyWires@yahoogroups.com]
> > Gesendet: Mittwoch, 10. Juni 2015 20:49
> > An: SkyWires@yahoogroups.com
> > Betreff: Re: [SkyWires] Low, non-resonant loop is UP!
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> >
> > Rich wrote:
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> > "I know my 160 size delta loop has to have corner angles close to 120
> > degree so have a good SWR on the higher bands."
> >
> > How did you get 120 degree corner angles in a delta loop?
> >
> > I must not be understanding something here.
> >
> > Andy
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4666. Re: [SkyWires] Steve's install strategy, thinking out loud

Yahoo group: SkyWires
Date: 2015-06-10 22:42:33 UTC
From: Skip Guenter
Topic: 4657 Message: 4666

Personally I think EZ-UP and Rohn are coming out of same factory after an EZ40 I bought had the (wrong) spec sticker for an H40 on it. I have both an EZ40 and an H50. The clamps are different.

How are these poles "attached to each corner of the house" going to go up thru the roof (at the eave)? Obviously not. Is the roof a gable roof or a hip roof? I'm suspecting a hip. So are you going to buy brackets (2 or 3 per corner) to offset the poles out from under the eaves. Like these http://www.dxengineering.com/parts/roh-wm18s ? @ $38? You're up over a couple hundred per corner aren't you?

I also have my doubts about two of these brackets holding a 35' push up pole. Maybe 10' of ridged EMT.
<http://www.dxengineering.com/parts/roh-wm18s>
Now that we've worked up to push-up poles...

Do you not have ANY trees above the eave height? Leave one leg under the eaves and expand it up and out thru a couple trees. This would enlarge the loop and bring three legs of it up. Even if you had to hire someone to put some attachment loops up in 3 trees I think it'd be way cheaper than the $800+ u r looking at. High school kids are looking for money about now. I think your total expense with a 3 tree solution is under $100 including the monkey hire. Save the $750 for future house payments.

I also saw an article where a guy used concrete filled buckets or tires to hold 20' galvanized pipe poles up for a loop. He just attached the loop and walked them up and tied the poles off in the opposite direction with Dacron rope. Very adjustable and certainly a quarter of the push-up solution cost at about $30 per corner.

Skip - K5SRG

On 06/10/2015 03:46 PM, slr_65@... [SkyWires] wrote:
>
>
>
> Economics, as cheap as possible of course! That rules out four towers
> but it also rules out cheap iffy pfc and expensive fiberglass too. It
> appears that Rohn makes a 35' telescoping mast that's UPS shippable,
> about $150 each. $600, ouch, but then again...not really, figure the
> cost over the time of use... There are other makers, for a few bucks
> less, but I think Rohn has a good reputation and product.
>
>
>

> ---
> Posted by: slr_65@...
> ---

4667. AW: AW: [SkyWires] Low, non-resonant loop is UP!

Yahoo group: SkyWires
Date: 2015-06-10 22:46:07 UTC
From: siegfried jackstien
Topic: 4640 Message: 4667

How would you get 360 degrees in a triangle??? 2 Turn loop ???

(just kidding)

Dg9bfc

Sigi

> -----Ursprüngliche Nachricht-----
> Von: SkyWires@yahoogroups.com [mailto:SkyWires@yahoogroups.com]
> Gesendet: Mittwoch, 10. Juni 2015 22:11
> An: SkyWires@yahoogroups.com
> Betreff: Re: AW: [SkyWires] Low, non-resonant loop is UP!
>
>
>
> Sigi,
>
> After thinking about that again, 60 deg is correct.
>
> Everett N8CNP
>
> Sent from my iPad
>
> On Jun 10, 2015, at 4:38 PM, 'siegfried jackstien'
> siegfried.jackstien@... [SkyWires] <SkyWires@yahoogroups.com>
> wrote:
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>
> Hmm .. sum in a triangle is 180 ... right??
>
> He sure meant each corner 60 degrees
>
> Dg9bfc
>
> Sigi
>
> > -----Ursprüngliche Nachricht-----
> > Von: SkyWires@yahoogroups.com [mailto:SkyWires@yahoogroups.com]
> > Gesendet: Mittwoch, 10. Juni 2015 20:49
> > An: SkyWires@yahoogroups.com
> > Betreff: Re: [SkyWires] Low, non-resonant loop is UP!
> >

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> >
> > Rich wrote:
> >
> > "I know my 160 size delta loop has to have corner angles close to
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> > degree so have a good SWR on the higher bands."
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> > How did you get 120 degree corner angles in a delta loop?
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> > I must not be understanding something here.
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> > Andy
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4668. Re: AW: AW: [SkyWires] Low, non-resonant loop is UP!

Yahoo group: SkyWires
Date: 2015-06-10 22:51:30 UTC
From: Skip Guenter
Topic: 4640 Message: 4668

exterior angles maybe, they total 360

On 06/10/2015 05:46 PM, 'siegfried jackstien'
siegfried.jackstien@... [SkyWires] wrote:
>
> How would you get 360 degrees in a triangle??? 2 Turn loop ???
>
> (just kidding)
>
> Dg9bfc
>
> Sigi
>
> > -----Urspr?ngliche Nachricht-----
> > Von: SkyWires@yahoogroups.com [mailto:SkyWires@yahoogroups.com]
> > Gesendet: Mittwoch, 10. Juni 2015 22:11
> > An: SkyWires@yahoogroups.com
> > Betreff: Re: AW: [SkyWires] Low, non-resonant loop is UP!
> >
> >
> >
> > Sigi,
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> > After thinking about that again, 60 deg is correct.
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> > Everett N8CNP
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> > On Jun 10, 2015, at 4:38 PM, 'siegfried jackstien'
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> > > -----Urspr?ngliche Nachricht-----
> > > Von: SkyWires@yahoogroups.com [mailto:SkyWires@yahoogroups.com]
> > > Gesendet: Mittwoch, 10. Juni 2015 20:49
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> > > Betreff: Re: [SkyWires] Low, non-resonant loop is UP!
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S. R. 'Skip' Guenter, K5SRG
/3905cc 40m SSB Late Coord
Alt Dir, 5th Call Area
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4669. AW: AW: AW: [SkyWires] Low, non-resonant loop is UP!

Yahoo group: SkyWires
Date: 2015-06-10 22:54:37 UTC
From: siegfried jackstien
Topic: 4640 Message: 4669

Back to school :-)

Exterior angles are 900 degrees (360 times 3 minus 180)

Dg9bfc

Sigi

> -----Ursprüngliche Nachricht-----
> Von: SkyWires@yahoogroups.com [mailto:SkyWires@yahoogroups.com]
> Gesendet: Mittwoch, 10. Juni 2015 22:52
> An: SkyWires@yahoogroups.com
> Betreff: Re: AW: AW: [SkyWires] Low, non-resonant loop is UP!
>
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>
> exterior angles maybe, they total 360
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>
> On 06/10/2015 05:46 PM, 'siegfried jackstien'
> siegfried.jackstien@... [SkyWires] wrote:
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> > Betreff: Re: AW: [SkyWires] Low, non-resonant loop is UP!
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> S. R. 'Skip' Guenter, K5SRG
> 3905cc 40m SSB Late Coord
> Alt Dir, 5th Call Area
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4670. Re: AW: AW: AW: [SkyWires] Low, non-resonant loop is UP!

Yahoo group: SkyWires
Date: 2015-06-11 00:07:42 UTC
From: Skip Guenter
Topic: 4640 Message: 4670

The exterior angles of a triangle total 360.

On 06/10/2015 05:54 PM, 'siegfried jackstien'
siegfried.jackstien@... [SkyWires] wrote:
>
> Back to school :-)
>
> Exterior angles are 900 degrees (360 times 3 minus 180)
>
> Dg9bfc
>
> Sigi
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> > -----Urspr?ngliche Nachricht-----
> > Von: SkyWires@yahoogroups.com [mailto:SkyWires@yahoogroups.com]
> > Gesendet: Mittwoch, 10. Juni 2015 22:52
> > An: SkyWires@yahoogroups.com
> > Betreff: Re: AW: AW: [SkyWires] Low, non-resonant loop is UP!
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> > exterior angles maybe, they total 360
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> > On 06/10/2015 05:46 PM, 'siegfried jackstien'
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> > How would you get 360 degrees in a triangle??? 2 Turn loop ???
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> > (just kidding)
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> > > Von: SkyWires@yahoogroups.com [mailto:SkyWires@yahoogroups.com]
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> > > Betreff: Re: AW: [SkyWires] Low, non-resonant loop is UP!
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> > > Everett N8CNP
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> > > On Jun 10, 2015, at 4:38 PM, 'siegfried jackstien'
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> > S. R. 'Skip' Guenter, K5SRG
> > 3905cc 40m SSB Late Coord
> > Alt Dir, 5th Call Area
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S. R. 'Skip' Guenter, K5SRG
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Alt Dir, 5th Call Area
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4671. Re: AW: AW: AW: [SkyWires] Low, non-resonant loop is UP!

Yahoo group: SkyWires
Date: 2015-06-11 00:09:34 UTC
From: Skip Guenter
Topic: 4640 Message: 4671

The sum of the measures of the three exterior angles (one for each
vertex) of any triangle is 360 degrees.^[note 2]
<http://en.wikipedia.org/wiki/Triangle#cite_note-7>

On 06/10/2015 05:54 PM, 'siegfried jackstien'
siegfried.jackstien@... [SkyWires] wrote:
>
> Back to school :-)
>
> Exterior angles are 900 degrees (360 times 3 minus 180)
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> Dg9bfc
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> > -----Urspr?ngliche Nachricht-----
> > Von: SkyWires@yahoogroups.com [mailto:SkyWires@yahoogroups.com]
> > Gesendet: Mittwoch, 10. Juni 2015 22:52
> > An: SkyWires@yahoogroups.com
> > Betreff: Re: AW: AW: [SkyWires] Low, non-resonant loop is UP!
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> > > Von: SkyWires@yahoogroups.com [mailto:SkyWires@yahoogroups.com]
> > > Gesendet: Mittwoch, 10. Juni 2015 22:11
> > > An: SkyWires@yahoogroups.com
> > > Betreff: Re: AW: [SkyWires] Low, non-resonant loop is UP!

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S. R. 'Skip' Guenter, K5SRG
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4672. Re: AW: AW: AW: [SkyWires] Low, non-resonant loop is UP!

Yahoo group: SkyWires
Date: 2015-06-11 00:10:55 UTC
From: Don Sanders
Topic: 4640 Message: 4672

Geometry must have changed since I went to school.
A triangle has 180 degrees total.

Dr. Don HC4/W4BWS

On Wed, Jun 10, 2015 at 7:07 PM, Skip Guenter sguenter@...
[SkyWires] <SkyWires@yahoogroups.com> wrote:

>
>
> The exterior angles of a triangle total 360.
>
> On 06/10/2015 05:54 PM, 'siegfried jackstien'
> siegfried.jackstien@... [SkyWires] wrote:
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>
>
> Back to school :-)
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> Exterior angles are 900 degrees (360 times 3 minus 180)
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> > Von: SkyWires@yahoogroups.com [mailto:SkyWires@yahoogroups.com
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> > On 06/10/2015 05:46 PM, 'siegfried jackstien'
> > siegfried.jackstien@freenet.de [SkyWires] wrote:
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> > How would you get 360 degrees in a triangle??? 2 Turn loop ???
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4673. Re: AW: AW: AW: [SkyWires] Low, non-resonant loop is UP!

Yahoo group: SkyWires
Date: 2015-06-11 00:19:17 UTC
From: Skip Guenter
Topic: 4640 Message: 4673

It has 180 of total INTERIOR angles. If you read again you will see we specifically were talking about EXTERIOR angles. Albeit totally irrelevant to the original topic.

The sum of the measures of the interior angles of a triangle <http://en.wikipedia.org/wiki/Sum_of_angles_of_a_triangle> in Euclidean space <http://en.wikipedia.org/wiki/Euclidean_space> is always 180 degrees.^[5] <http://en.wikipedia.org/wiki/Triangle#cite_note-6> This fact is equivalent to Euclid's parallel postulate <http://en.wikipedia.org/wiki/Parallel_postulate>. This allows determination of the measure of the third angle of any triangle given the measure of two angles. An /exterior angle <http://en.wikipedia.org/wiki/Exterior_angle>/ of a triangle is an angle that is a linear pair (and hence supplementary <http://en.wikipedia.org/wiki/Supplementary_angle>) to an interior angle. The measure of an exterior angle of a triangle is equal to the sum of the measures of the two interior angles that are not adjacent to it; this is the exterior angle theorem <http://en.wikipedia.org/wiki/Exterior_angle_theorem>. The sum of the measures of the three exterior angles (one for each vertex) of any triangle is 360 degrees.^[note 2] <http://en.wikipedia.org/wiki/Triangle#cite_note-7>

And Sigi, Yes 900 for ALL exterior angles.

On 06/10/2015 07:10 PM, Don Sanders w4bws1@... [SkyWires] wrote:
> Geometry must have changed since I went to school.
> A triangle has 180 degrees total.
>
> Dr. Don HC4/W4BWS
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> On Wed, Jun 10, 2015 at 7:07 PM, Skip Guenter sguenter@...
> <mailto:sguenter@...> [SkyWires] <SkyWires@yahoogroups.com
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> On 06/10/2015 05:54 PM, 'siegfried jackstien'
> siegfried.jackstien@...
> <mailto:siegfried.jackstien@...> [SkyWires] wrote:
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S. R. 'Skip' Guenter, K5SRG
/3905cc 40m SSB Late Coord
Alt Dir, 5th Call Area
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4674. Re: AW: AW: AW: [SkyWires] Low, non-resonant loop is UP!

Yahoo group: SkyWires
Date: 2015-06-11 00:15:23 UTC
From: Don Sanders
Topic: 4640 Message: 4674

From Wikipedia
Basic facts
<http://en.wikipedia.org/wiki/File:Remint3.svg>
<http://en.wikipedia.org/wiki/File:Remint3.svg>
A triangle, showing exterior angle d.

Triangles are assumed to be two-dimensional
<http://en.wikipedia.org/wiki/Dimension> plane figures
<http://en.wikipedia.org/wiki/Plane_figure>, unless the context provides
otherwise (see Non-planar triangles
<http://en.wikipedia.org/wiki/Triangle#Non-planar_triangles>, below). In
rigorous treatments, a triangle is therefore called a *2-simplex
<http://en.wikipedia.org/wiki/Simplex>* (see also Polytope
<http://en.wikipedia.org/wiki/Polytope>). Elementary facts about triangles
were presented byEuclid <http://en.wikipedia.org/wiki/Euclid> in books 1–4
of his *Elements <http://en.wikipedia.org/wiki/Euclid%27s_Elements>*,
around 300 BC.
<http://en.wikipedia.org/wiki/File:Triangle_sommeangles.svg>
<http://en.wikipedia.org/wiki/File:Triangle_sommeangles.svg>
The measures of the interior angles of the triangle always add up to 180
degrees (same color to point out they are equal).

*The sum of the measures of the interior angles of a triangle
<http://en.wikipedia.org/wiki/Sum_of_angles_of_a_triangle> in Euclidean
space <http://en.wikipedia.org/wiki/Euclidean_space> is always 180 degrees*.
[5] <http://en.wikipedia.org/wiki/Triangle#cite_note-6> This fact is
equivalent to Euclid's parallel postulate
<http://en.wikipedia.org/wiki/Parallel_postulate>. This allows
determination of the measure of the third angle of any triangle given the
measure of two angles. An *exterior angle
<http://en.wikipedia.org/wiki/Exterior_angle>* of a triangle is an angle
that is a linear pair (and hence supplementary
<http://en.wikipedia.org/wiki/Supplementary_angle>) to an interior angle.
The measure of an exterior angle of a triangle is equal to the sum of the
measures of the two interior angles that are not adjacent to it; this is
the exterior angle theorem
<http://en.wikipedia.org/wiki/Exterior_angle_theorem>. The sum of the
measures of the three exterior angles (one for each vertex) of any triangle
is 360 degrees.[note 2] <http://en.wikipedia.org/wiki/Triangle#cite_note-7>

Dr. Don HC4/W4BWS

On Wed, Jun 10, 2015 at 7:09 PM, Skip Guenter sguenter@...
[SkyWires] <SkyWires@yahoogroups.com> wrote:

>
>
>
>
> The sum of the measures of the three exterior angles (one for each vertex)
> of any triangle is 360 degrees.[note 2]
> <http://en.wikipedia.org/wiki/Triangle#cite_note-7>
>
>
> On 06/10/2015 05:54 PM, 'siegfried jackstien'
> siegfried.jackstien@... [SkyWires] wrote:
>
>
>
> Back to school :-)
>
> Exterior angles are 900 degrees (360 times 3 minus 180)
>
> Dg9bfc
>
> Sigi
>
> > -----Ursprüngliche Nachricht-----
> > Von: SkyWires@yahoogroups.com [mailto:SkyWires@yahoogroups.com
> <SkyWires@yahoogroups.com>]
> > Gesendet: Mittwoch, 10. Juni 2015 22:52
> > An: SkyWires@yahoogroups.com
> > Betreff: Re: AW: AW: [SkyWires] Low, non-resonant loop is UP!
> >
> >
> >
> > exterior angles maybe, they total 360
> >
> >
> > On 06/10/2015 05:46 PM, 'siegfried jackstien'
> > siegfried.jackstien@... [SkyWires] wrote:
> >
> >
> >
> >
> > How would you get 360 degrees in a triangle??? 2 Turn loop ???
> >
> > (just kidding)
> >
> > Dg9bfc
> >
> > Sigi
> >
> > > -----Ursprüngliche Nachricht-----
> > > Von: SkyWires@yahoogroups.com [mailto:SkyWires@...m
> <SkyWires@yahoogroups.com>]

> > > Gesendet: Mittwoch, 10. Juni 2015 22:11
> > > An: SkyWires@yahoogroups.com
> > > Betreff: Re: AW: [SkyWires] Low, non-resonant loop is UP!
> > >
> > >
> > >
> > > Sigi,
> > >
> > > After thinking about that again, 60 deg is correct.
> > >
> > > Everett N8CNP
> > >
> > > Sent from my iPad
> > >
> > > On Jun 10, 2015, at 4:38 PM, 'siegfried jackstien'
> > > siegfried.jackstien@... [SkyWires]
> > <SkyWires@yahoogroups.com> <SkyWires@yahoogroups.com>
> <mailto:SkyWires@yahoogroups.com> <SkyWires@yahoogroups.com>
> > > wrote:
> > >
> > >
> > >
> > >
> > >
> > > Hmm .. sum in a triangle is 180 ... right??
> > >
> > > He sure meant each corner 60 degrees
> > >
> > > Dg9bfc
> > >
> > > Sigi
> > >
> > > > -----Ursprüngliche Nachricht-----
> > > > Von: SkyWires@yahoogroups.com [mailto:SkyWires@yahoogroups.com
> <SkyWires@yahoogroups.com>]
> > > > Gesendet: Mittwoch, 10. Juni 2015 20:49
> > > > An: SkyWires@yahoogroups.com
> > > > Betreff: Re: [SkyWires] Low, non-resonant loop is UP!
> > > >
> > > >
> > > >
> > > > Rich wrote:
> > > >
> > > > "I know my 160 size delta loop has to have corner angles close
> > to
> > > > 120
> > > > degree so have a good SWR on the higher bands."
> > > >
> > > > How did you get 120 degree corner angles in a delta loop?
> > > >

> > > > I must not be understanding something here.
> > > >
> > > > Andy
> > > >
> > > >
> > > >
> > > >
> > >
> > >
> > >
> > >
> >
> >
> >
> >
> > --
> > S. R. 'Skip' Guenter, K5SRG
> > 3905cc 40m SSB Late Coord
> > Alt Dir, 5th Call Area
> >
> >
> >
>
>
> --
> S. R. 'Skip' Guenter, K5SRG
>
>
> *3905cc 40m SSB Late Coord Alt Dir, 5th Call Area *
>
>
>

4675. Re: AW: AW: AW: [SkyWires] Low, non-resonant loop is UP!

Yahoo group: SkyWires
Date: 2015-06-11 00:59:59 UTC
From: Andy
Topic: 4640 Message: 4675

"The exterior angles of a triangle total 360."

Um, when I was growing up, in math what you are referring to were were called "supplementary angles".

Basically, the amount that each angle must deviate from continuing on straight (= a 180 degree "angle") adds up to 360 degrees, for any closed polygon.

And for a triangle, it happens that the sum of the interior angles themselves, adds up to 180.

Ain't geometry fun?

I don't recall studying anything called "exterior angles" in math. Maybe that's because it has multiple, conflicting definitions! One definition is that it is the entire sweep around the outside of the angle. So for a 60 degree angle, the exterior angle (by that definition) is 300 degrees, and three of them adds up to 900 degrees as Sigi rightly points out. See, for example, this page from Wolfram's Mathematica:
http://mathworld.wolfram.com/ExteriorAngle.html

Now back to your regularly scheduled program.

Andy

4676. Re: [SkyWires] Steve's install strategy, thinking out loud

Yahoo group: SkyWires
Date: 2015-06-11 02:16:13 UTC
From: slr_65@...
Topic: 4657 Message: 4676

Hi Skip,

I'll look at EZ-UP, thanks.

Talking to the Building Inspector the suggestion was a piece of pipe cemented in the ground and the mast set over it. Easy enough, I have relatives who run a welding shop and a neighbor who works for the concrete company, so dig a hole, grab a piece of scrap pipe from the shop, stick the pipe in the hole and when they have a skosh of concrete left over we'll set it. Then the suggestioh was coming out from under the eaves with something attached to the trusses. He said wood, steel, etc. would work. Frankly he said those flimsy brackets would be fine. Again, relatives run a welding shop and even have one who's a carpenter, so I think this isn't too big of a deal. The Inspector gave the impresson they weren't too interested in masts and no one really asks before putting them up (and there's been a lot going up as since digital tv has came on all the networks and several lesser stations on the sub channels are now available, before digital we got CBS, ABC and PBS and that was it, now I think he said we have 18 total channels available, so people ARE cutting the cord an putting up antennas again)

There are zero trees on my property - our neighborhood was mostly maple trees and a tornado a couple years ago damaged the back two and carpenter ants tore the crap out of the two in front (carpenter ants love maple trees, especially damaged ones, and the neighborhood was full of damaged ones after the tornado...if you have to fight carpenter ants, use a spray called Termidor - it WILL kill them!). So no matter what antenna I choose, I will have to erect a support for it, no way around that.

I don't think the bucketed concrete poles would pass muster, though he did say he would check into stand alone masts vs towers for me. He also mentioned that flag poles are relatively unregulated, so hang a flag with the wire?

I had discussed tilt up masts made from two pieces of sch40 plumbing pipe slid inside each other with him earlier before my eye issues and he was receptive to them, but 21' lengths of sch40 aren't cheap either.

I may just end up with two supports for half the cost and then a Windom, doublet or something similar, though the performance of the loop vs my doublet makes me think the loop would be worth the extra cost. Again, just gotta amatorize the cost over the expected years of use. You can't figure the cost of poles, wire, etc. separately, it's all a system, so just figure a system cost...

4677. Re: [SkyWires] Steve's install strategy, thinking out loud

Yahoo group: SkyWires
Date: 2015-06-11 03:02:00 UTC
From: Evan Rolek
Topic: 4657 Message: 4677

I've had great luck with fiberglass. I've used Hot-Sticks when there is a need to extend/retract repeatedly, with lengths/heights up to 40 ft. Also, I've had great success with telescoping sections that I bought from Allen at Max-Gain Systems; great prices, great service, great guy; these are the ones I currently use by anchoring them to some trees, although they could attach to a house or whatever.

73,

Evan, K9SQG

-----Original Message-----
From: slr_65@... [SkyWires] <SkyWires@yahoogroups.com>
To: SkyWires <SkyWires@yahoogroups.com>
Sent: Wed, Jun 10, 2015 10:16 pm
Subject: Re: [SkyWires] Steve's install strategy, thinking out loud

Hi Skip,

I'll look at EZ-UP, thanks.

Talking to the Building Inspector the suggestion was a piece of pipe cemented in the ground and the mast set over it. Easy enough, I have relatives who run a welding shop and a neighbor who works for the concrete company, so dig a hole, grab a piece of scrap pipe from the shop, stick the pipe in the hole and when they have a skosh of concrete left over we'll set it. Then the suggestioh was coming out from under the eaves with something attached to the trusses. He said wood, steel, etc. would work. Frankly he said those flimsy brackets would be fine. Again, relatives run a welding shop and even have one who's a carpenter, so I think this isn't too big of a deal. The Inspector gave the impresson they weren't too interested in masts and no one really asks before putting them up (and there's been a lot going up as since digital tv has came on all the networks an d several lesser stations on the sub channels are now available, before digital we got CBS, ABC and PBS and that was it, now I think he said we have 18 total channels available, so people ARE cutting the cord an putting up antennas again)

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of sch40 aren't cheap either.

I may just end up with two supports for half the cost and then a Windom, doublet or something similar, though the performance of the loop vs my doublet makes me think the loop would be worth the extra cost. Again, just gotta amatorize the cost over the expected years of use. You can't figure the cost of poles, wire, etc. separately, it's all a system, so just figure a system cost...

4678. Re: [SkyWires] Steve's install strategy, thinking out loud

Yahoo group: SkyWires
Date: 2015-06-11 04:07:40 UTC
From: slr_65@...
Topic: 4657 Message: 4678

The Rohn 9h50, 34' extended, runs $154 delivered from DX Engineering. I think that's pretty hard to beat. Plus, I'd think galvanized steel would outlast the fiberglass and flex less in service.

Still looking at options, this doesn't have to be sorted in a day...

4679. RE: AW: AW: AW: [SkyWires] Low, non-resonant loop is UP!

Yahoo group: SkyWires
Date: 2015-06-11 04:23:30 UTC
From: Rick - DJ0IP / NJ0IP
Topic: 4640 Message: 4679

When speaking of angles between wires, we ALWAYS refer to their inside angle, not there outside angle. All text books, all articles and all other antenna groups use inside angle when referring to antennas.

A dipole with its legs bent down is referred to as an Inverted-V and it is said not to use an angle less than 90 degrees. Obviously it is referring to the lower angle (between the wires).

If we then bend the wires back up to a dipole position, and continue upwards another 20 degrees on each side, we change the name of the antenna to Vee instead of Inverted Vee and again speak of its inside angle of 140 degrees. We never refer to the outside angle.

60 degrees Inside EQUALS 120 degrees outside

This entire silly argument was only about semantics and doesn’t really help anyone trying to understand how to build loops.

I joined this group just yesterday, expecting to learn something about loop antennas and possibly share my experience with them.

So far I have only been reminded of my 8th grade math class. (hi)

73 - Rick, DJ0IP
(Nr. Frankfurt am Main)

From: SkyWires@yahoogroups.com [mailto:SkyWires@yahoogroups.com]
Sent: Thursday, June 11, 2015 3:00 AM
To: SkyWires@yahoogroups.com
Subject: Re: AW: AW: AW: [SkyWires] Low, non-resonant loop is UP!

"The exterior angles of a triangle total 360."

Um, when I was growing up, in math what you are referring to were were called "supplementary angles".

Basically, the amount that each angle must deviate from continuing on straight (= a 180 degree "angle") adds up to 360 degrees, for any closed polygon.

And for a triangle, it happens that the sum of the interior angles themselves, adds up to 180.

Ain't geometry fun?

I don't recall studying anything called "exterior angles" in math. Maybe that's because it has multiple, conflicting definitions! One definition is that it is the entire sweep around the outside of the angle. So for a 60 degree angle, the exterior angle (by that definition) is 300 degrees, and three of them adds up to 900 degrees as Sigi rightly points out. See, for example, this page from Wolfram's Mathematica:

http://mathworld.wolfram.com/ExteriorAngle.html

Now back to your regularly scheduled program.

Andy

4680. RE: [SkyWires] Steve's install strategy, thinking out loud

Yahoo group: SkyWires
Date: 2015-06-11 04:43:59 UTC
From: Rick - DJ0IP / NJ0IP
Topic: 4657 Message: 4680

Steve hit on one important point: Good masts are expensive. But so are good antennas. And the loop is an outstanding antenna.

IMO, 20 ft. is too low if you want to also work 80m. It’s OK for 40 and above.
And of course if all you can do is 20 ft., so be it; do it, even on 80.

If you have the space to run back-guy ropes, then you can get away with thinner material, which saves a lot of money.
If the mast must be self-supporting, then it’s gonna cost a bit to get 3 or 4 of them up.

The cheapest way I have found unfortunately won’t work for everybody.
But if you live close to an area where there are trees, using wooden poles makes good sense.
A wooden pole makes a great antenna support because it is non-metalic, but how do we erect it and what kind of base do we use.

Base: the cleverest solution I have seen was using steel I-beams. It would be better to use galvanized but you can also paint them several times. Simply Cement an I-beam into the earth about 2 to 3 ft. (depending on how solid the earth is at your QTH) with about 4' projecting above ground.

The wooden pole will be strapped inside the "I".
The beauty is, you can also strap a shorter, heavier pole such as a 10' steel pipe, and use that a a gin pole to pull the 30 or 40 ft. wooden mast up.

It looks like this from the top:
Gin-Pole-I-Wood-Pole
_____OIO_____

Then buy a case of beer and invite the local ham club over.
It takes about 10 minutes to explain the plan, then about 10 minutes per pole.
THEN you drink the beer. (hi)

Of course this also works for pulling metal poles up.
Don't forget to mount a stainless steel pulley and rope on each of the 4 masts before erecting them.

Now the question is, how do you remove the rope from the wooden mast used for pulling it up.
Answer: You don't. You leave it attached. When you remove the gin pole, the pull-up rope slips out of the gin pole's pulley and hangs down. Secure excess to the Wooden mast.

73 - Rick, DJ0IP
(Nr. Frankfurt am Main)

From: SkyWires@yahoogroups.com [mailto:SkyWires@yahoogroups.com]
Sent: Thursday, June 11, 2015 5:02 AM
To: SkyWires@yahoogroups.com

Subject: Re: [SkyWires] Steve's install strategy, thinking out loud

I've had great luck with fiberglass. I've used Hot-Sticks when there is a need to extend/retract repeatedly, with lengths/heights up to 40 ft. Also, I've had great success with telescoping sections that I bought from Allen at Max-Gain Systems; great prices, great service, great guy; these are the ones I currently use by anchoring them to some trees, although they could attach to a house or whatever.

73,

Evan, K9SQG
-----Original Message-----
From: slr_65@... [SkyWires] <SkyWires@yahoogroups.com>
To: SkyWires <SkyWires@yahoogroups.com>
Sent: Wed, Jun 10, 2015 10:16 pm
Subject: Re: [SkyWires] Steve's install strategy, thinking out loud

Hi Skip,

I'll look at EZ-UP, thanks.

Talking to the Building Inspector the suggestion was a piece of pipe cemented in the ground and the mast set over it. Easy enough, I have relatives who run a welding shop and a neighbor who works for the concrete company, so dig a hole, grab a piece of scrap pipe from the shop, stick the pipe in the hole and when they have a skosh of concrete left over we'll set it. Then the suggestioh was coming out from under the eaves with something attached to the trusses. He said wood, steel, etc. would work. Frankly he said those flimsy brackets would be fine. Again, relatives run a welding shop and even have one who's a carpenter, so I think this isn't too big of a deal. The Inspector gave the impresson they weren't too interested in masts and no one really asks before putting them up (and there's been a lot going up as since digital tv has came on all the networks an d several lesser stations on the sub channels are now available, before digital we got CBS, ABC and PBS and that was it, now I think he said we have 18 total channels available, so people ARE cutting the cord an putting up antennas again)

There are zero trees on my property - our neighborhood was mostly maple trees and a tornado a couple years ago damaged the back two and carpenter ants tore the crap out of the two in front (carpenter ants love maple trees, especially damaged ones, and the neighborhood was full of damaged ones after the tornado...if you have to fight carpenter ants, use a spray called Termidor - it WILL kill them!). So no matter what antenna I choose, I will have to erect a support for it, no way around that.

I don't think the bucketed concrete poles would pass muster, though he did say he would check into stand alone masts vs towers for me. He also mentioned that flag poles are relatively unregulated, so hang a flag with the wire?

I had discussed tilt up masts made from two pieces of sch40 plumbing pipe slid inside each other with him earlier before my eye issues and he was receptive to them, but 21' lengths of sch40 aren't cheap either.

I may just end up with two supports for half the cost and then a Windom, doublet or something similar, though the performance of the loop vs my doublet makes me think the loop would be worth the extra cost. Again, just gotta amatorize the cost over the expected years

of use. You can't figure the cost of poles, wire, etc. separately, it's all a system, so just figure a system cost...

4681. Re: [SkyWires] Steve's install strategy, thinking out loud

Yahoo group: SkyWires
Date: 2015-06-11 06:16:02 UTC
From: Evan Rolek
Topic: 4657 Message: 4681

Well, a fiberglass equivalent might be a tad bit cheaper. By sizing the fiberglass sections properly, you can indeed establish some flex which helps to save the mounting mechanism under dire circumstances. My poles have been up almost 20 years and show no sign of deterioration. How long it takes a Rohn mast to rust, not sure, periodic maintenance/painting (even if galvanized), not sure about that. To each their own...

-----Original Message-----
From: slr_65@... [SkyWires] <SkyWires@yahoogroups.com>
To: SkyWires <SkyWires@yahoogroups.com>
Sent: Thu, Jun 11, 2015 12:07 am
Subject: Re: [SkyWires] Steve's install strategy, thinking out loud

The Rohn 9h50, 34' extended, runs $154 delivered from DX Engineering. I think that's pretty hard to beat. Plus, I'd think galvanized steel would outlast the fiberglass and flex less in service.

Still looking at options, this doesn't have to be sorted in a day...

4682. Re: [SkyWires] Steve's install strategy, thinking out loud

Yahoo group: SkyWires
Date: 2015-06-11 06:57:24 UTC
From: slr_65@...
Topic: 4657 Message: 4682

Hi Evan,

Remember I'm vision impaired, so I didn't dig all the way through every fiberglass pole web site, but I hit the popular ones and it seemed they all were the same price, or more commonly higher, than the Rohn and that price didn't include shipping. Most were not as large of a starting or ending diameter as the Rohn either. I'm sure fiberglass does work, but I'm pretty sure galvanized steel will too and I'm just old fashioned and more comfortable with it.

4683. RE: [SkyWires] Steve's install strategy, thinking out loud

Yahoo group: SkyWires
Date: 2015-06-11 06:58:45 UTC
From: slr_65@...
Topic: 4657 Message: 4683

Hi Rick & All,

Yeah, I'm viewing it all as antenna cost and if you figure the cost per band, per year of use, it'll amatorize.

I'm still playing with my too low loop and won't really know much until I get the stand alone balun to play with, but a few questions still lurk.

Height still is a question, what is the minimum workable? I think I do want 80 meter as I can tune to it at my current wire length and I was surprised it was quite active later in the evening, seemed like friendly groups, the one group that tolerated my weak intrusion were very friendly and patient pulling me out of the background noise. 34' is the highest UPS shippable mast I can find, but the tilt up masts from sch 40 pipe aren't off the table either.

Wooden poles - are you talking simply trees with the branches removed, or pressure treated utility poles? What diameter?

Shape - my current loop is a rectangle about 65' on the long edges and 30' on the short edges. Square better?

Feedpoint - I've read the feedpoint can affect the directivity? I'm near Lincoln, Nebraska so I'd think I'd prefer to orientate towards Europe?

Size - I don't have to stay over the house, I could get into the back yard. I could get a full 80 meter loop there. Though I couldn't fit a 160 meter loop, would there be an advantage to setting the corner posts somewhat further apart to allow the loop to be made a tad bigger than 80 meters requires? Of course smaller loops could also be made within the corners, so being able to over/under size a bit may help with tuning?

4684. RE: [SkyWires] Steve's install strategy, thinking out loud

Yahoo group: SkyWires
Date: 2015-06-11 07:01:13 UTC
From: slr_65@...
Topic: 4657 Message: 4684

Hi Rick & All,

Yeah, I'm viewing it all as antenna cost and if you figure the cost per band, per year of use, it'll amatorize.

I'm still playing with my too low loop and won't really know much until I get the stand alone balun to play with, but a few questions still lurk.

Height still is a question, what is the minimum workable? I think I do want 80 meter as I can tune to it at my current wire length and I was surprised it was quite active later in the evening, seemed like friendly groups, the one group that tolerated my weak intrusion were very friendly and patient pulling me out of the background noise. 34' is the highest UPS shippable mast I can find, but the tilt up masts from sch 40 pipe aren't off the table either.

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4685. AW: [SkyWires] Steve's install strategy, thinking out loud

Yahoo group: SkyWires
Date: 2015-06-11 08:29:28 UTC
From: siegfried jackstien
Topic: 4657 Message: 4685

I would never sell my truck for a simple wire antenna installation

I would hang my wire wherever I have room

In a tree (even if on neighbours ground! ... you can use a longer rope from there) ... some fibre glass camouflage net poles (they are CHEAP!!!)

These poles can be bought for a few bucks (maybe 20-30 bucks for a 25-30 feet pole) ... no expensive rohns needed for just a wire antenna

I would install a wire antenna (either a big loop or a ladderline fed doublet ... or both ...

And use the saved money to install a small tower (tripod or similar) on the roof for a small beam for the higher bands ... topping that with a vhf and uhf beam and a vhf/uhf vertical

... add a vertical for the lowbands in the backyard ... and then youre all set

Dg9bfc

Sigi

> -----Ursprüngliche Nachricht-----
> Von: SkyWires@yahoogroups.com [mailto:SkyWires@yahoogroups.com]
> Gesendet: Mittwoch, 10. Juni 2015 20:46
> An: SkyWires@yahoogroups.com
> Betreff: [SkyWires] Steve's install strategy, thinking out loud
>
>
>
> Hi Guys,
>
> OK, the wheels are turning on how to get this up higher. I really don't
> want to do any major projects, but my condition can take months to heal to
> whatever state it's going to, and fortunately I've never abused sick time
> so I have almost a year's leave time before I either have to get back to
> work or go on disability. Even at that, we may get something figured to
> keep the house, so I'm cautiously exploring options. Oh, I have an old
> truck I won't be using any more that the neighbor is interested in, so I
> may sell it to fund the antenna project.
>
> First is economics, second is location and of course zoning and stuff
> comes into play.
>
> Economics, as cheap as possible of course! That rules out four towers but

> it also rules out cheap iffy pfc and expensive fiberglass too. It appears
> that Rohn makes a 35' telescoping mast that's UPS shippable, about $150
> each. $600, ouch, but then again...not really, figure the cost over the
> time of use... There are other makers, for a few bucks less, but I think
> Rohn has a good reputation and product.
>
> Location may play into zoning a bit. The rules on antennas, towers, masts
> and even flag poles are kind of murky here. Basically an antenna on a
> house can't exceed 60' off the ground, but a tripod and guys to the roof
> suffice, no real size of roof is required. Kind of interesting. Towers
> have rules, setbacks, etc.. Probably not an option. A mast doesn't
> really have rules though, as long as it's securely attached to the
> structure, which again could be a tripod, guys, etc, OR set in the ground
> and bolted to the side of the structure. A tower usually consists of more
> than one element, i.e. it is triangular or square where as a mast is
> usually one element, i.e. a pipe or collapsable pipe. A mast that stands
> alone or is guyed is murky area, the Inpsector thought for guidance the
> flag pole criteria may apply.
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> Soooo, I think four Rohn 35' telescoping masts attached to each corner of
> the house would be fine.
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> to do soon when I see if the stand alone balun lets the Kenwood's tuner
> work standalone.
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> My thought is one of those on each corner, so attached to the house at
> around 12'. Then I'm thinking just two guys to a corner coming off at
> right angles around 25' as the antenna wire will connect the four corners
> of the rectangle and help spread load?
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> This keeps the antenna over the house though, so the house and shack are
> within the antenna. It's not an issue now, so probably not one later
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> issue there is that the power feed to the house would drop through the
> middle of the rectangle, no way around it.
>
>
> 35' enough? Does it have to be all 35'? Two 35' corners sloping down to
> 15' corners do ok?
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> Just kicking around ideas. I've even considered maybe a Windom or
> something, but fitting an 80 meter in would be hard and though I can tune
> the 40 meter doublet to 80, I dunno how a Windom would do.
>
> Any thoughts, comments, etc.. I'm not thrilled with doing a big project,
> but this isn't that big or expensive and I think would increase the

> enjoyment a lot, antennas are the best bang for the buck!
>
> Steve KA0NEB
>
>
>
>
>
>

4686. Re: [SkyWires] Steve's install strategy, thinking out loud

Yahoo group: SkyWires
Date: 2015-06-11 09:06:35 UTC
From: Skip Guenter
Topic: 4657 Message: 4686

What's your call sign. I have kin up there.

On 06/11/2015 02:01 AM, slr_65@... [SkyWires] wrote:
>
>
> Feedpoint - I've read the feedpoint can affect the directivity? I'm
> near Lincoln, Nebraska so I'd think I'd prefer to orientate towards
> Europe?
>
> Size - I don't have to stay over the house, I could get into the back
> yard. I could get a full 80 meter loop there. Though I couldn't fit
> a 160 meter loop, would there be an advantage to setting the corner
> posts somewhat further apart to allow the loop to be made a tad bigger
> than 80 meters requires? Of course smaller loops could also be made
> within the corners, so being able to over/under size a bit may help
> with tuning?
>
>

--
S. R. 'Skip' Guenter, K5SRG
/3905cc 40m SSB Late Coord
Alt Dir, 5th Call Area
/

4687. Re: [SkyWires] Steve's install strategy, thinking out loud

Yahoo group: SkyWires
Date: 2015-06-11 12:10:14 UTC
From: Rich Schmuke
Topic: 4657 Message: 4687

I am poor and retired so I don't have a lot to spend here, I feel your pain. (I think that's what Bill said). I cant afford to buy so I build.
Here is a sketch of my 30ft tilt over.
http://i1102.photobucket.com/albums/g453/KD0ZZ/Tilt2.jpg
Note the picture of the 30ft tile has a smaller pipe in it because it was being used as a 20ft tilt testing a 2M antenna. It held up a beam and rotor until I built the 40ft tilt .
Click a few pictures to the left and you will see my 40ft tilt and it is simpler to make, just a couple of holes to drill.

Rich, KdØzz

On Wed, Jun 10, 2015 at 3:59 PM, beargyrils@... [SkyWires] <SkyWires@yahoogroups.com> wrote:

>
>
> Steve,many hams run nothing more then a random wire and work the world.
> Spending all that money to support a wire just does not make much sense to
> me. Use the loop you have now for a while and see how well it works. Bob
> AF2Q
> Sent from my BlackBerry® by Boost Mobile
> ------------------------------
> *From: * "slr_65@... [SkyWires]" <SkyWires@yahoogroups.com>
> *Sender: * SkyWires@yahoogroups.com
> *Date: *10 Jun 2015 13:46:10 -0700
> *To: *<SkyWires@yahoogroups.com>
> *ReplyTo: * SkyWires@yahoogroups.com
> *Subject: *[SkyWires] Steve's install strategy, thinking out loud
>
>
>
> Hi Guys,
>
> OK, the wheels are turning on how to get this up higher. I really don't
> want to do any major projects, but my condition can take months to heal to
> whatever state it's going to, and fortunately I've never abused sick time
> so I have almost a year's leave time before I either have to get back to
> work or go on disability. Even at that, we may get something figured to
> keep the house, so I'm cautiously exploring options. Oh, I have an old
> truck I won't be using any more that the neighbor is interested in, so I
> may sell it to fund the antenna project.
>
> First is economics, second is location and of course zoning and stuff
> comes into play.
>

> Economics, as cheap as possible of course! That rules out four towers but
> it also rules out cheap iffy pfc and expensive fiberglass too. It appears
> that Rohn makes a 35' telescoping mast that's UPS shippable, about $150
> each. $600, ouch , but then again...not really, figure the cost over the
> time of use... There are other makers, for a few bucks less, but I think
> Rohn has a good reputation and product.
>
> Location may play into zoning a bit. The rules on antennas, towers, masts
> and even flag poles are kind of murky here. Basically an antenna on a
> house can't exceed 60' off the ground, but a tripod and guys to the roof
> suffice, no real size of roof is required. Kind of interesting. Towers
> have rules, setbacks, etc.. Probably not an option. A mast doesn't really
> have rules though, as long as it's securely attached to the structure,
> which again could be a tripod, guys, etc, OR set in the ground and bolted
> to the side of the structure. A tower usually consists of more than one
> element, i.e. it is triangular or square where as a mast is usually one
> element, i.e. a pipe or collapsable pipe. A mast that stands alone or is
> guyed is murky area , the Inpsector thought for guidance the flag pole
> criteria may apply.
>
> Soooo, I think four Rohn 35' telescoping masts attached to each corner of
> the house would be fine.
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> That leaves me with the same size loop. I'll know if that's what I want
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> middle of the rectangle, no way around it.
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> the 40 meter doublet to 80, I dunno how a Windom would do.
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> but this isn't that big or expensive and I think would increase the

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>
> Steve KA0NEB
>
>
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>

4688. RE: [SkyWires] Steve's install strategy, thinking out loud

Yahoo group: SkyWires
Date: 2015-06-11 12:18:27 UTC
From: Rick - DJ0IP / NJ0IP
Topic: 4657 Message: 4688

Steve

The trees I’m speaking of are just trees with bark and limbs removed.
They may be painted or oiled but they are not pressure treated utility poles.

I live in Bavaria (even though it is near Frankfurt) and here we have a tradition of raising a May Tree (Maibaum) on the first of May, each year. Every city, town or village does that. We can buy trees untreated or already painted in white and blue stripes.

Here is what such an event looks like (hope the link works):
http://www.sueddeutsche.de/muenchen/pflicht-fuer-bewohner-der-stadt-was-echte-muenchner-im-fruehling-machen-1.1309161-6

I understand you are vision impaired but I don't know to what extent.
If you are unable to see the picture, perhaps someone can describe it to you.

Obviously your trees would be a wee bit shorter (hi).
As you can tell by the picture, the boys have their act together.
They put these up by hand; pure manpower, using only sticks to push it up.

Lots of people put these in their yard, but of course mostly only about 30 ft. high.

Now to the ELECTRICAL PART:

If you wish to feed your loop with coax, it is probably better to have it very close to resonance on either 80m or 40m.
This means about 275 ft. or 137 ft. This keeps the impedance on harmonic bands close to 100 to 150 Ohms. You can then use a 2.5:1 or 4:1 balun to match them.

If you are feeding with Openwire feedline and have a good antenna tuner, then having it resonant on the ham band is not so important.

RADIATION PATTERN:

I have only built and used square loops. I have never made mine in a triangle or some other shape.

>>>On the fundamental, you get a fairly round 360 degrees radiation pattern, and covering medium to high angle radiation angles.

>>>On the second harmonic (i.e. 40m for an 80m resonant full wave loop), you get 4 major lobes, one off of each corner. Its high angle radiation is reduced a lot but still fairly good in practice. There is also good radiation off the sides, though not so strong as off of the 4 corners. These are fairly wide lobes. I find a 2 wl long loop to be one of the best omni-directional antennas going.

>>>On the 4th harmonic and higher, as well as the 3rd harmonic for a 40m loop, the major lobes are horizontally a bit narrower and vertically, radiate much lower, which is

outstanding for DX. HERE IN EUROPE THIS IS BENEFICIAL!

If I build my 80m loop with its wires running exactly North-South and East-West, then on the higher bands, I get:
>>>a NW lobe beaming Stateside
>>>a NE lobe beaming JA and Northern Pacific
>>>a SW lob beaming Long Path to VK/ZL
>>>a SE lobe beaming the Middle East

That’s about as good as it gets, short of having a rotary beam!

Of course any object in the vicinity of the antenna might affect its radiation pattern.

Since I have no experience with a triangle loop, I won't bother you with my speculation on how it might work. I prefer to talk on antennas with which I have a lot of experience.

If I were you and had the space, I would try a full wl on 80m. Something like 275 ft. Everett, N8CNP just put one up and I put up the details of his loop on my web site.
See: www.dj0ip.de/loop-antennas/8-band-horizontal-loop/

73 - Rick, DJ0IP
(Nr. Frankfurt am Main)

From: SkyWires@yahoogroups.com [mailto:SkyWires@yahoogroups.com]
Sent: Thursday, June 11, 2015 9:01 AM
To: SkyWires@yahoogroups.com
Subject: RE: [SkyWires] Steve's install strategy, thinking out loud

Hi Rick & All,

Yeah, I'm viewing it all as antenna cost and if you figure the cost per band, per year of use, it'll amatorize.

I'm still playing with my too low loop and won't really know much until I get the stand alone balun to play with, but a few questions still lurk.

Height still is a question, what is the minimum workable? I think I do want 80 meter as I can tune to it at my current wire length and I was surprised it was quite active later in the evening, seemed like friendly groups, the one group that tolerated my weak intrusion were very friendly and patient pulling me out of the background noise. 34' is the highest UPS shippable mast I can find, but the tilt up masts from sch 40 pipe aren't off the table either.

Wooden poles - are you talking simply trees with the branches removed, or pressure treated utility poles? What diameter?

Shape - my current loop is a rectangle about 65' on the long edges and 30' on the short edges. Square better?

Feedpoint - I've read the feedpoint can affect the directivity? I'm near Lincoln, Nebraska so I'd think I'd prefer to orientate towards Europe?

Size - I don't have to stay over the house, I could get into the back yard. I could get a full 80 meter loop there. Though I couldn't fit a 160 meter loop, would there be an advantage to setting the corner posts somewhat further apart to allow the loop to be made a

tad bigger than 80 meters requires? Of course smaller loops could also be made within the corners, so being able to over/under size a bit may help with tuning?

4689. Re: [SkyWires] Steve's install strategy, thinking out loud

Yahoo group: SkyWires
Date: 2015-06-11 13:34:15 UTC
From: Evan Rolek
Topic: 4657 Message: 4689

Steve,

Galvanized works I'm sure. Nice to have options. Please keep the group updated.

73,

Evan

-----Original Message-----
From: slr_65@yahoo.com [SkyWires] <SkyWires@yahoogroups.com>
To: SkyWires <SkyWires@yahoogroups.com>
Sent: Thu, Jun 11, 2015 2:57 am
Subject: Re: [SkyWires] Steve's install strategy, thinking out loud

Hi Evan,

Remember I'm vision impaired, so I didn't dig all the way through every fiberglass pole web site, but I hit the popular ones and it seemed they all were the same price, or more commonly higher, than the Rohn and that price didn't include shipping. Most were not as large of a starting or ending diameter as the Rohn either. I'm sure fiberglass does work, but I'm pretty sure galvanized steel will too and I'm just old fashioned and more comfortable with it.

4690. Re: AW: [SkyWires] Steve's install strategy, thinking out loud

Yahoo group: SkyWires
Date: 2015-06-11 17:52:31 UTC
From: slr_65@...
Topic: 4657 Message: 4690

Hi Sigi,

The truck is truly spare. Before all of this hit my main hobbies were high power model rocketry and presenting public fireworks displays (I did them labor free, the community just had to buy the fireworks, my crew and I provided the equipment and manpower). This truck was used to haul the trailer and equipment. I can no longer do that though and one of my crew members has taken them over and he as a truck for the job, so this one is truly spare.

I have a nighbor who does a lawn service in his spare time and wants an older truck that he won't mind if it gets a scratch or two on it, so it's kind of a good match for us to make a deal.

It's truly a net gain for me, both in the sale and not paying tags and insurance on it, so I'm not hocking my stuff just radio play, it's just truly spare and though the future is uncertain, I do want to remain in radio, a man does need a hobby, so converting it from something I'm not using to something I would is something I'm comfortable with.

There's no neighbor trees either! Again, we had a tornado skip over the neighborhood a few years ago and this is an older neighborhood, it was full of elm trees which got killed off by disease, and maple trees which took over. The maples didn't make the storm damage well and the damaged ones left got attacked by carpenter ants, they were terrible in the couple years following the storm and tore the crap out of any tree left it seemed (the tree will look sound, but the inside will be completelyhollow!). We're recovering now, many have replanted trees but they're still small. The carpenter ants are gone - a chemical called Termidor, which is actually for termites, is carpenter ant death and it's cleaned up the problem (if you buy it and use it yourself, don't expect a fast kill, it's a slow acting one that kills the queen and colony).

The only thing sticking up in the air around here are the off limits utility poles!

4691. Re: [SkyWires] Steve's install strategy, thinking out loud

Yahoo group: SkyWires
Date: 2015-06-11 17:53:20 UTC
From: slr_65@...
Topic: 4657 Message: 4691

Hi Skip,

KA0NEB is my call.

4692. Re: [SkyWires] Steve's install strategy, thinking out loud

Yahoo group: SkyWires
Date: 2015-06-11 18:13:50 UTC
From: Skip Guenter
Topic: 4657 Message: 4692

Rick,

Thank you VERY much for the tuner sheet and the good info.

I'm about to string up a 75m/80m loop (insulated 14awg stranded copper) and side or corner feed it with 450 ohm window line directly (thru the wall) into the back of my Palstar AT2K (old one with a 4:1 current balun in it).

It's PRIMARY function will be to replace the 75m coil loaded section of my Alpha-Delta DX-CC dipole for use on 3.9MHz SSB. However I occasionally run, via tuner, down on the digi portion of the band ~3.58MHz.

It would also be a REAL bonus if the loop was also good on 7.19Mhz (my primary band segment) to supplement the dipole.

The loop will have a high corner (possible feed point) of around 10.5m with it slopping away to ~7.2m at the other 3 corners and will be slightly rectangular with it longer E-W than N-S. I could also feed it at 7.4m high on the east leg that's running N to S due to it's close proximity to an unused pulley I have in a tree there.

Finally to the questions. Should I cut this for 3.58MHz or 3.9Mhz considering it's intended mission? Anything to consider to increase odds of it out performing my dipole on 7.19Mhz? Any other suggestions?

Tschuess, Skip

On 06/11/2015 07:18 AM, 'Rick - DJ0IP / NJ0IP' Rick@... [SkyWires] wrote:
>
> Steve
>
> The trees I’m speaking of are just trees with bark and limbs removed.
> They may be painted or oiled but they are not pressure treated utility
> poles.
>
> I live in Bavaria (even though it is near Frankfurt) and here we have
> a tradition of raising a May Tree (Maibaum) on the first of May, each
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> Here is what such an event looks like (hope the link works):
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>
>

> I understand you are vision impaired but I don't know to what extent.
> If you are unable to see the picture, perhaps someone can describe it
> to you.
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> Obviously your trees would be a wee bit shorter (hi).
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> They put these up by hand; pure manpower, using only sticks to push it up.
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> Lots of people put these in their yard, but of course mostly only
> about 30 ft. high.
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> it very close to resonance on either 80m or 40m.
> This means about 275 ft. or 137 ft. This keeps the impedance on
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> 4:1 balun to match them.
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> tuner, then having it resonant on the ham band is not so important.
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> RADIATION PATTERN:
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> pattern, and covering medium to high angle radiation angles.
>
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> loop), you get 4 major lobes, one off of each corner. Its high angle
> radiation is reduced a lot but still fairly good in practice. There is
> also good radiation off the sides, though not so strong as off of the
> 4 corners. These are fairly wide lobes. I find a 2 wl long loop to be
> one of the best omni-directional antennas going.
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> vertically, radiate much lower, which is outstanding for DX. HERE IN
> EUROPE THIS IS BENEFICIAL!
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> East-West, then on the higher bands, I get:
> >>>a NW lobe beaming Stateside
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> >>>a SW lob beaming Long Path to VK/ZL
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>
> That’s about as good as it gets, short of having a rotary beam!

>
> Of course any object in the vicinity of the antenna might affect its
> radiation pattern.
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> Since I have no experience with a triangle loop, I won't bother you
> with my speculation on how it might work. I prefer to talk on antennas
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> If I were you and had the space, I would try a full wl on 80m.
> Something like 275 ft.
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> my web site.
> See: www.dj0ip.de/loop-antennas/8-band-horizontal-loop/
>
> 73 - Rick, DJ0IP
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>
> From: SkyWires@yahoogroups.com [mailto:SkyWires@yahoogroups.com]
> Sent: Thursday, June 11, 2015 9:01 AM
> To: SkyWires@yahoogroups.com
> Subject: RE: [SkyWires] Steve's install strategy, thinking out loud
>
> Hi Rick & All,
>
> Yeah, I'm viewing it all as antenna cost and if you figure the cost
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> want 80 meter as I can tune to it at my current wire length and I was
> surprised it was quite active later in the evening, seemed like
> friendly groups, the one group that tolerated my weak intrusion were
> very friendly and patient pulling me out of the background noise. 34'
> is the highest UPS shippable mast I can find, but the tilt up masts
> from sch 40 pipe aren't off the table either.
>
> Wooden poles - are you talking simply trees with the branches removed,
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>
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> Feedpoint - I've read the feedpoint can affect the directivity? I'm
> near Lincoln, Nebraska so I'd think I'd prefer to orientate towards
> Europe?
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> Size - I don't have to stay over the house, I could get into the back

> yard. I could get a full 80 meter loop there. Though I couldn't fit a
> 160 meter loop, would there be an advantage to setting the corner
> posts somewhat further apart to allow the loop to be made a tad bigger
> than 80 meters requires? Of course smaller loops could also be made
> within the corners, so being able to over/under size a bit may help
> with tuning?.
>

4693. Re: [SkyWires] Steve's install strategy, thinking out loud

Yahoo group: SkyWires
Date: 2015-06-11 18:17:51 UTC
From: slr_65@...
Topic: 4657 Message: 4693

Hi Rich,

Yes, that's exactly what I was looking at before all of this hit, and it still may be where I end up, I'm just looking at options right now.

I really think a tilt up like this is the least expensive option and the most convenient since no guys needed.

I need to keep in mind the future though and if we don't stay here then the tilt up isn't very portable and I may be forced to spend money over on something that is portable.

No easy choice here, but an undefinite future makes choices hard.

This has my vote for permanent installs though!

4694. RE: [SkyWires] Steve's install strategy, thinking out loud

Yahoo group: SkyWires
Date: 2015-06-11 18:28:08 UTC
From: slr_65@...
Topic: 4657 Message: 4694

Hi Rick,

I can see big things, but I have grey streaks in my vision and poor contrast, the light from a 100 watt light bulb probably looks like a 40 to me. Picture dim with not enough pixels. Still, I can blow most pics up, invert colors and stuff. I did get the gist of your pic, thanks!

I'm using ladder line currently and see no reason to not continue with it, it seems to be working fine.

I don't think I could stick a tall tree stump in the yard, I'm pretty sure someone would say something! LOL!

I'll digest the electrical facts here in a bit, thank you!

4695. Re: [SkyWires] Steve's install strategy, thinking out loud

Yahoo group: SkyWires
Date: 2015-06-11 18:46:43 UTC
From: Rich Schmuke
Topic: 4657 Message: 4695

The first (smaller) tilt up is portable. At my first installation I knew we would move in a few years so it is mounted on threaded rods, ready to move, cut off rods and install a little sod.

When i retired I bought the land in a rural county, no rules or regulations, do what ever I want. Installed a lot of power, 400 amp service transformer with 400 amp fused disconnect, 200 amp wire to house and 200 to shop .
The larger tilt is into ground and someone else's problem when I die. It now supports a hex beam and feed point for a 160 delta loop used on 160/80/40

Rich, KdØzz

On Thu, Jun 11, 2015 at 1:17 PM, slr_65@... [SkyWires] <SkyWires@yahoogroups.com> wrote:

>
>
> Hi Rich,
>
> Yes, that's exactly what I was looking at before all of this hit, and it
> still may be where I end up, I'm just looking at options right now.
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> No easy choice here, but an undefinite future makes choices hard.
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> This has my vote for permanent installs though!
>
>

4696. Re: [SkyWires] Steve's install strategy, thinking out loud

Yahoo group: SkyWires
Date: 2015-06-11 18:58:03 UTC
From: slr_65@...
Topic: 4657 Message: 4696

I like those tilt ups, I really do, just looks like the best bang for the buck. Removal wouldn't be that difficult if one gave thought to the base base when creating it so it could be easily lifted off and the rest left and buried.

The only real issue is the length of the pole it's self, I wonder if coupling smaller lengths would be strong enough?

4697. RE: [SkyWires] Steve's install strategy, thinking out loud

Yahoo group: SkyWires
Date: 2015-06-11 19:07:09 UTC
From: Rick - DJ0IP / NJ0IP
Topic: 4657 Message: 4697

Hello Skip,

The 80m loop sounds good. No, it sounds GREAT.

When running openwire, it makes absolutely no difference whether you tune it for 3.6 or 3.9 MHz.
The QSO partner at the other end will notice about as much as you and I notice when a sack of rice falls over in China.

Performance on 40m is going to be outstanding. As I said earlier, a 2 wl loop is one of my favorite antennas overall.

With Coax it would be a different story. Here I would always choose a resonate frequency 3.6 MHz or even lower (i.e. 3.55 MHz) so that the harmonics fall within the upper ham bands. With 3.9 MHz, all of its harmonics are outside of the higher bands. The SWR may be a bit high on 75m, so use a tuner.

The AT2K is an outstanding tuner, but I recommend not using its built-in balun.
In later models, Palstar removed the balun and went to external baluns.
They offer both a 1:1 and 4:1 external balun but the 1:1 is the better choice.

The very best kind of balun to ALWAYS use when feeding openwire fed antennas is a 1:1 Guanella balun.
I know most people believe a 4:1 is better but it’s not. That is a myth, nothing more.
For the following two reasons:

>1. The number one most important job of the balun is to keep common mode current out of the matchbox. With a perfect 1:1 SWR, the common mode impedance (CMI) of a 1:1 Guanella and a 4:1 Guanella Balun are close to being the same. As the SWR rises, the CMI of the 4:1 quickly goes to hell in a hand basket, whereas the 1:1 marches on like a super trooper, maintaining high CMI.

>2. Except for 160m, your AT2K has less than 10% loss with impedances from 12.5 Ohms up to over 1600 Ohms. There is zero benefit in using a 4:1 transformer in front of it to drop the impedance.

As for "which external balun", well I wind my own but if I were to buy one, the only one I would buy is the Balun Designs Model 1171. It's not cheap, but neither was the Palstar or any other quality product.
See: http://www.balundesigns.com/model-1171-1-1-atu-current-balun-1-5-54-mhz-5kw/?page_context=category&faceted_search=0

It is important for people to realize that:

>1. there are many different kinds of baluns because we have so many different applications for them.

>2. There is an awful lot of crap being offered for sale and many times the people selling them have no clue what they are talking about. So do your own due dilligance.

>3. One of the best ways to shoot yourself in the foot is to skimp on the balun. Not only can it end up being lossy and eating half your power, it can also be the cause of many unwanted side effects, such as TVI, hot mics, etc., simply because it is not doing the job it was supposed to do - even though it cost a lot of money. Sometimes that's because the product itself is crap, but often it is a good product but not the right one for the job at hand.

With a good external balun Skip, you're going to be very pleased with your loop.

Tschuess mein Friend!

73 - Rick, DJ0IP
(Nr. Frankfurt am Main)

From: SkyWires@yahoogroups.com [mailto:SkyWires@yahoogroups.com]
Sent: Thursday, June 11, 2015 8:14 PM
To: SkyWires@yahoogroups.com
Subject: Re: [SkyWires] Steve's install strategy, thinking out loud

Rick,

Thank you VERY much for the tuner sheet and the good info.

I'm about to string up a 75m/80m loop (insulated 14awg stranded copper) and side or corner feed it with 450 ohm window line directly (thru the wall) into the back of my Palstar AT2K (old one with a 4:1 current balun in it).

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Finally to the questions. Should I cut this for 3.58MHz or 3.9Mhz considering it's intended mission? Anything to consider to increase odds of it out performing my dipole on 7.19Mhz? Any other suggestions?

Tschuess, Skip

On 06/11/2015 07:18 AM, 'Rick - DJ0IP / NJ0IP' Rick@... [SkyWires] wrote:

Steve

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They may be painted or oiled but they are not pressure treated utility poles.

I live in Bavaria (even though it is near Frankfurt) and here we have a tradition of raising a May Tree (Maibaum) on the first of May, each year. Every city, town or village does that. We can buy trees untreated or already painted in white and blue stripes.

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If you are unable to see the picture, perhaps someone can describe it to you.

Obviously your trees would be a wee bit shorter (hi).
As you can tell by the picture, the boys have their act together.
They put these up by hand; pure manpower, using only sticks to push it up.

Lots of people put these in their yard, but of course mostly only about 30 ft. high.

Now to the ELECTRICAL PART:

If you wish to feed your loop with coax, it is probably better to have it very close to resonance on either 80m or 40m.
This means about 275 ft. or 137 ft. This keeps the impedance on harmonic bands close to 100 to 150 Ohms. You can then use a 2.5:1 or 4:1 balun to match them.

If you are feeding with Openwire feedline and have a good antenna tuner, then having it resonant on the ham band is not so important.

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That’s about as good as it gets, short of having a rotary beam!

Of course any object in the vicinity of the antenna might affect its radiation pattern.

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If I were you and had the space, I would try a full wl on 80m. Something like 275 ft. Everett, N8CNP just put one up and I put up the details of his loop on my web site. See: www.dj0ip.de/loop-antennas/8-band-horizontal-loop/

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Sent: Thursday, June 11, 2015 9:01 AM
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Subject: RE: [SkyWires] Steve's install strategy, thinking out loud

Hi Rick & All,

Yeah, I'm viewing it all as antenna cost and if you figure the cost per band, per year of use, it'll amatorize.

I'm still playing with my too low loop and won't really know much until I get the stand alone balun to play with, but a few questions still lurk.

Height still is a question, what is the minimum workable? I think I do want 80 meter as I can tune to it at my current wire length and I was surprised it was quite active later in the evening, seemed like friendly groups, the one group that tolerated my weak intrusion were very friendly and patient pulling me out of the background noise. 34' is the highest UPS shippable mast I can find, but the tilt up masts from sch 40 pipe aren't off the table either.

Wooden poles - are you talking simply trees with the branches removed, or pressure treated utility poles? What diameter?

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4698. RE: [SkyWires] Steve's install strategy, thinking out loud

Yahoo group: SkyWires
Date: 2015-06-11 19:14:08 UTC
From: Rick - DJ0IP / NJ0IP
Topic: 4657 Message: 4698

Heck, just paint the pole red, white, and blue and hang a Wolf Pack flag on it.
The neighbors will all salute it!

73 - Rick, DJ0IP
(Nr. Frankfurt am Main)

From: SkyWires@yahoogroups.com [mailto:SkyWires@yahoogroups.com]

I don't think I could stick a tall tree stump in the yard, I'm pretty sure someone would say something! LOL!

4699. AW: [SkyWires] Steve's install strategy, thinking out loud

Yahoo group: SkyWires
Date: 2015-06-11 20:01:42 UTC
From: siegfried jackstien
Topic: 4657 Message: 4699

First ... cut it for 3.4 ... and then fine tune it (as you sure know it is easier cutting a wire then adding a length to it)

My guessing is that you will have it tuned then to 3.55-3.6 (should give resonance on 7.15-7.2)

Measure it with a homebrewed 1:4 ... (if you can not switch your tuner to bypass with balun still used) ..

Check all bands (yes you WIIL use it also on higher bands!!)

I would not cut it tooo short (not tooo high in resonance) ... more towards 3.5-3.55

Reason ... higher would shift the harmonics out of the band (7.2x2=14.4 ... 7.2x3=21.6 ... etc.)

Good luck in finding your "sweet spot" ... grin

Dg9bfc

Sigi

Ps I use a topbandloop (168m) on ALL BANDS

> -----Ursprüngliche Nachricht-----
> Von: SkyWires@yahoogroups.com [mailto:SkyWires@yahoogroups.com]
> Gesendet: Donnerstag, 11. Juni 2015 18:14
> An: SkyWires@yahoogroups.com
> Betreff: Re: [SkyWires] Steve's install strategy, thinking out loud
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> See: www.dj0ip.de/loop-antennas/8-band-horizontal-loop/
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> <mailbox:///home/skip/.thunderbird/qrkjnec3.default/Mail/Local%20Folders/D
> rafts?number=75445&s=97359714/grpId=10946119/grpspId=1705063108/msgId=4688
> /stime=1434025105>
>
>

4700. Re: [SkyWires] Steve's install strategy, thinking out loud

Yahoo group: SkyWires
Date: 2015-06-11 20:09:58 UTC
From: denton sprague
Topic: 4657 Message: 4700

Send 4 of those poles over here Rick!!

I currently run a 300 ft or so horizontal loop up 30 ft….using channel master so called 40 ft telescoping metal poles.

I can work 160 thru 10 meters with loss of efficiency, of course, on 160 meters.

I feed it with 500 ohm home-brew feeders via a LL tuner by PA0LL that uses ganged roller inductors….I have tried other commercial transmatches with much less desirable results, including
Palstar AT2K, AT2KD, and TT 238 series of transmatches.

The LL tuner simply handles matching better…with the exception of a home-brew link coupled transmatch.

Best bet for auto tuner operation…get a SGC 230 for barefoot operation and connect one side of the twin lead to SGC tuner ground and the other to the SGC rf output….do not install any kind of balun on the output, but install rf chokes on the coax input and dc line to the SGC.

I have an older SGC 230 and it will handle 160 thru 10 meters with my short loop nicely,.

The only reason I am not using it now is because I have incorporated a little 600 watt solid state amp into the station.

I have plans to expand the loop to close to 500 ft by this fall, just to increase the efficiency on 160.

On Jun 11, 2015, at 12:07 PM, 'Rick - DJ0IP / NJ0IP' Rick@... [SkyWires] <SkyWires@yahoogroups.com> wrote:

> Hello Skip,
>
> The 80m loop sounds good. No, it sounds GREAT.
>
> When running openwire, it makes absolutely no difference whether you tune it for 3.6 or 3.9 MHz.
> The QSO partner at the other end will notice about as much as you and I notice when a sack of rice falls over in China.
>
> Performance on 40m is going to be outstanding. As I said earlier, a 2 wl loop is one of my favorite antennas overall.
>
> With Coax it would be a different story. Here I would always choose a resonate frequency 3.6 MHz or even lower (i.e. 3.55 MHz) so that the harmonics fall within the upper ham bands. With 3.9 MHz, all of its harmonics are outside of the higher bands. The SWR may be a bit high on 75m, so use a tuner.

>
> The AT2K is an outstanding tuner, but I recommend not using its built-in balun.
> In later models, Palstar removed the balun and went to external baluns.
> They offer both a 1:1 and 4:1 external balun but the 1:1 is the better choice.
>
> The very best kind of balun to ALWAYS use when feeding openwire fed antennas is a 1:1 Guanella balun.
> I know most people believe a 4:1 is better but it’s not. That is a myth, nothing more.
> For the following two reasons:
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>
>
>
>

4701. Military Surplus Fiberglass Poles - WHERE are they?

Yahoo group: SkyWires
Date: 2015-06-11 20:14:50 UTC
From: slr_65@...
Topic: 4701 Message: 4701

Discussing this with some fellow local amateurs, and doing some net research, I just keep seeing references to the inexpensive military surplus fiberglass poles and eBay is usually referenced.

They're supposed to be 4' long and swedged on one end and stack on top of each other. If the joints have a couple screws sunk in them and they're guyed well they are supposed to be workable for temp installs.

I doubt I would want to go with four of these for a loop, but if inexpensive enough I thought I might actually put a tall center up for a Vee support for a transmit antenna and then use my low loop for a receive antenna as my Kenwood has a receive antenna option.

I'll be darned if I can find these anywhere though. It's very frustrating to me as it's hard enough to read and search after search after search just doesn't spit it out.

Am I not using the right search terms? If so, WHAT DO I SEARCH FOR? Or, were these commonly available a few years ago and now the supply has dried up?

4702. Re: [SkyWires] Steve's install strategy, thinking out loud

Yahoo group: SkyWires
Date: 2015-06-11 20:21:17 UTC
From: Skip Guenter
Topic: 4657 Message: 4702

Rick,

OK, Let's assume I can override the urge to use what's in the tuner ;-) and mount the model 1171 near my coax pass thru in the shack and jumper to the pass thru with 3' of RG-213 or RG8x. Eliminating the hole in the wall I was about to drill/cut also!

The K5RCD site tells me to calc length to lowest possible frequency to be used (3.55Mhz) and then subtract 4% for lower velocity factor of the insulated wire. I end up with just a touch under 272' of wire. So that's what I'll try to hang. I originally looked at getting 510' of wire up (top of 160m) but just can't do it with house and power drop located in my space. I probably could get 385' of wire up but unless you say different I'm going with about 272'. I have a NA4RR hex beam up above the garage/shack here so I doubt I will use this loop for anything higher than 40m but one never knows.

Any thoughts on feeding at the middle of the East side (w/ ~55' of window line, no metal poles) vs the NE corner (~30' of same up to a pulley on the metal pole the Hex is on)?

Unfortunately my shack location is in the NE corner of my lot and except for the occasional Caribbean or Mexican contact all of where I need it to work is WNW clockwise to due East (I'm thinking best feed corner would be diagonally opposite from the shack) 100ft away and not very practical). Does feeding it in the middle of the East leg (going N to S) make it stronger across the rectangle to the West vs stronger to the SW feeding it in NE corner? Not much of anything to the SW of me. Are the differences too small to worry about?

Auch mein Freund,
Thanx again for the great info and support.

Skip

On 06/11/2015 02:07 PM, 'Rick - DJ0IP / NJ0IP' Rick@... [SkyWires] wrote:
>
> Hello Skip,
>
> The 80m loop sounds good. No, it sounds GREAT.
>
> When running openwire, it makes absolutely no difference whether you
> tune it for 3.6 or 3.9 MHz.
> The QSO partner at the other end will notice about as much as you and
> I notice when a sack of rice falls over in China.
>

> Performance on 40m is going to be outstanding. As I said earlier, a 2
> wl loop is one of my favorite antennas overall.
>
> With Coax it would be a different story. Here I would always choose a
> resonate frequency 3.6 MHz or even lower (i.e. 3.55 MHz) so that the
> harmonics fall within the upper ham bands. With 3.9 MHz, all of its
> harmonics are outside of the higher bands. The SWR may be a bit high
> on 75m, so use a tuner.
>
> The AT2K is an outstanding tuner, but I recommend not using its
> built-in balun.
> In later models, Palstar removed the balun and went to external baluns.
> They offer both a 1:1 and 4:1 external balun but the 1:1 is the better
> choice.
>
> The very best kind of balun to ALWAYS use when feeding openwire fed
> antennas is a 1:1 Guanella balun.
> I know most people believe a 4:1 is better but it’s not. That is a
> myth, nothing more.
> For the following two reasons:
>
> >1. The number one most important job of the balun is to keep common
> mode current out of the matchbox. With a perfect 1:1 SWR, the common
> mode impedance (CMI) of a 1:1 Guanella and a 4:1 Guanella Balun are
> close to being the same. As the SWR rises, the CMI of the 4:1 quickly
> goes to hell in a hand basket, whereas the 1:1 marches on like a super
> trooper, maintaining high CMI.
>
> >2. Except for 160m, your AT2K has less than 10% loss with impedances
> from 12.5 Ohms up to over 1600 Ohms. There is zero benefit in using a
> 4:1 transformer in front of it to drop the impedance.
>
> As for "which external balun", well I wind my own but if I were to buy
> one, the only one I would buy is the Balun Designs Model 1171. It's
> not cheap, but neither was the Palstar or any other quality product.
> See:
> http://www.balundesigns.com/model-1171-1-1-atu-current-balun-1-5-54-mhz-5kw/?page_contex
t=category&faceted_search=0
>
>
> It is important for people to realize that:
>
> >1. there are many different kinds of baluns because we have so many
> different applications for them.
>
> >2. There is an awful lot of crap being offered for sale and many
> times the people selling them have no clue what they are talking
> about. So do your own due dilligance.
>
> >3. One of the best ways to shoot yourself in the foot is to skimp on

> the balun. Not only can it end up being lossy and eating half your
> power, it can also be the cause of many unwanted side effects, such as
> TVI, hot mics, etc., simply because it is not doing the job it was
> supposed to do - even though it cost a lot of money. Sometimes that's
> because the product itself is crap, but often it is a good product but
> not the right one for the job at hand.
>
> With a good external balun Skip, you're going to be very pleased with
> your loop.
>
> Tschuess mein Friend!
>
> 73 - Rick, DJ0IP
> (Nr. Frankfurt am Main)
>
> From: SkyWires@yahoogroups.com [mailto:SkyWires@yahoogroups.com]
> Sent: Thursday, June 11, 2015 8:14 PM
> To: SkyWires@yahoogroups.com
> Subject: Re: [SkyWires] Steve's install strategy, thinking out loud
>
> Rick,
>
> Thank you VERY much for the tuner sheet and the good info.
>
> I'm about to string up a 75m/80m loop (insulated 14awg stranded
> copper) and side or corner feed it with 450 ohm window line directly
> (thru the wall) into the back of my Palstar AT2K (old one with a 4:1
> current balun in it).
>
> It's PRIMARY function will be to replace the 75m coil loaded section
> of my Alpha-Delta DX-CC dipole for use on 3.9MHz SSB. However I
> occasionally run, via tuner, down on the digi portion of the band
> ~3.58MHz.
>
> It would also be a REAL bonus if the loop was also good on 7.19Mhz (my
> primary band segment) to supplement the dipole.
>
> The loop will have a high corner (possible feed point) of around 10.5m
> with it slopping away to ~7.2m at the other 3 corners and will be
> slightly rectangular with it longer E-W than N-S. I could also feed it
> at 7.4m high on the east leg that's running N to S due to it's close
> proximity to an unused pulley I have in a tree there.
>
> Finally to the questions. Should I cut this for 3.58MHz or 3.9Mhz
> considering it's intended mission? Anything to consider to increase
> odds of it out performing my dipole on 7.19Mhz? Any other suggestions?
>
> Tschuess, Skip
>
> On 06/11/2015 07:18 AM, 'Rick - DJ0IP / NJ0IP' Rick@...

> [SkyWires] wrote:
>
> Steve
>
> The trees I’m speaking of are just trees with bark and limbs removed.
> They may be painted or oiled but they are not pressure treated utility
> poles.
>
> I live in Bavaria (even though it is near Frankfurt) and here we have
> a tradition of raising a May Tree (Maibaum) on the first of May, each
> year. Every city, town or village does that. We can buy trees
> untreated or already painted in white and blue stripes.
>
> Here is what such an event looks like (hope the link works):
> http://www.sueddeutsche.de/muenchen/pflicht-fuer-bewohner-der-stadt-was-echte-muenchner-im-fruehling-machen-1.1309161-6
>
>
> I understand you are vision impaired but I don't know to what extent.
> If you are unable to see the picture, perhaps someone can describe it
> to you.
>
> Obviously your trees would be a wee bit shorter (hi).
> As you can tell by the picture, the boys have their act together.
> They put these up by hand; pure manpower, using only sticks to push it up.
>
> Lots of people put these in their yard, but of course mostly only
> about 30 ft. high.
>
> Now to the ELECTRICAL PART:
>
> If you wish to feed your loop with coax, it is probably better to have
> it very close to resonance on either 80m or 40m.
> This means about 275 ft. or 137 ft. This keeps the impedance on
> harmonic bands close to 100 to 150 Ohms. You can then use a 2.5:1 or
> 4:1 balun to match them.
>
> If you are feeding with Openwire feedline and have a good antenna
> tuner, then having it resonant on the ham band is not so important.
>
> RADIATION PATTERN:
>
> I have only built and used square loops. I have never made mine in a
> triangle or some other shape.
>
> >>>On the fundamental, you get a fairly round 360 degrees radiation
> pattern, and covering medium to high angle radiation angles.
>
> >>>On the second harmonic (i.e. 40m for an 80m resonant full wave
> loop), you get 4 major lobes, one off of each corner. Its high angle

> radiation is reduced a lot but still fairly good in practice. There is
> also good radiation off the sides, though not so strong as off of the
> 4 corners. These are fairly wide lobes. I find a 2 wl long loop to be
> one of the best omni-directional antennas going.
>
> >>>On the 4th harmonic and higher, as well as the 3rd harmonic for a
> 40m loop, the major lobes are horizontally a bit narrower and
> vertically, radiate much lower, which is outstanding for DX. HERE IN
> EUROPE THIS IS BENEFICIAL!
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> If I build my 80m loop with its wires running exactly North-South and
> East-West, then on the higher bands, I get:
> >>>a NW lobe beaming Stateside
> >>>a NE lobe beaming JA and Northern Pacific
> >>>a SW lob beaming Long Path to VK/ZL
> >>>a SE lobe beaming the Middle East
>
> That’s about as good as it gets, short of having a rotary beam!
>
> Of course any object in the vicinity of the antenna might affect its
> radiation pattern.
>
> Since I have no experience with a triangle loop, I won't bother you
> with my speculation on how it might work. I prefer to talk on antennas
> with which I have a lot of experience.
>
> If I were you and had the space, I would try a full wl on 80m.
> Something like 275 ft.
> Everett, N8CNP just put one up and I put up the details of his loop on
> my web site.
> See: www.dj0ip.de/loop-antennas/8-band-horizontal-loop/
>
> 73 - Rick, DJ0IP
> (Nr. Frankfurt am Main)
>
> From: SkyWires@yahoogroups.com [mailto:SkyWires@yahoogroups.com]
> Sent: Thursday, June 11, 2015 9:01 AM
> To: SkyWires@yahoogroups.com
> Subject: RE: [SkyWires] Steve's install strategy, thinking out loud
>
> Hi Rick & All,
>
> Yeah, I'm viewing it all as antenna cost and if you figure the cost
> per band, per year of use, it'll amatorize.
>
> I'm still playing with my too low loop and won't really know much
> until I get the stand alone balun to play with, but a few questions
> still lurk.
>
> Height still is a question, what is the minimum workable? I think I do

> want 80 meter as I can tune to it at my current wire length and I was
> surprised it was quite active later in the evening, seemed like
> friendly groups, the one group that tolerated my weak intrusion were
> very friendly and patient pulling me out of the background noise. 34'
> is the highest UPS shippable mast I can find, but the tilt up masts
> from sch 40 pipe aren't off the table either.
>
> Wooden poles - are you talking simply trees with the branches removed,
> or pressure treated utility poles? What diameter?
>
> Shape - my current loop is a rectangle about 65' on the long edges and
> 30' on the short edges. Square better?
>
> Feedpoint - I've read the feedpoint can affect the directivity? I'm
> near Lincoln, Nebraska so I'd think I'd prefer to orientate towards
> Europe?
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> Size - I don't have to stay over the house, I could get into the back
> yard. I could get a full 80 meter loop there. Though I couldn't fit a
> 160 meter loop, would there be an advantage to setting the corner
> posts somewhat further apart to allow the loop to be made a tad bigger
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> within the corners, so being able to over/under size a bit may help
> with tuning?.
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--
S. R. 'Skip' Guenter, K5SRG
/3905cc 40m SSB Late Coord
Alt Dir, 5th Call Area
/

4703. Re: AW: [SkyWires] Steve's install strategy, thinking out loud

Yahoo group: SkyWires
Date: 2015-06-11 20:24:36 UTC
From: Skip Guenter
Topic: 4657 Message: 4703

Roger Roger, 5 x 9 copy.

On 06/11/2015 03:01 PM, 'siegfried jackstien'
siegfried.jackstien@... [SkyWires] wrote:
>
> First ... cut it for 3.4 ... and then fine tune it (as you sure know it is
> easier cutting a wire then adding a length to it)
>
> My guessing is that you will have it tuned then to 3.55-3.6 (should give
> resonance on 7.15-7.2)
>
> Measure it with a homebrewed 1:4 ... (if you can not switch your tuner to
> bypass with balun still used) ..
>
> Check all bands (yes you WIIL use it also on higher bands!!)
>
> I would not cut it tooo short (not tooo high in resonance) ... more
> towards
> 3.5-3.55
>
> Reason ... higher would shift the harmonics out of the band
> (7.2x2=14.4 ...
> 7.2x3=21.6 ... etc.)
>
> Good luck in finding your "sweet spot" ... grin
>
> Dg9bfc
>
> Sigi
>
> Ps I use a topbandloop (168m) on ALL BANDS
>
> > -----Urspr?ngliche Nachricht-----
> > Von: SkyWires@yahoogroups.com [mailto:SkyWires@yahoogroups.com]
> > Gesendet: Donnerstag, 11. Juni 2015 18:14
> > An: SkyWires@yahoogroups.com
> > Betreff: Re: [SkyWires] Steve's install strategy, thinking out loud
> >
> >
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> > Rick,
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> > Sent: Thursday, June 11, 2015 9:01 AM
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> > Subject: RE: [SkyWires] Steve's install strategy, thinking out loud
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> >
> >
> >
> <mailbox:///home/skip/.thunderbird/qrkjnec3.default/Mail/Local%20Folders/D
> >
> rafts?number=75445&s=97359714/grpId=10946119/grpspId=1705063108/msgId=4688
> > /stime=1434025105>
> >
> >
>
>

--
S. R. 'Skip' Guenter, K5SRG
/3905cc 40m SSB Late Coord
Alt Dir, 5th Call Area
/

4704. AW: AW: [SkyWires] Steve's install strategy, thinking out loud

Yahoo group: SkyWires
Date: 2015-06-11 20:47:12 UTC
From: siegfried jackstien
Topic: 4657 Message: 4704

Ok .. if it is really spare (and you can make a good deal) ... then sell it (and buy some equipment) ... but do not spent tooo much just for a wire antenna ... save that for a rotator and a beam (or other things)

A wire antenna does not cost much more as the wire (and some insulators)

If you have room ... then build a topbandloop (old timers say if you can not make it high ... then make it long)

... but I do not know your local situation ... so maybe you just NEED some poles (what about some used utility poles?!?)

Or build a frames from wood (cheap and should last for years)

Dg9bfc

Sigi

> -----Ursprüngliche Nachricht-----
> Von: SkyWires@yahoogroups.com [mailto:SkyWires@yahoogroups.com]
> Gesendet: Donnerstag, 11. Juni 2015 17:53
> An: SkyWires@yahoogroups.com
> Betreff: Re: AW: [SkyWires] Steve's install strategy, thinking out loud
>
>
>
> Hi Sigi,
>
> The truck is truly spare. Before all of this hit my main hobbies were
> high power model rocketry and presenting public fireworks displays (I did
> them labor free, the community just had to buy the fireworks, my crew and
> I provided the equipment and manpower). This truck was used to haul the
> trailer and equipment. I can no longer do that though and one of my crew
> members has taken them over and he as a truck for the job, so this one is
> truly spare.
>
> I have a nighbor who does a lawn service in his spare time and wants an
> older truck that he won't mind if it gets a scratch or two on it, so it's
> kind of a good match for us to make a deal.
>
> It's truly a net gain for me, both in the sale and not paying tags and
> insurance on it, so I'm not hocking my stuff just radio play, it's just
> truly spare and though the future is uncertain, I do want to remain in
> radio, a man does need a hobby, so converting it from something I'm not
> using to something I would is something I'm comfortable with.
>
> There's no neighbor trees either! Again, we had a tornado skip over the

> neighborhood a few years ago and this is an older neighborhood, it was
> full of elm trees which got killed off by disease, and maple trees which
> took over. The maples didn't make the storm damage well and the damaged
> ones left got attacked by carpenter ants, they were terrible in the couple
> years following the storm and tore the crap out of any tree left it seemed
> (the tree will look sound, but the inside will be completelyhollow!).
> We're recovering now, many have replanted trees but they're still small.
> The carpenter ants are gone - a chemical called Termidor, which is
> actually for termites, is carpenter ant death and it's cleaned up the
> problem (if you buy it and use it yourself, don't expect a fast kill, it's
> a slow acting one that kills the queen and colony).
>
> The only thing sticking up in the air around here are the off limits
> utility poles!
>
>

4705. Re: [SkyWires] Steve's install strategy, thinking out loud

Yahoo group: SkyWires
Date: 2015-06-11 20:54:33 UTC
From: Rich Schmuke
Topic: 4657 Message: 4705

I like those tilt ups, I really do, just looks like the best bang for the buck. Removal wouldn't be that difficult if one gave thought to the base base when creating it so it could be easily lifted off and the rest left and buried. *That is what I did*.

The only real issue is the length of the pole it's self, I wonder if coupling smaller lengths would be strong enough? *Strong enough for what?? I had a 3 element 15M mono band antenna and a CD-45 ll rotor on it.*

Rich, KdØzz

On Thu, Jun 11, 2015 at 1:58 PM, slr_65@... [SkyWires] <SkyWires@yahoogroups.com> wrote:

>
>
> I like those tilt ups, I really do, just looks like the best bang for the
> buck. Removal wouldn't be that difficult if one gave thought to the base
> base when creating it so it could be easily lifted off and the rest left
> and buried.
>
> The only real issue is the length of the pole it's self, I wonder if
> coupling smaller lengths would be strong enough?
>
>

4706. RE: [SkyWires] Steve's install strategy, thinking out loud

Yahoo group: SkyWires
Date: 2015-06-11 21:00:46 UTC
From: Rick - DJ0IP / NJ0IP
Topic: 4657 Message: 4706

Ah heck Denton, you□re 4 days too late!

I could have sent them back in Air Force One.
Obama was over here this past weekend for the G7 meeting!

Nice to see you□re on here too. I just joined 2 days ago.

You're a very lucky man to own one of Kees' LL tuners!
Just about the best thing going now days, unless you build your own
link-coupled tuner!

73 - Rick, DJ0IP
(Nr. Frankfurt am Main)

From: SkyWires@yahoogroups.com [mailto:SkyWires@yahoogroups.com]
Sent: Thursday, June 11, 2015 10:10 PM
To: SkyWires@yahoogroups.com
Subject: Re: [SkyWires] Steve's install strategy, thinking out loud

Send 4 of those poles over here Rick!!

I currently run a 300 ft or so horizontal loop up 30 ft .using channel
master so called 40 ft telescoping metal poles.

I can work 160 thru 10 meters with loss of efficiency, of course, on 160
meters.

I feed it with 500 ohm home-brew feeders via a LL tuner by PA0LL that uses
ganged roller inductors .I have tried other commercial transmatches with
much less desirable results, including
Palstar AT2K, AT2KD, and TT 238 series of transmatches.

The LL tuner simply handles matching better with the exception of a
home-brew link coupled transmatch.

Best bet for auto tuner operation get a SGC 230 for barefoot operation and
connect one side of the twin lead to SGC tuner ground and the other to the
SGC rf output .do not install any kind of balun on the output, but install
rf chokes on the coax input and dc line to the SGC.

I have an older SGC 230 and it will handle 160 thru 10 meters with my short
loop nicely,.

The only reason I am not using it now is because I have incorporated a
little 600 watt solid state amp into the station.

I have plans to expand the loop to close to 500 ft by this fall, just to
increase the efficiency on 160.

On Jun 11, 2015, at 12:07 PM, 'Rick - DJ0IP / NJ0IP' Rick@dj0ip.de [SkyWires] <SkyWires@yahoogroups.com> wrote:

4707. RE: [SkyWires] Military Surplus Fiberglass Poles - WHERE are they?

Yahoo group: SkyWires
Date: 2015-06-11 21:08:02 UTC
From: Rick - DJ0IP / NJ0IP
Topic: 4701 Message: 4707

Unfortunately you are right; these have become very scarce.
I haven’t seen them on ebay, except for onsies, twosies, for a couple of years now.

They were actually tent poles.
I guess the army doesn’t sleep in tents anymore.

I picked up a bag of about 12 of these while in the states a few years ago.
I use them often for temporary use.

One trick to reduce their wobbling is to epoxy them together in sets of 2’s.
That makes for one steady 8’ long pole segment. Still short enough to store anywhere.
Then when you mate them together, tape a couple of strips of electrical tape to the swaged ends.
This gives them a snugger fit.
These two actions really improves the rigidity of this kind of pole.

However, the trick is to find them now days.

73 - Rick, DJ0IP
(Nr. Frankfurt am Main)

From: SkyWires@yahoogroups.com [mailto:SkyWires@yahoogroups.com]
Sent: Thursday, June 11, 2015 10:15 PM
To: SkyWires@yahoogroups.com
Subject: [SkyWires] Military Surplus Fiberglass Poles - WHERE are they?

Discussing this with some fellow local amateurs, and doing some net research, I just keep seeing references to the inexpensive military surplus fiberglass poles and eBay is usually referenced.

They're supposed to be 4' long and swedged on one end and stack on top of each other. If the joints have a couple screws sunk in them and they're guyed well they are supposed to be workable for temp installs.

I doubt I would want to go with four of these for a loop, but if inexpensive enough I thought I might actually put a tall center up for a Vee support for a transmit antenna and then use my low loop for a receive antenna as my Kenwood has a receive antenna option.

I'll be darned if I can find these anywhere though. It's very frustrating to me as it's hard enough to read and search after search after search just doesn't spit it out.

Am I not using the right search terms? If so, WHAT DO I SEARCH FOR? Or, were these commonly available a few years ago and now the supply has dried up?

4708. AW: [SkyWires] Military Surplus Fiberglass Poles - WHERE are they?

Yahoo group: SkyWires
Date: 2015-06-11 21:07:21 UTC
From: siegfried jackstien
Topic: 4701 Message: 4708

Evilbay

Search for camouflage net poles

Available in fibre glass and aluminium

(I found a military surplus store here that still has thousands of them)

Dg9bfc

Sigi

> -----Ursprüngliche Nachricht-----
> Von: SkyWires@yahoogroups.com [mailto:SkyWires@yahoogroups.com]
> Gesendet: Donnerstag, 11. Juni 2015 20:15
> An: SkyWires@yahoogroups.com
> Betreff: [SkyWires] Military Surplus Fiberglass Poles - WHERE are they?
>
>
>
> Discussing this with some fellow local amateurs, and doing some net
> research, I just keep seeing references to the inexpensive military
> surplus fiberglass poles and eBay is usually referenced.
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>

4709. Re: [SkyWires] Military Surplus Fiberglass Poles - WHERE are they?

Yahoo group: SkyWires
Date: 2015-06-11 21:14:40 UTC
From: Skip Guenter
Topic: 4701 Message: 4709

CQ, CQ, SE Nebraska,

I have the aluminum versions holding an 8.5' 2m omni at 29' AGL on garage roof for 3 years. Bottom is in a tripod. One set of guy wires at the joint between the top two sections and then a 14" piece of the fiberglass version that the antenna actually clamps to (puts the guys about 4.5' below the top of the pole). The top two joints in the aluminum pole are cross bolted with SS hardware.

In the past I also had a 2m quad on the aluminum sections up at 39' coming from a hinged spike in the ground behind the garage, clamped at the peak of the gable roof and then two sets of guy wires at joints above. All joints above roof peak cross bolted. I used to find bags of these things at the hamfests as recently as a year and a half ago. Big fest this weekend in Dallas so I'll ask the guys to check to see if they're still around.

They are actually a bit short of 48" each and I still have the old 10 section Quad pole in 3 sections behind the garage (painted light grey) with the guy plates still in it. As I recall the smooth ones are actually a bit heavier duty than the ribbed ones. Lemme know if you need exact dimensions.

Skip - K5SRG

On 06/11/2015 03:14 PM, slr_65@... [SkyWires] wrote:
>
> Discussing this with some fellow local amateurs, and doing some net
> research, I just keep seeing references to the inexpensive military
> surplus fiberglass poles and eBay is usually referenced.
>
> They're supposed to be 4' long and swedged on one end and stack on top
> of each other. If the joints have a couple screws sunk in them and
> they're guyed well they are supposed to be workable for temp installs.
>
> I doubt I would want to go with four of these for a loop, but if
> inexpensive enough I thought I might actually put a tall center up for
> a Vee support for a transmit antenna and then use my low loop for a
> receive antenna as my Kenwood has a receive antenna option.
>
> I'll be darned if I can find these anywhere though. It's very
> frustrating to me as it's hard enough to read and search after search
> after search just doesn't spit it out.
>
> Am I not using the right search terms? If so, WHAT DO I SEARCH FOR?
> Or, were these commonly available a few years ago and now the supply

> has dried up?
>
>
>

--
S. R. 'Skip' Guenter, K5SRG
/3905cc 40m SSB Late Coord
Alt Dir, 5th Call Area
/

4710. RE: [SkyWires] Steve's install strategy, thinking out loud

Yahoo group: SkyWires
Date: 2015-06-11 21:23:58 UTC
From: Rick - DJ0IP / NJ0IP
Topic: 4657 Message: 4710

Hi Skip,

Between the balun and the matchbox, I strongly recommend using ONLY RG-213 or LMR-400. Even though RG8x can handle your power level, it might break down under the high voltage presented on some bands.

I STRONGLY RECOMMEND DOING WHAT SIGI SAID!

Don’t cut it ‘exactly’ to any formula. Cut it longer than the formula dictates, and forget the 4% as well.
Put the loop up, measure your resonance on the desired bands, and then trim in small increments.

You know the gig: “What's going on? I’ve cut it 3 times and it’s still too short!” (hi)

As for recommending where to feed it, well again we might ask Sigi to model it for you. I’m pathetic at modeling. He's good at it. I’m a hands-on field guy.

It is not going to make any difference on 80m but on 40 or 30m it will make a bit of difference where you feed it.

I have never fed a horizontal loop in the middle, only in one of the corners. I might speculate on how I think it would work, but most of the time when I do that, I end up looking foolish. Instead I will stick to talking about things I have done and know work. If I don't know, I won't guess.
That's what models are for.

I wanted to take a look at your QTH on googlemaps, but you only show a PO box on QRZ.com.

73 - Rick, DJ0IP
(Nr. Frankfurt am Main)

From: SkyWires@yahoogroups.com [mailto:SkyWires@yahoogroups.com]
Sent: Thursday, June 11, 2015 10:21 PM
To: SkyWires@yahoogroups.com
Subject: Re: [SkyWires] Steve's install strategy, thinking out loud

Rick,

OK, Let's assume I can override the urge to use what's in the tuner ;-) and mount the model 1171 near my coax pass thru in the shack and jumper to the pass thru with 3' of RG-213 or RG8x. Eliminating the hole in the wall I was about to drill/cut also!

The K5RCD site tells me to calc length to lowest possible frequency to be used (3.55Mhz) and then subtract 4% for lower velocity factor of the insulated wire. I end up with just a touch under 272' of wire. So that's what I'll try to hang. I originally looked at getting 510' of wire up (top of 160m) but just can't do it with house and power drop located in my space. I probably could get 385' of wire up but unless you say different I'm going with

about 272'. I have a NA4RR hex beam up above the garage/shack here so I doubt I will use this loop for anything higher than 40m but one never knows.

Any thoughts on feeding at the middle of the East side (w/ ~55' of window line, no metal poles) vs the NE corner (~30' of same up to a pulley on the metal pole the Hex is on)?

Unfortunately my shack location is in the NE corner of my lot and except for the occasional Caribbean or Mexican contact all of where I need it to work is WNW clockwise to due East (I'm thinking best feed corner would be diagonally opposite from the shack) 100ft away and not very practical). Does feeding it in the middle of the East leg (going N to S) make it stronger across the rectangle to the West vs stronger to the SW feeding it in NE corner? Not much of anything to the SW of me. Are the differences too small to worry about?

Auch mein Freund,
Thanx again for the great info and support.

Skip

4711. Re: [SkyWires] horizontal loop resonence

Yahoo group: SkyWires
Date: 2015-06-11 21:25:23 UTC
From: Evan Rolek
Topic: 4657 Message: 4711

All,

Based upon near field (field strength meter in the shack, signal reports within a mile of my QTH) and far field (stations 50-600 miles away, switching back and forth over several months), I could determine no significant difference in received nor transmitted signal reports between a resonant and "non-resonant" horizontal loop for 40 or 80 meters. What am I missing here by not having a resonant horizontal loop?

73,

Evan, K9SQG

-----Original Message-----
From: Skip Guenter sguenter@... [SkyWires] <SkyWires@yahoogroups.com>
To: SkyWires <SkyWires@yahoogroups.com>
Sent: Thu, Jun 11, 2015 4:21 pm
Subject: Re: [SkyWires] Steve's install strategy, thinking out loud

Rick,

OK, Let's assume I can override the urge to use what's in the tuner ;-) and mount the model 1171 near my coax pass thru in the shack and jumper to the pass thru with 3' of RG-213 or RG8x. Eliminating the hole in the wall I was about to drill/cut also!

The K5RCD site tells me to calc length to lowest possible frequency to be used (3.55Mhz) and then subtract 4% for lower velocity factor of the insulated wire. I end up with just a touch under 272' of wire. So that's what I'll try to hang. I originally looked at getting 510' of wire up (top of 160m) but just can't do it with house and power drop located in my space. I probably could get 385' of wire up but unless you say different I'm going with about 272'. I have a NA4RR hex beam up above the garage/shack here so I doubt I will use this loop for anything higher than 40m but one never knows.

Any thoughts on feeding at the middle of the East side (w/ ~55' of window line, no metal poles) vs the NE corner (~30' of same up to a pulley on the metal pole the Hex is on)?

Unfortunately my shack location is in the NE corner of my lot and except for the occasional Caribbean or Mexican contact all of where I need it to work is WNW clockwise to due East (I'm thinking best feed corner would be diagonally opposite from the shack) 100ft away and not very practical). Does feeding it in the middle of the East leg (going N to S) make it stronger across the rectangle to the West vs stronger to the SW feeding it in NE corner? Not much of anything to the SW of me. Are the differences too small to worry about?

Auch mein Freund,
Thanx again for the great info and support.

Skip

On 06/11/2015 02:07 PM, 'Rick - DJ0IP / NJ0IP' Rick@... [SkyWires] wrote:

Hello Skip,

The 80m loop sounds good. No, it sounds GREAT.

When running openwire, it makes absolutely no difference whether you tune it for 3.6 or 3.9 MHz.
The QSO partner at the other end will notice about as much as you and I notice when a sack of rice falls over in China.

Performance on 40m is going to be outstanding. As I said earlier, a 2 wl loop is one of my favorite antennas overall.

With Coax it would be a different story. Here I would always choose a resonate frequency 3.6 MHz or even lower (i.e. 3.55 MHz) so that the harmonics fall within the upper ham bands. With 3.9 MHz, all of its harmonics are outside of the higher bands. The SWR may be a bit high on 75m, so use a tuner.

The AT2K is an outstanding tuner, but I recommend not using its built-in balun.
In later models, Palstar removed the balun and went to external baluns.
They offer both a 1:1 and 4:1 external balun but the 1:1 is the better choice.

The very best kind of balun to ALWAYS use when feeding openwire fed antennas is a 1:1 Guanella balun.
I know most people believe a 4:1 is better but it’s not. That is a myth, nothing more.
For the following two reasons:

>1. The number one most important job of the balun is to keep common mode current out of the matchbox. With a perfect 1:1 SWR, the common mode impedance (CMI) of a 1:1 Guanella and a 4:1 Guanella Balun are close to being the same. As the SWR rises, the CMI of the 4:1 quickly goes to hell in a hand basket, whereas the 1:1 marches on like a super trooper, maintaining high CMI.

>2. Except for 160m, your AT2K has less than 10% loss with impedances from 12.5 Ohms up to over 1600 Ohms. There is zero benefit in using a 4:1 transformer in front of it to drop the impedance.

As for "which external balun", well I wind my own but if I were to buy one, the only one I would buy is the Balun Designs Model 1171. It's not cheap, but neither was the Palstar or any other quality product.
See: http://www.balundesigns.com/model-1171-1-1-atu-current-balun-1-5-54-mhz-5kw/?page_context=category&faceted_search=0

It is important for people to realize that:

>1. there are many different kinds of baluns because we have so many different applications for them.

>2. There is an awful lot of crap being offered for sale and many times the people selling them have no clue what they are talking about. So do your own due dilligance.

>3. One of the best ways to shoot yourself in the foot is to skimp on the balun. Not only can it end up being lossy and eating half your power, it can also be the cause of many unwanted side effects, such as TVI, hot mics, etc., simply because it is not doing the job it was supposed to do - even though it cost a lot of money. Sometimes that's because the

product itself is crap, but often it is a good product but not the right one for the job at hand.

With a good external balun Skip, you're going to be very pleased with your loop.

Tschuess mein Friend!

73 - Rick, DJ0IP
(Nr. Frankfurt am Main)

From: SkyWires@yahoogroups.com [mailto:SkyWires@yahoogroups.com]
Sent: Thursday, June 11, 2015 8:14 PM
To: SkyWires@yahoogroups.com
Subject: Re: [SkyWires] Steve's install strategy, thinking out loud

Rick,

Thank you VERY much for the tuner sheet and the good info.

I'm about to string up a 75m/80m loop (insulated 14awg stranded copper) and side or corner feed it with 450 ohm window line directly (thru the wall) into the back of my Palstar AT2K (old one with a 4:1 current balun in it).

It's PRIMARY function will be to replace the 75m coil loaded section of my Alpha-Delta DX-CC dipole for use on 3.9MHz SSB. However I occasionally run, via tuner, down on the digi portion of the band ~3.58MHz.

It would also be a REAL bonus if the loop was also good on 7.19Mhz (my primary band segment) to supplement the dipole.

The loop will have a high corner (possible feed point) of around 10.5m with it slopping away to ~7.2m at the other 3 corners and will be slightly rectangular with it longer E-W than N-S. I could also feed it at 7.4m high on the east leg that's running N to S due to it's close proximity to an unused pulley I have in a tree there.

Finally to the questions. Should I cut this for 3.58MHz or 3.9Mhz considering it's intended mission? Anything to consider to increase odds of it out performing my dipole on 7.19Mhz? Any other suggestions?

Tschuess, Skip

On 06/11/2015 07:18 AM, 'Rick - DJ0IP / NJ0IP' Rick@... [SkyWires] wrote:

Steve

The trees I’m speaking of are just trees with bark and limbs removed.
They may be painted or oiled but they are not pressure treated utility poles.

I live in Bavaria (even though it is near Frankfurt) and here we have a tradition of raising a May Tree (Maibaum) on the first of May, each year. Every city, town or village does that. We can buy trees untreated or already painted in white and blue stripes.

Here is what such an event looks like (hope the link works):
http://www.sueddeutsche.de/muenchen/pflicht-fuer-bewohner-der-stadt-was-echte-muenchner-im-fruehling-machen-1.1309161-6

I understand you are vision impaired but I don't know to what extent.
If you are unable to see the picture, perhaps someone can describe it to you.

Obviously your trees would be a wee bit shorter (hi).
As you can tell by the picture, the boys have their act together.
They put these up by hand; pure manpower, using only sticks to push it up.

Lots of people put these in their yard, but of course mostly only about 30 ft. high.

Now to the ELECTRICAL PART:

If you wish to feed your loop with coax, it is probably better to have it very close to resonance on either 80m or 40m.
This means about 275 ft. or 137 ft. This keeps the impedance on harmonic bands close to 100 to 150 Ohms. You can then use a 2.5:1 or 4:1 balun to match them.

If you are feeding with Openwire feedline and have a good antenna tuner, then having it resonant on the ham band is not so important.

RADIATION PATTERN:

I have only built and used square loops. I have never made mine in a triangle or some other shape.

>>>On the fundamental, you get a fairly round 360 degrees radiation pattern, and covering medium to high angle radiation angles.

>>>On the second harmonic (i.e. 40m for an 80m resonant full wave loop), you get 4 major lobes, one off of each corner. Its high angle radiation is reduced a lot but still fairly good in practice. There is also good radiation off the sides, though not so strong as off of the 4 corners. These are fairly wide lobes. I find a 2 wl long loop to be one of the best omni-directional antennas going.

>>>On the 4th harmonic and higher, as well as the 3rd harmonic for a 40m loop, the major lobes are horizontally a bit narrower and vertically, radiate much lower, which is outstanding for DX. HERE IN EUROPE THIS IS BENEFICIAL!

If I build my 80m loop with its wires running exactly North-South and East-West, then on the higher bands, I get:
>>>a NW lobe beaming Stateside
>>>a NE lobe beaming JA and Northern Pacific
>>>a SW lob beaming Long Path to VK/ZL
>>>a SE lobe beaming the Middle East

That’s about as good as it gets, short of having a rotary beam!

Of course any object in the vicinity of the antenna might affect its radiation pattern.

Since I have no experience with a triangle loop, I won't bother you with my speculation on how it might work. I prefer to talk on antennas with which I have a lot of experience.

If I were you and had the space, I would try a full wl on 80m. Something like 275 ft.
Everett, N8CNP just put one up and I put up the details of his loop on my web site.
See: www.dj0ip.de/loop-antennas/8-band-horizontal-loop/

73 - Rick, DJ0IP
(Nr. Frankfurt am Main)

From: SkyWires@yahoogroups.com [mailto:SkyWires@yahoogroups.com]
Sent: Thursday, June 11, 2015 9:01 AM
To: SkyWires@yahoogroups.com
Subject: RE: [SkyWires] Steve's install strategy, thinking out loud

Hi Rick & All,

Yeah, I'm viewing it all as antenna cost and if you figure the cost per band, per year of use, it'll amatorize.

I'm still playing with my too low loop and won't really know much until I get the stand alone balun to play with, but a few questions still lurk.

Height still is a question, what is the minimum workable? I think I do want 80 meter as I can tune to it at my current wire length and I was surprised it was quite active later in the evening, seemed like friendly groups, the one group that tolerated my weak intrusion were very friendly and patient pulling me out of the background noise. 34' is the highest UPS shippable mast I can find, but the tilt up masts from sch 40 pipe aren't off the table either.

Wooden poles - are you talking simply trees with the branches removed, or pressure treated utility poles? What diameter?

Shape - my current loop is a rectangle about 65' on the long edges and 30' on the short edges. Square better?

Feedpoint - I've read the feedpoint can affect the directivity? I'm near Lincoln, Nebraska so I'd think I'd prefer to orientate towards Europe?

Size - I don't have to stay over the house, I could get into the back yard. I could get a full 80 meter loop there. Though I couldn't fit a 160 meter loop, would there be an advantage to setting the corner posts somewhat further apart to allow the loop to be made a tad bigger than 80 meters requires? Of course smaller loops could also be made within the corners, so being able to over/under size a bit may help with tuning?.

--
S. R. 'Skip' Guenter, K5SRG
3905cc 40m SSB Late Coord
Alt Dir, 5th Call Area

4712. RE: [SkyWires] horizontal loop resonence

Yahoo group: SkyWires
Date: 2015-06-11 21:35:27 UTC
From: Rick - DJ0IP / NJ0IP
Topic: 4657 Message: 4712

Resonance. (that’s all)

It is a myth that resonant antennas radiate better than non-resonant antennas.
In fact we often intentionally make antennas non-resonant so as to get more gain or a better match.

Especially with openwire-fed, center-fed dipoles, we often intentionally make them a bit longer or shorter than resonance so as to avoid the high impedance on even harmonic bands. That doesn't make them work less efficiently, but it does make them much easier to match.

Wish I had a dollar for every ridiculous myth floating around!

73 - Rick, DJ0IP
(Nr. Frankfurt am Main)

From: SkyWires@yahoogroups.com [mailto:SkyWires@yahoogroups.com]
Sent: Thursday, June 11, 2015 11:25 PM

What am I missing here by not having a resonant horizontal loop?

73,

Evan, K9SQG

4713. AW: [SkyWires] horizontal loop resonence

Yahoo group: SkyWires
Date: 2015-06-11 21:38:10 UTC
From: siegfried jackstien
Topic: 4657 Message: 4713

Me too (wishing to get a euro for every myth)

Dg9bfc

Sigi

> -----Ursprüngliche Nachricht-----
> Von: SkyWires@yahoogroups.com [mailto:SkyWires@yahoogroups.com]
> Gesendet: Donnerstag, 11. Juni 2015 21:35
> An: SkyWires@yahoogroups.com
> Betreff: RE: [SkyWires] horizontal loop resonence
>
>
>
> Resonance. (that□s all)
>
> It is a myth that resonant antennas radiate better than non-resonant
> antennas.
> In fact we often intentionally make antennas non-resonant so as to get
> more gain or a better match.
>
> Especially with openwire-fed, center-fed dipoles, we often intentionally
> make them a bit longer or shorter than resonance so as to avoid the high
> impedance on even harmonic bands. That doesn't make them work less
> efficiently, but it does make them much easier to match.
>
> Wish I had a dollar for every ridiculous myth floating around!
>
> 73 - Rick, DJ0IP
> (Nr. Frankfurt am Main)
>
> --------------------------------
> From: SkyWires@yahoogroups.com [mailto:SkyWires@yahoogroups.com]
> Sent: Thursday, June 11, 2015 11:25 PM
>
> What am I missing here by not having a resonant horizontal loop?
>
> 73,
>
> Evan, K9SQG
>
>
>
>

4714. Re: Military Surplus Fiberglass Poles - WHERE are they?

Yahoo group: SkyWires
Date: 2015-06-11 22:33:26 UTC
From: slr_65@...
Topic: 4701 Message: 4714

Thanks guys - I'm glad it wasn't just me not being able to find these on fleaBay, though I'm disappointed they are no longer commonly available.

4715. Re: [SkyWires] horizontal loop resonence

Yahoo group: SkyWires
Date: 2015-06-11 22:44:12 UTC
From: Skip Guenter
Topic: 4657 Message: 4715

Honestly these ARE questions:
What about ability to bypass tuner on the tuned band / Freq? Isn't that good for a bit of signal? Especially when coax fed?

On 06/11/2015 04:35 PM, 'Rick - DJ0IP / NJ0IP' Rick@... [SkyWires] wrote:
>
> Resonance. (that’s all)
>
> It is a myth that resonant antennas radiate better than non-resonant
> antennas.
> In fact we often intentionally make antennas non-resonant so as to get
> more gain or a better match.
>
> Especially with openwire-fed, center-fed dipoles, we often
> intentionally make them a bit longer or shorter than resonance so as
> to avoid the high impedance on even harmonic bands. That doesn't make
> them work less efficiently, but it does make them much easier to match.
>
> Wish I had a dollar for every ridiculous myth floating around!
>
> 73 - Rick, DJ0IP
> (Nr. Frankfurt am Main)
>
> ------------------------------
> From: SkyWires@yahoogroups.com [mailto:SkyWires@yahoogroups.com]
> Sent: Thursday, June 11, 2015 11:25 PM
>
> What am I missing here by not having a resonant horizontal loop?
>
> 73,
>
> Evan, K9SQG
>
>

--
S. R. 'Skip' Guenter, K5SRG
/3905cc 40m SSB Late Coord
Alt Dir, 5th Call Area
/

4716. AW: [SkyWires] horizontal loop resonence

Yahoo group: SkyWires
Date: 2015-06-11 23:07:04 UTC
From: siegfried jackstien
Topic: 4657 Message: 4716

That is why I tuned my loop (cut to resonance) with the tuner bridged ...

Not that the signal is different when I use the tuner ... but it is just not needed (that half of a db loss would nobody notice)

... the main advantage is ... if you wanna use an amp (but do not have a high power tuner)

If antenna is matched then no need for a tuner (and a slight mismatch can be tuned away with the pi section of a tube amp)

Dg9bfc

Sigi

> -----Ursprüngliche Nachricht-----
> Von: SkyWires@yahoogroups.com [mailto:SkyWires@yahoogroups.com]
> Gesendet: Donnerstag, 11. Juni 2015 22:44
> An: SkyWires@yahoogroups.com
> Betreff: Re: [SkyWires] horizontal loop resonence
>
>
>
> Honestly these ARE questions:
> What about ability to bypass tuner on the tuned band / Freq? Isn't that
> good for a bit of signal? Especially when coax fed?
>
>
> On 06/11/2015 04:35 PM, 'Rick - DJ0IP / NJ0IP' Rick@dj0ip.de [SkyWires]
> wrote:
>
>
>
>
> Resonance. (that□s all)
>
> It is a myth that resonant antennas radiate better than non-resonant
> antennas.
> In fact we often intentionally make antennas non-resonant so as to
> get more gain or a better match.
>
> Especially with openwire-fed, center-fed dipoles, we often
> intentionally make them a bit longer or shorter than resonance so as to
> avoid the high impedance on even harmonic bands. That doesn't make them
> work less efficiently, but it does make them much easier to match.
>

> Wish I had a dollar for every ridiculous myth floating around!
>
> 73 - Rick, DJ0IP
> (Nr. Frankfurt am Main)
>
> ---
> From: SkyWires@yahoogroups.com [mailto:SkyWires@yahoogroups.com]
> Sent: Thursday, June 11, 2015 11:25 PM
>
> What am I missing here by not having a resonant horizontal loop?
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> 73,
>
> Evan, K9SQG
>
>
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>
> --
> S. R. 'Skip' Guenter, K5SRG
> 3905cc 40m SSB Late Coord
> Alt Dir, 5th Call Area
>
>
>

4717. Re: [SkyWires] Re: Military Surplus Fiberglass Poles - WHERE are they?

Yahoo group: SkyWires
Date: 2015-06-11 23:55:35 UTC
From: Steven KA9MOT
Topic: 4701 Message: 4717

I have 48 of them in my garage. You'll see them put to good use on my QRZ page.
Don't put screws in them. You'll just weaken them. SS radiator clamps will hold them.

Steve KA9MOT
On Jun 11, 2015 5:33 PM, "slr_65@... [SkyWires]" <SkyWires@yahoogroups.com> wrote:

>
>
> Thanks guys - I'm glad it wasn't just me not being able to find these on
> fleaBay, though I'm disappointed they are no longer commonly available.
>
>

4718. Re: [SkyWires] horizontal loop resonance

Yahoo group: SkyWires
Date: 2015-06-12 03:49:19 UTC
From: Evan Rolek
Topic: 4657 Message: 4718

Fellow enthusiasts,

Interesting comments about resonance, or lack of it, with a horizontal loop.

I don't mind a little loss through an antenna tuner. With window line, I'm still better off than with coax. Plus the tuner significantly reduces harmonics when transmitting, and affords some attenuation of other, undesirable signals within the band of interest on receive. The noise reduction with the loop is a big benefit for me. For my operating needs, I'm content with my installation but still strive for improvements from time to time.

So what is good for my installation and needs might not work for others. But it is still nice to exchange ideas, that's one way we can learn,

73,

Evan, K9SQG

4719. D-I-Y Mast Notes

Yahoo group: SkyWires
Date: 2015-06-12 04:00:11 UTC
From: slr_65@...
Topic: 4719 Message: 4719

I've obviously been looking at mast options and I ran across this site last night.
http://www.eham.net/articles/33609
I'll save you from having to read through it all.
*) Basically it's not really a push up" mast, it's a "stackable" mast along the lines of the now hard to find military fiberglass masts.
*) He's using 1-1/2" EMT electrical conduit.
*) He's coupling it with some close fitting Drawn Over Mandrel tubing, the couplers extend onto each section about 5".
*) If you use 10' sections he installs a 6" stiffener in the middle of the length, else they tend to bend there.
*) He suggests just cutting the sections into 5' pieces and coupling them.

Interesting, but the DOM tubing is expensive enough to make other options more attractive.

I found another web page referencing this one, I thought I bookmarked it, but darned if I can find it again even after a long search of my history...vision impairment and LOTS of searches don't make it too easy to locate a specific page again!

Oh well, the gist of the second page was:
*) They also used 1-1/2" EMT.
*) They also cut it into 5' sections, mostly for ease of assembly, but also mentioned it was a bit stronger when coupled smaller sections were used.
*) They used the normal EMT connectors though. They are shorter, but they said they worked fine.
*) They JB Welded one connector on each section.
*) They used the normal set screw and then also drilled another hole through the connecter and section and would tap it and install a machine screw.
*) They were using the same guy wire plates as the first article.
*) They guyed it every 10'

The EMT in town is $12 a 10' section, so $42 per 35'.
The couplers are about $2 each, so $12 for couplers.
So $54 plus I haven't priced JB Weld or the guy wire rings. Guy wire costs too, plus you're tripping over them.

I don't think I'm leaning this way, I'm thinking the tilt up looks better, but I thought I'd write this up a bit in case anyone else is looking for something inexpensive and portable and has found the old military fiberglass poles are no longer out there.

Steve KA0NEB

4720. RE: [SkyWires] horizontal loop resonance

Yahoo group: SkyWires
Date: 2015-06-12 08:25:31 UTC
From: Rick - DJ0IP / NJ0IP
Topic: 4657 Message: 4720

GM Evan,

Provided you make intelligent matchbox choices, then you are right.
And as your closing statement points out, the mileage definitely does vary from one installation to the next.

There are many different matchbox technologies and all “claim” to be the best thing since sliced bread. Many can even show at least one example where that may even be true.

The truth is, we have a diverse portfolio of antenna applications and the matching requirements are all over the map. The single biggest problem we have today is "the mindset of the operator."

Seems Joe Ham thinks he ought to be able to do everything with just one matchbox, if he buys a good one. NOT! No matchbox on the planet can do that.

If we would remove the 160m band and the 10m and 12m band from the scenario, then we could come close for many applications (not all). But it is impossible to build a matchbox that will match all impedances (from 5 Ohms to 4000 Ohms) on all bands.

Different strokes for different folks.
Different matchbox technologies for different applications.

So it is wrong to generalize and say that a matchbox has low loss or high loss.
The right matchbox will have low loss and the wrong matchbox will have high loss.

Almost all matchboxes have a “sweet spot” where they perform efficiently.
They match anything within that range with so little loss that the QSO partner at the other end will never notice any difference.”

But they also ALL have weak spots where the efficiency sinks like a rock, and in some cases, can eat up over 50% of the power.

The ARRL has been testing antenna tuners for the past 15 years to determine their matching range and efficiency. Their test results were published in QST during this time period.

Each test typically compares 3 to 5 similar matchboxes and the results are published in tables.
These table clearly show the sweet spot for each matchbox.

I spent countless hours going through all of these test reviews and summarizing the results into one MONSTER Excel spread sheet. This gives the viewer an overview of most of the ATUs on the market.

You will find this file (Matchbox Shoot-Out) on my web site, here:
http://www.dj0ip.de/antenna-matchboxes/matchbox-shoot-out/

NOTE: This spreadsheet is no substitute for reading the original QST review. It is just a starting point to create your own short list of ATUs that might be what you are looking for. Once you have your list of 3 or 4 tuners, THEN read the original review and make an intelligent choice.

About the dumbest thing anyone can do is choose a matchbox because it matches the transceiver line or because Dave down the street has one and likes it. That's about like choosing your XYL based on the color of clothes she was wearing the day you met her. ;-)

Do your own due diligence and judge products on their ability to solve your own requirements, not by how popular they on eham.

73 - Rick, DJ0IP
(Nr. Frankfurt am Main)

From: SkyWires@yahoogroups.com [mailto:SkyWires@yahoogroups.com]
Sent: Friday, June 12, 2015 5:49 AM
To: SkyWires@yahoogroups.com
Subject: Re: [SkyWires] horizontal loop resonance

Fellow enthusiasts,

Interesting comments about resonance, or lack of it, with a horizontal loop.

I don't mind a little loss through an antenna tuner. With window line, I'm still better off than with coax. Plus the tuner significantly reduces harmonics when transmitting, and affords some attenuation of other, undesirable signals within the band of interest on receive. The noise reduction with the loop is a big benefit for me. For my operating needs, I'm content with my installation but still strive for improvements from time to time.

So what is good for my installation and needs might not work for others. But it is still nice to exchange ideas, that's one way we can learn,

73,

Evan, K9SQG

4721. RE: [SkyWires] Steve's install strategy, thinking out loud

Yahoo group: SkyWires
Date: 2015-06-12 09:08:16 UTC
From: Rick - DJ0IP / NJ0IP
Topic: 4657 Message: 4721
Attachments: 1 described; binary payloads are missing from this source WARC

Skip,

I have copied Sigi on this reply. Let’s keep him in the loop! (pun intended – hi)

He’s my sanity check because sometimes I make mistakes too.

First of all, it will make no difference if you have 3’ or 6’ of coax between the Balun and the tuner.

Just be sure it is of the best quality you can get.

I have attached a 2-page PDF.

Let’s begin on page 2.

It shows your QTH (I hope) and two scales in meters.

My Googlemaps shows meters.

Start by defining your property lines.

For instance, on the front side does your property end at about 40m or 50m?

On the east side, does it end at 40m?

Once we know that, we can add property lines to page 1 and then draw your antenna in.

Then we proceed by you telling us what direction your main interest is.

I think you said WNW to due East, which would include North. Not sure what you might work to the north, other locals on 80 and for that it makes no difference where we place the feedpoint.

We’ll continue one step at a time.

73 - Rick, DJ0IP

(Nr. Frankfurt am Main)

From: SkyWires@yahoogroups.com [mailto:SkyWires@yahoogroups.com]
Sent: Thursday, June 11, 2015 10:21 PM
To: SkyWires@yahoogroups.com
Subject: Re: [SkyWires] Steve's install strategy, thinking out loud

Rick,

OK, Let's assume I can override the urge to use what's in the tuner ;-) and mount the model 1171 near my coax pass thru in the shack and jumper to the pass thru with 3' of RG-213 or RG8x. Eliminating the hole in the wall I was about to drill/cut also!

The K5RCD site tells me to calc length to lowest possible frequency to be used (3.55Mhz) and then subtract 4% for lower velocity factor of the insulated wire. I end up with just a touch under 272' of wire. So that's what I'll try to hang. I originally looked at getting 510' of wire up (top of 160m) but just can't do it with house and power drop located in my space. I probably could get 385' of wire up but unless you say different I'm going with about 272'. I have a NA4RR hex beam up above the garage/shack here so I doubt I will use this loop for anything higher than 40m but one never knows.

Any thoughts on feeding at the middle of the East side (w/ ~55' of window line, no metal poles) vs the NE corner (~30' of same up to a pulley on the metal pole the Hex is on)?

Unfortunately my shack location is in the NE corner of my lot and except for the occasional Caribbean or Mexican contact all of where I need it to work is WNW clockwise to due East (I'm thinking best feed corner would be diagonally opposite from the shack) 100ft away and not very practical). Does feeding it in the middle of the East leg (going N to S) make it stronger across the rectangle to the West vs stronger to the SW feeding it in NE corner? Not much of anything to the SW of me. Are the differences too small to worry about?

Auch mein Freund,
Thanx again for the great info and support.

Skip

On 06/11/2015 02:07 PM, 'Rick - DJ0IP / NJ0IP' Rick@... [SkyWires] wrote:

Hello Skip,

The 80m loop sounds good. No, it sounds GREAT.

When running openwire, it makes absolutely no difference whether you tune it for 3.6 or 3.9 MHz.
The QSO partner at the other end will notice about as much as you and I notice when a sack of rice falls over in China.

Performance on 40m is going to be outstanding. As I said earlier, a 2 wl loop is one of my favorite antennas overall.

With Coax it would be a different story. Here I would always choose a resonate frequency 3.6 MHz or even lower (i.e. 3.55 MHz) so that the harmonics fall within the upper ham bands. With 3.9 MHz, all of its harmonics are outside of the higher bands. The SWR may be a bit high on 75m, so use a tuner.

The AT2K is an outstanding tuner, but I recommend not using its built-in balun.
In later models, Palstar removed the balun and went to external baluns.
They offer both a 1:1 and 4:1 external balun but the 1:1 is the better choice.

The very best kind of balun to ALWAYS use when feeding openwire fed antennas is a 1:1 Guanella balun.
I know most people believe a 4:1 is better but it’s not. That is a myth, nothing more.
For the following two reasons:

>1. The number one most important job of the balun is to keep common mode current out of the matchbox. With a perfect 1:1 SWR, the common mode impedance (CMI) of a 1:1 Guanella and a 4:1 Guanella Balun are close to being the same. As the SWR rises, the CMI of the 4:1

quickly goes to hell in a hand basket, whereas the 1:1 marches on like a super trooper, maintaining high CMI.

>2. Except for 160m, your AT2K has less than 10% loss with impedances from 12.5 Ohms up to over 1600 Ohms. There is zero benefit in using a 4:1 transformer in front of it to drop the impedance.

As for "which external balun", well I wind my own but if I were to buy one, the only one I would buy is the Balun Designs Model 1171. It's not cheap, but neither was the Palstar or any other quality product.
See: http://www.balundesigns.com/model-1171-1-1-atu-current-balun-1-5-54-mhz-5kw/?page_context=category <http://www.balundesigns.com/model-1171-1-1-atu-current-balun-1-5-54-mhz-5kw/?page_context=category&faceted_search=0> &faceted_search=0

It is important for people to realize that:

>1. there are many different kinds of baluns because we have so many different applications for them.

>2. There is an awful lot of crap being offered for sale and many times the people selling them have no clue what they are talking about. So do your own due dilligance.

>3. One of the best ways to shoot yourself in the foot is to skimp on the balun. Not only can it end up being lossy and eating half your power, it can also be the cause of many unwanted side effects, such as TVI, hot mics, etc., simply because it is not doing the job it was supposed to do - even though it cost a lot of money. Sometimes that's because the product itself is crap, but often it is a good product but not the right one for the job at hand.

With a good external balun Skip, you're going to be very pleased with your loop.

Tschuess mein Friend!

73 - Rick, DJ0IP
(Nr. Frankfurt am Main)

From: SkyWires@yahoogroups.com [mailto:SkyWires@yahoogroups.com]
Sent: Thursday, June 11, 2015 8:14 PM
To: SkyWires@yahoogroups.com
Subject: Re: [SkyWires] Steve's install strategy, thinking out loud

Rick,

Thank you VERY much for the tuner sheet and the good info.

I'm about to string up a 75m/80m loop (insulated 14awg stranded copper) and side or corner feed it with 450 ohm window line directly (thru the wall) into the back of my Palstar AT2K (old one with a 4:1 current balun in it).

It's PRIMARY function will be to replace the 75m coil loaded section of my Alpha-Delta DX-CC dipole for use on 3.9MHz SSB. However I occasionally run, via tuner, down on the digi portion of the band ~3.58MHz.

It would also be a REAL bonus if the loop was also good on 7.19Mhz (my primary band segment) to supplement the dipole.

The loop will have a high corner (possible feed point) of around 10.5m with it slopping away to ~7.2m at the other 3 corners and will be slightly rectangular with it longer E-W than N-S. I could also feed it at 7.4m high on the east leg that's running N to S due to it's close proximity to an unused pulley I have in a tree there.

Finally to the questions. Should I cut this for 3.58MHz or 3.9Mhz considering it's intended mission? Anything to consider to increase odds of it out performing my dipole on 7.19Mhz? Any other suggestions?

Tschuess, Skip

On 06/11/2015 07:18 AM, 'Rick - DJ0IP / NJ0IP' Rick@... [SkyWires] wrote:

Steve

The trees I’m speaking of are just trees with bark and limbs removed.
They may be painted or oiled but they are not pressure treated utility poles.

I live in Bavaria (even though it is near Frankfurt) and here we have a tradition of raising a May Tree (Maibaum) on the first of May, each year. Every city, town or village does that. We can buy trees untreated or already painted in white and blue stripes.

Here is what such an event looks like (hope the link works):
http://www.sueddeutsche.de/muenchen/pflicht-fuer-bewohner-der-stadt-was-echte-muenchner-im-fruehling-machen-1.1309161-6

I understand you are vision impaired but I don't know to what extent.
If you are unable to see the picture, perhaps someone can describe it to you.

Obviously your trees would be a wee bit shorter (hi).
As you can tell by the picture, the boys have their act together.
They put these up by hand; pure manpower, using only sticks to push it up.

Lots of people put these in their yard, but of course mostly only about 30 ft. high.

Now to the ELECTRICAL PART:

If you wish to feed your loop with coax, it is probably better to have it very close to resonance on either 80m or 40m.
This means about 275 ft. or 137 ft. This keeps the impedance on harmonic bands close to 100 to 150 Ohms. You can then use a 2.5:1 or 4:1 balun to match them.

If you are feeding with Openwire feedline and have a good antenna tuner, then having it resonant on the ham band is not so important.

RADIATION PATTERN:

I have only built and used square loops. I have never made mine in a triangle or some other shape.

>>>On the fundamental, you get a fairly round 360 degrees radiation pattern, and covering medium to high angle radiation angles.

>>>On the second harmonic (i.e. 40m for an 80m resonant full wave loop), you get 4 major lobes, one off of each corner. Its high angle radiation is reduced a lot but still fairly

good in practice. There is also good radiation off the sides, though not so strong as off of the 4 corners. These are fairly wide lobes. I find a 2 wl long loop to be one of the best omni-directional antennas going.

>>>On the 4th harmonic and higher, as well as the 3rd harmonic for a 40m loop, the major lobes are horizontally a bit narrower and vertically, radiate much lower, which is outstanding for DX. HERE IN EUROPE THIS IS BENEFICIAL!

If I build my 80m loop with its wires running exactly North-South and East-West, then on the higher bands, I get:
>>>a NW lobe beaming Stateside
>>>a NE lobe beaming JA and Northern Pacific
>>>a SW lob beaming Long Path to VK/ZL
>>>a SE lobe beaming the Middle East

That’s about as good as it gets, short of having a rotary beam!

Of course any object in the vicinity of the antenna might affect its radiation pattern.

Since I have no experience with a triangle loop, I won't bother you with my speculation on how it might work. I prefer to talk on antennas with which I have a lot of experience.

If I were you and had the space, I would try a full wl on 80m. Something like 275 ft. Everett, N8CNP just put one up and I put up the details of his loop on my web site.
See: www.dj0ip.de/loop-antennas/8-band-horizontal-loop/

73 - Rick, DJ0IP
(Nr. Frankfurt am Main)

From: SkyWires@yahoogroups.com [mailto:SkyWires@yahoogroups.com]
Sent: Thursday, June 11, 2015 9:01 AM
To: SkyWires@yahoogroups.com
Subject: RE: [SkyWires] Steve's install strategy, thinking out loud

Hi Rick & All,

Yeah, I'm viewing it all as antenna cost and if you figure the cost per band, per year of use, it'll amatorize.

I'm still playing with my too low loop and won't really know much until I get the stand alone balun to play with, but a few questions still lurk.

Height still is a question, what is the minimum workable? I think I do want 80 meter as I can tune to it at my current wire length and I was surprised it was quite active later in the evening, seemed like friendly groups, the one group that tolerated my weak intrusion were very friendly and patient pulling me out of the background noise. 34' is the highest UPS shippable mast I can find, but the tilt up masts from sch 40 pipe aren't off the table either.

Wooden poles - are you talking simply trees with the branches removed, or pressure treated utility poles? What diameter?

Shape - my current loop is a rectangle about 65' on the long edges and 30' on the short edges. Square better?

Feedpoint - I've read the feedpoint can affect the directivity? I'm near Lincoln, Nebraska so I'd think I'd prefer to orientate towards Europe?

Size - I don't have to stay over the house, I could get into the back yard. I could get a full 80 meter loop there. Though I couldn't fit a 160 meter loop, would there be an advantage to setting the corner posts somewhat further apart to allow the loop to be made a tad bigger than 80 meters requires? Of course smaller loops could also be made within the corners, so being able to over/under size a bit may help with tuning?.

--
S. R. 'Skip' Guenter, K5SRG
3905cc 40m SSB Late Coord
Alt Dir, 5th Call Area

4722. RE: [SkyWires] horizontal loop resonence

Yahoo group: SkyWires
Date: 2015-06-12 09:36:26 UTC
From: Rick - DJ0IP / NJ0IP
Topic: 4657 Message: 4722

Those are apples with oranges, Skip.

I do not try to feed non-resonant loops with coax.
If I use a non-resonant loop, then it is fed with openwire.

I only use coax with a resonant antenna.

With resonant antennas, a *good* Balun, and less than 100 ft. of *good*
coax, the loss can be just as low as with openwire.

A *good* tuner will not have enough loss to affect your performance when
measured on the S-meter at the other end of the QSO.

The biggest problem here is, often people don't use the right tuner for this
job. When their signal is down, they blame it on "tuners in general" when
the problem is, they failed to do their due diligence in their selection of
tuners. I equate this one to the soccer mom who buys a Porsche, then
complains because it doesn't have room for the soccer team. Should have
bought a mini-van!

73 - Rick, DJ0IP
(Nr. Frankfurt am Main)

> -----Ursprüngliche Nachricht-----
> Von: SkyWires@yahoogroups.com [mailto:SkyWires@yahoogroups.com]
> Gesendet: Donnerstag, 11. Juni 2015 22:44

>
>
> Honestly these ARE questions:
> What about ability to bypass tuner on the tuned band / Freq? Isn't that
> good for a bit of signal? Especially when coax fed?
>
>

4723. RE: [SkyWires] Steve's install strategy, thinking out loud [1 Attachment]

Yahoo group: SkyWires
Date: 2015-06-12 09:37:30 UTC
From: Rick - DJ0IP / NJ0IP
Topic: 4657 Message: 4723

Ooops, sorry guys; obviously that reply was not meant for the entire group.

Didn't mean to spam everybody.

73 - Rick, DJ0IP
(Nr. Frankfurt am Main)

From: SkyWires@yahoogroups.com [mailto:SkyWires@yahoogroups.com]
Sent: Friday, June 12, 2015 11:08 AM
To: SkyWires@yahoogroups.com
Cc: 'siegfried jackstien'
Subject: RE: [SkyWires] Steve's install strategy, thinking out loud [1 Attachment]

[Attachment(s) from Rick - DJ0IP / NJ0IP included below]
Skip,

I have copied Sigi on this reply. Let’s keep him in the loop! (pun intended – hi)
He’s my sanity check because sometimes I make mistakes too.

4724. AW: [SkyWires] horizontal loop resonance

Yahoo group: SkyWires
Date: 2015-06-12 13:46:40 UTC
From: siegfried jackstien
Topic: 4657 Message: 4724

> About the dumbest thing anyone can do is choose a matchbox because it
> matches the transceiver line or because Dave down the street has one and
> likes it. That's about like choosing your XYL based on the color of
> clothes she was wearing the day you met her. ;-)
>

It was jeans and a red t-shirt ...grin

Dg9bfc

Sigi

4726. Re: [SkyWires] horizontal loop resonance

Yahoo group: SkyWires
Date: 2015-06-12 15:06:21 UTC
From: Evan Rolek
Topic: 4657 Message: 4726

Rick and Fellow Enthusiasts,

So, so correct with what you said below. The QST test results provide a lot of useful insight! Armed with that information, as well as knowing the resistive and reactive components of one's own antenna for the bands of interest, permits one to make an informed decision about which tuners might be acceptable. The specs from the manufacturers border on useless because they rarely mention the inductive and capacitive reactances that the tuner can match, they typically only mention the resistive component.

Too, there is a lot of myth and magic out there along with out and out disinformation. When a statement like "can match a 10:1 SWR" is made, does that mean that it can match a 5 ohm and a 500 ohm load? Typically, matching the low impedances is where a lot of tuners fall down. In addition, there is a lot of hearsay and rumor like "the Johnson Matchbox has very limited matching range". Well, just judging by what the manufacturers say about their respective tuners, yes. BUT note that the Johnson Matchbox was DESIGNED for higher impedance antennas usually fed with open wire line. For my horizontal loops the impedances fall within 110 to 250 ohms resistive components for the bands that I operate and, even given the reactive components, the Johnson KW Matchbox is more than up to the task for matching the antennas! So the issue is, will any given tuner be suitable for my particular antennas on the bands that one operates? And as Rick substantiates, one size does not fit all. Those QST (and ARRL book dealing with just antenna tuners) test figures are great information that, well, you won't find in the ads. For those that prefer the advertising hype, there is plenty out there, hi hi. Thus the decision can be made easily and quickly by using an emotional perspective and just believe what the ads say. And who knows, one might be lucky enough to find out that it works for their particular installation. I'm somewhat boring and would rather make decisions about antenna tuners in a more informed manner by looking at the ARRL's data.

73,

Evan, K9SQG

-----Original Message-----
From: 'Rick - DJ0IP / NJ0IP' Rick@... [SkyWires] <SkyWires@yahoogroups.com>
To: SkyWires <SkyWires@yahoogroups.com>
Sent: Fri, Jun 12, 2015 4:25 am
Subject: RE: [SkyWires] horizontal loop resonance

GM Evan,

Provided you make intelligent matchbox choices, then you are right.
And as your closing statement points out, the mileage definitely does vary from one installation to the next.

There are many different matchbox technologies and all “claim” to be the best thing since sliced bread. Many can even show at least one example where that may even be true.

The truth is, we have a diverse portfolio of antenna applications and the matching requirements are all over the map. The single biggest problem we have today is "the mindset of the operator."

Seems Joe Ham thinks he ought to be able to do everything with just one matchbox, if he buys a good one. NOT! No matchbox on the planet can do that.

If we would remove the 160m band and the 10m and 12m band from the scenario, then we could come close for many applications (not all). But it is impossible to build a matchbox that will match all impedances (from 5 Ohms to 4000 Ohms) on all bands.

Different strokes for different folks.
Different matchbox technologies for different applications.

So it is wrong to generalize and say that a matchbox has low loss or high loss.
The right matchbox will have low loss and the wrong matchbox will have high loss.

Almost all matchboxes have a “sweet spot” where they perform efficiently.
They match anything within that range with so little loss that the QSO partner at the other end will never notice any difference.”

But they also ALL have weak spots where the efficiency sinks like a rock, and in some cases, can eat up over 50% of the power.

The ARRL has been testing antenna tuners for the past 15 years to determine their matching range and efficiency. Their test results were published in QST during this time period.

Each test typically compares 3 to 5 similar matchboxes and the results are published in tables.
These table clearly show the sweet spot for each matchbox.

I spent countless hours going through all of these test reviews and summarizing the results into one MONSTER Excel spread sheet. This gives the viewer an overview of most of the ATUs on the market.

You will find this file (Matchbox Shoot-Out) on my web site, here:
http://www.dj0ip.de/antenna-matchboxes/matchbox-shoot-out/

NOTE: This spreadsheet is no substitute for reading the original QST review. It is just a starting point to create your own short list of ATUs that might be what you are looking for. Once you have your list of 3 or 4 tuners, THEN read the original review and make an intelligent choice.

About the dumbest thing anyone can do is choose a matchbox because it matches the transceiver line or because Dave down the street has one and likes it. That's about like choosing your XYL based on the color of clothes she was wearing the day you met her. ;-)

Do your own due diligence and judge products on their ability to solve your own requirements, not by how popular they on eham.

73 - Rick, DJ0IP
(Nr. Frankfurt am Main)

From: SkyWires@yahoogroups.com [mailto:SkyWires@yahoogroups.com]
Sent: Friday, June 12, 2015 5:49 AM

To: SkyWires@yahoogroups.com
Subject: Re: [SkyWires] horizontal loop resonance

Fellow enthusiasts,

Interesting comments about resonance, or lack of it, with a horizontal loop.

I don't mind a little loss through an antenna tuner. With window line, I'm still better off than with coax. Plus the tuner significantly reduces harmonics when transmitting, and affords some attenuation of other, undesirable signals within the band of interest on receive. The noise reduction with the loop is a big benefit for me. For my operating needs, I'm content with my installation but still strive for improvements from time to time.

So what is good for my installation and needs might not work for others. But it is still nice to exchange ideas, that's one way we can learn,

73,

Evan, K9SQG

4727. RE: [SkyWires] Steve's install strategy, thinking out loud [1 Attachment]

Yahoo group: SkyWires
Date: 2015-06-12 22:28:28 UTC
From: slr_65@...
Topic: 4657 Message: 4727

I've been looking at options to get the antenna up higher, it's a perplexing problem to do on a budget...reminds me of a cartoon I saw once, everyone was standing around looking at something and the caption read "I don't know the answer, but I certainly admire the problem!".

4728. Experience with 295' horizontal loop

Yahoo group: SkyWires
Date: 2015-06-13 13:24:09 UTC
From: James Allender
Topic: 4728 Message: 4728

Greetings to all. I have really enjoyed all of the recent posts concerning horizontal loop antennas, tuners, baluns, etc. I thought I would share some simple experiences that I have had with this antenna.

I have a 295' or so loop strung around my back yard, fed with 450 ohm line, connected to a little Elecraft T1 tuner, and then into my K2 rig, running never more than 12 w or so. The loop has four sort of equal sides; it is hung on little ropes and pulleys from "trees of opportunity." Two of the corners are about 15' high, the other two are only about 8' high. (I do live on a hill, though.)

I am surprised at how well this setup works. It tunes easily on all bands from 80 to 10 m. I have used it on 40, 30, 20, 17, and 15 m. On 20 m it is comparable to and sometimes better than my 20 m inverted vee with its center elevation at about 35'.

Contacts through the U.S. are no problem on 20 and 15. Europe and central Asia are workable. Far East and Africa - not so much, but that is partly due to my low power. Evening contacts on 40 and 30 are easy enough.

So, for me, this antenna is inexpensive, easy to construct, works on multiple bands, and surprises me with good performance, it spite of its low elevation. I hope my experience will encourage others to give this setup a try!

4729. RE: [SkyWires] Steve's install strategy, thinking out loud [1 Attachment]

Yahoo group: SkyWires
Date: 2015-06-13 18:58:54 UTC
From: slr_65@...
Topic: 4657 Message: 4729

Still looking at support options. I really think I'm stuck with the Rohn H-50 or something similar.

Many, many posts on the net where guys are doing what I want to do - ground mounted, supported at a first story eave and then up unguyed another 10 feet for sure, sometimes 15 to 20 but they lower them when not in use or bad weather is approaching. They are of course running wire antennas only. Guying is needed for anything more, and even a good idea for wire antennas and I could get a couple on.

This is with the H-50, a truck ship only 50 foot model and since it's only being raised about half or a little more, the inner tubes are reinforcing the outter tubes, so it's really increasing the strength.

The UPS shippable model can only get to 34 feet fully extended, so run it at half and you're only looking at 17' or so with double strength.

Rohn lists two distributors that are 200 miles away from me, I think I'll see if they sell direct and if so then that's about $60 in gas and a few hours of a grumpy wife who probably didn't want to blow a day on a road trip. Buy four and it's only $15 extra each for delivery....if the base price is good.

Still an expensive option, but there's just no high spots on this property.

The tilt ups would be nice, but not portable and not cheap either. with these if we have to move they can come easily.

DIY masts may be doable, I found one guy who does his with EMT....he just splits a section of it and uses it to create the connectors and it works well, but something that doesn't telescope could be a hassle to erect.

Still kicking around options, but it's looking like a beefy telescoping mast is the best option. Relatively portable, relatively easy to mount, easy enough to extend / retract....just expensive...I gures it's a one time cost though, so just amortorize it and go on.

4730. HO-HO-HOH by L.B. Cebik file

Yahoo group: SkyWires
Date: 2015-06-13 23:15:04 UTC
From: TOM MARTIN
Topic: 4730 Message: 4730

Hello, if anybody would like The Horizontally oriented, horizontally polarized large loop antenna file, by L.B. Cebik W4RNL, send me an email and I will send you the file.

The file is an article written some time back, but if your into building loop antennas, it is a wealth of information. But be warned if you print it out, it is many pages long.

Tom Martin, W7TJM (formally KA7SFL)

4731. Re: [SkyWires] HO-HO-HOH by L.B. Cebik file

Yahoo group: SkyWires
Date: 2015-06-13 23:25:55 UTC
From: Everettsharp
Topic: 4730 Message: 4731

Tom,
Please send me a copy: everettsharp@...

Thanks
Everett N8CNP

Sent from my iPhone

> On Jun 13, 2015, at 6:15 PM, 'TOM MARTIN' thomas.martin@... [SkyWires] <SkyWires@yahoogroups.com> wrote:
>
> Hello, if anybody would like The Horizontally oriented, horizontally polarized large loop antenna file, by L.B. Cebik W4RNL, send me an email and I will send you the file.
>
>
>
> The file is an article written some time back, but if your into building loop antennas, it is a wealth of information. But be warned if you print it out, it is many pages long.
>
>
>
> Tom Martin, W7TJM (formally KA7SFL)
>
>

4732. Cebik file

Yahoo group: SkyWires
Date: 2015-06-14 00:35:19 UTC
From: WA8JXM
Topic: 4732 Message: 4732

Tom, please send me the Cebik file on horizontal large loop antennas.

thanks es 73,

Ken WA8JXM

4733. Re: [SkyWires] HO-HO-HOH by L.B. Cebik file

Yahoo group: SkyWires
Date: 2015-06-14 00:44:37 UTC
From: Everettsharp
Topic: 4730 Message: 4733

>
> Tom,
> Please send me a copy: everettsharp@...
>
> Thanks
> Everett N8CNP
>
> Sent from my iPhone
>
>> On Jun 13, 2015, at 6:15 PM, 'TOM MARTIN' thomas.martin@... [SkyWires] <SkyWires@yahoogroups.com> wrote:
>>
>> Hello, if anybody would like The Horizontally oriented, horizontally polarized large loop antenna file, by L.B. Cebik W4RNL, send me an email and I will send you the file.
>>
>>
>>
>> The file is an article written some time back, but if your into building loop antennas, it is a wealth of information. But be warned if you print it out, it is many pages long.
>>
>>
>>
>> Tom Martin, W7TJM (formally KA7SFL)
>>
>>

4734. Re: HO-HO-HOH by L.B. Cebik file

Yahoo group: SkyWires
Date: 2015-06-14 01:37:35 UTC
From: contact001@...
Topic: 4730 Message: 4734

Hi Tom,

I would like a copy of the file. A good address for me is
kk4wmx
@
skhowell.com

Thanks!

Nick Howell
KK4WMX

4735. Re: [SkyWires] HO-HO-HOH by L.B. Cebik file

Yahoo group: SkyWires
Date: 2015-06-14 02:37:12 UTC
From: Mick
Topic: 4730 Message: 4735

Tom,

If you don't mind adding me to the distribution list I would be grateful.

Thanks
Mick

W6MOB@...

> On Jun 13, 2015, at 4:15 PM, 'TOM MARTIN' thomas.martin@... [SkyWires] <SkyWires@yahoogroups.com> wrote:
>
> Hello, if anybody would like The Horizontally oriented, horizontally polarized large loop antenna file, by L.B. Cebik W4RNL, send me an email and I will send you the file.
>
>
>
> The file is an article written some time back, but if your into building loop antennas, it is a wealth of information. But be warned if you print it out, it is many pages long.
>
>
>
> Tom Martin, W7TJM (formally KA7SFL)
>
>

4736. Re: HO-HO-HOH by L.B. Cebik file

Yahoo group: SkyWires
Date: 2015-06-14 03:42:34 UTC
From: slr_65@...
Topic: 4730 Message: 4736

Hi Tom,

I'd like a copy, but don't really want to post my email here...it's on qrz.com though, just search for my call and roll over the email spot and it'll pop up, if it's not too much trouble.

Thanks!

Steve KA0NEB

4737. AW: [SkyWires] Re: HO-HO-HOH by L.B. Cebik file

Yahoo group: SkyWires
Date: 2015-06-14 12:40:40 UTC
From: siegfried jackstien
Topic: 4730 Message: 4737

But steve ... we all know your email (it is in every post included)

Dg9bfc

sigi

> -----Ursprüngliche Nachricht-----
> Von: SkyWires@yahoogroups.com [mailto:SkyWires@yahoogroups.com]
> Gesendet: Sonntag, 14. Juni 2015 03:43
> An: SkyWires@yahoogroups.com
> Betreff: [SkyWires] Re: HO-HO-HOH by L.B. Cebik file
>
>
>
> Hi Tom,
>
> I'd like a copy, but don't really want to post my email here...it's on
> qrz.com though, just search for my call and roll over the email spot and
> it'll pop up, if it's not too much trouble.
>
> Thanks!
>
> Steve KA0NEB
>
>

4738. New file uploaded to SkyWires

Yahoo group: SkyWires
Date: 2015-06-14 13:01:06 UTC
From: SkyWires@yahoogroups.com
Topic: 1641 Message: 4738

Hello,

This email message is a notification to let you know that
a file has been uploaded to the Files area of the SkyWires
group.

File : /HO-HO-HOHPLS.htm
Uploaded by : bronco1992_1982 <thomas.martin@...>
Description : Cebik large loop antenna

You can access this file at the URL:
https://groups.yahoo.com/neo/groups/SkyWires/files/HO-HO-HOHPLS.htm

To learn more about file sharing for your group, please visit:
https://help.yahoo.com/kb/index?page=content&y=PROD_GRPS&locale=en_US&id=SLN15398

Regards,

bronco1992_1982 <thomas.martin@...>

4739. New file uploaded to SkyWires

Yahoo group: SkyWires
Date: 2015-06-14 13:04:30 UTC
From: SkyWires@yahoogroups.com
Topic: 1641 Message: 4739

Hello,

This email message is a notification to let you know that
a file has been uploaded to the Files area of the SkyWires
group.

File : /LARGE LOOP/HO-HO-HOHPLS.htm
Uploaded by : bronco1992_1982 <thomas.martin@...>
Description : HTM file for large loop antenna

You can access this file at the URL:
https://groups.yahoo.com/neo/groups/SkyWires/files/LARGE%20LOOP/HO-HO-HOHPLS.htm

To learn more about file sharing for your group, please visit:
https://help.yahoo.com/kb/index?page=content&y=PROD_GRPS&locale=en_US&id=SLN15398

Regards,

bronco1992_1982 <thomas.martin@...>

4740. New file uploaded to SkyWires

Yahoo group: SkyWires
Date: 2015-06-14 13:07:25 UTC
From: SkyWires@yahoogroups.com
Topic: 1641 Message: 4740

Hello,

This email message is a notification to let you know that
a file has been uploaded to the Files area of the SkyWires
group.

File : /LARGE LOOP/HO-HO-HOHPLS.zip
Uploaded by : bronco1992_1982 <thomas.martin@...>
Description : all files for HO-HO-HOH antenna

You can access this file at the URL:
https://groups.yahoo.com/neo/groups/SkyWires/files/LARGE%20LOOP/HO-HO-HOHPLS.zip

To learn more about file sharing for your group, please visit:
https://help.yahoo.com/kb/index?page=content&y=PROD_GRPS&locale=en_US&id=SLN15398

Regards,

bronco1992_1982 <thomas.martin@...>

4741. My mistake

Yahoo group: SkyWires
Date: 2015-06-14 13:11:50 UTC
From: thomas.martin@...
Topic: 4741 Message: 4741

To all I promised the files for HO-HO-HOH antenna.
I have posted a zip file in the files area.

Please excuse my "senior moment

Tom / W7TJM

4743. Re: [SkyWires] New file uploaded to SkyWires

Yahoo group: SkyWires
Date: 2015-06-14 15:08:24 UTC
From: Skip Guenter
Topic: 1641 Message: 4743

Is a .pdf version with the diagrams embedded avail?

On 06/14/2015 08:01 AM, SkyWires@yahoogroups.com wrote:
>
>
> Hello,
>
> This email message is a notification to let you know that
> a file has been uploaded to the Files area of the SkyWires
> group.
>
> File : /HO-HO-HOHPLS.htm
> Uploaded by : bronco1992_1982 <thomas.martin@...>
> Description : Cebik large loop antenna
>
> You can access this file at the URL:
> https://groups.yahoo.com/neo/groups/SkyWires/files/HO-HO-HOHPLS.htm
>
> To learn more about file sharing for your group, please visit:
> https://help.yahoo.com/kb/index?page=content&y=PROD_GRPS&locale=en_US&id=SLN15398
>
> Regards,
>
> bronco1992_1982 <thomas.martin@...>
>
>

--
S. R. 'Skip' Guenter, K5SRG
/3905cc 40m SSB Late Coord
Alt Dir, 5th Call Area
/

4744. Re: [SkyWires] My mistake

Yahoo group: SkyWires
Date: 2015-06-14 15:19:01 UTC
From: Skip Guenter
Topic: 4741 Message: 4744

got 'em, Thanx

On 06/14/2015 08:11 AM, thomas.martin@... [SkyWires] wrote:
>
> To all I promised the files for HO-HO-HOH antenna.
> I have posted a zip file in the files area.
>
> Please excuse my "senior moment
>
> Tom / W7TJM
>
>
>

--
S. R. 'Skip' Guenter, K5SRG
/3905cc 40m SSB Late Coord
Alt Dir, 5th Call Area
/

4745. Re: [SkyWires] New file uploaded to SkyWires

Yahoo group: SkyWires
Date: 2015-06-14 15:25:06 UTC
From: Skip Guenter
Topic: 1641 Message: 4745

Plz Disregard.

On 06/14/2015 10:08 AM, Skip Guenter sguenter@... [SkyWires]
wrote:
>
> Is a .pdf version with the diagrams embedded avail?
>
> On 06/14/2015 08:01 AM, SkyWires@yahoogroups.com wrote:
>>
>>
>> Hello,
>>
>> This email message is a notification to let you know that
>> a file has been uploaded to the Files area of the SkyWires
>> group.
>>
>> File : /HO-HO-HOHPLS.htm
>> Uploaded by : bronco1992_1982 <thomas.martin@...>
>> Description : Cebik large loop antenna
>>
>> You can access this file at the URL:
>> https://groups.yahoo.com/neo/groups/SkyWires/files/HO-HO-HOHPLS.htm
>>
>> To learn more about file sharing for your group, please visit:
>> https://help.yahoo.com/kb/index?page=content&y=PROD_GRPS&locale=en_US&id=SLN15398
>>
>> Regards,
>>
>> bronco1992_1982 <thomas.martin@...>
>>
>
> --
> S. R. 'Skip' Guenter, K5SRG
> /3905cc 40m SSB Late Coord
> Alt Dir, 5th Call Area
> /
>

--
S. R. 'Skip' Guenter, K5SRG
/3905cc 40m SSB Late Coord
Alt Dir, 5th Call Area
/

4746. Re: [SkyWires] Re: HO-HO-HOH by L.B. Cebik file

Yahoo group: SkyWires
Date: 2015-06-14 15:52:41 UTC
From: David Shrum
Topic: 4730 Message: 4746

I was thinking the same thing.
Dave N8PU

On Sun, Jun 14, 2015 at 8:40 AM, 'siegfried jackstien'
siegfried.jackstien@... [SkyWires] <SkyWires@yahoogroups.com> wrote:

> But steve ... we all know your email (it is in every post included)
>
> Dg9bfc
>
> sigi
>
> > -----Ursprüngliche Nachricht-----
> > Von: SkyWires@yahoogroups.com [mailto:SkyWires@yahoogroups.com]
> > Gesendet: Sonntag, 14. Juni 2015 03:43
> > An: SkyWires@yahoogroups.com
> > Betreff: [SkyWires] Re: HO-HO-HOH by L.B. Cebik file
> >
> >
> >
> > Hi Tom,
> >
> > I'd like a copy, but don't really want to post my email here...it's on
> > qrz.com though, just search for my call and roll over the email spot and
> > it'll pop up, if it's not too much trouble.
> >
> > Thanks!
> >
> > Steve KA0NEB
> >
> >
>
>
>
> ------------------------------------
> Posted by: "siegfried jackstien" <siegfried.jackstien@...>
> ------------------------------------
>
>
> ------------------------------------
>
> Yahoo Groups Links
>
>
>

>

4747. Re: HO-HO-HOH by L.B. Cebik file

Yahoo group: SkyWires
Date: 2015-06-14 18:51:57 UTC
From: joel1847@...
Topic: 4730 Message: 4747

I would like a copy as well. Email address is joel1847@msn.com

Thanks

Joel
kj6dif
norcal

4748. Re: [SkyWires] Re: HO-HO-HOH by L.B. Cebik file

Yahoo group: SkyWires
Date: 2015-06-14 19:12:40 UTC
From: Don Sanders
Topic: 4730 Message: 4748

Copy is in the files section on the website for skywires

Dr. Don HC4/W4BWS

On Sun, Jun 14, 2015 at 1:51 PM, joel1847@... [SkyWires] <
SkyWires@yahoogroups.com> wrote:

>
>
> I would like a copy as well. Email address is joel1847@...
>
> Thanks
>
> Joel
> kj6dif
> norcal
>
>

4749. Re: [SkyWires] HO-HO-HOH by L.B. Cebik file

Yahoo group: SkyWires
Date: 2015-06-15 00:55:18 UTC
From: Hal
Topic: 4730 Message: 4749

Tom,
Please send me copy aa2id@...

thanks

Hal AA2ID

-----Original Message-----
From: Everettsharp everettsharp@... [SkyWires] <SkyWires@yahoogroups.com>
To: SkyWires <SkyWires@yahoogroups.com>
Sent: Sat, Jun 13, 2015 8:44 pm
Subject: Re: [SkyWires] HO-HO-HOH by L.B. Cebik file

Tom,

Please send me a copy: everettsharp@...

Thanks

Everett N8CNP

Sent from my iPhone

On Jun 13, 2015, at 6:15 PM, 'TOM MARTIN' thomas.martin@... [SkyWires] <SkyWires@yahoogroups.com> wrote:

Hello, if anybody would like The Horizontally oriented, horizontally polarized large loop antenna file, by L.B. Cebik W4RNL, send me an email and I will send you the file.

The file is an article written some time back, but if your into building loop antennas, it is a wealth of information. But be warned if you print it out, it is many pages long.

Tom Martin, W7TJM (formally KA7SFL)

4750. Re: HO-HO-HOH by L.B. Cebik file -PDF attached-

Yahoo group: SkyWires
Date: 2015-06-15 01:12:13 UTC
From: dave.n8pu@...
Topic: 4730 Message: 4750
Attachments: 1 described; binary payloads are missing from this source WARC

I see a couple of people ask for a PDF file, I copied the web page and created a PDF from it. I'm sending it to you off the list. If you wanted to look at it to make sure nothing got missed, then if you chose to, if it looks ok to you then you could upload that too, and they would have an option.

Dave N8PU

4751. Re: AW: [SkyWires] Re: HO-HO-HOH by L.B. Cebik file

Yahoo group: SkyWires
Date: 2015-06-15 04:40:52 UTC
From: slr_65@...
Topic: 4730 Message: 4751

LOL! Guess I never noticed, I check the group from the web! Guess the spambots haven't picked up on us yet!

4752. Slingshots DON'T work!

Yahoo group: SkyWires
Date: 2015-06-15 04:47:51 UTC
From: slr_65@...
Topic: 4752 Message: 4752

OK, didn't get my project done today, another amateur in town wanted to try a loop and he DOES have trees.

The thought was to use a wrist rocket slingshot to shoot a nut with a string attached up and over a branch or two.

(I was there mostly for moral support, I couldn't see the shot at all)

Attaching even the lightest string, laying the string out, etc. just doesn't get much altitude.

After cussing and discussing, we're thinking spud gun!

We can't be theonly amateurs to face this though, so what is the preferred method of popping a string over a tall tree?

Still, it was a fun afternoon, even if we didn't get much done.

Last night a couple echolinked in and we played on HF for bit, I did surprisingly well on 80 meter about 600 miles out. Got to Riverside, CA with a respectable signal on 20 meter also, so the low loop is working...it could just work better...

Made for a fun night, two more states off my WAS quest!

4753. RE: AW: [SkyWires] Re: HO-HO-HOH by L.B. Cebik file

Yahoo group: SkyWires
Date: 2015-06-15 04:53:32 UTC
From: Rick - DJ0IP / NJ0IP
Topic: 4730 Message: 4753

Skip, are you the group owner?

73 - Rick, DJ0IP

(Nr. Frankfurt am Main)

From: SkyWires@yahoogroups.com [mailto:SkyWires@yahoogroups.com]
Sent: Monday, June 15, 2015 6:41 AM
To: SkyWires@yahoogroups.com
Subject: Re: AW: [SkyWires] Re: HO-HO-HOH by L.B. Cebik file

LOL! Guess I never noticed, I check the group from the web! Guess the spambots haven't picked up on us yet!

4754. RE: [SkyWires] Slingshots DON'T work!

Yahoo group: SkyWires
Date: 2015-06-15 05:30:06 UTC
From: Rick - DJ0IP / NJ0IP
Topic: 4752 Message: 4754

How high are you trying to get in the tree?
I guess the Spudgun is the best thing going.
I only have an EZ-Hang.
I can get about 60 ft. with it. That’s usually enough.

73 - Rick, DJ0IP
(Nr. Frankfurt am Main)

From: SkyWires@yahoogroups.com [mailto:SkyWires@yahoogroups.com]
Sent: Monday, June 15, 2015 6:48 AM
To: SkyWires@yahoogroups.com
Subject: [SkyWires] Slingshots DON'T work!

OK, didn't get my project done today, another amateur in town wanted to try a loop and he DOES have trees.

The thought was to use a wrist rocket slingshot to shoot a nut with a string attached up and over a branch or two.

(I was there mostly for moral support, I couldn't see the shot at all)

Attaching even the lightest string, laying the string out, etc. just doesn't get much altitude.

After cussing and discussing, we're thinking spud gun!

We can't be theonly amateurs to face this though, so what is the preferred method of popping a string over a tall tree?

Still, it was a fun afternoon, even if we didn't get much done.

Last night a couple echolinked in and we played on HF for bit, I did surprisingly well on 80 meter about 600 miles out. Got to Riverside, CA with a respectable signal on 20 meter also, so the low loop is working...it could just work better...

Made for a fun night, two more states off my WAS quest!

4755. RE: [SkyWires] Slingshots DON'T work!

Yahoo group: SkyWires
Date: 2015-06-15 05:42:49 UTC
From: Rick - DJ0IP / NJ0IP
Topic: 4752 Message: 4755

Here’s a Tip:

I tie pigtails onto the tiny yellow weight of my EZ-Hang.

I too have difficulty spotting it when it is hanging in a tree.
Since adding Pigtails, it’s much easier to find.

We have a plastic tape-like material here, striped red and white.
It is used to mark off danger areas at construction sites.

It is about 2 inches in diameter.
I cut a piece about 8 inches long, and then I cut it in half, over its length.
This leaves it about 1” wide.
I then tie it to the fishing weight of the EZ-Hang.
BIG improvement. Of course it does limit the height just a tad, but there is no big difference.

73 - Rick, DJ0IP
(Nr. Frankfurt am Main)

From: SkyWires@yahoogroups.com [mailto:SkyWires@yahoogroups.com]
Sent: Monday, June 15, 2015 6:48 AM
To: SkyWires@yahoogroups.com
Subject: [SkyWires] Slingshots DON'T work!

OK, didn't get my project done today, another amateur in town wanted to try a loop and he DOES have trees.

The thought was to use a wrist rocket slingshot to shoot a nut with a string attached up and over a branch or two.

(I was there mostly for moral support, I couldn't see the shot at all)

Attaching even the lightest string, laying the string out, etc. just doesn't get much altitude.

After cussing and discussing, we're thinking spud gun!

We can't be theonly amateurs to face this though, so what is the preferred method of popping a string over a tall tree?

Still, it was a fun afternoon, even if we didn't get much done.

Last night a couple echolinked in and we played on HF for bit, I did surprisingly well on 80 meter about 600 miles out. Got to Riverside, CA with a respectable signal on 20 meter also, so the low loop is working...it could just work better...

Made for a fun night, two more states off my WAS quest!

4756. Re: AW: [SkyWires] Re: HO-HO-HOH by L.B. Cebik file

Yahoo group: SkyWires
Date: 2015-06-15 05:47:36 UTC
From: Skip Guenter
Topic: 4730 Message: 4756

Of THIS group... I'm the rank rookie.

On 06/14/2015 11:53 PM, 'Rick - DJ0IP / NJ0IP' Rick@... [SkyWires]
wrote:
>
> Skip, are you the group owner?
>
> 73 - Rick, DJ0IP
>
> (Nr. Frankfurt am Main)
>
> *From:*SkyWires@yahoogroups.com [mailto:SkyWires@yahoogroups.com]
> *Sent:* Monday, June 15, 2015 6:41 AM
> *To:* SkyWires@yahoogroups.com
> *Subject:* Re: AW: [SkyWires] Re: HO-HO-HOH by L.B. Cebik file
>
> LOL! Guess I never noticed, I check the group from the web! Guess
> the spambots haven't picked up on us yet!
>
>

--
S. R. 'Skip' Guenter, K5SRG
/3905cc 40m SSB Late Coord
Alt Dir, 5th Call Area
/

4757. Re: [SkyWires] Slingshots DON'T work!

Yahoo group: SkyWires
Date: 2015-06-15 05:44:36 UTC
From: Rich Schmuke
Topic: 4752 Message: 4757

That is what I used, 1/2" SS nut and a Zebco fishing reel mounted in a stick. Pull a string back over, then a heaver line with a plastic pulley from a big box home store. I have a window sash weight at each corner of my loop to keep the loop up when the wind blows the trees.

Rich, KdØzz

On Sun, Jun 14, 2015 at 11:47 PM, slr_65@... [SkyWires] <SkyWires@yahoogroups.com> wrote:

>
>
> OK, didn't get my project done today, another amateur in town wanted to
> try a loop and he DOES have trees.
>
> The thought was to use a wrist rocket slingshot to shoot a nut with a
> string attached up and over a branch or two.
>
> (I was there mostly for moral support, I couldn't see the shot at all)
>
> Attaching even the lightest string, laying the string out, etc. just
> doesn't get much altitude.
>
> After cussing and discussing, we're thinking spud gun!
>
> We can't be theonly amateurs to face this though, so what is the preferred
> method of popping a string over a tall tree?
>
> Still, it was a fun afternoon, even if we didn't get much done.
>
> Last night a couple echolinked in and we played on HF for bit, I did
> surprisingly well on 80 meter about 600 miles out. Got to Riverside, CA
> with a respectable signal on 20 meter also, so the low loop is working...it
> could just work better...
>
> Made for a fun night, two more states off my WAS quest!
>
>
>
>

4758. Re: Slingshots DON'T work!

Yahoo group: SkyWires
Date: 2015-06-15 07:33:58 UTC
From: slr_65@...
Topic: 4752 Message: 4758

Thanks guys, I knew we weren't the only ones who've faced this!

The trees are linden trees, about 30' high, but with good spreads and they're probably 40' apart with the canopy limbs bumping into each other.

Doing some research and ragchewing about it on the repeater tonight, we're going to try and build a pneumatic launcher, much like a spud gun.

I'll post back how it works and if it works well a link to the one we used (we're still choosing one right now).

Steve

4759. Re: [SkyWires] Re: Slingshots DON'T work!

Yahoo group: SkyWires
Date: 2015-06-15 11:28:30 UTC
From: Rich Schmuke
Topic: 4752 Message: 4759

Here are the trees I had to clear out just to get a wire up.
http://i1102.photobucket.com/albums/g453/KD0ZZ/160%20Loop/trees010_zpse5180867.jpg
A picture to the right show a rope over a 40ft high into a red cedar.
If I had to do it again I would use a bow & arrow with a fishing reel.

Rich, KdØzz

On Mon, Jun 15, 2015 at 2:33 AM, slr_65@... [SkyWires] <
SkyWires@yahoogroups.com> wrote:

>
>
> Thanks guys, I knew we weren't the only ones who've faced this!
>
> The trees are linden trees, about 30' high, but with good spreads and
> they're probably 40' apart with the canopy limbs bumping into each other.
>
> Doing some research and ragchewing about it on the repeater tonight, we're
> going to try and build a pneumatic launcher, much like a spud gun.
>
> I'll post back how it works and if it works well a link to the one we used
> (we're still choosing one right now).
>
> Steve
>
>

4760. AW: [SkyWires] Re: Slingshots DON'T work!

Yahoo group: SkyWires
Date: 2015-06-15 12:12:50 UTC
From: siegfried jackstien
Topic: 4752 Message: 4760

I have sent you some pictures of my tennis ball launcher

Dg9bfc

Sigi

Ps idea is "stolen" from

www.antennalaunchers.com

> -----Ursprüngliche Nachricht-----
> Von: SkyWires@yahoogroups.com [mailto:SkyWires@yahoogroups.com]
> Gesendet: Montag, 15. Juni 2015 07:34
> An: SkyWires@yahoogroups.com
> Betreff: [SkyWires] Re: Slingshots DON'T work!
>
>
>
> Thanks guys, I knew we weren't the only ones who've faced this!
>
> The trees are linden trees, about 30' high, but with good spreads and
> they're probably 40' apart with the canopy limbs bumping into each other.
>
> Doing some research and ragchewing about it on the repeater tonight, we're
> going to try and build a pneumatic launcher, much like a spud gun.
>
> I'll post back how it works and if it works well a link to the one we used
> (we're still choosing one right now).
>
> Steve
>
>

4761. AW: [SkyWires] Re: Slingshots DON'T work!

Yahoo group: SkyWires
Date: 2015-06-15 12:13:08 UTC
From: siegfried jackstien
Topic: 4752 Message: 4761

Tennis ball spudgun works better (and is safer!!!)

Dg9bfc

Sigi

> -----Ursprüngliche Nachricht-----
> Von: SkyWires@yahoogroups.com [mailto:SkyWires@yahoogroups.com]
> Gesendet: Montag, 15. Juni 2015 11:29
> An: SkyWires@yahoogroups.com
> Betreff: Re: [SkyWires] Re: Slingshots DON'T work!
>
>
>
> Here are the trees I had to clear out just to get a wire up.
> http://i1102.photobucket.com/albums/g453/KD0ZZ/160%20Loop/trees010_zpse518
> 0867.jpg
>
> A picture to the right show a rope over a 40ft high into a red cedar.
>
> If I had to do it again I would use a bow & arrow with a fishing reel.
>
>
> Rich, KdØzz
>
>
> On Mon, Jun 15, 2015 at 2:33 AM, slr_65@... [SkyWires]
> <SkyWires@yahoogroups.com> wrote:
>
>
>
>
>
>
> Thanks guys, I knew we weren't the only ones who've faced this!
>
> The trees are linden trees, about 30' high, but with good spreads
> and they're probably 40' apart with the canopy limbs bumping into each
> other.
>
> Doing some research and ragchewing about it on the repeater tonight,
> we're going to try and build a pneumatic launcher, much like a spud gun.
>
> I'll post back how it works and if it works well a link to the one
> we used (we're still choosing one right now).
>
> Steve

>
>
>
>
>

4762. RE: [SkyWires] Re: Slingshots DON'T work!

Yahoo group: SkyWires
Date: 2015-06-15 12:53:15 UTC
From: Rick - DJ0IP / NJ0IP
Topic: 4752 Message: 4762

Those two guys in the picture (down the page) look like something out of Ghost Busters!

73 - Rick, DJ0IP

(Nr. Frankfurt am Main)

From: SkyWires@yahoogroups.com [mailto:SkyWires@yahoogroups.com]
Sent: Monday, June 15, 2015 2:13 PM
To: SkyWires@yahoogroups.com
Subject: AW: [SkyWires] Re: Slingshots DON'T work!

I have sent you some pictures of my tennis ball launcher

Dg9bfc

Sigi

4765. HO-HO-HOH zip file

Yahoo group: SkyWires
Date: 2015-06-15 15:56:10 UTC
From: thomas.martin@...
Topic: 4765 Message: 4765

To all who have asked me to send the HO-HO-HOH Cebik file to them.

Please download it from the files section here, it is under LARGE LOOP, and is the .zip file.

Tom W7TJM

4766. Re: [SkyWires] Slingshots DON'T work!

Yahoo group: SkyWires
Date: 2015-06-15 19:03:30 UTC
From: slr_65@...
Topic: 4752 Message: 4766

Hi Guys,

Thanks for the feedback!

We were pushing the boundaries with a slingshot in town, I think a bow would get some unwanted attention and the fall out zone is a residential neighborhood, so probably not a good idea.

The pneumatic launchers seem to be what most are using.

The tennis ball ones look nice and we do like the idea of a tennis ball projectile, but they're fairly expensive to construct, especially when this won't be used much as it's just temporary...unless it works...HI HI! If it works then it would just need redone if problems creep up. It's just like he's doing portable operations routinely.

We're (well, he's...I'm just moral support here!), leaning towards this relatively cheap and simple design. No fancy electric valves, has a small cheap projectile that's probably pretty safe too, etc..

Has anyone tried this design? If it doesn't work well then making a tennis ball sized one isn't out of the question, but it's just a matter of getting a wire over two trees, the exact path isn't really a concern, so aiming accuracy and stuff just isn't that big of a consideration for this project.

Antenna Wire Launcher http://www.wb5cxc.com/spud_gun.html

http://www.wb5cxc.com/spud_gun.html

Antenna Wire Launcher http://www.wb5cxc.com/spud_gun.html © WB5CXC 2011 Made with Xara

View on www.wb5cxc.com http://www.wb5cxc.com/spud_gun.html
Preview by Yahoo

4767. Re: Slingshots DON'T work!

Yahoo group: SkyWires
Date: 2015-06-15 19:12:26 UTC
From: Chuck
Topic: 4752 Message: 4767

I also use a 1/2" SS Nut but with a standard slingshot I purchased for a few bucks at Mr. Walton's market. I use a spool of yellow colored construction line that's easy to see in the tree, and fan out a sufficient quantity on the ground in front of me before shooting. The last time I used it, it only took three attempts to get the nut through a Y next to the tree trunk about 60 feet up. Didn't cost much, and it works fine for me.

Chuck
W9BIK

4768. Re: [SkyWires] Slingshots DON'T work!

Yahoo group: SkyWires
Date: 2015-06-15 19:15:47 UTC
From: Steven KA9MOT
Topic: 4752 Message: 4768

Spud guns are nice but they are costly, and illegal in many places. Wrist rockets require a skill I lack.

I use a spinning rod with 10 pound test line, and a 3 oz fishing weight that I painted Fluorescent Orange. Buy and paint a half dozen, believe it or not, the dang things get lost. Who GNU?

I easily cast over my 60 foot tree, my yard and into my neighbor's yard. I have a row of 7 trees that are about 40 feet high and the row is about 100 foot long. I can cast a line over the top of all of them, if there is no wind. Wind is your enemy, a devious, and spiteful enemy whose sole purpose is to ruin your day.
You might want to use a finger to control the line so it doesn't go too far depending on how forgiving your neighbors are. Any make sure there are no house or car windows nearby, incase you have an errant cast. <---This applies to all methods.

Steve KA9MOT

On Mon, Jun 15, 2015 at 2:03 PM, slr_65@... [SkyWires] <SkyWires@yahoogroups.com> wrote:

>
>
> Hi Guys,
>
> Thanks for the feedback!
>
> We were pushing the boundaries with a slingshot in town, I think a bow
> would get some unwanted attention and the fall out zone is a residential
> neighborhood, so probably not a good idea.
>
> The pneumatic launchers seem to be what most are using.
>
> The tennis ball ones look nice and we do like the idea of a tennis ball
> projectile, but they're fairly expensive to construct, especially when this
> won't be used much as it's just temporary...unless it works...HI HI! If it
> works then it would just need redone if problems creep up. It's just like
> he's doing portable operations routinely.
>
> We're (well, he's...I'm just moral support here!), leaning towards this
> relatively cheap and simple design. No fancy electric valves, has a small
> cheap projectile that's probably pretty safe too, etc..
>
> Has anyone tried this design? If it doesn't work well then making a
> tennis ball sized one isn't out of the question, but it's just a matter of

> getting a wire over two trees, the exact path isn't really a concern, so
> aiming accuracy and stuff just isn't that big of a consideration for this
> project.
>
> Antenna Wire Launcher <http://www.wb5cxc.com/spud_gun.html>
> [image: image] <http://www.wb5cxc.com/spud_gun.html>
> Antenna Wire Launcher <http://www.wb5cxc.com/spud_gun.html>
> © WB5CXC 2011 Made with Xara
> View on www.wb5cxc.com <http://www.wb5cxc.com/spud_gun.html>
> Preview by Yahoo
>
>
>
>
>

4769. Re: [SkyWires] Slingshots DON'T work!

Yahoo group: SkyWires
Date: 2015-06-15 19:16:01 UTC
From: Rich Schmuke
Topic: 4752 Message: 4769

Yes it will work, the only problem is aiming it and quickly turning the valve at the same time. That is why the other design uses a dump valve. Back when I was employed we used a similar design to shoot chickens. Not shot at chickens but chickens as the projectile in aircraft bird strike test.

Rich, KdØzz

On Mon, Jun 15, 2015 at 2:03 PM, slr_65@... [SkyWires] <SkyWires@yahoogroups.com> wrote:

>
>
> Hi Guys,
>
> Thanks for the feedback!
>
> We were pushing the boundaries with a slingshot in town, I think a bow
> would get some unwanted attention and the fall out zone is a residential
> neighborhood, so probably not a good idea.
>
> The pneumatic launchers seem to be what most are using.
>
> The tennis ball ones look nice and we do like the idea of a tennis ball
> projectile, but they're fairly expensive to construct, especially when this
> won't be used much as it's just temporary...unless it works...HI HI! If it
> works then it would just need redone if problems creep up. It's just like
> he's doing portable operations routinely.
>
> We're (well, he's...I'm just moral support here!), leaning towards this
> relatively cheap and simple design. No fancy electric valves, has a small
> cheap projectile that's probably pretty safe too, etc..
>
> Has anyone tried this design? If it doesn't work well then making a
> tennis ball sized one isn't out of the question, but it's just a matter of
> getting a wire over two trees, the exact path isn't really a concern, so
> aiming accuracy and stuff just isn't that big of a consideration for this
> project.
>
> Antenna Wire Launcher <http://www.wb5cxc.com/spud_gun.html>
> [image: image] <http://www.wb5cxc.com/spud_gun.html>
> Antenna Wire Launcher <http://www.wb5cxc.com/spud_gun.html>
> © WB5CXC 2011 Made with Xara
> View on www.wb5cxc.com <http://www.wb5cxc.com/spud_gun.html>
> Preview by Yahoo
>

>
>
>
>

4770. Re: Slingshots DON'T work!

Yahoo group: SkyWires
Date: 2015-06-15 21:05:10 UTC
From: slr_65@...
Topic: 4752 Message: 4770

Wow Chuck,

Shawn and my son both tried nuts of various sizes, fishing line, 1mm flax twine, all laid out etc. and couldn't get any respectable distance, I think my son could've thrown a baseball better. It seemed it was the line as just shooting a nut worked fairly well, though not near the height needed to cross the trees.

We were just using a Daisey sling shot from Wally World though, so perhaps not all slingshots are created equal.

4771. Re: [SkyWires] Slingshots DON'T work!

Yahoo group: SkyWires
Date: 2015-06-15 21:23:21 UTC
From: slr_65@...
Topic: 4752 Message: 4771

Hi Steve,

I think if a spud gun is illegal then so's a slingshot, bow and arrow, etc..

Basically, if you read the city ordinances none of it is permissible...even your casting....in our city you can only deploy fishing equipment on your own property or designated areas of city property and even at that you must cast only what is necessary to reach the water and can not endanger the public in general. Tossing a lead weight over the trees into the neighbor's yard, near a street and sidewalk without a body of water anywhere in sight probably violates that ordinance.

Ok, so we're scofflaws and intent on violating the law, now it's down to getting it done quickly without notice and with as little risk as possible. That rules out bows, crossbows, etc.. Even slingshots, people don't like to see slingshots in town and frankly, they would take forever for us anyway, they just don't work. That leaves the spud gun. Quick to deploy, they seem to work and work well in just a couple shots, the pucks aren't overly dangerous, etc.. I actually discussed it with a retired cop this morning, he laughed and said they wouldn't ticket such an activity unless we damaged something or hurt someone, and even then only if the victim pressed.

There's actually even an exemption for cable routing tools as many tech companies evidently use pneumatic shooters to run pull strings in large building tunnels and ceilings, he wasn't sure this would qualify, though that's exactly what it's doing. Basically he said do it safe, do it quick and I think the pneumatic spud gun meets that criteria the closest.

If you have plenty of room, the pole and weights and already know how to use them though, then yeah....more power to ya! It obvioulsy works and who can argue with success?!?!

4772. RE: [SkyWires] Re: Slingshots DON'T work!

Yahoo group: SkyWires
Date: 2015-06-15 21:36:57 UTC
From: Rick - DJ0IP / NJ0IP
Topic: 4752 Message: 4772

Steve, it sounds like you were using a flingshot rather than a slingshot.
I easily get 60 ft. with my EZ-Hang slingshot.

73 - Rick, DJ0IP
(Nr. Frankfurt am Main)

From: SkyWires@yahoogroups.com [mailto:SkyWires@yahoogroups.com]
Sent: Monday, June 15, 2015 11:05 PM
To: SkyWires@yahoogroups.com
Subject: [SkyWires] Re: Slingshots DON'T work!

Wow Chuck,

Shawn and my son both tried nuts of various sizes, fishing line, 1mm flax twine, all laid out etc. and couldn't get any respectable distance, I think my son could've thrown a baseball better. It seemed it was the line as just shooting a nut worked fairly well, though not near the height needed to cross the trees.

We were just using a Daisey sling shot from Wally World though, so perhaps not all slingshots are created equal.

4773. RE: [SkyWires] Re: Slingshots DON'T work!

Yahoo group: SkyWires
Date: 2015-06-15 22:59:51 UTC
From: slr_65@...
Topic: 4752 Message: 4773

I suspect there are slingshot and then there are slingshot!

We only had one choice in town, a Daisey model. Still, wrist braced, surgical tubing...I wouldn't want to be in front of it!

Looking online, there are many, many models, but they quickly get pricey too, so that puts a pneumatic launcher back into the picture.

If you read the reviews on eham and other sites you'll notice that though the EZ Launch is well reviewed, many reviewers say it's time has past and the pnuematic launchers are the way to go.

We'll be discussing it in a bit. He's working, I'm off work and have time to research...the choices seem to be the simple one with a manual valve. Cheap, should work for the height and accuracy isn't a big concern, again, not trying for a specific spot, just up and over two close trees. On the other hand, for less than $100 it can be easily aimable and maybe more useful in the future. We'll see what he wants to do.

Fun stuff, who knew amateur radio would get you building a spud gun?! HI HI!

4774. Re: [SkyWires] Re: Slingshots DON'T work!

Yahoo group: SkyWires
Date: 2015-06-15 23:04:34 UTC
From: Rich Schmuke
Topic: 4752 Message: 4774

Mine is also from wally world , the name is a wrist rocket and it attaches to a board with a fishing real with no problem, I just use a hose clamp , sling shot on top, reel on lower side.

Rich, KdØzz

On Mon, Jun 15, 2015 at 4:05 PM, slr_65@... [SkyWires] <SkyWires@yahoogroups.com> wrote:

>
>
> Wow Chuck,
>
> Shawn and my son both tried nuts of various sizes, fishing line, 1mm flax twine, all laid out etc. and couldn't get any respectable distance, I think my son could've thrown a baseball better. It seemed it was the line as just shooting a nut worked fairly well, though not near the height needed to cross the trees.
>
> We were just using a Daisey sling shot from Wally World though, so perhaps not all slingshots are created equal.
>
>

4775. Re: Military Surplus Fiberglass Poles - WHERE are they?

Yahoo group: SkyWires
Date: 2015-06-16 00:49:35 UTC
From: radioman@...
Topic: 4701 Message: 4775

I found plenty of fiberglass poles by under Google.
Here is the one that I think I've seen at Dayton and purchased from him:

http://www.militaryfieldgear.com/index.html http://www.militaryfieldgear.com/index.html

Rich KC8HMJ

4776. Re: Military Surplus Fiberglass Poles - WHERE are they?

Yahoo group: SkyWires
Date: 2015-06-16 01:10:50 UTC
From: slr_65@...
Topic: 4701 Message: 4776

Oh, they're out there, they just aren't a bargain any more. When it gets 3/4 of what I could get a Rohn H-50 for it's hard to justify because I could run the Rohn guyless at 20' or less over the house and guys cost too. BTW, I called the distributor for Rohn, they will sell direct, $130 for the mast. $60 in gas to get it, but if I bought two or more then the cost of shipping gets cheap per unit. May even be others around that would want to add on to an order if I'm picking up.

Still working on options...

I found one place in Texas that had them for $20 for a 12 piece set with the spreaders and all....and only $120 shipping!!!! I hate that kinda crap, just give an honest price to start with!

I asked around, it seems that EVERY old ham has at least one set of these in their garage, and they got them dirt cheap, but NO ONE is letting go of them! LOL! They just love 'em!

4777. Re: [SkyWires] Slingshots DON'T work!

Yahoo group: SkyWires
Date: 2015-06-16 04:01:31 UTC
From: Evan Rolek
Topic: 4752 Message: 4777

Well, MY slingshot works. I use one of those slingshots the sporting goods stores sell, the kind with a wrist brace. Then, I attach a Game Tracker (spool of line, flourescent orange, on a spool and holder), attach it to a teardrop shaped fishing sinker. You "shoot" the sinker over a limb, then use it to pull up a thicker line, and then finally the thickest line you'll be using. MY slingshot has gotten things up 50 ft or so, your mileage might vary. BUT know that safety glasses, a spotter, etc. safety precautions are in order.

73,

Evan, K9SQG

-----Original Message-----
From: slr_65@yahoo.com [SkyWires] <SkyWires@yahoogroups.com>
To: SkyWires <SkyWires@yahoogroups.com>
Sent: Mon, Jun 15, 2015 12:47 am
Subject: [SkyWires] Slingshots DON'T work!

OK, didn't get my project done today, another amateur in town wanted to try a loop and he DOES have trees.

The thought was to use a wrist rocket slingshot to shoot a nut with a string attached up and over a branch or two.

(I was there mostly for moral support, I couldn't see the shot at all)

Attaching even the lightest string, laying the string out, etc. just doesn't get much altitude.

After cussing and discussing, we're thinking spud gun!

We can't be theonly amateurs to face this though, so what is the preferred method of popping a string over a tall tree?

Still, it was a fun afternoon, even if we didn't get much done.

Last night a couple echolinked in and we played on HF for bit, I did surprisingly well on 80 meter about 600 miles out. Got to Riverside, CA with a respectable signal on 20 meter also, so the low loop is working...it could just work better...

Made for a fun night, tw o more states off my WAS quest!

4778. AW: [SkyWires] Slingshots DON'T work!

Yahoo group: SkyWires
Date: 2015-06-16 04:53:19 UTC
From: siegfried jackstien
Topic: 4752 Message: 4778

Especially THAT kind of slingshots are forbidden here (hunting slingshot)

I used my tennis ball launcher a few dozen times ... and even if such a spudgun is called a weapon here (projectile, barrel, pressure chamber = weapon ... that□s the law here)... it is still a lot safer with a tennis ball as when using a lead weight (regardless if thrown from a slingshot or from a fishing rod)

Only thing that wold be allowed is a tennis ball but thrown with a normal tennis racket

I made some speed tests with my launcher ... and I have below half of the speed a good tennis player reaches

Dg9bfc

sigi

> -----Ursprüngliche Nachricht-----
> Von: SkyWires@yahoogroups.com [mailto:SkyWires@yahoogroups.com]
> Gesendet: Dienstag, 16. Juni 2015 04:02
> An: SkyWires@yahoogroups.com
> Betreff: Re: [SkyWires] Slingshots DON'T work!
>
>
>
> Well, MY slingshot works. I use one of those slingshots the sporting
> goods stores sell, the kind with a wrist brace. Then, I attach a Game
> Tracker (spool of line, flourescent orange, on a spool and holder), attach
> it to a teardrop shaped fishing sinker. You "shoot" the sinker over a
> limb, then use it to pull up a thicker line, and then finally the thickest
> line you'll be using. MY slingshot has gotten things up 50 ft or so, your
> mileage might vary. BUT know that safety glasses, a spotter, etc. safety
> precautions are in order.
>
>
> 73,
>
>
>
> Evan, K9SQG
>
>
> -----Original Message-----
> From: slr_65@... [SkyWires] <SkyWires@yahoogroups.com>
> To: SkyWires <SkyWires@yahoogroups.com>

> Sent: Mon, Jun 15, 2015 12:47 am
> Subject: [SkyWires] Slingshots DON'T work!
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> working...it could just work better...
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> Made for a fun night, tw o more states off my WAS quest!
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>

4779. Re: AW: [SkyWires] Slingshots DON'T work!

Yahoo group: SkyWires
Date: 2015-06-16 05:00:17 UTC
From: Steven KA9MOT
Topic: 4752 Message: 4779

When thrown at an angle sufficient to fly over a 60 foot tree, it goes mostly straight up and then straight down. I do imagine it would smart a little if it were to hit someone in the top of the head, but by then all of it's energy is mostly spent, and you could point out to the victim that, "This is why you should have worn your hat!" hihi
On Jun 15, 2015 11:56 PM, "'siegfried jackstien' siegfried.jackstien@... [SkyWires]" <SkyWires@yahoogroups.com> wrote:

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> Especially THAT kind of slingshots are forbidden here (hunting slingshot)
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> I used my tennis ball launcher a few dozen times ... and even if such a
> spudgun is called a weapon here (projectile, barrel, pressure chamber =
> weapon ... that’s the law here)... it is still a lot safer with a tennis
> ball as when using a lead weight (regardless if thrown from a slingshot or
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> speed a good tennis player reaches
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> Dg9bfc
>
> sigi
>
> > -----Ursprüngliche Nachricht-----
> > Von: SkyWires@yahoogroups.com [mailto:SkyWires@yahoogroups.com]
> > Gesendet: Dienstag, 16. Juni 2015 04:02
> > An: SkyWires@yahoogroups.com
> > Betreff: Re: [SkyWires] Slingshots DON'T work!
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4780. AW: [SkyWires] Slingshots DON'T work!

Yahoo group: SkyWires
Date: 2015-06-16 05:04:44 UTC
From: siegfried jackstien
Topic: 4752 Message: 4780

Garden sprayer ... 8 bucks

(nice thing is you have a trigger valve, a pump , a tank and a pressure gauge for that 8 bucks)

Barrel 5 bucks (with the 75mm coupler included)

Most expensive was the valve (around 20 bucks if you use the 1 inch version)

... tennis balls were for free from our local tennis club

... when you make your launcher from such a high number of adaptors, couplers, elbows etc. ... then it will not be cheaper

Dg9bfc

sigi

> -----Ursprüngliche Nachricht-----
> Von: SkyWires@yahoogroups.com [mailto:SkyWires@yahoogroups.com]
> Gesendet: Montag, 15. Juni 2015 19:04
> An: SkyWires@yahoogroups.com
> Betreff: Re: [SkyWires] Slingshots DON'T work!
>
>
>
> Hi Guys,
>
> Thanks for the feedback!
>
> We were pushing the boundaries with a slingshot in town, I think a bow
> would get some unwanted attention and the fall out zone is a residential
> neighborhood, so probably not a good idea.
>
> The pneumatic launchers seem to be what most are using.
>
> The tennis ball ones look nice and we do like the idea of a tennis ball
> projectile, but they're fairly expensive to construct, especially when
> this won't be used much as it's just temporary...unless it works...HI HI!
> If it works then it would just need redone if problems creep up. It's
> just like he's doing portable operations routinely.
>
> We're (well, he's...I'm just moral support here!), leaning towards this
> relatively cheap and simple design. No fancy electric valves, has a small
> cheap projectile that's probably pretty safe too, etc..
>
> Has anyone tried this design? If it doesn't work well then making a

> tennis ball sized one isn't out of the question, but it's just a matter of
> getting a wire over two trees, the exact path isn't really a concern, so
> aiming accuracy and stuff just isn't that big of a consideration for this
> project.
>
> Antenna Wire Launcher <http://www.wb5cxc.com/spud_gun.html>
> image <http://www.wb5cxc.com/spud_gun.html>
> Antenna Wire Launcher <http://www.wb5cxc.com/spud_gun.html>
> © WB5CXC 2011 Made with Xara
> View on www.wb5cxc.com <http://www.wb5cxc.com/spud_gun.html>
> Preview by Yahoo
>
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4781. AW: AW: [SkyWires] Slingshots DON'T work!

Yahoo group: SkyWires
Date: 2015-06-16 05:18:19 UTC
From: siegfried jackstien
Topic: 4752 Message: 4781

A lead weight that comes down from 60 feet plus ... makes a hole in your head (or can damage a car etc.)

Tennis ball is the way to go

Dg9bfc

sigi

> -----Ursprüngliche Nachricht-----
> Von: SkyWires@yahoogroups.com [mailto:SkyWires@yahoogroups.com]
> Gesendet: Dienstag, 16. Juni 2015 05:00
> An: SkyWires@yahoogroups.com
> Betreff: Re: AW: [SkyWires] Slingshots DON'T work!
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> > Gesendet: Dienstag, 16. Juni 2015 04:02
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> > Sent: Mon, Jun 15, 2015 12:47 am
> > Subject: [SkyWires] Slingshots DON'T work!
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4782. RE: [SkyWires] Re: Slingshots DON'T work!

Yahoo group: SkyWires
Date: 2015-06-16 05:31:33 UTC
From: Rick - DJ0IP / NJ0IP
Topic: 4752 Message: 4782

How high are your trying to go, Steve?

There is another way I often use that is rarely spoken about, yet it is by far the most accurate.

You can place your rope any place you want, down to within about one inch of where you want it.

I like to experiment with wire antennas and have several long telescoping fiberglass poles.

Several are 12m (40') long, and a few are 60' long.

The 40' one is what I use. I usually remove the very top segment, leaving me 37' (plus my own arm's reach) to work with.

I fasten a tiny pulley near the top of the pole and run a thin rope up and back.

I use a large fishing lead weight for the weight and tie some colored tape to it so that I can see it.

Then I simply stand in place, telescope the pole segments up, one at a time, which takes about 60 seconds, then walk the pole into place, poking the tip just over the branch that is to hold the rope.

Let the weight fall slowly to the ground; voila! The thin rope is exactly where you want it.

A thick rope is then pulled up in its place.

NOBODY will call the cops, though they might call the funny farm.

"Rick's out there fishing in one of his trees again!" (hi)

I also have a very large step ladder.

I can get up about 8' on it. So I can almost get a line 50' into the tree using this system.

73 - Rick, DJ0IP

(Nr. Frankfurt am Main)

From: SkyWires@yahoogroups.com [mailto:SkyWires@yahoogroups.com]
Sent: Tuesday, June 16, 2015 1:00 AM
To: SkyWires@yahoogroups.com
Subject: RE: [SkyWires] Re: Slingshots DON'T work!

I suspect there are slingshot and then there are slingshot!

We only had one choice in town, a Daisey model. Still, wrist braced, surgical tubing...I wouldn't want to be in front of it!

Looking online, there are many, many models, but they quickly get pricey too, so that puts a pneumatic launcher back into the picture.

If you read the reviews on eham and other sites you'll notice that though the EZ Launch is well reviewed, many reviewers say it's time has past and the pnuematic launchers are the way to go.

We'll be discussing it in a bit. He's working, I'm off work and have time to research...the choices seem to be the simple one with a manual valve. Cheap, should work for the height and accuracy isn't a big concern, again, not trying for a specific spot, just up and over two close trees. On the other hand, for less than $100 it can be easily aimable and maybe more useful in the future. We'll see what he wants to do.

Fun stuff, who knew amateur radio would get you building a spud gun?! HI HI!

4783. RE: AW: [SkyWires] Slingshots DON'T work!

Yahoo group: SkyWires
Date: 2015-06-16 05:40:56 UTC
From: Rick - DJ0IP / NJ0IP
Topic: 4752 Message: 4783

With my EZ-Hang, I shoot up at a high angle, just when the weight is over the tree, I activate the brake with my thumb.

The once the weight has fallen a little, I carefully control its slow decent with my thumb.

No danger at all, unless the line breaks ☐ in which case . . . ring the bell and run like .ah get out!

73 - Rick, DJ0IP

(Nr. Frankfurt am Main)

From: SkyWires@yahoogroups.com [mailto:SkyWires@yahoogroups.com]
Sent: Tuesday, June 16, 2015 7:18 AM
To: SkyWires@yahoogroups.com
Subject: AW: AW: [SkyWires] Slingshots DON'T work!

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Tennis ball is the way to go

Dg9bfc

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> -----Ursprüngliche Nachricht-----
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> Gesendet: Dienstag, 16. Juni 2015 05:00
> An: SkyWires@yahoogroups.com
> Betreff: Re: AW: [SkyWires] Slingshots DON'T work!
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4784. RE: [SkyWires] Re: Slingshots DON'T work!

Yahoo group: SkyWires
Date: 2015-06-16 06:44:51 UTC
From: slr_65@...
Topic: 4752 Message: 4784

Hi Rick,

The trees are linden trees, about 30' high, but with good spreads and they're probably 40' apart with the canopy limbs bumping into each other. Sooo, we're trying to go up 30', then horizontal probably 60-70' and then down.

The method you describe we were just talking about tonight! One of the guys said they saw the City with a hot stick reaching up and turning some switches off on a pole and wondered if long poles couldn't be used here too. The idea was shelved though as long fiberglass poles are expensive and they probably wouldn't be used much.

In the end, we've decided to try the simple manual valve actuated shooter. Judging from the videos on YouTube our shot isn't that hard of one, so it shouldn't take much.

It's amazing how one can get carried away with these things though, troll the net, there are ones made out of metal, multiple electric valves, aiming systems, etc..

We're thinking a cap with an air chuck. No need fpr an air gauge, we'll fill it from a portable compressor with a gauge. The cap on a larger pvc pipe air reservoir, a reducer to a valve, valve to barrel. Two caps and a short section of smaller pipe for a sabo to pull the line. Shouldn't cost much. May be less accurate than one you can hold like a gun, aim and fire electrically, but accuracy isn't the goal here, we're not aiming to go over a branch, we're aiming to go over two whole trees.

I'll update as we play!

4785. Re: AW: [SkyWires] Slingshots DON'T work!

Yahoo group: SkyWires
Date: 2015-06-16 06:45:39 UTC
From: slr_65@...
Topic: 4752 Message: 4785

Yeah, one of the web sites I visited that sells kits and complete units pointed that out too, their unit flies well, but no faster than if it were hit by a good player with a racket. I have no doubt the tennis ball units are the safest, they're just larger and more expensive to build. What we're looking at is smaller and using a small pvc sabo to pull the string, not as safe as a tennis ball, but I think still much safer than a hunk of lead.

4786. Re: [SkyWires] Re: Slingshots DON'T work!

Yahoo group: SkyWires
Date: 2015-06-16 06:56:51 UTC
From: Hans Remeeus
Topic: 4752 Message: 4786
Attachments: 3 described; binary payloads are missing from this source WARC

This is how I did it last month.

The workplatform could go up to about 85 feet. My 160 meter long deltaloop however is at about 40 feet high.

73, Hans.

Vriendelijke groeten,
Hans Remeeus (PA1HR/OE3JRC)
http://www.remeeus.eu
http://www.hansremeeus.nl
Communication is about people, the rest is technology.

4787. Re: [SkyWires] Slingshots DON'T work!

Yahoo group: SkyWires
Date: 2015-06-16 07:09:07 UTC
From: slr_65@...
Topic: 4752 Message: 4787

There must be technique to it too Evan. If you read on the net you'll find some people love their EZ shooters and some, like us, find they don't work well at all.

The one telling thing is that when you read the reviews for the EZ Hang you'll find several mention switching to pneumatic shooters, but when you read up on the pneumatic shooters I've not seen one instance where people switched from them back to any other methods, indeed I've not read one review where anyone wasn't happy with their pneumatic shooter. I think that says a lot.

Can it be done other ways? Obviously it can. What method does everyone seem the happiest with? It seems it's the pneumatic ones, so we're going with the majority and seeing how it works.

If it doesn't work then we do have access to a 35' extension ladder, we may try that, though the fiberglass extension pole method isn't out of the running either...and of all those mentioned, is probably the only one that is permissible under most city codes.

Fun discussion guys! I knew we weren't the only ones to have faced this issue, it's great to hear how others have cracked this nut!

Steve KA0NEB

4788. RE: [SkyWires] Slingshots DON'T work!

Yahoo group: SkyWires
Date: 2015-06-16 07:17:55 UTC
From: Rick - DJ0IP / NJ0IP
Topic: 4752 Message: 4788

When I first got my EZ-Hang, I thought it was cr@p.
The darn weight just didn't go where I wanted it to.
After a bit of practice (say, 20 or 30 shots), I got the "hang" of it (Pun intended).
Now I can put it just about anywhere I want.

What I had to do was learn to aim way above where I wanted it to go, and then at the right time, push the brake with my thumb to interrupt its flight.

I suspect those unhappy with it, used it once or twice and didn't like.
I'm quite pleased with mine.

But for 30 ft.? Honestly I would buy a baseball or softball, drill a hole in it, screw an eyebolt into it and "sling" it over the tree.
Notice I said "sling", not "throw".
I'm no good at slinging either but with a little patience and 10 to 15 slings, it eventually goes where it is supposed to.
The entire investment is about $3.

SLING: grab the line about 18" above the ball and ling it round and round. I prefer slinging it under-arm. The trick is to let it go at the right instant.

>>> Hans, you attachment did not come through.

73 - Rick, DJ0IP
(Nr. Frankfurt am Main)

From: SkyWires@yahoogroups.com [mailto:SkyWires@yahoogroups.com]
Sent: Tuesday, June 16, 2015 9:09 AM
To: SkyWires@yahoogroups.com
Subject: Re: [SkyWires] Slingshots DON'T work!

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4789. RE: [SkyWires] Slingshots DON'T work!

Yahoo group: SkyWires
Date: 2015-06-16 09:29:54 UTC
From: slr_65@...
Topic: 4752 Message: 4789

We got annoyed enough with the slingshot that we're not looking back.

Now, slinging a tennis ball...probably not as accurate as an air launcher, but....our neighbor has one of these for their dog and they chuck a tennis ball like no other....I may have to go visiting, with some dog treats and new tennis balls!

Chuckit! Tennis Ball Launcher
http://www.petco.com/product/8801/Chuckit-Tennis-Ball-Launcher.aspx

http://www.petco.com/product/8801/Chuckit-Tennis-Ball-Launcher.aspx

Chuckit! Tennis Ball L...
http://www.petco.com/product/8801/Chuckit-Tennis-Ball-Launcher.aspx Here's How to Chuckit! Throw It: There's a learning curve of ten to 20 throws. Find an open area, ...

View on www.petco.com http://www.petco.com/product/8801/Chuckit-Tennis-Ball-Launcher.aspx
Preview by Yahoo

4790. AW: AW: [SkyWires] Slingshots DON'T work!

Yahoo group: SkyWires
Date: 2015-06-16 11:32:52 UTC
From: siegfried jackstien
Topic: 4752 Message: 4790

A good slingshot and some leads ... costs aehem ... I have no idea ...maybe 30 40 bucks?!? ...

Anything that will get you to a usable height above 30 feet will cost 30- 50 bucks (maybe more)

Tennis ball launcher

Fishing pole with weight

Used tennis racket with ball

Slingshot

Bow and arrow or crossbow

Etc etc.

Each of them has costs in the same range (more or less)

So ... what I did is ... I have seen nearly similar costs

Different performance ... and different safety

And then I selected the tennis ball launcher to have best performance, easy to use, and has highest safety (cause I also use that on fieldday)

Except the tennis racket and the fishing rod ALL OF THESE THINGS ARE FORBIDDEN HERE ...

(another reason why I took my homebrewed tennis launcher to be very save)

I am thinking that it will not be counted as a real weapon cause it is built with exact the performance that needed for a tree ... but save enough that even if you would have a direct hit you would have no injury (it will hurt somewhat and a "blue spot" ... but that□s all)

.... and when I do not use it for antennas ... then I play with the dog :-)

That can not be well done with the other possible solutions (except again the tennis racket) ...

I have MUCH FUN WITH THE DOG AND THE TENNIS BALL LAUNCHER ... GRIN

Dg9bfc

Sigi

> -----Ursprüngliche Nachricht-----
> Von: SkyWires@yahoogroups.com [mailto:SkyWires@yahoogroups.com]

> Gesendet: Dienstag, 16. Juni 2015 06:46
> An: SkyWires@yahoogroups.com
> Betreff: Re: AW: [SkyWires] Slingshots DON'T work!
>
>
>
> Yeah, one of the web sites I visited that sells kits and complete units
> pointed that out too, their unit flies well, but no faster than if it were
> hit by a good player with a racket. I have no doubt the tennis ball units
> are the safest, they're just larger and more expensive to build. What
> we're looking at is smaller and using a small pvc sabo to pull the string,
> not as safe as a tennis ball, but I think still much safer than a hunk of
> lead.
>
>

4791. AW: [SkyWires] Re: Slingshots DON'T work!

Yahoo group: SkyWires
Date: 2015-06-16 11:43:03 UTC
From: siegfried jackstien
Topic: 4752 Message: 4791

Over 2 trees or over one spezial branch (or close to an area in a tree) are
2 completely different things

I also use the launcher for retrieving weather sondes from trees

(I am a sonde hunter also)

We tried a slingshot (and still use it for lower heights) ... but there is a
height that is just tooo much for slingshot with a line and weight...

And that IS THE HEIGHT WHERE A LAUNCHER JUST STARTS TO WORK WELL :-)

DG9BFC

SIGI

> -----Ursprüngliche Nachricht-----
> Von: SkyWires@yahoogroups.com [mailto:SkyWires@yahoogroups.com]
> Gesendet: Dienstag, 16. Juni 2015 06:45
> An: SkyWires@yahoogroups.com
> Betreff: RE: [SkyWires] Re: Slingshots DON'T work!
>
>
>
> Hi Rick,
>
> The trees are linden trees, about 30' high, but with good spreads and
> they're probably 40' apart with the canopy limbs bumping into each other.
> Sooo, we're trying to go up 30', then horizontal probably 60-70' and then
> down.
>
> The method you describe we were just talking about tonight! One of the
> guys said they saw the City with a hot stick reaching up and turning some
> switches off on a pole and wondered if long poles couldn't be used here
> too. The idea was shelved though as long fiberglass poles are expensive
> and they probably wouldn't be used much.
>
> In the end, we've decided to try the simple manual valve actuated shooter.
> Judging from the videos on YouTube our shot isn't that hard of one, so it
> shouldn't take much.
>
> It's amazing how one can get carried away with these things though, troll
> the net, there are ones made out of metal, multiple electric valves,
> aiming systems, etc..
>
> We're thinking a cap with an air chuck. No need fpr an air gauge, we'll
> fill it from a portable compressor with a gauge. The cap on a larger pvc

> pipe air reservoir, a reducer to a valve, valve to barrel. Two caps and a
> short section of smaller pipe for a sabo to pull the line. Shouldn't cost
> much. May be less accurate than one you can hold like a gun, aim and fire
> electrically, but accuracy isn't the goal here, we're not aiming to go
> over a branch, we're aiming to go over two whole trees.
>
> I'll update as we play!
>
>

4792. MBU DX Cluster for Android

Yahoo group: SkyWires
Date: 2015-06-16 12:44:18 UTC
From: Marian Anghel
Topic: 4792 Message: 4792

Hello Friends,
I have build new app MBU DX Cluster for Android. You can test it.
MBU DX Cluster - Android Apps on Google Play
| |
| | | | | | | |
| MBU DX Cluster - Android Apps on Google PlayMBU DX Cluster is simple android application for ham radio operators to view live the spots on mobile device. All the spots are refreshing every 60 seconds. Large n... |
| |
| View on play.google.com | Preview by Yahoo |
| |
| |

The IOS and Windows app is on development.
 73! Marian YO2MBU

4793. Re: HO-HO-HOH by L.B. Cebik file

Yahoo group: SkyWires
Date: 2015-06-16 15:13:19 UTC
From: everettsharp@...
Topic: 4730 Message: 4793

Hi Tom, I was not able to down load the HO-HO-HOH article from the Yahoo web site with the pictures included in the article. Could you please send me the article unzipped in PDF format. Thanks everettsharp@aol.com

Everett N8CNP

4794. Military Surplus Fiberglass Poles - WHERE are they?

Yahoo group: SkyWires
Date: 2015-06-16 17:00:19 UTC
From: Cencom
Topic: 4701 Message: 4794

You can find the military-style masts at:

http://www.tmastco.com

73, Larry - W1GOR

4795. Re: Military Surplus Fiberglass Poles - WHERE are they?

Yahoo group: SkyWires
Date: 2015-06-16 17:36:00 UTC
From: slr_65@...
Topic: 4701 Message: 4795

The most recent pricing there is from 2013 and they said:

Pricing:
NEW PRICING: WOW! And you though gasoline was the only thing that has doubled in price in the last few years. To continue bringing you these outstanding surplus aluminum sections, we now have to compete directly with others who recognize the value of the high quality aluminum available in these items. We try to maintain a decent supply of pieces in stock; however, we are not sure how much longer these will be readily available.

Prices vary (from $9.00 to $12.00 each) due to the condition of the tube sections and the erratic availability of these through surplus outlets. Since our standard shipping boxes are suitable for quantities of 4 or 10, please keep that in mind when requesting quotes. Buyer pays all shipping costs.

Sooo. $108 to $144 plus shipping....The Rohn H-50 is $130 and I could drive to pick it up for about the same as the shipping cost of the military mast, soooo not really a bargain.

These ARE available -> they're just not available inexpensively any more.

My fault, I took too long to mend my errant ways and come back to amateur radio, so I missed some bargains!

4796. AW: [SkyWires] Re: Military Surplus Fiberglass Poles - WHERE are they?

Yahoo group: SkyWires
Date: 2015-06-16 20:18:17 UTC
From: siegfried jackstien
Topic: 4701 Message: 4796

Here i can still get the fibre glass poles for around 3 bucks per section

(or get 10 for 30 ... shipping included)

It is just half an hour drive from me so I buy them direct (not on evilbay)

But he also sells then in the bay ...

Dg9bfc

Sigi

Ps last time I paid 2.50 each ... bought 40 for 100 euros :-)

> -----Ursprüngliche Nachricht-----
> Von: SkyWires@yahoogroups.com [mailto:SkyWires@yahoogroups.com]
> Gesendet: Dienstag, 16. Juni 2015 17:36
> An: SkyWires@yahoogroups.com
> Betreff: [SkyWires] Re: Military Surplus Fiberglass Poles - WHERE are
> they?
>
>
>
> The most recent pricing there is from 2013 and they said:
>
>
>
> Pricing:
>
> NEW PRICING: WOW! And you though gasoline was the only thing that has
> doubled in price in the last few years. To continue bringing you these
> outstanding surplus aluminum sections, we now have to compete directly
> with others who recognize the value of the high quality aluminum available
> in these items. We try to maintain a decent supply of pieces in stock;
> however, we are not sure how much longer these will be readily available.
>
>
>
>
>
> Prices vary (from $9.00 to $12.00 each) due to the condition of the tube
> sections and the erratic availability of these through surplus outlets.
> Since our standard shipping boxes are suitable for quantities of 4 or 10,
> please keep that in mind when requesting quotes. Buyer pays all shipping
> costs.
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>

>
>
> Sooo. $108 to $144 plus shipping....The Rohn H-50 is $130 and I could
> drive to pick it up for about the same as the shipping cost of the
> military mast, soooo not really a bargain.
>
>
>
>
> These ARE available -> they're just not available inexpensively any more.
>
>
>
>
> My fault, I took too long to mend my errant ways and come back to amateur
> radio, so I missed some bargains!
>
>
>

4797. This odd multi band doublet

Yahoo group: SkyWires
Date: 2015-06-16 21:10:38 UTC
From: kd1ia
Topic: 4797 Message: 4797

Hi all and thanks for reading. I am currentlyantennaless and have a mind to work on that and get back on the air a bit. The good news is I have a 100ft plus tree next to water to hang my doublet from. I would like you who have the software and are willing to help to tell me what I might get by installing the following 4 wire sides fed to a manual tuner with open wire line. The legs are as follows

A: 124.8/124.8
A' 62.4 /62.4
B: 88.7 / 88.7
B' 44.6 / 44.6

These represent a half wave on 160 and 75 followed by
.64 wave elements on 40 and 20m.

Again this will be at apx 100ft fed with 450ohm line back to the tuner at the shack.

Any comments suggestions welcome!

Thanks for any help and I hope to be back on the air for the comming contest season doing the best I can.

73 de John KO1H

4798. Re: AW: [SkyWires] Re: Military Surplus Fiberglass Poles - WHERE are they?

Yahoo group: SkyWires
Date: 2015-06-16 21:19:18 UTC
From: slr_65@...
Topic: 4701 Message: 4798

Yep, I've read many such accounts on the net...one local said they were $35 for 12 at the hamfest in Lincoln just a year ago, this last March they were $75 at the hamfest.

The supply has evidently dried up and it seems everyone who has them loves them and aren't giving them up!

Oh well, I'll plod on. In the mean time, I'm still making contacts with my low loop...

4799. RE: [SkyWires] Slingshots DON'T work!

Yahoo group: SkyWires
Date: 2015-06-17 02:17:01 UTC
From: slr_65@...
Topic: 4752 Message: 4799

LOL! OK, I like to EchoLink and tonight I participated in the good morning net for the Australian Sunshine Coast Amateur Radio Club and we discussed the how to top a tree problem...

The Aussies have this figured out, lots of drones out there and the guys who own them LOVE to show them off....pop a note on Facebook and find a drone.

We did, found one but it'll be a couple weeks before he could do it, if we don't find one sooner we'll still do the air launcher, but for the future that's good info!

4800. Re: [SkyWires] Slingshots DON'T work!

Yahoo group: SkyWires
Date: 2015-06-17 03:20:51 UTC
From: Evan Rolek
Topic: 4752 Message: 4800

Yes, but sometimes those drones do crash. And I hate to see a drone man cry....

-----Original Message-----
From: slr_65@... [SkyWires] <SkyWires@yahoogroups.com>
To: SkyWires <SkyWires@yahoogroups.com>
Sent: Tue, Jun 16, 2015 10:17 pm
Subject: RE: [SkyWires] Slingshots DON'T work!

LOL! OK, I like to EchoLink and tonight I participated in the good morning net for the Australian Sunshine Coast Amateur Radio Club and we discussed the how to top a tree problem...

The Aussies have this figured out, lots of drones out there and the guys who own them LOVE to show them off....pop a note on Facebook and find a drone.

We did, found one but it'll be a couple weeks before he could do it, if we don't find one sooner we'll still do the air launcher, but for the future that's good info!

4801. Re: [SkyWires] Slingshots DON'T work!

Yahoo group: SkyWires
Date: 2015-06-17 07:42:39 UTC
From: slr_65@...
Topic: 4752 Message: 4801

We discussed that. He's flown his a lot and has done this before! He said as long as the wind was good it'll be fine. He also has two so will bring back up!

Interesting solution to the problem, though it won't put a wire over a specific branch like other methods. It'll get a wire over the whole tree though!

Interesting where this hobby of ours takes us!

4802. Tilted loop, feed high or low?

Yahoo group: SkyWires
Date: 2015-06-17 11:31:43 UTC
From: slr_65@...
Topic: 4802 Message: 4802

OK, once we get the wire over the trees the loop will be kind of tilted, is it best to feed the loop in the high or low section?

4803. RE: [SkyWires] Tilted loop, feed high or low?

Yahoo group: SkyWires
Date: 2015-06-17 11:37:50 UTC
From: Rick - DJ0IP / NJ0IP
Topic: 4802 Message: 4803

Best for what?

In all the talk of trees and ropes, I’ve forgotten how long your loop will be and whether it is to favor working low bands, locals, or high bands DX.

73 - Rick, DJ0IP
(Nr. Frankfurt am Main)

From: SkyWires@yahoogroups.com [mailto:SkyWires@yahoogroups.com]
Sent: Wednesday, June 17, 2015 1:32 PM
To: SkyWires@yahoogroups.com
Subject: [SkyWires] Tilted loop, feed high or low?

OK, once we get the wire over the trees the loop will be kind of tilted, is it best to feed the loop in the high or low section?

4804. AW: [SkyWires] Tilted loop, feed high or low?

Yahoo group: SkyWires
Date: 2015-06-17 12:01:39 UTC
From: siegfried jackstien
Topic: 4802 Message: 4804

Current is what radiates

Feed it high

A slight tilt does not hurt on 2 lowest bands ... but would show some front to back ratio (from high towards low) on next harmonics

Dg9bfc

sigi

> -----Ursprüngliche Nachricht-----
> Von: SkyWires@yahoogroups.com [mailto:SkyWires@yahoogroups.com]
> Gesendet: Mittwoch, 17. Juni 2015 11:32
> An: SkyWires@yahoogroups.com
> Betreff: [SkyWires] Tilted loop, feed high or low?
>
>
>
> OK, once we get the wire over the trees the loop will be kind of tilted,
> is it best to feed the loop in the high or low section?
>
>
>
>
>
>

4805. Re: Tilted loop, feed high or low?

Yahoo group: SkyWires
Date: 2015-06-17 12:20:32 UTC
From: slr_65@...
Topic: 4802 Message: 4805

I'm guessing 225', high at 40', low at 15', squarish circle.

4806. RE: [SkyWires] Tilted loop, feed high or low?

Yahoo group: SkyWires
Date: 2015-06-17 12:29:33 UTC
From: slr_65@...
Topic: 4802 Message: 4806

I'm guessing 225', top around 40', bottom around 15', more square than rectangular, but probably a squarish circle.

4807. RE: [SkyWires] Re: Tilted loop, feed high or low?

Yahoo group: SkyWires
Date: 2015-06-17 13:38:58 UTC
From: Rick - DJ0IP / NJ0IP
Topic: 4802 Message: 4807

OK, THEN feed it high.

There are other factors, so just saying feed it high might not always be correct.

For instance, if the antenna’s main use is high band DX, its strongest lobe will be in the corner opposite the feedpoint, assuming it is approximately square. In that case, if there is not too much difference in height, then it should be fed with the opposite corner in the main direction of radiation.

However with so much difference in height, then it is best to take the high point.

73 - Rick, DJ0IP
(Nr. Frankfurt am Main)

From: SkyWires@yahoogroups.com [mailto:SkyWires@yahoogroups.com]
Sent: Wednesday, June 17, 2015 2:21 PM
To: SkyWires@yahoogroups.com
Subject: [SkyWires] Re: Tilted loop, feed high or low?

I'm guessing 225', high at 40', low at 15', squarish circle.

4808. Re: [SkyWires] Slingshots DON'T work!

Yahoo group: SkyWires
Date: 2015-06-18 13:07:17 UTC
From: tthiewes@...
Topic: 4752 Message: 4808

slr_65 mailto:slr_65@yahoo.com?subject=Re%3A%20Slingshots%20DON%27T%20work%21,
Make sure you video your drone work for us. I have to admit, it sounds very creative and tempting. Very tempting.
Terry KD0UTQ

4809. Re: [SkyWires] Slingshots DON'T work!

Yahoo group: SkyWires
Date: 2015-06-18 16:46:34 UTC
From: slr_65@...
Topic: 4752 Message: 4809

If we use it I'll see if we can!

We decided to try the pneumatic shooter first.

Since I'm off work recovering and bored to death, and this isn't a precision project requiring good vision, I built the launcher yesterday.

I varied from the design in the link I posted a bit, here's what/why I did:

The object here is to get the wire over the trees, it's not to build a portable device that can be backpacked, etc. so simple, which also lends to inexpensive, won out over compact.

*) 1-1/4" sch 40 PVC was chosen. Make sure it has a pressure rating written on it. Pipe for use as Drain Waste Vent use only is sometimes sold and it's not pressure rated. Pressure rated pipe can be used as DWV though, so most hardware stores usually just carry pressure rated pipe, but it may be also be labeled as DWV. Bottom line, look for a pressure rating written on the side, if there is one it's good to use.

*) 1-1/4" was chosen because it's easy to make the projectiles for that size. Short 3" pieces of 3/4" pvc pipe with end caps glued on fit PERFECTLY in 1-1/4" pipe. A small wood screw thread eye hole screw was screwed into one end of each projectile for the string to hook to.

*) Most of the launcher designs on the net opt for good enough performance balanced with a small size. Because of this they tend to short the size of the air chamber. Reading the pneumatic tater tosser web sites (there's been a surprising amount of research on these things, they seem to be a favorite for science classes to figure out the best barrel lengths, air tank volumes, pressure, etc.), it seems the air chamber needs to be twice to four times the volume of the barrel, so we chose to go with twice.

*) Though compact wasn't a design criteria, neither is unwieldy either, so we wanted to balance the barrel length with the air chamber length. Looking at the tater tosser web sites, it seems two foot, though not optimum, works well.

*) With a two foot barrel we need four feet for an air chamber if we use the same size pipe, which we did to save money as the pipe is sold in 10' lengths usually (ACE Hardware actually sells it by the foot here, but it's more expensive that way. Still, if you wanted to shorten it up you could buy a short length of larger diameter and probably come out ahead).

*) This seems to work well. 6' is kind of long, but not bad. The 4' air chamber puts the valve at what feels like a convenient spot about waist high.

*) We opted for a manual valve. Electric valves work better, no doubt, but add to the cost of the project and judging from the YouTube videos and science class project data on the net, should give us the performance we need for our short hop.

*) We chose a 1" valve. Why? Because that's what everyone else chose! I think that's because it's a common size for an inexpensive sprinkler system dump valve. All the data on the net seems based on this size, and it was a bit less expensive than a 1-1/4" so we couldn't see any reason to not follow the herd.

OK, here's how it's built, I'll try to take pics later.

1-1/4" cap with valve stem installed in it.
4' piece of straight pipe.
1-1/4" glue to 1" threaded adapter.
1" threaded plastic ball valve.
1-1/4" glue to 1" threaded adapter.
2' piece of straight pipe.

Projectiles as described earlier.

6' feels good, it lets you brace it on the ground and angle to shoot it, the valve feels like it's in a good position. The valve stem will stick in the dirt during use though, so be mindful of that and always put the cap back on after charging.

We were hoping to play later today, but it's raining today, so it may be a day or two, I'll post back how it goes.

4810. Steve's Low Loop Resonance Test Results

Yahoo group: SkyWires
Date: 2015-06-19 01:17:59 UTC
From: slr_65@...
Topic: 4810 Message: 4810

Hi Guys,

My buddy dug up the 4:1 current balun so I played with it today and thought I'd share the test results.

My loop is approximately 210' ran at about 12' under the eaves of our single story ranch style house. It's about a 2' over hang and it's ran down the middle so it's about 12" from the wall and 12" from metal rain gutters. It's fed with about 35' of 450 ladder line to a ladder loc center insulator.

I had been running it through a Dentron Super Tuner with a 4:1 voltage balun and it will load 80 through 10 meter.

I have an MFJ-209 SWR analyzer with a frequency counter, but until today I had no way to find where it was resonant because I didn't have a stand alone balun.

I had hoped the stand alone blun would let the Kenwood tuner tune the loop, but no joy. It will tune 15 through half of 6 meter though.

If I tune the Dentron for 80 meter and leave it set for 80 meter the Kenwood will match it from to 30 meter though, so 20 is the only pain in the butt.

Anyway, with the stand alone balun I was able to use the MFJ to see where the low SWRs were at.

1005/210 is 4.78 so I figured that was one low SWR spot. It's a little off, but there's a lot going on here with the low height, proximity to a building, etc..

Onwards to the data....There were some places where it got lower (well, wasn't pegged above 4:1 as hard!), but these are where it significantly dips.

5.6 mhz 3.0:1
9.9 mhz 2.7:1
15.7 mhz 1.7:1
19.5 mhz 2:0:1
25.5 mhz 1.0:1
29.6 mhz 1.3:1

It looks like about every 5 mhz the SWR reduces. Interesting.

I left the current balun hooked up for now, though I'd see if there's any improvement in receiving or transmitting that's noticed.

My buddy has an MFJ combination 1:1 and 4:1 balun somewhere he's going to dig up, it'd be interesting to see what changing to a 1:1 balun does.

Also, I moved my radio room so that's why the ladder line has a long run. I could relocate the feed point and shorten the ladder line to something less than 20' if it would make a

difference.

Anyway, there's the results of the playing...I'd love to hear any thoughts, comments, etc..

FUN STUFF! 8-)

4811. Re: Steve's Low Loop Resonance Test Results

Yahoo group: SkyWires
Date: 2015-06-19 01:30:38 UTC
From: slr_65@...
Topic: 4810 Message: 4811

Hmmm, just thinking out loud, the SWR reduces about every 5hz,with is about where it starts dipping the SWRs and is near where it's predicted to be resonant. As the frequency comes up the SWR dips get better...is that due to ground proximity and as we get more wavelengths above the ground the better it behaves?

4812. Re: [SkyWires] Re: Steve's Low Loop Resonance Test Results

Yahoo group: SkyWires
Date: 2015-06-19 01:53:30 UTC
From: Evan Rolek
Topic: 4810 Message: 4812

Steve,

Without some experimentation, it is difficult (dare I say impossible?) to know conclusively the reasons for your findings. But let me say here are some candidate reasons: ground proximity/conductivity, capacitive coupling to the house structure and/or contents, feedline attributes, balun attributes, system losses, etc. etc.

The antenna is so low, even on the highest bands, I'm not sure it is high enough to think in terms of "wavelengths above ground". Too, I tend to look at parameters other than SWR. Many very lossy antennas exhibit excellent SWR across broad ranges of frequency, yet are poor radiators.

Just some wild thoughts...

73,

Evan, K9SQG

-----Original Message-----
From: slr_65@... [SkyWires] <SkyWires@yahoogroups.com>
To: SkyWires <SkyWires@yahoogroups.com>
Sent: Thu, Jun 18, 2015 9:30 pm
Subject: [SkyWires] Re: Steve's Low Loop Resonance Test Results

Hmmm, just thinking out loud, the SWR reduces about every 5hz,with is about where it starts dipping the SWRs and is near where it's predicted to be resonant. As the frequency comes up the SWR dips get better...is that due to ground proximity and as we get more wavelengths above the ground the better it behaves?

4813. Re: [SkyWires] Re: Steve's Low Loop Resonance Test Results

Yahoo group: SkyWires
Date: 2015-06-19 02:14:15 UTC
From: slr_65@...
Topic: 4810 Message: 4813

Absolutely Evan, there's a whole lot (wrong) going on here! It's hard to pin any one thing down, and in fact there probably isn't any one thing, it's probably a mix of all you mentioned.

Shrug, it's working, I just gotta use the Dentron on some bands and takes a little setup, I can deal with that.

I gotta figure a way to get it away from the house at least though, higher would even be better.

My son had a thought, he has some scrap 2x4s, his thought was to cut them in half and make some 4'x4' 90s and screw them under the eaves, they'd come out a couple foot past the rain gutters and then up 4'. Not really a height gain, but an away from structure a bit more gain, but is it enough....enough to want to explain to the XYL why the top of her house looks like a prison's razor wire?! LOL!

4814. RE: [SkyWires] Steve's Low Loop Resonance Test Results

Yahoo group: SkyWires
Date: 2015-06-19 03:28:33 UTC
From: Rick - DJ0IP / NJ0IP
Topic: 4810 Message: 4814

DUMP THE 4:1 VOLTAGE BALUN!

BEST is to use a 1:1 Current balun at the tuner.
BEST here is a Balun Designs Model 1115t
www.balundesigns.com/model-1171-1-1-atu-current-balun-1-5-54-mhz-5kw/

The worst thing you can do with a tuner is put a 4:1 balun in front of it.
ALWAYS USE A 1:1 BALUN.

If you don’t have one handy but happen to have some unused coax, then you can easily make one.
Just wrap 22 or 23 ft. of RG-213 or RG-58 onto about a 4” form (i.e. PVC pipe).
It is OK to close space it (touching turns) but a little better if you space the turns with nylon rope (1/4").

You will see a picture of one in action in the last picture of the gallery of my QTH in Oklahoma:
http://www.dj0ip.de/my-station/oklahoma-2010/

Use this with your Denton Super tuner. It will work just fine.

It is an unfortunate myth that tuners need a 4:1 balun.
See: http://karinya.net/g3txq/tuner_balun/
Even the ATU manufacturers had this wrong for many years, but finally they figured it out and for the past 5 years or so, are now delivering their high power tuners with 1:1 Guanella baluns. No more 4:1.

73 - Rick, DJ0IP
(Nr. Frankfurt am Main)

From: SkyWires@yahoogroups.com [mailto:SkyWires@yahoogroups.com]
Sent: Friday, June 19, 2015 3:18 AM
To: SkyWires@yahoogroups.com
Subject: [SkyWires] Steve's Low Loop Resonance Test Results

Hi Guys,

My buddy dug up the 4:1 current balun so I played with it today and thought I'd share the test results.

My loop is approximately 210' ran at about 12' under the eaves of our single story ranch style house. It's about a 2' over hang and it's ran down the middle so it's about 12" from the wall and 12" from metal rain gutters. It's fed with about 35' of 450 ladder line to a ladder loc center insulator.

I had been running it through a Dentron Super Tuner with a 4:1 voltage balun and it will load 80 through 10 meter.

I have an MFJ-209 SWR analyzer with a frequency counter, but until today I had no way to find where it was resonant because I didn't have a stand alone balun.

I had hoped the stand alone blun would let the Kenwood tuner tune the loop, but no joy. It will tune 15 through half of 6 meter though.

If I tune the Dentron for 80 meter and leave it set for 80 meter the Kenwood will match it from to 30 meter though, so 20 is the only pain in the butt.

Anyway, with the stand alone balun I was able to use the MFJ to see where the low SWRs were at.

1005/210 is 4.78 so I figured that was one low SWR spot. It's a little off, but there's a lot going on here with the low height, proximity to a building, etc..

Onwards to the data....There were some places where it got lower (well, wasn't pegged above 4:1 as hard!), but these are where it significantly dips.

5.6 mhz 3.0:1
9.9 mhz 2.7:1
15.7 mhz 1.7:1
19.5 mhz 2:0:1
25.5 mhz 1.0:1
29.6 mhz 1.3:1

It looks like about every 5 mhz the SWR reduces. Interesting.

I left the current balun hooked up for now, though I'd see if there's any improvement in receiving or transmitting that's noticed.

My buddy has an MFJ combination 1:1 and 4:1 balun somewhere he's going to dig up, it'd be interesting to see what changing to a 1:1 balun does.

Also, I moved my radio room so that's why the ladder line has a long run. I could relocate the feed point and shorten the ladder line to something less than 20' if it would make a difference.

Anyway, there's the results of the playing...I'd love to hear any thoughts, comments, etc..

FUN STUFF! 8-)

4815. RE: [SkyWires] Re: Steve's Low Loop Resonance Test Results

Yahoo group: SkyWires
Date: 2015-06-19 03:32:14 UTC
From: Rick - DJ0IP / NJ0IP
Topic: 4810 Message: 4815

Hang a bird feeder on it. That’ll keep the XYL happy.

The further away from the house, the better!

Even moving it horizontally might help.

Try to get the feedpoint at least 5 ft. away from the house.

73 - Rick, DJ0IP

(Nr. Frankfurt am Main)

From: SkyWires@yahoogroups.com [mailto:SkyWires@yahoogroups.com]
Sent: Friday, June 19, 2015 4:14 AM
To: SkyWires@yahoogroups.com
Subject: Re: [SkyWires] Re: Steve's Low Loop Resonance Test Results

Absolutely Evan, there's a whole lot (wrong) going on here! It's hard to pin any one thing down, and in fact there probably isn't any one thing, it's probably a mix of all you mentioned.

Shrug, it's working, I just gotta use the Dentron on some bands and takes a little setup, I can deal with that.

I gotta figure a way to get it away from the house at least though, higher would even be better.

My son had a thought, he has some scrap 2x4s, his thought was to cut them in half and make some 4'x4' 90s and screw them under the eaves, they'd come out a couple foot past the rain gutters and then up 4'. Not really a height gain, but an away from structure a bit more gain, but is it enough....enough to want to explain to the XYL why the top of her house looks like a prison's razor wire?! LOL!

4816. Re: [SkyWires] Steve's Low Loop Resonance Test Results

Yahoo group: SkyWires
Date: 2015-06-19 04:16:53 UTC
From: Andy
Topic: 4810 Message: 4816

Random thoughts here. I haven't been following these threads lately, so I don't know how much background info I have missed.

SWR itself doesn't indicate resonance. Nor does it necessarily relate to things like ground proximity. It is nothing but a half-blind measure of impedance.

Your antenna (with feedline) has some impedance at every frequency. If you plot it on a Smith chart, it usually makes loops and spirals that wander around on the graph. On an ordinary impedance vs. frequency plot, the impedance wavers up and down, a little like a damped distorted sine wave.

A dip in SWR means nothing more than the impedance curve getting closer to the middle of the Smith chart = the measurement impedance. With a good 4:1 balun, that impedance, at the output of the balun, would be 200 ohms. So if the antenna's impedance varies from say 100 to 1000 ohms (at the inside end of your feedline), every so often it passes closer to 200 ohms, and when it does, the SWR dips at that point. That's all it means, nothing more.

It's quite possible to make it so that the SWR dips nowhere near resonance, and is high at resonance.

For it to be resonant, it needs to have jX=0. But you are looking into the feedline, not just the antenna, so you won't see jX=0 at the same frequencies. The feedline essentially detunes the antenna and effective resonant points (as seen by your meter indoors) shift to new frequencies.

The only point in your SWR measurements that also indicates resonance, is when SWR=1.0:1, because that's the only one where we know X=0. (X=0 is necessary for SWR=1.0:1, but not vice-versa.)

"As the frequency comes up, the SWR dips get better." There is no particular reason for that. It just means the impedance is coming closer to 200 ohms (at output of balun). Might be because of losses, might be simply because that's what happens to happen.

The feedpoint impedance of large loops tends to waver above and below something (around 150 ohms, or was it 377 ?) as you go up and up in frequency, and it might happen to be getting closer to 200 ohms as a result.

Or consider that maybe the 4:1 balun isn't perfect. None of them are. Its increasing losses at higher frequencies could even be making the SWR dips look better, having nothing to do with what the antenna does.

Mounting an antenna low TENDS to increase its losses because of ground proximity (which isn't necessarily a horrible thing, in moderation) ...

which TENDS to reduce the impedance excursions between high and low.
Whether or not that reduces your SWR, or actually increases it, depends on
other factors.

Andy

4817. Re: [SkyWires] Steve's Low Loop Resonance Test Results

Yahoo group: SkyWires
Date: 2015-06-19 04:29:30 UTC
From: Andy
Topic: 4810 Message: 4817

FYI, there are some people who intentionally use very low antennas even on the lowest HF frequencies.

By low, I mean around 6 feet above earth, on 80/75 meters or 40 meters. At that height, they are a small fraction of a wavelength above earth, and tend to make fair-to-good NVIS antennas on those lower HF frequencies. Word is that such low antennas might help reject man-made noise, making them quieter. They do sacrifice efficiency, but some users of those antennas find that they "get out" well enough so efficiency is not that bad. Your mileage may vary.

One version (the "super gain NVIS antenna") has a 6-8 foot high folded dipole above either one or three wire reflectors laying on the ground.

The same idea might work for loops too.

Andy

4818. Re: [SkyWires] Steve's Low Loop Resonance Test Results

Yahoo group: SkyWires
Date: 2015-06-19 04:49:26 UTC
From: slr_65@...
Topic: 4810 Message: 4818

Lots to digest guys, thanks!

Actually Andy, I DO get out fairly well for 80 meter. When I was a kid doing this we had a Yaesu 101E, but it didn't have the 80 meter crystals in it for some reason. Once I returned I knew I wanted 40 through 10, but wasn't too concerned with 80, I'd always heard it was very noisey, to the point of unusable in the summer. I just tuned up on it once to see if I could...and I could. Then I got to listening to it, it's actually quieter for me than 40 and it's fairly full of guys from Texas, Oklahoma, Kansas, Missouri, Iowa, and Illinoise for me (I'm in southeast Nebraska). Nice guys who don't mind my low signal (it's low, but stable they usually say), so it's become a favored band for me.

4819. RE: [SkyWires] Steve's Low Loop Resonance Test Results

Yahoo group: SkyWires
Date: 2015-06-19 04:56:15 UTC
From: Rick - DJ0IP / NJ0IP
Topic: 4810 Message: 4819

Andy, that is a myth. Antennas that close to the ground are worse than when they are higher, at least on TX.

A dipole or loop at a quarter wavelength will work better (on transmit) for NVIS than when mounted close to the ground for the reason you mentioned in your previous post: ground losses.

Once you go higher than 1/4 wavelength, that's when the NVIS efficiency drops off.

However your point about receiving quieter (i.e. less noise), might sometimes be true.

You had lots of good points in your previous post, but I would dump the 4:1 balun and only use a 1:1 Guanella. Much better CMI, thus less common mode current problem. The balun's primary job is to keep the common mode current out. Let the matchbox do the matching. If the matchbox can't match up to 200 Ohms, then the Op has bought a lemon. (hi)

The loop is close to 150 Ohms on upper bands, but it also depends on height, as I'm sure you well know.

Cheers!

73 - Rick, DJ0IP
(Nr. Frankfurt am Main)

From: SkyWires@yahoogroups.com [mailto:SkyWires@yahoogroups.com]
Sent: Friday, June 19, 2015 6:30 AM
To: SkyWires@yahoogroups.com
Subject: Re: [SkyWires] Steve's Low Loop Resonance Test Results

FYI, there are some people who intentionally use very low antennas even on the lowest HF frequencies.

By low, I mean around 6 feet above earth, on 80/75 meters or 40 meters. At that height, they are a small fraction of a wavelength above earth, and tend to make fair-to-good NVIS antennas on those lower HF frequencies. Word is that such low antennas might help reject man-made noise, making them quieter. They do sacrifice efficiency, but some users of those antennas find that they "get out" well enough so efficiency is not that bad. Your mileage may vary.

One version (the "super gain NVIS antenna") has a 6-8 foot high folded dipole above either one or three wire reflectors laying on the ground.

The same idea might work for loops too.

Andy

4820. Re: [SkyWires] Slingshots DON'T work!

Yahoo group: SkyWires
Date: 2015-06-19 05:29:25 UTC
From: slr_65@...
Topic: 4752 Message: 4820

We did play with the shooter tonight and we're almost there!

The thing will definitely chuck the puck over the trees!

Our problem is the string. On the first shot we laid it out on the grass and it pulled off the mark. On the second we put the string in a bucket and tried to loosely coil it, it was sailing fine, right on target but then a big mouse nest of string came out and grabbed a low branch, so just made one tree.

It was getting dark so we stopped. We dug up an open face fishing reel, it's getting duct taped on tomorrow!

4821. RE: [SkyWires] Slingshots DON'T work!

Yahoo group: SkyWires
Date: 2015-06-19 06:20:36 UTC
From: Rick - DJ0IP / NJ0IP
Topic: 4752 Message: 4821

I think the fishing reel will do the trick.
Seems rope anywhere else always finds a way to tangle in something and limit flight.

73 - Rick, DJ0IP
(Nr. Frankfurt am Main)

From: SkyWires@yahoogroups.com [mailto:SkyWires@yahoogroups.com]
Sent: Friday, June 19, 2015 7:29 AM
To: SkyWires@yahoogroups.com
Subject: Re: [SkyWires] Slingshots DON'T work!

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It was getting dark so we stopped. We dug up an open face fishing reel, it's getting duct taped on tomorrow!

4822. Chinese Antenna Analyzer

Yahoo group: SkyWires
Date: 2015-06-19 08:25:07 UTC
From: slr_65@...
Topic: 4822 Message: 4822

I hate to support China, but sometimes you just have to.

I wanted to build one of the Aussie Antenna Analyzer kits, but I don't think that's in the cards with my vision now.

If I'm going to antenna play though, it'd be nice to have some way to test half way decently. Doing a little research I found the Mini60 SARK100 seems to be well reviewed and a good buy.

Here's one review:
Review of Mini60 Antenna Analyzer
https://bonoradio.wordpress.com/2015/02/24/review-of-mini60-antenna-analyzer/

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Review of Mini60 Ant...
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View on bonoradio.word...
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Preview by Yahoo

This fleaBay seller has them on sale, but it's also a Best Offer product, I tried hard, could only talk 'em down another couple bucks, but it's still less than they were asking! They'll take $110.
Mini ark100 HF 1-60M ANT SWR Antenna Analyzer Meter Tester +Battery +PC software http://www.ebay.com/itm/111353604444?_trksid=p2057872.m2749.l2649&ssPageName=STRK%3AMEBIDX%3AIT

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Mini ark100 HF 1-60... http://www.ebay.com/itm/111353604444?_trksid=p2057872.m2749.l2649&ssPageName=STRK%3AMEBIDX%3AIT US $112.75 New in Business & Industrial, Electrical & Test Equipment, Electrical Equipment &am...

View on www.ebay.com http://www.ebay.com/itm/111353604444?_trksid=p2057872.m2749.l2649&ssPageName=STRK%3AMEBIDX%3AIT
Preview by Yahoo

4823. RE: [SkyWires] Slingshots DON'T work!

Yahoo group: SkyWires
Date: 2015-06-19 08:26:01 UTC
From: slr_65@...
Topic: 4752 Message: 4823

Yeah, I think so too...it was working swimingly, it's just the string getting in the way, coming off a reel should be fine....we'll know tomorrow!

4824. RE: [SkyWires] Chinese Antenna Analyzer

Yahoo group: SkyWires
Date: 2015-06-19 08:57:22 UTC
From: Rick - DJ0IP / NJ0IP
Topic: 4822 Message: 4824

I just bought one.
Be aware that it comes naked.
You have to buy a battery set, which cost me another 30 bucks.
The battery connection for the internal wires is a piece of twinlead (zip cord) wire, cut flush.
You have to solder the batteries in.

Then you have to build 3 dummy loads to calibrate it before using.
This is really Simple Simon, “if” you have a good assortment of resistors – which I did.
I solder each of my resistors onto/into an RCA Phono Plug and will simply plug them into the analyzer through an adapter from PL to Phono.

However Sigi has one and he swears by it and I trust his judgment.
I haven’t had time to work with it yet and won’t for another 2 weeks.
We have a big Hamfest here in Europe next week and I’m busy preparing for it.

Normally I don't recommend stuff without trying it myself first, but in this case I trust Sigi enough to rely on his judgment.

I also have an MFJ-259B as well as a RigExpert AA54 scanning analyzer.
So I have a good pair to compare it too, if I ever find the time.

73 - Rick, DJ0IP
(Nr. Frankfurt am Main)

From: SkyWires@yahoogroups.com [mailto:SkyWires@yahoogroups.com]
Sent: Friday, June 19, 2015 10:25 AM
To: SkyWires@yahoogroups.com
Subject: [SkyWires] Chinese Antenna Analyzer

I hate to support China, but sometimes you just have to.

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If I'm going to antenna play though, it'd be nice to have some way to test half way decently. Doing a little research I found the Mini60 SARK100 seems to be well reviewed and a good buy.

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I mentioned in a previous post that I had purchased a Mini60 antenna analyzer. I am going to post a qui...

View on bonoradio.word...
Preview by Yahoo

This fleaBay seller has them on sale, but it's also a Best Offer product, I tried hard, could only talk 'em down another couple bucks, but it's still less than they were asking! They'll take $110.
Mini ark100 HF 1-60M ANT SWR Antenna Analyzer Meter Tester +Battery +PC software

Mini ark100 HF 1-60...
US $112.75 New in Business & Industrial, Electrical & Test Equipment, Electrical Equipment &am...

View on www.ebay.com
Preview by Yahoo

4825. AW: [SkyWires] Chinese Antenna Analyzer

Yahoo group: SkyWires
Date: 2015-06-19 09:19:31 UTC
From: siegfried jackstien
Topic: 4822 Message: 4825

Sark100 is a good analyzer (if you just need shortwave up to 6m)

I bought a sark100 and added a Bluetooth module (hc06) to it

Now I can measure swr direct at the antenna without the need for a long usb cable (in fact I can pull my analyzer up the pole or in the tree with the antenna and have NO cable at all ... so any influences of coax or ladderline is out of the test setup

Dig trough evilbay and you should find a sark for around 70-80 bucks

Sometimes they sell them for 25 bucks (BUT ADD 100 for postage!!!!) ....so carefully read the offers in evilbay

The mini60 is nearly the same analyzer ... only difference is that it has a lipo charger (sark100 has nimh charger) and it is a bit smaller

Dg9bfc

Sigi

Ps any questions?? Feel free to ask :-)

> -----Ursprüngliche Nachricht-----
> Von: SkyWires@yahoogroups.com [mailto:SkyWires@yahoogroups.com]
> Gesendet: Freitag, 19. Juni 2015 08:25
> An: SkyWires@yahoogroups.com
> Betreff: [SkyWires] Chinese Antenna Analyzer
>
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> ame=STRK%3AMEBIDX%3AIT>
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4826. Re: [SkyWires] Re: Steve's Low Loop Resonance Test Results

Yahoo group: SkyWires
Date: 2015-06-19 12:46:28 UTC
From: WA8JXM
Topic: 4810 Message: 4826

On 18/06/2015 22:14, slr_65@... [SkyWires] wrote:
> I gotta figure a way to get it away from the house at least though,
> higher would even be better.

Put a 20' mast on each corner of the house. Either get some chainlink fence toprail which comes in 21' lengths?) or take two 10' pieces of conduit (EMT) that slip inside each other (1-1/4 and 1-1/2") and splice them together. If nothing else, drive a metal fence post (t-post) or a piece of heavy angle iron into the ground and tie the masts to them.

Significantly changing the length of the open wire feed will significantly change the feed impedance. Your feedline is a impedance transformer, the value varies with it's wavelength.

73, Ken WA8JXM

4827. Re: [SkyWires] Steve's Low Loop Resonance Test Results

Yahoo group: SkyWires
Date: 2015-06-19 12:54:06 UTC
From: WA8JXM
Topic: 4810 Message: 4827

On 18/06/2015 23:28, 'Rick - DJ0IP / NJ0IP' Rick@... [SkyWires] wrote:
> BEST is to use a 1:1 Current balun at the tuner.
>
> The worst thing you can do with a tuner is put a 4:1 balun in front of it.
> ALWAYS USE A 1:1 BALUN.

I think it depends on the impedance. Some antennas/feedlines need a
1:1, some need a 4:1, and some need no balun.

I have done experimenting here and some antennas/feedlines tune better
with a 4:1 balun, some with a 1:1.

Ken WA8JXM

4829. Baluns, tuners, Steve's loop test results, etc.

Yahoo group: SkyWires
Date: 2015-06-19 13:32:00 UTC
From: Evan Rolek
Topic: 4810 Message: 4829

Well, it depends. Whether a voltage balun or current balun is appropriate, and whether the ratio is 1:1, 4:1, 9:1, depends on the antenna and the bands of interest. Without knowing the parameters of the antenna SYSTEM, the complete system including feedline, it is impossible to select the best balun to use, although one might guess right. Whether that guess is correct for all bands of interest is an unanswered question. Often, it boils down to, "no single balun will be best for all of the bands of interest for the respective antenna" and then it becomes a matter of having more than one balun, more than one tuner, more than one antenna, etc. etc. For my operations, I've found the Johnson KW Matchbox works great, and it has NO balun; no it is not designed for impedances much below 50 ohms (resistive component) but my horizontal loops are above that for the bands I work. No balun to saturate, beefy components used, etc. so it is the best tuner for me BUT not necessarily for others. Hence, one can make an informed decision, or guess your way through experimentation; sometimes I use a blend of both, hi hi.

73,

Evan, K9SQG

-----Original Message-----
From: 'Rick - DJ0IP / NJ0IP' Rick@... [SkyWires] <SkyWires@yahoogroups.com>
To: SkyWires <SkyWires@yahoogroups.com>
Sent: Thu, Jun 18, 2015 11:28 pm
Subject: RE: [SkyWires] Steve's Low Loop Resonance Test Results

DUMP THE 4:1 VOLTAGE BALUN!

BEST is to use a 1:1 Current balun at the tuner.
BEST here is a Balun Designs Model 1115t
www.balundesigns.com/model-1171-1-1-atu-current-balun-1-5-54-mhz-5kw/

The worst thing you can do with a tuner is put a 4:1 balun in front of it.
ALWAYS USE A 1:1 BALUN.

If you don’t have one handy but happen to have some unused coax, then you can easily make one.
Just wrap 22 or 23 ft. of RG-213 or RG-58 onto about a 4” form (i.e. PVC pipe).
It is OK to close space it (touching turns) but a little better if you space the turns with nylon rope (1/4").

You will see a picture of one in action in the last picture of the gallery of my QTH in Oklahoma:
http://www.dj0ip.de/my-station/oklahoma-2010/

Use this with your Denton Super tuner. It will work just fine.

It is an unfortunate myth that tuners need a 4:1 balun.
See: http://karinya.net/g3txq/tuner_balun/

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I had hoped the stand alone blun would let the Kenwood tuner tune the loop, but no joy. It will tune 15 through half of 6 meter though.

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Anyway, with the stand alone balun I was able to use the MFJ to see where the low SWRs were at.

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I left the current balun hooked up for now, though I'd see if there's any improvement in receiving or transmitting that's noticed.

My buddy has an MFJ combination 1:1 and 4:1 balun somewhere he's going to dig up, it'd be interesting to see what changing to a 1:1 balun does.

Also, I moved my radio room so that's why the ladder line has a long run. I could relocate the feed point and shorten the ladder line to something less than 20' if it would make a difference.

Anyway, there's the results of the playing...I'd love to hear any thoughts, comments, etc..

FUN STUFF! 8-)

4832. RE: [SkyWires] Steve's Low Loop Resonance Test Results

Yahoo group: SkyWires
Date: 2015-06-19 14:00:33 UTC
From: Rick - DJ0IP / NJ0IP
Topic: 4810 Message: 4832

Ken, the purpose of the balun is not to match the antenna.
By definition a balun's main purpose is to prevent anything going on in the antenna from unbalancing the inherent balanced flow of current in the feedline, be it openwire or coax.

The 4:1 current balun does a fair job at this as long as it is well matched.
As the SWR begins to go up, its CMI drops rapidly.
In contrast, the 1:1 current balun continues to do its job, even in the presence of higher SWR.

When we use a balun in an OCFD antenna, the impedance on all bands is between 200 and 400 Ohms and we can safely use a 4:1 current balun there. But in front of a tuner, we don't want to limit the matching range of the tuner, so a 1:1 balun is better.

When I say limit the matching range, I mean matching without incurring problems with common mode current, not just impedance matching. The 4:1 balun is going to begin to give you trouble above 200 to 300 Ohms and below 100 Ohms. It will play nicely in the middle

If all you do is run 100w into longer antennas, you will probably never have a problem and not believe what I wrote above.
But if you run 1kW and especially when you are trying to match a somewhat short antenna on a low band, you will quickly remember my words the first time you get bitten by the common mode current! (hi)

With 100w, generally the situation is such that we can get away with bending the rules.
But above 500w things begin to get touchy.

If you matchbox is not capable of matching the antenna's impedance without a 4:1 balun, then you have chosen the wrong matchbox for the job. End of story. There are plenty of matchboxes that match up to 2 or 3 kOhm or more, but there are just as many which do not.

With QRP, you can almost get away with murder! It really doesn't matter how you match it.

If I can help it, I make no exception to the rule: ALWAYS USE A 1:1 CURRENT BALUN IN FRONT OF THE TUNER (if you need a balun at all).

Of course sometimes with portable operations I also bend the rules because that's all I happen to have that will match the impedande.. But that doesn't apply to running high power.

73 - Rick, DJ0IP
(Nr. Frankfurt am Main)

From: SkyWires@yahoogroups.com [mailto:SkyWires@yahoogroups.com]
Sent: Friday, June 19, 2015 2:54 PM
To: SkyWires@yahoogroups.com
Subject: Re: [SkyWires] Steve's Low Loop Resonance Test Results

On 18/06/2015 23:28, 'Rick - DJ0IP / NJ0IP' Rick@... [SkyWires] wrote:
> BEST is to use a 1:1 Current balun at the tuner.
>
> The worst thing you can do with a tuner is put a 4:1 balun in front of it.
> ALWAYS USE A 1:1 BALUN.

I think it depends on the impedance. Some antennas/feedlines need a
1:1, some need a 4:1, and some need no balun.

I have done experimenting here and some antennas/feedlines tune better
with a 4:1 balun, some with a 1:1.

Ken WA8JXM

4835. Re: AW: [SkyWires] Chinese Antenna Analyzer

Yahoo group: SkyWires
Date: 2015-06-19 14:33:02 UTC
From: slr_65@...
Topic: 4822 Message: 4835

That's GREAT news, thanks Guys!

I got the mini - from what I read the Chinese SARKS 0f the larger original design sometimes had an oscillator problem, it literally had a wrong part in it and skewed a reading. It could easily be fixed, but I'm not up to it with my vision these days. This problem was reported a couple years ago and it seems they did fix it, but yet I've read enough recent reports of people getting the evidently an old stock one occasionally that I decided to not risk it for a few bucks savings, the Mini60 it seems has never suffered from this problem, it's basically the old unit with some new upgrades and never suffered from the problems of the older one.

Mine comes with a battery, but yeah - naked, you download the manual and software. From what I read though, it seems like a bargain. I paid $110 shipped from a seller I've bought a bunch of Arduino stuff from without ever a problem, well, I did have one but they shipped me a new one without having to run the old one at a ridiculous shipping cost, so I'm comfortable with them.

I don't have anything bluetooth, so I didn't worry about that....hmmm may be I do....My wife's tablet may be bluetooth, I know it's android. We'll see when it gets here, bluetooth can be added.

Anyway, THANKS for filling me in! It should be here the first part of July, I'll play then....nice to know where to ask questions!

73s,

Steve KA0NEB

4836. Re: [SkyWires] Re: Steve's Low Loop Resonance Test Results

Yahoo group: SkyWires
Date: 2015-06-19 14:40:52 UTC
From: slr_65@...
Topic: 4810 Message: 4836

Hi Ken,

Yeah, I think four posts is going to be the ultimate answer, I'm thinking four Rohn H-50s so I can go 30' guyless. It's expensive, but not terrible and it's portable so if we have to move I can take 'em with me and maybe do something at the new QTH so no money left behind in the worst case scenario.

I"m taking high dose steroids right now and having some significant side effects lately, so just haven't been up tomuch beyond some minor playing with the balun and the air launcher with my buddy. I'll get back to my antenna issues soon...I talked to a couple neighbors, a couple have kids with those portable basketball goals, I'm wondering if I set two of those out in the yard and ran the loop on only one side of the house and then the other 3 over open, albeit low, ground if we can get away from some of the house effect problems? If it significantly makes a difference then I may see about getting a couple posts out in the yard rather than just going above the house. Some time rolling basketballgoals and a little time running some wire and we'll know....and yeah, I have incredibly GREAT neighbors!

4837. RE: [SkyWires] Steve's Low Loop Resonance Test Results

Yahoo group: SkyWires
Date: 2015-06-19 14:57:47 UTC
From: slr_65@...
Topic: 4810 Message: 4837

Hi Rick,

I'm trying to get the Kenwood's tuner to work as automatic tuning would be nicer than manual for me with low vision, though I CAN do it.

The Kenwood says it wants 10 to 150 ohms, so it's evidently not overly robust, which I figured anyway as it clicks relays away probably switching fixed inductors and caps, where as the Dentron has a fixed inductor but BIG adjustable caps.

My buddy has a low power, 300 watt I think, 1 and 4 to 1 balun somewhere from his qrp camping days, he's going to try and dig it up and we'll see what it does, if for nothing else than entertainment value while I'm sitting here in recovery bored out of my mind.

I picked up you said sometimes you don't need a balun at all, how do I get from ladder line into the tuner then, the balanced line feeds go through the internal balun. Rather than open the unit to patch in, maybe just jerry rig a coax connector to open line and see what happens?

All in all, the Dentron is working fine....using the interal balun I can tune all bands without issue, with the current balun I can also tune all bands without issue. The current balun does seem to have a wider tuning "sweet spot" though so the coarse settings of the dial numbers are usually close enough that I can just dial in, hit auto tune on the Kenwood and be good to go. I could do that on 20 and below with the voltage balun but on 80 and 40 either had to use the MFJ with freq counter to dial it in, or just brush the caps and trya couple times with the auto tune to get it working. The current balun seems happier with the coarse seetings. Actually, I can set it up for 80 and leave the Dentron and it will autotune 40, which it won't do with the internal balun.

4838. RE: [SkyWires] Baluns, tuners, Steve's loop test results, etc.

Yahoo group: SkyWires
Date: 2015-06-19 15:37:33 UTC
From: Rick - DJ0IP / NJ0IP
Topic: 4810 Message: 4838

Evan,

You got some good mixed with the bad there.
You have some good points but also described what people have mistakenly done for many years.

The Antenna Tuner manufacturers have learned their lesson and switched away from 4:1 baluns, now building 1:1 baluns into their tuners. They have learned, but most of the ham community is still behind the power curve on this point!

There is plenty of solid information available on this with mathematical proof, but also backed up by lab and field test data. Most of it is not written in any books, but it is on the web. Unfortunately there is more mis-information on the web about baluns than good information.

First of all, we need to understand what a balun is, what it does and that it is not a part of the antenna. One more time: the balun is not an antenna accessory! It is a transmission line accessory.
You will find baluns explained in the transmission line chapter of the ARRL Handbooks, not in the antenna chapter.

The best single source for reading about and understanding baluns is a paper written by Roy Lewallen, W7EL and published by the ARRL in the first issue if its series of "Antenna Compendium" books. The title is “Baluns, what they do and how they do it.”
http://www.eznec.com/Amateur/Articles/Baluns.pdf
You find it on the EZNEC web site because Roy is also the author of EZNEC.

When the balun is located at the antenna and when feeding with coax transmission line to the antenna’s feedpoint, then we consider the transformation ratio of the balun and choose appropriately.
We should ALWAYS choose a current and NEVER choose a voltage balun.

In cases where the antenna's feedpoint impedance is far off from that of the balun, we should actually use a device called a “hybrid balun” which has a 1:1 current balun on the TX side and a transformer of some ratio on the ANT side. The transformer may even be the same schematic of what we call a balun in other applications (yes, even the voltage balun works here), but if its impedance is not looking into a pretty good match, it won’t “bal”. Therefore it alone is not a balun; just a transformer, and we need the additional 1:1 balun in front of it to achieve the required amount CMI.

Even most balun manufacturers don't understand this point because most of them are copy cats, just building what the good manufacturers build, but a little cheaper. The good ones who understand the situation are Balun Designs and DX-Engineering - if you speak to the right person at DX-E. The balun portfolio of DX-Engineering was architected by Tom Rauch, W8JI, and most of what I know about baluns, I learned by studying his web pages. He also says to ALWAYS use a 1:1 balun in conjunction with an antenna tuner.

When using an antenna tuner, the impedance of the antenna system DOES NOT DETERMINE which balun to use. We should ALWAYS use a 1:1 balun here.

When using an antenna tuner, it is important to keep any common mode current OUT of the matchbox. A "4:1 voltage balun" will NEVER do that and a "4:1 current balun" will only do it over a limited impedance range. For feeding openwire, a 1:1 current balun is the best thing going (short of the Johnson Viking Matchbox) for this application.

If your matchbox doesn't have the range you need and you don't want to (or can't) buy one with a broader range, then place a 1:1 current balun directly at the matchbox and follow it with a 4:1 balun at the antenna side of the 1:1 balun. This will do the trick.

SIMPLY USING A 4:1 BALUN (alone) IS THE WRONG THING TO DO AND YOU WILL GET BURNED (physically) IF YOU DO THAT AND RUN HIGH POWER!

The Johnson matchbox of course was great. It is always best to use a truly symmetrical coupler when feeding with openwire feedline. By nature of its TX side and ANT side being galvanic-coupled instead of DC-coupled, we gain at least an additional 20 dB of CMI, which really helps keep out the nasty effects of common mode current.

BTW, the Johnson Viking Matchbox was the greatest thing going 50 years ago, but then we acquired the WARC bands. A German company called "Annecke" brought out an improved version of the JV Matchbox which was significantly better at matching these new bands than the old JV matchbox was, AND it had improved matching range.

All of this is described on my web site, as well as Upgrade Instructions on how to add the Annecke improvements to the older Johnson.
www.dj0ip.de/antenna-matchboxes/symmetrical-matchboxes/viking-vs-annecke/
and
www.dj0ip.de/antenna-matchboxes/symmetrical-matchboxes/j-viking-upgrade/

We [should] never stop learning, even when it means unlearning some of our mistakes of the past.

73 - Rick, DJ0IP
(Nr. Frankfurt am Main)

From: SkyWires@yahoogroups.com [mailto:SkyWires@yahoogroups.com]
Sent: Friday, June 19, 2015 3:32 PM
To: SkyWires@yahoogroups.com
Subject: [SkyWires] Baluns, tuners, Steve's loop test results, etc.

Well, it depends. Whether a voltage balun or current balun is appropriate, and whether the ratio is 1:1, 4:1, 9:1, depends on the antenna and the bands of interest. Without knowing the parameters of the antenna SYSTEM, the complete system including feedline, it is impossible to select the best balun to use, although one might guess right. Whether that guess is correct for all bands of interest is an unanswered question. Often, it boils down to, "no single balun will be best for all of the bands of interest for the respective antenna" and then it becomes a matter of having more than one balun, more than one tuner, more than one antenna, etc. etc. For my operations, I've found the Johnson KW Matchbox works great, and it has NO balun; no it is not designed for impedances much below 50 ohms (resistive component) but my horizontal loops are above that for the bands I work. No balun to saturate, beefy components used, etc. so it is the best tuner for me BUT not necessarily for others. Hence, one can make an informed decision, or guess your way through

experimentation; sometimes I use a blend of both, hi hi.

73,

Evan, K9SQG
-----Original Message-----
From: 'Rick - DJ0IP / NJ0IP' Rick@... [SkyWires] <SkyWires@yahoogroups.com>
To: SkyWires <SkyWires@yahoogroups.com>
Sent: Thu, Jun 18, 2015 11:28 pm
Subject: RE: [SkyWires] Steve's Low Loop Resonance Test Results

DUMP THE 4:1 VOLTAGE BALUN!

BEST is to use a 1:1 Current balun at the tuner.
BEST here is a Balun Designs Model 1115t
www.balundesigns.com/model-1171-1-1-atu-current-balun-1-5-54-mhz-5kw/

The worst thing you can do with a tuner is put a 4:1 balun in front of it.
ALWAYS USE A 1:1 BALUN.

If you don’t have one handy but happen to have some unused coax, then you can easily make one.
Just wrap 22 or 23 ft. of RG-213 or RG-58 onto about a 4” form (i.e. PVC pipe).
It is OK to close space it (touching turns) but a little better if you space the turns with nylon rope (1/4").

You will see a picture of one in action in the last picture of the gallery of my QTH in Oklahoma:
http://www.dj0ip.de/my-station/oklahoma-2010/

Use this with your Denton Super tuner. It will work just fine.

It is an unfortunate myth that tuners need a 4:1 balun.
See: http://karinya.net/g3txq/tuner_balun/
Even the ATU manufacturers had this wrong for many years, but finally they figured it out and for the past 5 years or so, are now delivering their high power tuners with 1:1 Guanella baluns. No more 4:1.

73 - Rick, DJ0IP
(Nr. Frankfurt am Main)

From: SkyWires@yahoogroups.com [mailto:SkyWires@yahoogroups.com]
Sent: Friday, June 19, 2015 3:18 AM
To: SkyWires@yahoogroups.com
Subject: [SkyWires] Steve's Low Loop Resonance Test Results

Hi Guys,

My buddy dug up the 4:1 current balun so I played with it today and thought I'd share the test results.

My loop is approximately 210' ran at about 12' under the eaves of our single story ranch style house. It's about a 2' over hang and it's ran down the middle so it's about 12" from the wall and 12" from metal rain gutters. It's fed with about 35' of 450 ladder line to a ladder loc center insulator.

I had been running it through a Dentron Super Tuner with a 4:1 voltage balun and it will load 80 through 10 meter.

I have an MFJ-209 SWR analyzer with a frequency counter, but until today I had no way to find where it was resonant because I didn't have a stand alone balun.

I had hoped the stand alone blun would let the Kenwood tuner tune the loop, but no joy. It will tune 15 through half of 6 meter though.

If I tune the Dentron for 80 meter and leave it set for 80 meter the Kenwood will match it from to 30 meter though, so 20 is the only pain in the butt.

Anyway, with the stand alone balun I was able to use the MFJ to see where the low SWRs were at.

1005/210 is 4.78 so I figured that was one low SWR spot. It's a little off, but there's a lot going on here with the low height, proximity to a building, etc..

Onwards to the data....There were some places where it got lower (well, wasn't pegged above 4:1 as hard!), but these are where it significantly dips.

5.6 mhz 3.0:1
9.9 mhz 2.7:1
15.7 mhz 1.7:1
19.5 mhz 2:0:1
25.5 mhz 1.0:1
29.6 mhz 1.3:1

It looks like about every 5 mhz the SWR reduces. Interesting.

I left the current balun hooked up for now, though I'd see if there's any improvement in receiving or transmitting that's noticed.

My buddy has an MFJ combination 1:1 and 4:1 balun somewhere he's going to dig up, it'd be interesting to see what changing to a 1:1 balun does.

Also, I moved my radio room so that's why the ladder line has a long run. I could relocate the feed point and shorten the ladder line to something less than 20' if it would make a difference.

Anyway, there's the results of the playing...I'd love to hear any thoughts, comments, etc..

FUN STUFF! 8-)

4839. RE: [SkyWires] Steve's Low Loop Resonance Test Results

Yahoo group: SkyWires
Date: 2015-06-19 15:46:22 UTC
From: Rick - DJ0IP / NJ0IP
Topic: 4810 Message: 4839

Seve,

Unfortunately ATU’s built into our transceivers never have the tuning range of the external ones.
That would require several more coils and capacitors.
An ATU that only tunes to 150 Ohms is pretty useless for this kind of work and in my opinion, should better be called an antenna Pruner It just doesn’t have high enough matching range.

You can improve that with the use of an external transformer but I STRONGLY suggest placing a 1:1 Maxwell or even better Guanella choke between the Kenwood and the 4:1 transformer. A 4:1 balun serves just as a transformer in this application.

You may find on some bands it tunes best with the 4:1 in and on other bands it tunes best with it out.
When using the Dentron, always leave it OUT.

I also have little stick-on labels on my matchbox. These are pre-tune spots, making it easy and quick to change bands.

Good luck.

73 - Rick, DJ0IP
(Nr. Frankfurt am Main)

From: SkyWires@yahoogroups.com [mailto:SkyWires@yahoogroups.com]
Sent: Friday, June 19, 2015 4:58 PM
To: SkyWires@yahoogroups.com
Subject: RE: [SkyWires] Steve's Low Loop Resonance Test Results

Hi Rick,

I'm trying to get the Kenwood's tuner to work as automatic tuning would be nicer than manual for me with low vision, though I CAN do it.

The Kenwood says it wants 10 to 150 ohms, so it's evidently not overly robust, which I figured anyway as it clicks relays away probably switching fixed inductors and caps, where as the Dentron has a fixed inductor but BIG adjustable caps.

My buddy has a low power, 300 watt I think, 1 and 4 to 1 balun somewhere from his qrp camping days, he's going to try and dig it up and we'll see what it does, if for nothing else than entertainment value while I'm sitting here in recovery bored out of my mind.

I picked up you said sometimes you don't need a balun at all, how do I get from ladder line into the tuner then, the balanced line feeds go through the internal balun. Rather than open the unit to patch in, maybe just jerry rig a coax connector to open line and see what happens?

All in all, the Dentron is working fine....using the interal balun I can tune all bands without issue, with the current balun I can also tune all bands without issue. The current balun does seem to have a wider tuning "sweet spot" though so the coarse settings of the dial numbers are usually close enough that I can just dial in, hit auto tune on the Kenwood and be good to go. I could do that on 20 and below with the voltage balun but on 80 and 40 either had to use the MFJ with freq counter to dial it in, or just brush the caps and trya couple times with the auto tune to get it working. The current balun seems happier with the coarse seetings. Actually, I can set it up for 80 and leave the Dentron and it will autotune 40, which it won't do with the internal balun.

4840. Re: [SkyWires] Steve's Low Loop Resonance Test Results

Yahoo group: SkyWires
Date: 2015-06-19 16:08:02 UTC
From: joel1847@...
Topic: 4810 Message: 4840

I remember reading in an older antenna book (have to look to see which one) that the lower a loop antenna, the lower the impedance. And the longer in wavelengths the antenna is, the lower the takeoff angle. So by my reading of the text, wouldn't a 1550' loop at around 10 feet off the deck, be a fairly decent dx antenna? I downloaded some antenna software, but haven't been able to play with it to see how it would model out.

I've got a large loop up, that I haven't fully tested yet. It is quiet, for my area and powerline noise and it's kinda shaped like the state of Massachusetts with Cape Cod hacked off. Kinda like a L that is upside down and backwards. I plan on testing it out more on field day, but I'd be curious if anyone that is modeling software savvy could possibly model it quick like to give me more of a clue.

Thanks

Joel
norcal
kj6dif

4841. RE: [SkyWires] Steve's Low Loop Resonance Test Results

Yahoo group: SkyWires
Date: 2015-06-19 16:40:46 UTC
From: Rick - DJ0IP / NJ0IP
Topic: 4810 Message: 4841

That is only part of the story, Joel.

Besides takeoff angle and impedance, there is a third, important factor: ground losses.
When we get too close to the ground, ground losses go up.
This is true for all horizontal antennas.

10’ is even low for 20m, but for the higher bands, then it would be ok.
However the gain you are referring to is not omni-directional.
It is at 90 degree increments from the feedpoint (assuming nothing is physically influencing and disturbing the pattern)

30 to 40 ft. is actually a good compromise between giving us some nice lobes in these 4 directions, while still having enough radiation in between to work thos directions to, albeit with a somewhat weaker signal.

73 - Rick, DJ0IP
(Nr. Frankfurt am Main)

From: SkyWires@yahoogroups.com [mailto:SkyWires@yahoogroups.com]
Sent: Friday, June 19, 2015 6:08 PM
To: SkyWires@yahoogroups.com
Subject: Re: [SkyWires] Steve's Low Loop Resonance Test Results

I remember reading in an older antenna book (have to look to see which one) that the lower a loop antenna, the lower the impedance. And the longer in wavelengths the antenna is, the lower the takeoff angle. So by my reading of the text, wouldn't a 1550' loop at around 10 feet off the deck, be a fairly decent dx antenna? I downloaded some antenna software, but haven't been able to play with it to see how it would model out.

I've got a large loop up, that I haven't fully tested yet. It is quiet, for my area and powerline noise and it's kinda shaped like the state of Massachusetts with Cape Cod hacked off. Kinda like a L that is upside down and backwards. I plan on testing it out more on field day, but I'd be curious if anyone that is modeling software savvy could possibly model it quick like to give me more of a clue.

Thanks

Joel
norcal
kj6dif

4842. RE: [SkyWires] Steve's Low Loop Resonance Test Results

Yahoo group: SkyWires
Date: 2015-06-19 17:12:08 UTC
From: slr_65@...
Topic: 4810 Message: 4842

Hi Rick, yeah, I figured that, but some guys have had good luck with the 590 tuner, but I think they had a fairly resonant antenna to start with, my loop is just what fits.

Before I lost my vision I picked up another Dentron with the thought of using an Aruino micro and stepper motors to make a tuner....I may still, I'm looking for an Arduino IDE with high contrast I can see.

The balun I have is a Balun Designs, I dropped a note to them to see if this one could be converted to a 1:!, they said yes for avery reasonable charge, so I'm thinking I'll send it in to them (it's not really mine, but it's on permanent loan, was spare for my buddy - I showed him the thread here, he agrees swapping it for a 1:1 would make better use of it, even if it migrates back to him...he'll use it with his tuner if he ever needs one).

Thanks, I'm really enjoying this group!

Steve

4843. RE: [SkyWires] Steve's Low Loop Resonance Test Results

Yahoo group: SkyWires
Date: 2015-06-19 17:16:06 UTC
From: Rick - DJ0IP / NJ0IP
Topic: 4810 Message: 4843

Yes, your loop not being resonant on 80m means the impedances will be a bit different than what we usually see with a resonant loop. I honestly have no idea what they might be. Doesn’t really matter. That’s what we have (good) matchboxes for!

73 - Rick, DJ0IP
(Nr. Frankfurt am Main)

From: SkyWires@yahoogroups.com [mailto:SkyWires@yahoogroups.com]
Sent: Friday, June 19, 2015 7:12 PM
To: SkyWires@yahoogroups.com
Subject: RE: [SkyWires] Steve's Low Loop Resonance Test Results

Hi Rick, yeah, I figured that, but some guys have had good luck with the 590 tuner, but I think they had a fairly resonant antenna to start with, my loop is just what fits.

Before I lost my vision I picked up another Dentron with the thought of using an Aruino micro and stepper motors to make a tuner....I may still, I'm looking for an Arduino IDE with high contrast I can see.

The balun I have is a Balun Designs, I dropped a note to them to see if this one could be converted to a 1:!, they said yes for avery reasonable charge, so I'm thinking I'll send it in to them (it's not really mine, but it's on permanent loan, was spare for my buddy - I showed him the thread here, he agrees swapping it for a 1:1 would make better use of it, even if it migrates back to him...he'll use it with his tuner if he ever needs one).

Thanks, I'm really enjoying this group!

Steve

4844. Re: [SkyWires] Steve's Low Loop Resonance Test Results

Yahoo group: SkyWires
Date: 2015-06-19 17:17:55 UTC
From: slr_65@...
Topic: 4810 Message: 4844

When I was a teenager and doing this we had a Yaesu FT-101E, I remember tuning up but not the details of it too much....hmmm, I'll bet YouTube has a video of that, I should go take a walk down memory lane!

A buddy just down the street just picked an 101 up, it was his Uncle's back in the day. He had to change some caps, but ti's back on the air sounding great!

4845. Wire Splice

Yahoo group: SkyWires
Date: 2015-06-19 18:40:06 UTC
From: Rich Schmuke
Topic: 4845 Message: 4845

A few days ago a question was brought up about using different sizes wires on a antenna. No problem as long as it does not break it is OK and mixing sizes is no problem,
For a easy way to join wires and also keep it adjustable I always use split bolts.

http://i1102.photobucket.com/albums/g453/KD0ZZ/160%20Loop/SplitBolt_zps565c8c1e.jpg
For a standard dipole add them at the center insulator for a quick change
.http://i1102.photobucket.com/albums/g453/KD0ZZ/QuickChangeDipole008.jpg
Split bolts can be found at any hardware or big box home store. Simple, quick and no soldering iron needed in the field.

Rich, KdØzz

4846. AW: AW: [SkyWires] Chinese Antenna Analyzer

Yahoo group: SkyWires
Date: 2015-06-19 19:45:54 UTC
From: siegfried jackstien
Topic: 4822 Message: 4846

Hello Steve

You can add bt module also to the mini60 (cause it is actually the same design as the sark100 with just the charger changed and case made a bit smaller) ... if you wanna add bt ... then I can send you all needed details

Bt can be used on a tablet/smartphone with an adroid app ... or on the pc with windows software (if needed I can send both to you in direct mail)

Greetz

Sigi

Dg9bfc

> -----Ursprüngliche Nachricht-----
> Von: SkyWires@yahoogroups.com [mailto:SkyWires@yahoogroups.com]
> Gesendet: Freitag, 19. Juni 2015 14:33
> An: SkyWires@yahoogroups.com
> Betreff: Re: AW: [SkyWires] Chinese Antenna Analyzer
>
>
>
> That's GREAT news, thanks Guys!
>
> I got the mini - from what I read the Chinese SARKS 0f the larger original
> design sometimes had an oscillator problem, it literally had a wrong part
> in it and skewed a reading. It could easily be fixed, but I'm not up to
> it with my vision these days. This problem was reported a couple years
> ago and it seems they did fix it, but yet I've read enough recent reports
> of people getting the evidently an old stock one occasionally that I
> decided to not risk it for a few bucks savings, the Mini60 it seems has
> never suffered from this problem, it's basically the old unit with some
> new upgrades and never suffered from the problems of the older one.
>
> Mine comes with a battery, but yeah - naked, you download the manual and
> software. From what I read though, it seems like a bargain. I paid $110
> shipped from a seller I've bought a bunch of Arduino stuff from without
> ever a problem, well, I did have one but they shipped me a new one without
> having to run the old one at a ridiculous shipping cost, so I'm
> comfortable with them.
>
> I don't have anything bluetooth, so I didn't worry about that....hmmm may
> be I do....My wife's tablet may be bluetooth, I know it's android. We'll
> see when it gets here, bluetooth can be added.
>

> Anyway, THANKS for filling me in! It should be here the first part of
> July, I'll play then....nice to know where to ask questions!
>
> 73s,
>
> Steve KA0NEB
>
>

4847. New file uploaded to SkyWires

Yahoo group: SkyWires
Date: 2015-06-19 20:13:18 UTC
From: SkyWires@yahoogroups.com
Topic: 1641 Message: 4847

Hello,

This email message is a notification to let you know that
a file has been uploaded to the Files area of the SkyWires
group.

File : /loop balun experiment.pdf
Uploaded by : everettsharp74 <everettsharp@...>
Description : Experimenting with different Baluns on a 275' Horizontal
Multi-Band Loop Antenna

You can access this file at the URL:
https://groups.yahoo.com/neo/groups/SkyWires/files/loop%20balun%20experiment.pdf

To learn more about file sharing for your group, please visit:
https://help.yahoo.com/kb/index?page=content&y=PROD_GRPS&locale=en_US&id=SLN15398

Regards,

everettsharp74 <everettsharp@...>

4848. Re: [SkyWires] New file uploaded to SkyWires

Yahoo group: SkyWires
Date: 2015-06-19 20:14:40 UTC
From: everettsharp@...
Topic: 1641 Message: 4848

Hello,

I removed the original article and replaced it with a revised version.

Everett N8CNP

In a message dated 6/19/2015 3:13:23 P.M. Central Daylight Time,
SkyWires@yahoogroups.com writes:

Hello,

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File : /loop balun experiment.pdf
Uploaded by : everettsharp74 <everettsharp@...>
Description : Experimenting with different Baluns on a 275' Horizontal
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You can access this file at the URL:
https://groups.yahoo.com/neo/groups/SkyWires/files/loop%20balun%20experiment
.pdf

To learn more about file sharing for your group, please visit:
https://help.yahoo.com/kb/index?page=content&y=PROD_GRPS&locale=en_US&id=SLN
15398

Regards,

everettsharp74 <everettsharp@...>

4849. RE: [SkyWires] New file uploaded to SkyWires

Yahoo group: SkyWires
Date: 2015-06-19 20:46:28 UTC
From: Rick - DJ0IP / NJ0IP
Topic: 1641 Message: 4849

On page 2 of Everett's newly uploaded file, you will see his home-brew dual-core 4:1 Guanella balun.
Look carefully at the spacing between the two cores when they are soldered together.
THIS IS CORRECT.

The balun shown in the file referred to a couple of days ago, the one showing how to build a balun, had too narrow of spacing, or actually no spacing at all. This is probably the reason the SWR results of the narrow spaced toroid balun were less than optimum.

Also notice that he has inserted his enamel-insulated wires inside of Teflon insulation.
Everett used #16 wire which is certainly thick enough for this size of core.
In fact #18 or #20 would suffice because these cores are really only safe for about 500 or 600 Watts.

BTW, I use the same size cores in my main station antenna, an 80m OCFD, and I run 600w.

73 - Rick, DJ0IP
(Nr. Frankfurt am Main)

From: SkyWires@yahoogroups.com [mailto:SkyWires@yahoogroups.com]
Sent: Friday, June 19, 2015 10:15 PM
To: SkyWires@yahoogroups.com
Subject: Re: [SkyWires] New file uploaded to SkyWires

Hello,

I removed the original article and replaced it with a revised version.

Everett N8CNP

In a message dated 6/19/2015 3:13:23 P.M. Central Daylight Time, SkyWires@yahoogroups.com writes:

Hello,

This email message is a notification to let you know that
a file has been uploaded to the Files area of the SkyWires
group.

File : /loop balun experiment.pdf
Uploaded by : everettsharp74 <everettsharp@...>
Description : Experimenting with different Baluns on a 275' Horizontal
Multi-Band Loop Antenna

You can access this file at the URL:
https://groups.yahoo.com/neo/groups/SkyWires/files/loop%20balun%20experiment.pdf

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https://help.yahoo.com/kb/index?page=content&y=PROD_GRPS&locale=en_US&id=SLN15398

Regards,

everettsharp74 <everettsharp@...>

4850. Re: [SkyWires] New file uploaded to SkyWires

Yahoo group: SkyWires
Date: 2015-06-19 21:18:55 UTC
From: Everettsharp
Topic: 1641 Message: 4850

Rick,

Looks like you have found a new home here. Later I plan on writing a good detailed article on how to build a 4:1 Balun including where to get all of the parts. Lots of pictures.

I was looking Mouser's web site this morning and the carry a 61 mix core that is a little larger than the FT140-61. I may later order some to try out.

Although I don't show the sweep in the article that I posted it looks quite good on 6 and 2 meters. So I guess you could call it a 10 band antenna.

Everett N8CNP

Sent from my iPhone

> On Jun 19, 2015, at 3:46 PM, 'Rick - DJ0IP / NJ0IP' Rick@... [SkyWires] <SkyWires@yahoogroups.com> wrote:
>
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> Look carefully at the spacing between the two cores when they are soldered together.
> THIS IS CORRECT.
>
> The balun shown in the file referred to a couple of days ago, the one showing how to build a balun, had too narrow of spacing, or actually no spacing at all. This is probably the reason the SWR results of the narrow spaced toroid balun were less than optimum.
>
> Also notice that he has inserted his enamel-insulated wires inside of Teflon insulation.
> Everett used #16 wire which is certainly thick enough for this size of core.
> In fact #18 or #20 would suffice because these cores are really only safe for about 500 or 600 Watts.
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> BTW, I use the same size cores in my main station antenna, an 80m OCFD, and I run 600w.
>
> 73 - Rick, DJ0IP
> (Nr. Frankfurt am Main)
>
> From: SkyWires@yahoogroups.com [mailto:SkyWires@yahoogroups.com]
> Sent: Friday, June 19, 2015 10:15 PM
> To: SkyWires@yahoogroups.com
> Subject: Re: [SkyWires] New file uploaded to SkyWires
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> Hello,
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> https://help.yahoo.com/kb/index?page=content&y=PROD_GRPS&locale=en_US&id=SLN15398
>
> Regards,
>
> everettsharp74 <everettsharp@aol.com>
>
>

4851. Re: [SkyWires] Steve's Low Loop Resonance Test Results

Yahoo group: SkyWires
Date: 2015-06-20 01:03:55 UTC
From: slr_65@...
Topic: 4810 Message: 4851

OK, more playing today since I have the stand alone bslun.

The doublet ladder line fine is cut to 40 meter but the Kenwood can't match it, it can't match until a higher band, I don't recall which.

I have a coax fed center insulator though, so I cut a coax fed 40 meter dipole and hung it exactly where the ladder line fed one was at.

The Kenwood can match 40, 17, 15 and 10!

With the Dentron I can of course match everything. I like 80 and 20 so I'll have to match them, but 40 and the rest are now automatic, that's progress!

The SWR sweep of the coax fed is interesting, not many SWR swings, most stay in the 3.5ish range, here's what I got:

7.0 mhz = 2.8:1 Kenwood matches
21.2 mhz = 1.0:!
35.2 mhz = 1.7:1

So, this leads us back to the 4:1 balun and low antenna...low lowers impedance and the balun is lowering it further, with more impedance by using coax my Kenwood is happier? I talked to one guy on 20 meter, said I sounded fine.

Again, fun stuff...I need to get off my butt and doing something!...hmmm, I should hook the ends of the dipole up to the loop and see what a coax fed loop does....

Steve

4852. RE: [SkyWires] Steve's Low Loop Resonance Test Results

Yahoo group: SkyWires
Date: 2015-06-20 01:22:32 UTC
From: joel1847@...
Topic: 4810 Message: 4852

Thanks for the reply Rick.

So to minimize ground losses could one run an electric fence wire along the ground under the loop and then attach that to the grounding system somehow?

It should have less losses than using the chain link fence I would think.

I could insulate the return wire off the ground fairly easily actually.

I know it's like using an electric knife to cut butter, but the powerline noise is really bad in the summer months. Getting it any higher than the olive trees and you're looking at starting to interfere with the power lines that are on 2 sides of the property. I've got a 2 1/4 mile rolls of electrical fence wire. I might just try it to see how it will work. Do some testing before and after to see if there is a difference in received and transmitted signals. Hopefully I could get that done before field day.

Thanks again

joel
kj6dif
norcal

That is only part of the story, Joel.

Besides takeoff angle and impedance, there is a third, important factor: ground losses.
When we get too close to the ground, ground losses go up.
This is true for all horizontal antennas.

10’ is even low for 20m, but for the higher bands, then it would be ok.
However the gain you are referring to is not omni-directional.
It is at 90 degree increments from the feedpoint (assuming nothing is physically influencing and disturbing the pattern)

30 to 40 ft. is actually a good compromise between giving us some nice lobes in these 4 directions, while still having enough radiation in between to work thos directions to, albeit with a somewhat weaker signal.

73 - Rick, DJ0IP
(Nr. Frankfurt am Main)

4853. Re: [SkyWires] Steve's Low Loop Resonance Test Results

Yahoo group: SkyWires
Date: 2015-06-20 01:34:03 UTC
From: slr_65@...
Topic: 4810 Message: 4853

OK, getting late for playing tonight, but for tomorrow night...

Usually 468/Freq gives the length you get the best match. So freq times length equals 468. Well, I've got so much going on with the low height, structure, etc. that the 468 constant isn't holding true. OK, well I have two of the three pieces to figure out the Casa Del KA0NEB constant don't I? Basically the new dipole is cut to 66' (I left some for trimming) and it's very happy at 21.2 mhz, so 66*21.1 gives us 1399.2 for the new constant. OK, if I want it to be happy around 7.2 then 1399.2 / 7.2 = 194.33 or 97.16 per leg? Of course I'm bending around the house so that may play in...anyway, on the right track here, all wet, or you need something to do anyway Steve, go play and report back?

4854. Re: [SkyWires] Steve's Low Loop Resonance Test Results

Yahoo group: SkyWires
Date: 2015-06-20 02:47:58 UTC
From: Andy
Topic: 4810 Message: 4854

'Rick - DJ0IP / NJ0IP' wrote:

"Andy, that is a myth."

Sorry -- which part is the myth?

Is it a myth that some people use very low antennas?

Or is it a myth that efficiency falls when they are that low?

I also said that low antennas direct much of their (available) signal upwards, and I don't believe that is a myth either. Both measurements and modeling support that; but if you feel otherwise (that they make better DX antennas), then I'll let you have that. But I wouldn't agree with it.

I'm just saying what others have to say about their very low, field-expedient antennas. I also want to say that they don't work for everyone.

Andy

4855. Re: [SkyWires] Steve's Low Loop Resonance Test Results

Yahoo group: SkyWires
Date: 2015-06-20 03:08:48 UTC
From: slr_65@...
Topic: 4810 Message: 4855

OK, I took the reporting back option, and am skeeter bit to death for my effort!

But the answer is....yes, that does work, mostly.

I measured the loop, I was off, I thought the house was 65x30 with about 2' to be added for running in the middle of the eaves, but there's only 187' of wire in the loop.

I cut the loop in half and the low SWR point moved right where the modified formula predicted - just shy of 7.5 mhz. It lets the Kenwood tuner work on 40 fine though, and it works on every other higher band except of course, 20. What is it about 20 that makes it a pita? The SWR does dip a little above 20, but doesn't get below 3:1, which my Kenwood seems to need before it will tune. There are other dips in the higher harmonics and they dip much better than 20 does, what's the deal with that?

I need a little more length to move it down just a bit more, but I'm out of room looping the....since I'm doing everything I shouldn't already, I wonder if I could let them over lap each other on the eaves for a couple feet at the end?

Again, fun stuff. I can deal with this, if I can most on the Kenwood auto tuner and just use the Dentron for 80/20 that's fine. Though I'm liking 80 I don't use it much, so antenna switch and feed the Dentron through the Kenwood's second antenna input and leave the Dentron set there and then switch the antenna and let it feed the first antenna input to the Kenwood and let it's tuner handle those bands. It's doable.

It'll be interesting to see if the 1:! balun works as well as the coax seems to be. Also, I see sometimes guys use 75 ohm RG6 coax, possibly try it to see if the increase in imedance helps?

So many 'speriments....just what I need, something to keep me busy!

4856. Re: [SkyWires] Steve's Low Loop Resonance Test Results

Yahoo group: SkyWires
Date: 2015-06-20 03:37:13 UTC
From: Don Sanders
Topic: 4810 Message: 4856

Well, 187 feet is 3 half waves at 7.5 MHz. So depending on where the feed point is along the wire, it may be high or low impedance on 40 meters.
On 20, actually 15 MHz as is, the antenna is 3 waves long. This may be causing a very high impedance which the tuner cannot handle.
Adding 10 feet of wire to the loop should put near 7.150. The wire could be just a half loop, which means it drops vertically 5 feet from one end of the loop,and then back up to the other end of the loop. That way you still have the same physical size loop but electrically it is longer.
Use a 3 to 6 inch insulator between the ends of the current loop. PVC water pipe should do. Then the added 10 feet can hang from the PVC.

Dr. Don HC4/W4BWS

On Fri, Jun 19, 2015 at 10:08 PM, slr_65@... [SkyWires] <SkyWires@yahoogroups.com> wrote:

>
>
> OK, I took the reporting back option, and am skeeter bit to death for my
> effort!
>
> But the answer is....yes, that does work, mostly.
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> 2' to be added for running in the middle of the eaves, but there's only
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> seems to be. Also, I see sometimes guys use 75 ohm RG6 coax, possibly try
> it to see if the increase in imedance helps?
>
> So many 'speriments....just what I need, something to keep me busy!
>
>

4857. Re: [SkyWires] Steve's Low Loop Resonance Test Results

Yahoo group: SkyWires
Date: 2015-06-20 05:19:03 UTC
From: slr_65@...
Topic: 4810 Message: 4857

Hi Don,

I tried the coax fed loop and though I could Dentron tune it, the Kenwood wasn't happy.

In that incarnation it's a rectangle and it's fed in the middle of the south long side.

I cut the loop in the middle and then the Kenwood is happy with everything but 20 meters.

I added 5' on to each end and let it dangle. 1:! at 7.2, but over 3 at 20, it gets happy around 17 mhz. Everything else close enough the Kenwood is happy.

20 is annoying me!

4858. RE: [SkyWires] New file uploaded to SkyWires

Yahoo group: SkyWires
Date: 2015-06-20 07:23:54 UTC
From: Rick - DJ0IP / NJ0IP
Topic: 1641 Message: 4858

GM Everett,

If your pole can support the weight, you can use FT-240-61.
They're $19 ea. at www.spiderbeam.us and you can get them in single units there.
Some of the other sources I have found have minimum quantity restrictions.
I've also bought toroids on ebay.

In fact since you want to cover 80m as well, it would be even better to use -51 or -52 material.
These have a permeability about twice as high as -61, yet only half as much as #43.
This would give you a little higher CMI on 80m.

I'm interested in the results of your research.
People are always asking me where to buy this stuff in the states and I honestly don't know.
I know where to buy it here in Europe (Germany and UK), but no idea in the states.
I'm checked all the US ham radio stores that I am familiar with but can't find it.

Seems more people home-brew here in Europe than in the states because we have several stores that supply us with this stuff.
For instance DX-Wire. Www.dx-wire.de (you can change the language to English).

73 - Rick, DJ0IP
(Nr. Frankfurt am Main)

From: SkyWires@yahoogroups.com [mailto:SkyWires@yahoogroups.com]
Sent: Friday, June 19, 2015 11:19 PM
To: SkyWires@yahoogroups.com
Subject: Re: [SkyWires] New file uploaded to SkyWires

Rick,

Looks like you have found a new home here. Later I plan on writing a good detailed article on how to build a 4:1 Balun including where to get all of the parts. Lots of pictures.

I was looking Mouser's web site this morning and the carry a 61 mix core that is a little larger than the FT140-61. I may later order some to try out.

Although I don't show the sweep in the article that I posted it looks quite good on 6 and 2 meters. So I guess you could call it a 10 band antenna.

Everett N8CNP

Sent from my iPhone

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Look carefully at the spacing between the two cores when they are soldered together.
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The balun shown in the file referred to a couple of days ago, the one showing how to build a balun, had too narrow of spacing, or actually no spacing at all. This is probably the reason the SWR results of the narrow spaced toroid balun were less than optimum.

Also notice that he has inserted his enamel-insulated wires inside of Teflon insulation.
Everett used #16 wire which is certainly thick enough for this size of core.
In fact #18 or #20 would suffice because these cores are really only safe for about 500 or 600 Watts.

BTW, I use the same size cores in my main station antenna, an 80m OCFD, and I run 600w.

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Uploaded by : everettsharp74 <everettsharp@...>
Description : Experimenting with different Baluns on a 275' Horizontal
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https://help.yahoo.com/kb/index?page=content&y=PROD_GRPS&locale=en_US&id=SLN15398

Regards,

everettsharp74 <everettsharp@...>

4859. RE: [SkyWires] Steve's Low Loop Resonance Test Results

Yahoo group: SkyWires
Date: 2015-06-20 07:37:56 UTC
From: Rick - DJ0IP / NJ0IP
Topic: 4810 Message: 4859

That is not going to help, Joel.
That works great with quarter wave verticals.
Horizontal wires need HEIGHT.
There is no substitute for that, that I know of.

73 - Rick, DJ0IP
(Nr. Frankfurt am Main)

From: SkyWires@yahoogroups.com [mailto:SkyWires@yahoogroups.com]
Sent: Saturday, June 20, 2015 3:23 AM
To: SkyWires@yahoogroups.com
Subject: RE: [SkyWires] Steve's Low Loop Resonance Test Results

Thanks for the reply Rick.

So to minimize ground losses could one run an electric fence wire along the ground under the loop and then attach that to the grounding system somehow?

It should have less losses than using the chain link fence I would think.

I could insulate the return wire off the ground fairly easily actually.

I know it's like using an electric knife to cut butter, but the powerline noise is really bad in the summer months. Getting it any higher than the olive trees and you're looking at starting to interfere with the power lines that are on 2 sides of the property. I've got a 2 1/4 mile rolls of electrical fence wire. I might just try it to see how it will work. Do some testing before and after to see if there is a difference in received and transmitted signals. Hopefully I could get that done before field day.

Thanks again

joel
kj6dif
norcal

That is only part of the story, Joel.

Besides takeoff angle and impedance, there is a third, important factor: ground losses.
When we get too close to the ground, ground losses go up.
This is true for all horizontal antennas.

10’ is even low for 20m, but for the higher bands, then it would be ok.
However the gain you are referring to is not omni-directional.
It is at 90 degree increments from the feedpoint (assuming nothing is physically influencing and disturbing the pattern)

30 to 40 ft. is actually a good compromise between giving us some nice lobes in these 4 directions, while still having enough radiation in between to work thos directions to,

albeit with a somewhat weaker signal.

73 - Rick, DJ0IP
(Nr. Frankfurt am Main)

4860. RE: [SkyWires] Steve's Low Loop Resonance Test Results

Yahoo group: SkyWires
Date: 2015-06-20 07:36:25 UTC
From: Rick - DJ0IP / NJ0IP
Topic: 4810 Message: 4860

CAREFUL STEVE! DON’T JUMP TO ANY FALSE CONCLUSIONS.

A good SWR * IS NOT ANY INDICATION AT ALL * of how good an antenna actually performs.
Lossy coax will tend to lower SWR peaks across the hf spectrum and wrongly show more broad banded dips.

I find it curious that your SWR is so bad on 40m and so good on 15m.
Normally it’s the other way around.
For me, lights go on when I see something like that. Something is wrong.

A statement like SWR is 2.5:1 is pretty useless information on its own.
What is needed is a scan of the SWR across the entire band, beginning about 100 kHz below and ending about 100 kHz above the band. If your analyzer doesn’t have a scanning feature, then simply measure it manually in 50 kHz steps and record the values.
This enables us to get a picture of how the antenna is behaving, then comparing to how we know an dipole should behave.

Before I had a scanning analyzer, I made myself Excel spreadsheets for each of the bands with Frequency in the first column and SWR in the second. Then using Excel’s features you can plot the curve. What it should look like is in any antenna book.
If it doesn’t look like this, there’s something rotten in Denmark!

I think you said you purchased a SARK Mini60.
That can scan the bands.

What you want to do is scan the entire hf spectrum, beginning just below the lowest band of the antenna, and then scan each ham band individually with a scan just wide enough to show about 100 kHz above and below the band. This gives a good snapshot of what the antenna is doing.

73 - Rick, DJ0IP
(Nr. Frankfurt am Main)

From: SkyWires@yahoogroups.com [mailto:SkyWires@yahoogroups.com]
Sent: Saturday, June 20, 2015 3:04 AM
To: SkyWires@yahoogroups.com
Subject: Re: [SkyWires] Steve's Low Loop Resonance Test Results

OK, more playing today since I have the stand alone bslun.

The doublet ladder line fine is cut to 40 meter but the Kenwood can't match it, it can't match until a higher band, I don't recall which.

I have a coax fed center insulator though, so I cut a coax fed 40 meter dipole and hung it exactly where the ladder line fed one was at.

The Kenwood can match 40, 17, 15 and 10!

With the Dentron I can of course match everything. I like 80 and 20 so I'll have to match them, but 40 and the rest are now automatic, that's progress!

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So, this leads us back to the 4:1 balun and low antenna...low lowers impedance and the balun is lowering it further, with more impedance by using coax my Kenwood is happier? I talked to one guy on 20 meter, said I sounded fine.

Again, fun stuff...I need to get off my butt and doing something!...hmmm, I should hook the ends of the dipole up to the loop and see what a coax fed loop does....

Steve

4861. RE: [SkyWires] Steve's Low Loop Resonance Test Results

Yahoo group: SkyWires
Date: 2015-06-20 07:51:51 UTC
From: Rick - DJ0IP / NJ0IP
Topic: 4810 Message: 4861

NOPE! That's all wrong.

These bands are not directly harmonically related like that.
You are forgetting one very important fact: "End Effect".

The formula for a dipole is 492/f. (in free space)
On earth, the velocity factor of the wire shortens the constant to about 482.
Then “End Effect” shortens the formula again from 482 to 468.
But this is only when you have just one half wavelength of wire.

On 15m you have 3 half wavelengths.
Only one is affected by end effect (the one made of the two outer ends).
So basically you wire length should be:

(482/f) + (482/f) + (468/f) . . .

where “f” is whatever frequency you want the 40m dipole to resonate on, on 15m.

You are going to come out with something like 69 or 70 ft.
Therefore a 66 or 67 ft. dipole is too short, thus 15m resonance will be too high.

But your 15m resonance is not too high, so there is something wrong here.

If it were in the clear, not bent, and working properly, then a dipole resonate at about 7.1 MHz is what you should shoot for.
This will make the 15m resonance about 21.6 MHz. However it is still well within the matching range of your matchbox and it will work just fine on both bands.

Also, the fact that the dipole bends and goes around a corner changes the picture, but I can’t say by how much.

73 - Rick, DJ0IP
(Nr. Frankfurt am Main)

From: SkyWires@yahoogroups.com [mailto:SkyWires@yahoogroups.com]
Sent: Saturday, June 20, 2015 3:34 AM
To: SkyWires@yahoogroups.com
Subject: Re: [SkyWires] Steve's Low Loop Resonance Test Results

OK, getting late for playing tonight, but for tomorrow night...

Usually 468/Freq gives the length you get the best match. So freq times length equals 468. Well, I've got so much going on with the low height, structure, etc. that the 468 constant isn't holding true. OK, well I have two of the three pieces to figure out the Casa Del KA0NEB constant don't I? Basically the new dipole is cut to 66' (I left some for trimming) and it's very happy at 21.2 mhz, so 66*21.1 gives us 1399.2 for the new constant. OK, if I want it to be happy around 7.2 then 1399.2 / 7.2 = 194.33 or 97.16 per leg? Of course I'm bending around the house so that may play in...anyway, on the right track here, all wet, or

you need something to do anyway Steve, go play and report back?

4862. RE: [SkyWires] Steve's Low Loop Resonance Test Results

Yahoo group: SkyWires
Date: 2015-06-20 07:57:21 UTC
From: Rick - DJ0IP / NJ0IP
Topic: 4810 Message: 4862

It is a myth that antennas very low to the ground work better for NVIS than when they are higher up.

The radiation angle is the same for these antennas when they are close the ground as it is when they are ¼ wavelength in the air.

However the ground losses increase as we move it closer to the ground, and as we get real close, the ground losses shoot way up.

So a 80m dipole 15’ off of the ground is worse than one 40’ off of the ground in all cases, NVIS, DX, anything.

Although it might be quieter as far as noise goes.

However is you take the higher antenna and reduce your RF gain, or use an attenuator, it will be quieter too.

This is documented in any antenna book.

Check the vertical radiation pattern of any modeled dipole at various heights.

Cebik did a paper on this once. Perhaps I can find it. I’ll have to search my files.

73 - Rick, DJ0IP

(Nr. Frankfurt am Main)

From: SkyWires@yahoogroups.com [mailto:SkyWires@yahoogroups.com]
Sent: Saturday, June 20, 2015 4:48 AM
To: SkyWires@yahoogroups.com
Subject: Re: [SkyWires] Steve's Low Loop Resonance Test Results

'Rick - DJ0IP / NJ0IP' wrote:

"Andy, that is a myth."

Sorry -- which part is the myth?

Is it a myth that some people use very low antennas?

Or is it a myth that efficiency falls when they are that low?

I also said that low antennas direct much of their (available) signal upwards, and I don't believe that is a myth either. Both measurements and modeling support that; but if you feel otherwise (that they make better DX antennas), then I'll let you have that. But I wouldn't agree with it.

I'm just saying what others have to say about their very low, field-expedient antennas. I also want to say that they don't work for everyone.

Andy

4863. RE: [SkyWires] Steve's Low Loop Resonance Test Results

Yahoo group: SkyWires
Date: 2015-06-20 08:04:23 UTC
From: Rick - DJ0IP / NJ0IP
Topic: 4810 Message: 4863

Well I will reply to my own dumb post below.

It can help once the antenna is high enough.

But increasing the height to at least 1/8 wavelength will do more than laying a ground screen under it.

73 - Rick, DJ0IP

(Nr. Frankfurt am Main)

From: SkyWires@yahoogroups.com [mailto:SkyWires@yahoogroups.com]
Sent: Saturday, June 20, 2015 9:38 AM
To: SkyWires@yahoogroups.com
Subject: RE: [SkyWires] Steve's Low Loop Resonance Test Results

That is not going to help, Joel.
That works great with quarter wave verticals.
Horizontal wires need HEIGHT.
There is no substitute for that, that I know of.

73 - Rick, DJ0IP
(Nr. Frankfurt am Main)

From: SkyWires@yahoogroups.com [mailto:SkyWires@yahoogroups.com]
Sent: Saturday, June 20, 2015 3:23 AM
To: SkyWires@yahoogroups.com
Subject: RE: [SkyWires] Steve's Low Loop Resonance Test Results

Thanks for the reply Rick.

So to minimize ground losses could one run an electric fence wire along the ground under the loop and then attach that to the grounding system somehow?

It should have less losses than using the chain link fence I would think.

I could insulate the return wire off the ground fairly easily actually.

I know it's like using an electric knife to cut butter, but the powerline noise is really bad in the summer months. Getting it any higher than the olive trees and you're looking at starting to interfere with the power lines that are on 2 sides of the property. I've got a 2 1/4 mile rolls of electrical fence wire. I might just try it to see how it will work. Do some testing before and after to see if there is a difference in received and transmitted signals. Hopefully I could get that done before field day.

Thanks again

joel
kj6dif

norcal

That is only part of the story, Joel.

Besides takeoff angle and impedance, there is a third, important factor: ground losses.
When we get too close to the ground, ground losses go up.
This is true for all horizontal antennas.

10’ is even low for 20m, but for the higher bands, then it would be ok.
However the gain you are referring to is not omni-directional.
It is at 90 degree increments from the feedpoint (assuming nothing is physically influencing and disturbing the pattern)

30 to 40 ft. is actually a good compromise between giving us some nice lobes in these 4 directions, while still having enough radiation in between to work thos directions to, albeit with a somewhat weaker signal.

73 - Rick, DJ0IP
(Nr. Frankfurt am Main)

4864. RE: [SkyWires] Steve's Low Loop Resonance Test Results

Yahoo group: SkyWires
Date: 2015-06-20 08:51:25 UTC
From: slr_65@...
Topic: 4810 Message: 4864

I have a SARK on order, but it's a few weeks out as it's coming from China.

I have an MFJ-209 with an external frequency counter, but it's not calibrated above 3:1 and just coarsely below. The frequency adjust is pretty touchy too, so its not the best tool for detail work. If I get time I may try to do a better data compilation though.

I'm just trying to avoid the pita of manually tuning up every band change, it's not easy with low vision. The markings on the Dentron are coarse, sometimes they work, sometimes I gotta touch 'em up. I guess I could put a coax switch and put the analyzer in permanent with the flip of a switch, or maybe just printing a new scale for the front of the Dentron that's finer calibrated...what I'd like to do, but I can't see the Arduino IDE any more, is couple pots to the cap shafts and read them with the Arduino and then display a precsion number on a BIG display. I gotta find an Arduino IDE with high contrast fonts.

I may have a reprieve though, there are two trees in the city right of way that you usually can't touch (they fine people for trimming them!), I figured all they could do is say no, so I asked...I CAN hang a wire in them! 8-) So we may get some height yet!

4865. AW: [SkyWires] Steve's Low Loop Resonance Test Results

Yahoo group: SkyWires
Date: 2015-06-20 10:29:03 UTC
From: siegfried jackstien
Topic: 4810 Message: 4865

Go an buy an autotuner (cg3000 or one of the sgc autotuners)

Put a choke (balun) on the input of the tuner (and also add chokes for the control and/or power cable) ... so the tuner is floating" (rf wise)

My friend andreas uses such a setup (ladderline fed doublet) with such a tuner and he can work all bands without touching any knob ... just qsy and transmit (and tuner does the rest

Your internal tuner can not do that (much smaller tuning range)

Using tuners in a row (the dentron and the internal tuner) is also not a good solutions (2 tuners = 2 times tuner loss)

Greetz

Sigi

Dg9bfc

> -----Ursprüngliche Nachricht-----
> Von: SkyWires@yahoogroups.com [mailto:SkyWires@yahoogroups.com]
> Gesendet: Samstag, 20. Juni 2015 08:51
> An: SkyWires@yahoogroups.com
> Betreff: RE: [SkyWires] Steve's Low Loop Resonance Test Results
>
>
>
> I have a SARK on order, but it's a few weeks out as it's coming from
> China.
>
> I have an MFJ-209 with an external frequency counter, but it's not
> calibrated above 3:1 and just coarsely below. The frequency adjust is
> pretty touchy too, so its not the best tool for detail work. If I get
> time I may try to do a better data compilation though.
>
> I'm just trying to avoid the pita of manually tuning up every band change,
> it's not easy with low vision. The markings on the Dentron are coarse,
> sometimes they work, sometimes I gotta touch 'em up. I guess I could put
> a coax switch and put the analyzer in permanent with the flip of a switch,
> or maybe just printing a new scale for the front of the Dentron that's
> finer calibrated...what I'd like to do, but I can't see the Arduino IDE
> any more, is couple pots to the cap shafts and read them with the Arduino
> and then display a precsion number on a BIG display. I gotta find an
> Arduino IDE with high contrast fonts.
>
> I may have a reprieve though, there are two trees in the city right of way

> that you usually can't touch (they fine people for trimming them!), I
> figured all they could do is say no, so I asked...I CAN hang a wire in
> them! 8-) So we may get some height yet!
>
>

4866. Steve's Analyzers and Matchboxes

Yahoo group: SkyWires
Date: 2015-06-20 10:31:42 UTC
From: Rick - DJ0IP / NJ0IP
Topic: 4810 Message: 4866

Steve,

I changed the subject line.
We simply MUST start doing that every time we change the content of the email.

Under "Steve's Low Loop Resonance Test.."
We have had:
➢ Low Loop Resonance Test
➢ Different types of masts
➢ How to get a rope in the tree
➢ Details of sling shots
➢ Details of pump guns
➢ Baluns
➢ Shapes of loops
➢ Analyzers
➢ Matchboxes

That is totally inefficient.
It makes it impossible to look back on previous posts on a particular topic because you can't find the right one.
They all have the same subject line.

Now to the Analyzers:

The MJF-209 is not very effective but a lot better than no analyzer at all.
At least you don't have to use the transmitter for checking.

NEVER EVER LEAVE THE ANALYZER IN THE LINE VIA A SWITCH.
You will soon fry the analyzer!
Once you get your antenna pruned correctly and the Dentron marked correctly, it will be easier.

It will take a while to learn to use the SARK, but it is a good low cost means of really evaluating your antennas.

The matchbox solution is, you need to buy a new AutoTuner.
But buy a good one. All tuners were NOT created equally.
Some tune to just 600 Ohms, others to 1200 Ohms, most can match up to 1600 Ohms, and the very good ones can match up to 3200 Ohms.

I'm sure you will get a load of opinions on "which Autotuner", but my preference for a good, yet low cost tuner is the MFJ-991B. It is identical to the 993B, except it does not have the cross-needle watt meter. The 991B costs about $230 and the 993B costs $269.
These two tuners can match from 6-1600 Ohms at 300w or switchable to 6-3200 Ohms at 150w.

Either of these will give you the push-button matching you are looking for.
But before you begin, you really should have your antenna(s) as efficient as you can get

them under the circumstances.

Also, you must remember to always reduce power to something like 10 to 30 watts before activating the external tuner.

Your 40m dipole sure sounds suspicious to me!

I hope you can use those two trees.
I have never had any luck asking the city for permission to use anything, except their restrooms at the city hall.

73 - Rick, DJ0IP
(Nr. Frankfurt am Main)

From: SkyWires@yahoogroups.com [mailto:SkyWires@yahoogroups.com]
Sent: Saturday, June 20, 2015 10:51 AM
To: SkyWires@yahoogroups.com
Subject: RE: [SkyWires] Steve's Low Loop Resonance Test Results

I have a SARK on order, but it's a few weeks out as it's coming from China.

I have an MFJ-209 with an external frequency counter, but it's not calibrated above 3:1 and just coarsely below. The frequency adjust is pretty touchy too, so its not the best tool for detail work. If I get time I may try to do a better data compilation though.

I'm just trying to avoid the pita of manually tuning up every band change, it's not easy with low vision. The markings on the Dentron are coarse, sometimes they work, sometimes I gotta touch 'em up. I guess I could put a coax switch and put the analyzer in permanent with the flip of a switch, or maybe just printing a new scale for the front of the Dentron that's finer calibrated...what I'd like to do, but I can't see the Arduino IDE any more, is couple pots to the cap shafts and read them with the Arduino and then display a precsion number on a BIG display. I gotta find an Arduino IDE with high contrast fonts.

I may have a reprieve though, there are two trees in the city right of way that you usually can't touch (they fine people for trimming them!), I figured all they could do is say no, so I asked...I CAN hang a wire in them! 8-) So we may get some height yet!

4867. Re: [SkyWires] New file uploaded to SkyWires

Yahoo group: SkyWires
Date: 2015-06-20 10:48:27 UTC
From: Everett Sharp
Topic: 1641 Message: 4867

Rick,

I put together a spread sheet listing the most common ferrite cores and their cost from various suppliers. I also have listed the companies web site addresses. I will post it here on this site later today.

If you are just looking for 1 or 2 toroids, then kit parts is the best place to go. The FT240-61 cores are $10 each and the FT140-61 cores are 2 for $5. If you are buying more than 1 or 2, than either Mosure, or Arrow are the place to go.

I will have to try the K, or 52 cores for a balun. The FT150K cores would make a nice 4:1 balun, but their cost is $8 each at CWS and I can get the FT240-52 cores for around the same price. I also found a place to get the 52 mix in FT140-52.

On Field Day we will be setting up a 40 meter Delta loop, which was tuned about a month ago when we set it up on a dry run. The over all length is 139' and the vertical sections are 41' long. I will sweep it using various baluns, 4:1, 2.5:1, 2.25:1 and 1:1 and write up a article showing the results. However, when doing a quick and dirty check the 2.5:1 was better than the 4:1 balun.

We are also going to put up a 160 meter Skywire loop, which will be 574' long. However, we plan on feeding it with ladder line and use a tuner. If I have time I will hook up a 4:1 and a 1:1 balun on the end of the ladder line and run a sweep with each balun.

Everett N8CNP

Sent from my iPad

> On Jun 20, 2015, at 2:23 AM, 'Rick - DJ0IP / NJ0IP' Rick@... [SkyWires] <SkyWires@yahoogroups.com> wrote:
>
> GM Everett,
>
> If your pole can support the weight, you can use FT-240-61.
> They’re $19 ea. at www.spiderbeam.us and you can get them in single units there.
> Some of the other sources I have found have minimum quantity restrictions.
> I’ve also bought toroids on ebay.
>
> In fact since you want to cover 80m as well, it would be even better to use -51 or -52 material.
> These have a permeability about twice as high as -61, yet only half as much as #43.
> This would give you a little higher CMI on 80m.
>
> I’m interested in the results of your research.
> People are always asking me where to buy this stuff in the states and I honestly don’t know.
> I know where to buy it here in Europe (Germany and UK), but no idea in the states.

> I’m checked all the US ham radio stores that I am familiar with but can’t find it.
>
> Seems more people home-brew here in Europe than in the states because we have several stores that supply us with this stuff.
> For instance DX-Wire. Www.dx-wire.de (you can change the language to English).
>
> 73 - Rick, DJ0IP
> (Nr. Frankfurt am Main)
>
> From: SkyWires@yahoogroups.com [mailto:SkyWires@yahoogroups.com]
> Sent: Friday, June 19, 2015 11:19 PM
> To: SkyWires@yahoogroups.com
> Subject: Re: [SkyWires] New file uploaded to SkyWires
>
> Rick,
>
> Looks like you have found a new home here. Later I plan on writing a good detailed article on how to build a 4:1 Balun including where to get all of the parts. Lots of pictures.
>
> I was looking Mouser's web site this morning and the carry a 61 mix core that is a little larger than the FT140-61. I may later order some to try out.
>
> Although I don't show the sweep in the article that I posted it looks quite good on 6 and 2 meters. So I guess you could call it a 10 band antenna.
>
> Everett N8CNP
>
> Sent from my iPhone
>
> On Jun 19, 2015, at 3:46 PM, 'Rick - DJ0IP / NJ0IP' Rick@dj0ip.de [SkyWires] <SkyWires@yahoogroups.com> wrote:
>
> On page 2 of Everett’s newly uploaded file, you will see his home-brew dual-core 4:1 Guanella balun.
> Look carefully at the spacing between the two cores when they are soldered together.
> THIS IS CORRECT.
>
> The balun shown in the file referred to a couple of days ago, the one showing how to build a balun, had too narrow of spacing, or actually no spacing at all. This is probably the reason the SWR results of the narrow spaced toroid balun were less than optimum.
>
> Also notice that he has inserted his enamel-insulated wires inside of Teflon insulation.
> Everett used #16 wire which is certainly thick enough for this size of core.
> In fact #18 or #20 would suffice because these cores are really only safe for about 500 or 600 Watts.
>
> BTW, I use the same size cores in my main station antenna, an 80m OCFD, and I run 600w.
>
> 73 - Rick, DJ0IP

> (Nr. Frankfurt am Main)
>
> From: SkyWires@yahoogroups.com [mailto:SkyWires@yahoogroups.com]
> Sent: Friday, June 19, 2015 10:15 PM
> To: SkyWires@yahoogroups.com
> Subject: Re: [SkyWires] New file uploaded to SkyWires
>
> Hello,
>
> I removed the original article and replaced it with a revised version.
>
> Everett N8CNP
>
> In a message dated 6/19/2015 3:13:23 P.M. Central Daylight Time, SkyWires@...m writes:
>
> Hello,
>
> This email message is a notification to let you know that
> a file has been uploaded to the Files area of the SkyWires
> group.
>
> File : /loop balun experiment.pdf
> Uploaded by : everettsharp74 <everettsharp@...>
> Description : Experimenting with different Baluns on a 275' Horizontal
> Multi-Band Loop Antenna
>
> You can access this file at the URL:
> https://groups.yahoo.com/neo/groups/SkyWires/files/loop%20balun%20experiment.pdf
>
> To learn more about file sharing for your group, please visit:
> https://help.yahoo.com/kb/index?page=content&y=PROD_GRPS&locale=en_US&id=SLN15398
>
> Regards,
>
> everettsharp74 <everettsharp@...>
>
>

4868. Matchbox Suggestions for Steve

Yahoo group: SkyWires
Date: 2015-06-20 10:51:03 UTC
From: Rick - DJ0IP / NJ0IP
Topic: 4810 Message: 4868

Sigi□s tip is good, but I would also add a 1:1 Choke between the tuner and
the antenna.
This can be a simple coax choke.

The reason is, we have two challenges here:
1) matching, and
2) common mode current on the feedline.
It is a good idea to place a choke between the feedline and the tuner, to keep the common mode current out of the tuner.

I have had good luck running high power with the choke that is pictured in the first and last picture in the gallery of pictures from my former QTH in Oklahoma:
http://www.dj0ip.de/my-station/oklahoma-2010/

For low power, use RG-58 instead of RG-213.
Use about 23' on about a 4" form.
The spacing with rope is optional but helps by reducing mutual capacitance between the turns.

73 - Rick, DJ0IP
(Nr. Frankfurt am Main)

From: SkyWires@yahoogroups.com [mailto:SkyWires@yahoogroups.com]
Sent: Saturday, June 20, 2015 12:29 PM
To: SkyWires@yahoogroups.com
Subject: AW: [SkyWires] Steve's Low Loop Resonance Test Results

Go an buy an autotuner (cg3000 or one of the sgc autotuners)

Put a choke (balun) on the input of the tuner (and also add chokes for the control and/or power cable) ... so the tuner is floating" (rf wise)

My friend andreas uses such a setup (ladderline fed doublet) with such a tuner and he can work all bands without touching any knob ... just qsy and transmit (and tuner does the rest

Your internal tuner can not do that (much smaller tuning range)

Using tuners in a row (the dentron and the internal tuner) is also not a good solutions (2 tuners = 2 times tuner loss)

Greetz

Sigi

Dg9bfc

> -----Ursprüngliche Nachricht-----
> Von: SkyWires@yahoogroups.com [mailto:SkyWires@yahoogroups.com]
> Gesendet: Samstag, 20. Juni 2015 08:51
> An: SkyWires@yahoogroups.com
> Betreff: RE: [SkyWires] Steve's Low Loop Resonance Test Results
>
>
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> I have a SARK on order, but it's a few weeks out as it's coming from
> China.
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> pretty touchy too, so its not the best tool for detail work. If I get
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> I may have a reprieve though, there are two trees in the city right of way
> that you usually can't touch (they fine people for trimming them!), I
> figured all they could do is say no, so I asked...I CAN hang a wire in
> them! 8-) So we may get some height yet!
>
>

4869. AW: [SkyWires] Steve's Analyzers and Matchboxes

Yahoo group: SkyWires
Date: 2015-06-20 11:04:08 UTC
From: siegfried jackstien
Topic: 4810 Message: 4869

```
>
> I hope you can use those two trees.
> I have never had any luck asking the city for permission to use anything,
> except their restrooms at the city hall.
>
```

Hello rick

I also use 2 "city trees" for my loop ... I did not ask ... I just used them

Sometimes it is easier to ask for forgiveness then ask for permission :-)

Dg9bfc

Sigi

4870. AW: [SkyWires] New file uploaded to SkyWires

Yahoo group: SkyWires
Date: 2015-06-20 11:06:56 UTC
From: siegfried jackstien
Topic: 1641 Message: 4870

Everett... what comes out at lower end of the ladderline in your 160m loop highly depends on what ladderline length you use

I use different length for the different bands (added length is switched in with 2 banana plugs) ...

Dg9bfc

Sigi

> -----Ursprüngliche Nachricht-----
> Von: SkyWires@yahoogroups.com [mailto:SkyWires@yahoogroups.com]
> Gesendet: Samstag, 20. Juni 2015 10:48
> An: SkyWires@yahoogroups.com
> Betreff: Re: [SkyWires] New file uploaded to SkyWires
>
>
>
> Rick,
>
> I put together a spread sheet listing the most common ferrite cores and
> their cost from various suppliers. I also have listed the companies web
> site addresses. I will post it here on this site later today.
>
> If you are just looking for 1 or 2 toroids, then kit parts is the best
> place to go. The FT240-61 cores are $10 each and the FT140-61 cores are 2
> for $5. If you are buying more than 1 or 2, than either Mosure, or Arrow
> are the place to go.
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> I will have to try the K, or 52 cores for a balun. The FT150K cores would
> make a nice 4:1 balun, but their cost is $8 each at CWS and I can get the
> FT240-52 cores for around the same price. I also found a place to get the
> 52 mix in FT140-52.
>
> On Field Day we will be setting up a 40 meter Delta loop, which was tuned
> about a month ago when we set it up on a dry run. The over all length is
> 139' and the vertical sections are 41' long. I will sweep it using various
> baluns, 4:1, 2.5:1, 2.25:1 and 1:1 and write up a article showing the
> results. However, when doing a quick and dirty check the 2.5:1 was better
> than the 4:1 balun.
>
> We are also going to put up a 160 meter Skywire loop, which will be 574'
> long. However, we plan on feeding it with ladder line and use a tuner. If
> I have time I will hook up a 4:1 and a 1:1 balun on the end of the ladder
> line and run a sweep with each balun.

>
> Everett N8CNP
>
> Sent from my iPad
>
> On Jun 20, 2015, at 2:23 AM, 'Rick - DJ0IP / NJ0IP' Rick@...
> [SkyWires] <SkyWires@yahoogroups.com> wrote:
>
>
>
>
>
>
> GM Everett,
>
> If your pole can support the weight, you can use FT-240-61.
> They□re $19 ea. at www.spiderbeam.us and you can get them in single
> units there.
> Some of the other sources I have found have minimum quantity
> restrictions.
> I□ve also bought toroids on ebay.
>
> In fact since you want to cover 80m as well, it would be even better
> to use -51 or -52 material.
> These have a permeability about twice as high as -61, yet only half
> as much as #43.
> This would give you a little higher CMI on 80m.
>
> I□m interested in the results of your research.
> People are always asking me where to buy this stuff in the states
> and I honestly don□t know.
> I know where to buy it here in Europe (Germany and UK), but no idea
> in the states.
> I□m checked all the US ham radio stores that I am familiar with but
> can□t find it.
>
> Seems more people home-brew here in Europe than in the states
> because we have several stores that supply us with this stuff.
> For instance DX-Wire. Www.dx-wire.de (you can change the language to
> English).
>
> 73 - Rick, DJ0IP
> (Nr. Frankfurt am Main)
>
> From: SkyWires@yahoogroups.com [mailto:SkyWires@yahoogroups.com]
> Sent: Friday, June 19, 2015 11:19 PM
> To: SkyWires@yahoogroups.com
> Subject: Re: [SkyWires] New file uploaded to SkyWires
>
> Rick,

>
> Looks like you have found a new home here. Later I plan on writing a
> good detailed article on how to build a 4:1 Balun including where to get
> all of the parts. Lots of pictures.
>
> I was looking Mouser's web site this morning and the carry a 61 mix
> core that is a little larger than the FT140-61. I may later order some to
> try out.
>
> Although I don't show the sweep in the article that I posted it
> looks quite good on 6 and 2 meters. So I guess you could call it a 10 band
> antenna.
>
> Everett N8CNP
>
> Sent from my iPhone
>
> On Jun 19, 2015, at 3:46 PM, 'Rick - DJ0IP / NJ0IP' Rick@...
> [SkyWires] <SkyWires@yahoogroups.com> wrote:
>
> On page 2 of Everett□s newly uploaded file, you will see his home-
> brew dual-core 4:1 Guanella balun.
> Look carefully at the spacing between the two cores when they are
> soldered together.
> THIS IS CORRECT.
>
> The balun shown in the file referred to a couple of days ago, the
> one showing how to build a balun, had too narrow of spacing, or actually
> no spacing at all. This is probably the reason the SWR results of the
> narrow spaced toroid balun were less than optimum.
>
> Also notice that he has inserted his enamel-insulated wires inside
> of Teflon insulation.
> Everett used #16 wire which is certainly thick enough for this size
> of core.
> In fact #18 or #20 would suffice because these cores are really only
> safe for about 500 or 600 Watts.
>
> BTW, I use the same size cores in my main station antenna, an 80m
> OCFD, and I run 600w.
>
> 73 - Rick, DJ0IP
> (Nr. Frankfurt am Main)
>
> From: SkyWires@yahoogroups.com [mailto:SkyWires@yahoogroups.com]
> Sent: Friday, June 19, 2015 10:15 PM
> To: SkyWires@yahoogroups.com
> Subject: Re: [SkyWires] New file uploaded to SkyWires
>

> Hello,
>
> I removed the original article and replaced it with a revised
> version.
>
> Everett N8CNP
>
> In a message dated 6/19/2015 3:13:23 P.M. Central Daylight Time,
> SkyWires@yahoogroups.com writes:
>
> Hello,
>
> This email message is a notification to let you know that
> a file has been uploaded to the Files area of the SkyWires
> group.
>
> File : /loop balun experiment.pdf
> Uploaded by : everettsharp74 <everettsharp@...>
> Description : Experimenting with different Baluns on a 275'
> Horizontal
> Multi-Band Loop Antenna
>
> You can access this file at the URL:
> https://groups.yahoo.com/neo/groups/SkyWires/files/loop%20balun%20ex
> periment.pdf
>
> To learn more about file sharing for your group, please visit:
> https://help.yahoo.com/kb/index?page=content&y=PROD_GRPS&locale=en_U
> S&id=SLN15398
>
> Regards,
>
> everettsharp74 <everettsharp@...>
>
>
>
>

4871. AW: [SkyWires] Matchbox Suggestions for Steve

Yahoo group: SkyWires
Date: 2015-06-20 11:10:51 UTC
From: siegfried jackstien
Topic: 4810 Message: 4871

Rick

How do you add a choke on tuner output (if ladderline is used) ???

If the tuner is completely floating (rf wise) then there should be very low common mode current towards the rig ...

When that "input" choke has a high enough impedance then there is no way for cmc flowing towards rig/ground .... it is just blocked at the tuners input

Dg9bfc

sigi

> -----Ursprüngliche Nachricht-----
> Von: SkyWires@yahoogroups.com [mailto:SkyWires@yahoogroups.com]
> Gesendet: Samstag, 20. Juni 2015 10:51
> An: SkyWires@yahoogroups.com
> Betreff: [SkyWires] Matchbox Suggestions for Steve
>
>
>
> Sigi□s tip is good, but I would also add a 1:1 Choke between the tuner and
> the antenna.
> This can be a simple coax choke.
>
> The reason is, we have two challenges here:
> 1) matching, and
> 2) common mode current on the feedline.
> It is a good idea to place a choke between the feedline and the tuner, to
> keep the common mode current out of the tuner.
>
> I have had good luck running high power with the choke that is pictured in
> the first and last picture in the gallery of pictures from my former QTH
> in
> Oklahoma:
> http://www.dj0ip.de/my-station/oklahoma-2010/
>
> For low power, use RG-58 instead of RG-213.
> Use about 23' on about a 4" form.
> The spacing with rope is optional but helps by reducing mutual capacitance
> between the turns.
>
> 73 - Rick, DJ0IP
> (Nr. Frankfurt am Main)
>

> From: SkyWires@yahoogroups.com [mailto:SkyWires@yahoogroups.com]
> Sent: Saturday, June 20, 2015 12:29 PM
> To: SkyWires@yahoogroups.com
> Subject: AW: [SkyWires] Steve's Low Loop Resonance Test Results
>
>
> Go an buy an autotuner (cg3000 or one of the sgc autotuners)
>
> Put a choke (balun) on the input of the tuner (and also add chokes for the
> control and/or power cable) ... so the tuner is floating" (rf wise)
>
> My friend andreas uses such a setup (ladderline fed doublet) with such a
> tuner and he can work all bands without touching any knob ... just qsy and
> transmit (and tuner does the rest
>
> Your internal tuner can not do that (much smaller tuning range)
>
> Using tuners in a row (the dentron and the internal tuner) is also not a
> good solutions (2 tuners = 2 times tuner loss)
>
> Greetz
>
> Sigi
>
> Dg9bfc
>
> > -----Ursprüngliche Nachricht-----
> > Von: SkyWires@yahoogroups.com [mailto:SkyWires@yahoogroups.com]
> > Gesendet: Samstag, 20. Juni 2015 08:51
> > An: SkyWires@yahoogroups.com
> > Betreff: RE: [SkyWires] Steve's Low Loop Resonance Test Results
> >
> >
> >
> > I have a SARK on order, but it's a few weeks out as it's coming from
> > China.
> >
> > I have an MFJ-209 with an external frequency counter, but it's not
> > calibrated above 3:1 and just coarsely below. The frequency adjust is
> > pretty touchy too, so its not the best tool for detail work. If I get
> > time I may try to do a better data compilation though.
> >
> > I'm just trying to avoid the pita of manually tuning up every band
> change,
> > it's not easy with low vision. The markings on the Dentron are coarse,
> > sometimes they work, sometimes I gotta touch 'em up. I guess I could put
> > a coax switch and put the analyzer in permanent with the flip of a
> switch,
> > or maybe just printing a new scale for the front of the Dentron that's

> > finer calibrated...what I'd like to do, but I can't see the Arduino IDE
> > any more, is couple pots to the cap shafts and read them with the
> Arduino
> > and then display a precsion number on a BIG display. I gotta find an
> > Arduino IDE with high contrast fonts.
> >
> > I may have a reprieve though, there are two trees in the city right of
> way
> > that you usually can't touch (they fine people for trimming them!), I
> > figured all they could do is say no, so I asked...I CAN hang a wire in
> > them! 8-) So we may get some height yet!
> >
> >
>
>
>
>

4872. RE: [SkyWires] Steve's Analyzers and Matchboxes

Yahoo group: SkyWires
Date: 2015-06-20 11:23:06 UTC
From: Rick - DJ0IP / NJ0IP
Topic: 4810 Message: 4872

That□s IMPOSSIBLE Sigi . . . you don□t even live in a city! (hi)

I tried that once when living in Kirchheim, near Munich.
I had one leg of a dipole crossing a street and tied to a tree.
It took about one week until I got a letter from the city telling me to
remove it or they would remove it and send me the bill.

73 - Rick, DJ0IP
(Nr. Frankfurt am Main)

From: SkyWires@yahoogroups.com [mailto:SkyWires@yahoogroups.com]
Sent: Saturday, June 20, 2015 1:04 PM
To: SkyWires@yahoogroups.com
Subject: AW: [SkyWires] Steve's Analyzers and Matchboxes

>
> I hope you can use those two trees.
> I have never had any luck asking the city for permission to use anything,
> except their restrooms at the city hall.
>

Hello rick

I also use 2 "city trees" for my loop ... I did not ask ... I just used them

Sometimes it is easier to ask for forgiveness then ask for permission :-)

Dg9bfc

Sigi

4873. RE: [SkyWires] Matchbox Suggestions for Steve

Yahoo group: SkyWires
Date: 2015-06-20 11:29:44 UTC
From: Rick - DJ0IP / NJ0IP
Topic: 4810 Message: 4873

It is obvious that you did not look at my pictures, Sigi.

I said it is pictured in the first and last picture in the gallery showing
pictures of my QTH in Oklahoma.

It couldn□t be any simpler than what you see in the picture.
The coax is wrapped on a pvc pipe.
The bottom stub has a PL-259 attached.
The top end of the coax has 2 banana jacks soldered to it.
The openwire simply plugs in.

In this case I'm not so much worried about the common mode current towards
the rig as I am worried about the CMC getting into the digital electronics
inside of the tuner itself.

Without the choke on the antenna side, the CMC is free to play havoc with
everything inside the tuner.

Here's the link again:
http://www.dj0ip.de/my-station/oklahoma-2010/

73 - Rick, DJ0IP
(Nr. Frankfurt am Main)

From: SkyWires@yahoogroups.com [mailto:SkyWires@yahoogroups.com]
Sent: Saturday, June 20, 2015 1:11 PM
To: SkyWires@yahoogroups.com
Subject: AW: [SkyWires] Matchbox Suggestions for Steve

Rick

How do you add a choke on tuner output (if ladderline is used) ???

If the tuner is completely floating (rf wise) then there should be very low
common mode current towards the rig ...

When that "input" choke has a high enough impedance then there is no way for
cmc flowing towards rig/ground .... it is just blocked at the tuners input

> http://www.dj0ip.de/my-station/oklahoma-2010/
>

4874. Re: AW: [SkyWires] New file uploaded to SkyWires

Yahoo group: SkyWires
Date: 2015-06-20 11:39:54 UTC
From: Everett Sharp
Topic: 1641 Message: 4874

Sigi,

The ladder line is 450 ohm, 16 gage and 100' long. I would like to put a balun at the antenna, but we are going to pushed for time on field day. So I will have to work with the readings at the end of the ladder line.

Everett N8CNP

Sent from my iPad

> On Jun 20, 2015, at 6:06 AM, 'siegfried jackstien' siegfried.jackstien@... [SkyWires] <SkyWires@yahoogroups.com> wrote:
>
> Everett... what comes out at lower end of the ladderline in your 160m loop
> highly depends on what ladderline length you use
>
> I use different length for the different bands (added length is switched in
> with 2 banana plugs) ...
>
> Dg9bfc
>
> Sigi
>
> > -----Ursprüngliche Nachricht-----
> > Von: SkyWires@yahoogroups.com [mailto:SkyWires@yahoogroups.com]
> > Gesendet: Samstag, 20. Juni 2015 10:48
> > An: SkyWires@yahoogroups.com
> > Betreff: Re: [SkyWires] New file uploaded to SkyWires
> >
> >
> >
> > Rick,
> >
> > I put together a spread sheet listing the most common ferrite cores and
> > their cost from various suppliers. I also have listed the companies web
> > site addresses. I will post it here on this site later today.
> >
> > If you are just looking for 1 or 2 toroids, then kit parts is the best
> > place to go. The FT240-61 cores are $10 each and the FT140-61 cores are 2
> > for $5. If you are buying more than 1 or 2, than either Mosure, or Arrow
> > are the place to go.
> >
> > I will have to try the K, or 52 cores for a balun. The FT150K cores would
> > make a nice 4:1 balun, but their cost is $8 each at CWS and I can get the
> > FT240-52 cores for around the same price. I also found a place to get the
> > 52 mix in FT140-52.

> >
> > On Field Day we will be setting up a 40 meter Delta loop, which was tuned
> > about a month ago when we set it up on a dry run. The over all length is
> > 139' and the vertical sections are 41' long. I will sweep it using various
> > baluns, 4:1, 2.5:1, 2.25:1 and 1:1 and write up a article showing the
> > results. However, when doing a quick and dirty check the 2.5:1 was better
> > than the 4:1 balun.
> >
> > We are also going to put up a 160 meter Skywire loop, which will be 574'
> > long. However, we plan on feeding it with ladder line and use a tuner. If
> > I have time I will hook up a 4:1 and a 1:1 balun on the end of the ladder
> > line and run a sweep with each balun.
> >
> > Everett N8CNP
> >
> > Sent from my iPad
> >
> > On Jun 20, 2015, at 2:23 AM, 'Rick - DJ0IP / NJ0IP' Rick@...
> > [SkyWires] <SkyWires@yahoogroups.com> wrote:
> >
> >
> >
> >
> >
> >
> > GM Everett,
> >
> > If your pole can support the weight, you can use FT-240-61.
> > They’re $19 ea. at www.spiderbeam.us and you can get them in single
> > units there.
> > Some of the other sources I have found have minimum quantity
> > restrictions.
> > I’ve also bought toroids on ebay.
> >
> > In fact since you want to cover 80m as well, it would be even better
> > to use -51 or -52 material.
> > These have a permeability about twice as high as -61, yet only half
> > as much as #43.
> > This would give you a little higher CMI on 80m.
> >
> > I’m interested in the results of your research.
> > People are always asking me where to buy this stuff in the states
> > and I honestly don’t know.
> > I know where to buy it here in Europe (Germany and UK), but no idea
> > in the states.
> > I’m checked all the US ham radio stores that I am familiar with but
> > can’t find it.
> >
> > Seems more people home-brew here in Europe than in the states
> > because we have several stores that supply us with this stuff.
> > For instance DX-Wire. Www.dx-wire.de (you can change the language to

> > English).
> >
> > 73 - Rick, DJ0IP
> > (Nr. Frankfurt am Main)
> >
> > From: SkyWires@yahoogroups.com [mailto:SkyWires@yahoogroups.com]
> > Sent: Friday, June 19, 2015 11:19 PM
> > To: SkyWires@yahoogroups.com
> > Subject: Re: [SkyWires] New file uploaded to SkyWires
> >
> > Rick,
> >
> > Looks like you have found a new home here. Later I plan on writing a
> > good detailed article on how to build a 4:1 Balun including where to get
> > all of the parts. Lots of pictures.
> >
> > I was looking Mouser's web site this morning and the carry a 61 mix
> > core that is a little larger than the FT140-61. I may later order some to
> > try out.
> >
> > Although I don't show the sweep in the article that I posted it
> > looks quite good on 6 and 2 meters. So I guess you could call it a 10 band
> > antenna.
> >
> > Everett N8CNP
> >
> > Sent from my iPhone
> >
> > On Jun 19, 2015, at 3:46 PM, 'Rick - DJ0IP / NJ0IP' Rick@dj0ip.de
> > [SkyWires] <SkyWires@yahoogroups.com> wrote:
> >
> > On page 2 of Everett’s newly uploaded file, you will see his home-
> > brew dual-core 4:1 Guanella balun.
> > Look carefully at the spacing between the two cores when they are
> > soldered together.
> > THIS IS CORRECT.
> >
> > The balun shown in the file referred to a couple of days ago, the
> > one showing how to build a balun, had too narrow of spacing, or actually
> > no spacing at all. This is probably the reason the SWR results of the
> > narrow spaced toroid balun were less than optimum.
> >
> > Also notice that he has inserted his enamel-insulated wires inside
> > of Teflon insulation.
> > Everett used #16 wire which is certainly thick enough for this size
> > of core.
> > In fact #18 or #20 would suffice because these cores are really only
> > safe for about 500 or 600 Watts.
> >
> > BTW, I use the same size cores in my main station antenna, an 80m

> > OCFD, and I run 600w.
> >
> > 73 - Rick, DJ0IP
> > (Nr. Frankfurt am Main)
> >
> > From: SkyWires@yahoogroups.com [mailto:SkyWires@yahoogroups.com]
> > Sent: Friday, June 19, 2015 10:15 PM
> > To: SkyWires@yahoogroups.com
> > Subject: Re: [SkyWires] New file uploaded to SkyWires
> >
> > Hello,
> >
> > I removed the original article and replaced it with a revised
> > version.
> >
> > Everett N8CNP
> >
> > In a message dated 6/19/2015 3:13:23 P.M. Central Daylight Time,
> > SkyWires@yahoogroups.com writes:
> >
> > Hello,
> >
> > This email message is a notification to let you know that
> > a file has been uploaded to the Files area of the SkyWires
> > group.
> >
> > File : /loop balun experiment.pdf
> > Uploaded by : everettsharp74 <everettsharp@...>
> > Description : Experimenting with different Baluns on a 275'
> > Horizontal
> > Multi-Band Loop Antenna
> >
> > You can access this file at the URL:
> > https://groups.yahoo.com/neo/groups/SkyWires/files/loop%20balun%20ex
> > periment.pdf
> >
> > To learn more about file sharing for your group, please visit:
> > https://help.yahoo.com/kb/index?page=content&y=PROD_GRPS&locale=en_U
> > S&id=SLN15398
> >
> > Regards,
> >
> > everettsharp74 <everettsharp@...>
> >
> >
> >
> >
>
>

4875. AW: [SkyWires] Steve's Analyzers and Matchboxes

Yahoo group: SkyWires
Date: 2015-06-20 11:45:19 UTC
From: siegfried jackstien
Topic: 4810 Message: 4875

You are right ... I live not in a city ... more rural (very small village)

I do not even have direct neighbours (no man mande noise except from my own house)

So ... what is correct term for that ?? village tree??

Maybe your problem was the crossing of the street?!?

I used a tree outside from my property ... but the loop is above my area (and NOT ACROSS THE STREET!!!)

Dg9bfc

Sigi

> -----Ursprüngliche Nachricht-----
> Von: SkyWires@yahoogroups.com [mailto:SkyWires@yahoogroups.com]
> Gesendet: Samstag, 20. Juni 2015 11:23
> An: SkyWires@yahoogroups.com
> Betreff: RE: [SkyWires] Steve's Analyzers and Matchboxes
>
>
>
> That□s IMPOSSIBLE Sigi . . . you don□t even live in a city! (hi)
>
> I tried that once when living in Kirchheim, near Munich.
> I had one leg of a dipole crossing a street and tied to a tree.
> It took about one week until I got a letter from the city telling me to
> remove it or they would remove it and send me the bill.
>
> 73 - Rick, DJ0IP
> (Nr. Frankfurt am Main)
>
> From: SkyWires@yahoogroups.com [mailto:SkyWires@yahoogroups.com]
> Sent: Saturday, June 20, 2015 1:04 PM
> To: SkyWires@yahoogroups.com
> Subject: AW: [SkyWires] Steve's Analyzers and Matchboxes
>
>
> > I hope you can use those two trees.
> > I have never had any luck asking the city for permission to use
> anything,
> > except their restrooms at the city hall.
> >

>
> Hello rick
>
> I also use 2 "city trees" for my loop ... I did not ask ... I just used
> them
>
> Sometimes it is easier to ask for forgiveness then ask for permission :-)
>
> Dg9bfc
>
> Sigi
>
>
>
>

4876. Re: AW: [SkyWires] Steve's Analyzers and Matchboxes

Yahoo group: SkyWires
Date: 2015-06-20 11:52:35 UTC
From: Everett Sharp
Topic: 4810 Message: 4876

Rick and Sigi,

My 1:1 choke is 2 stacked FT240-31 cores with 10 bifilar turns of 14 magnet wire inside of Teflon tubing.

Everett

Sent from my iPad

> On Jun 20, 2015, at 6:45 AM, 'siegfried jackstien' siegfried.jackstien@freenet.de [SkyWires] <SkyWires@yahoogroups.com> wrote:
>
> You are right ... I live not in a city ... more rural (very small village)
>
> I do not even have direct neighbours (no man mande noise except from my own
> house)
>
> So ... what is correct term for that ?? village tree??
>
> Maybe your problem was the crossing of the street?!?
>
> I used a tree outside from my property ... but the loop is above my area
> (and NOT ACROSS THE STREET!!!)
>
> Dg9bfc
>
> Sigi
>
> > -----Ursprüngliche Nachricht-----
> > Von: SkyWires@yahoogroups.com [mailto:SkyWires@yahoogroups.com]
> > Gesendet: Samstag, 20. Juni 2015 11:23
> > An: SkyWires@yahoogroups.com
> > Betreff: RE: [SkyWires] Steve's Analyzers and Matchboxes
> >
> >
> >
> > That’s IMPOSSIBLE Sigi . . . you don’t even live in a city! (hi)
> >
> > I tried that once when living in Kirchheim, near Munich.
> > I had one leg of a dipole crossing a street and tied to a tree.
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> > remove it or they would remove it and send me the bill.
> >
> > 73 - Rick, DJ0IP
> > (Nr. Frankfurt am Main)
> >

> > From: SkyWires@yahoogroups.com [mailto:SkyWires@yahoogroups.com]
> > Sent: Saturday, June 20, 2015 1:04 PM
> > To: SkyWires@yahoogroups.com
> > Subject: AW: [SkyWires] Steve's Analyzers and Matchboxes
> >
> >
> > >
> > > I hope you can use those two trees.
> > > I have never had any luck asking the city for permission to use
> > anything,
> > > except their restrooms at the city hall.
> > >
> >
> > Hello rick
> >
> > I also use 2 "city trees" for my loop ... I did not ask ... I just used
> > them
> >
> > Sometimes it is easier to ask for forgiveness then ask for permission :-)
> >
> > Dg9bfc
> >
> > Sigi
> >
> >
> >
> >
>
>

4877. AW: [SkyWires] Matchbox Suggestions for Steve

Yahoo group: SkyWires
Date: 2015-06-20 12:01:58 UTC
From: siegfried jackstien
Topic: 4810 Message: 4877

Ok ... NOW I LOOKED AT THAT PICTURE

Did you measure the inductance of that ugly balun ???

What about the impedance jump from ladderline to the 50 ohms coax?? Would that not add another point for losses??

If on shack end you have something in lower ohms range (current spot) then your choke will work well ... but what if you have a high impedance spot at the shack end (a few hundred ohms or more) ... what does the mismatch between that choke and the ladderline do ???

Dg9bfc

Sigi

> -----Ursprüngliche Nachricht-----
> Von: SkyWires@yahoogroups.com [mailto:SkyWires@yahoogroups.com]
> Gesendet: Samstag, 20. Juni 2015 11:30
> An: SkyWires@yahoogroups.com
> Betreff: RE: [SkyWires] Matchbox Suggestions for Steve
>
>
>
> It is obvious that you did not look at my pictures, Sigi.
>
> I said it is pictured in the first and last picture in the gallery showing
> pictures of my QTH in Oklahoma.
>
> It couldn□t be any simpler than what you see in the picture.
> The coax is wrapped on a pvc pipe.
> The bottom stub has a PL-259 attached.
> The top end of the coax has 2 banana jacks soldered to it.
> The openwire simply plugs in.
>
> In this case I'm not so much worried about the common mode current towards
> the rig as I am worried about the CMC getting into the digital electronics
> inside of the tuner itself.
>
> Without the choke on the antenna side, the CMC is free to play havoc with
> everything inside the tuner.
>
> Here's the link again:
> http://www.dj0ip.de/my-station/oklahoma-2010/
>
> 73 - Rick, DJ0IP

> (Nr. Frankfurt am Main)
>
> From: SkyWires@yahoogroups.com [mailto:SkyWires@yahoogroups.com]
> Sent: Saturday, June 20, 2015 1:11 PM
> To: SkyWires@yahoogroups.com
> Subject: AW: [SkyWires] Matchbox Suggestions for Steve
>
>
> Rick
>
> How do you add a choke on tuner output (if ladderline is used) ???
>
> If the tuner is completely floating (rf wise) then there should be very
> low
> common mode current towards the rig ...
>
> When that "input" choke has a high enough impedance then there is no way
> for
> cmc flowing towards rig/ground .... it is just blocked at the tuners input
>
> > http://www.dj0ip.de/my-station/oklahoma-2010/
> >
>
>
>
>

4878. Re: [SkyWires] New file uploaded to SkyWires

Yahoo group: SkyWires
Date: 2015-06-20 13:03:51 UTC
From: enkitec@...
Topic: 1641 Message: 4878

FT-240-61 at $10 and FT-240-52 at $11:

http://www.kitsandparts.com/toroids.php

73,
Mark Jordan PY3SS

On 20-Jun-15 04:23, 'Rick - DJ0IP / NJ0IP' Rick@... [SkyWires] wrote:
>
> GM Everett,
>
> If your pole can support the weight, you can use FT-240-61.
> They’re $19 ea. at www.spiderbeam.us and you can get them in single
> units there.
> Some of the other sources I have found have minimum quantity restrictions.
> I’ve also bought toroids on ebay.
>
> In fact since you want to cover 80m as well, it would be even better
> to use -51 or -52 material.
> These have a permeability about twice as high as -61, yet only half as
> much as #43.
> This would give you a little higher CMI on 80m.
>

4879. RE: [SkyWires] Matchbox Suggestions for Steve

Yahoo group: SkyWires
Date: 2015-06-20 13:12:57 UTC
From: Rick - DJ0IP / NJ0IP
Topic: 4810 Message: 4879

Sigi . . . ☹
Ha ha! Stop thinking like an engineer for 30 seconds and just look at it again.
It seems engineers always search for the bad in things, and often miss the good.

We are on 1.8 to 30 MHz here, not 23cm.
THIS CHOKE/BALUN WORKS JUST FINE FOR THIS APPLICATION.

You know my approach to things: KEEP IT SIMPLE, STUPID! (hi)

This is not an idea or concept.
This is what I have used daily for 10 years, running about 750w of power into it.
In Oklahoma, I could work the entire world during big contests on 80m, usually with just one or two calls. 40m as well.

Africa, China, anywhere! As soon as it popped up on the spotting net, I worked it.
The antenna I was using in Oklahoma is shown in a couple of the other pictures. It was a simple short vertical dipole (openwire fed) with 9m long legs.

Previously in Germany I had used it to match a center-fed openwire-fed 80m dipole. I used it on all bands with an L-Network tuner.
AND
I also used it there with a short center-fed vertical (2x 6m), fed with openwire.
I used this on all bands from 80m thru 10m.
This short center-fed vertical was very good at working across the pond to stateside, as well as around the world, but it was not nearly as good on 80m as the larger one I had in Oklahoma. I could work the world with it on all bands, but sometimes I need 10 or more calls.

My contest scores don’t break any records, but are much higher than 60 or 70% of the other entries in the contests. In the big CQWW contests I generally turn about 1/2 million points in the SSB contest and 1 million points in the CW contest. You don't do that with antennas that don't work well.

We can search for non-plus excellence 'til the cows come home.
We can blow our bank account buying the unnecessary CR@P the engineers and marketing gurus would make us think we need.

But at the end of the day, there are lots of simple low cost solutions to nearly every problem that work 95% as good as the $5000 solution. Perhaps a wee bit exaggerated - - but not much!

Now to your questions:

"""Did you measure the inductance of that ugly balun ???"""

No; don't care what it is. It gets the job done.
Prior to using it, I burned up about half a dozen commercial baluns rated 2.5kW or more.
With them I had RF in the shack and got burned on the matchbox. Once I switched to using

this ugly balun, the problems ALL went away, but the performance remained.
THAT PRETTY MUCH SAYS IT ALL!

"""What about the impedance jump from ladderline to the 50 ohms coax?? Would
that not add another point for losses??"""

This is HF, not UHF.

If I feed a 450 Ohm openwire feedline to an 80m dipole on 40m, I have a 2500 Ohm antenna fed by a 450 Ohm (long) feedline. That is a jump of 5:1, yet we all know that the loss is so trivial that it can be neglected.

The jump for 450 to 50 Ohms is 9:1 but the coax is only 7m long.
Again the loss is trivial. Not saying there is none; there is loss, but negligible.

The gain is "a solution that works" and it only cost a fraction of what I spent on each of the commercial baluns I had previously burned up.

This solution works fine. Try it and you will see.

If you want it to work on 160m, add another 10' of coax to it.
Although, I used it on 160m as is, and had no problems.

I have several friends who use this including one who runs 1KW AM on 80m (in Tennessee).
I have never heard anyone come back and say they had any problems with it.

"""If on shack end you have something in lower ohms range (current spot) then
your choke will work well ... but what if you have a high impedance spot at
the shack end (a few hundred ohms or more) ... what does the mismatch
between that choke and the ladderline do ???"""

Well when I had an 80m dipole used on 40m, I did indeed have high impedance.
Yet I was able to match the antenna on all bands with my Ten-Tec Model 228B L-Network matchbox and run high power through it. I had no problems.

People with lots of time on their hands and nothing to do are welcome to try and calculate these losses, but I say, 'who cares.'
Regardless of what number they come up with, what ultimately matters is the S-Meter reading at the other end of the QSO, not some silly theoretically number that somebody calculated.

This one is so simple to build and so cheap, anyone can try it.

73
Rick, DJ0IP

4880. Re: [SkyWires] New file uploaded to SkyWires

Yahoo group: SkyWires
Date: 2015-06-20 13:29:51 UTC
From: Everett Sharp
Topic: 1641 Message: 4880

Mark,

Later I will post in the file section a spread sheet with venders and prices. Kitparts is not the cheapest place to go, but easy to order from. It is amazing the difference in prices from the different venders for the same core. You have to look at minimum quantiles and shipping cost with each of the venders.

Everett N8CNP

Sent from my iPad

> On Jun 20, 2015, at 8:03 AM, enkitec@... [SkyWires] <SkyWires@yahoogroups.com> wrote:
>
>
> FT-240-61 at $10 and FT-240-52 at $11:
>
> http://www.kitsandparts.com/toroids.php
>
> 73,
> Mark Jordan PY3SS
>
>
>> On 20-Jun-15 04:23, 'Rick - DJ0IP / NJ0IP' Rick@... [SkyWires] wrote:
>>
>> GM Everett,
>>
>> If your pole can support the weight, you can use FT-240-61.
>> They’re $19 ea. at www.spiderbeam.us and you can get them in single units there.
>> Some of the other sources I have found have minimum quantity restrictions.
>> I’ve also bought toroids on ebay.
>>
>> In fact since you want to cover 80m as well, it would be even better to use -51 or -52 material.
>> These have a permeability about twice as high as -61, yet only half as much as #43.
>> This would give you a little higher CMI on 80m.
>
>

4881. Re: [SkyWires] Steve's Low Loop Resonance Test Results

Yahoo group: SkyWires
Date: 2015-06-20 13:37:21 UTC
From: Joe
Topic: 4810 Message: 4881

Also, even if you ignore all the end effects, it still will simply
resonate high simply by the math!
Say your dead flat at 7.15 MHz, 3 X is 21.450, at the top of 15 too high.

Joe WB9SBD
On 6/20/2015 2:51 AM, 'Rick - DJ0IP / NJ0IP' Rick@... [SkyWires] wrote:
> NOPE! That's all wrong.
>
> These bands are not directly harmonically related like that.
> You are forgetting one very important fact: "End Effect".
>
> The formula for a dipole is 492/f. (in free space)
> On earth, the velocity factor of the wire shortens the constant to about 482.
> Then “End Effect” shortens the formula again from 482 to 468.
> But this is only when you have just one half wavelength of wire.
>
> On 15m you have 3 half wavelengths.
> Only one is affected by end effect (the one made of the two outer ends).
> So basically you wire length should be:
>
> (482/f) + (482/f) + (468/f) . . .
>
> where “f” is whatever frequency you want the 40m dipole to resonate on, on 15m.
>
> You are going to come out with something like 69 or 70 ft.
> Therefore a 66 or 67 ft. dipole is too short, thus 15m resonance will be too high.
>
> But your 15m resonance is not too high, so there is something wrong here.
>
> If it were in the clear, not bent, and working properly, then a dipole resonate at about
7.1 MHz is what you should shoot for.
> This will make the 15m resonance about 21.6 MHz. However it is still well within the
matching range of your matchbox and it will work just fine on both bands.
>
> Also, the fact that the dipole bends and goes around a corner changes the picture, but I
can’t say by how much.
>
> 73 - Rick, DJ0IP
> (Nr. Frankfurt am Main)
>
> From: SkyWires@yahoogroups.com [mailto:SkyWires@yahoogroups.com]
> Sent: Saturday, June 20, 2015 3:34 AM
> To: SkyWires@yahoogroups.com
> Subject: Re: [SkyWires] Steve's Low Loop Resonance Test Results
>

>
> OK, getting late for playing tonight, but for tomorrow night...
>
> Usually 468/Freq gives the length you get the best match. So freq times length equals 468. Well, I've got so much going on with the low height, structure, etc. that the 468 constant isn't holding true. OK, well I have two of the three pieces to figure out the Casa Del KA0NEB constant don't I? Basically the new dipole is cut to 66' (I left some for trimming) and it's very happy at 21.2 mhz, so 66*21.1 gives us 1399.2 for the new constant. OK, if I want it to be happy around 7.2 then 1399.2 / 7.2 = 194.33 or 97.16 per leg? Of course I'm bending around the house so that may play in...anyway, on the right track here, all wet, or you need something to do anyway Steve, go play and report back?
>
>
>
>
> ---
> Posted by: "Rick - DJ0IP / NJ0IP" <Rick@...>
> ---
>
>
> ---
>
> Yahoo Groups Links
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4882. Re: [SkyWires] Steve's Low Loop Resonance Test Results

Yahoo group: SkyWires
Date: 2015-06-20 13:48:09 UTC
From: Don Sanders
Topic: 4810 Message: 4882

Steve you solved part of the problem.
Well, the 20 meter problem is a bear. How about a radical approach.
If possible, Get 3 10 foot pieces of PVC water pipe that will telescope together.
Insert the smaller into the larger 6 to 10 inches and secure with self tapping screws.
At the feed point of the main antenna, add a 16.5 foot wire to each side of the feed point.
Run one vertically using the PVC to support it. Run the other horizontal along the roof eve.
You now have a good 20 meter DX vertical.

Dr. Don HC4/W4BWS

On Sat, Jun 20, 2015 at 12:19 AM, slr_65@... [SkyWires] <SkyWires@yahoogroups.com> wrote:

>
>
> Hi Don,
>
> I tried the coax fed loop and though I could Dentron tune it, the Kenwood
> wasn't happy.
>
> In that incarnation it's a rectangle and it's fed in the middle of the
> south long side.
>
> I cut the loop in the middle and then the Kenwood is happy with everything
> but 20 meters.
>
> I added 5' on to each end and let it dangle. 1:! at 7.2, but over 3 at 20,
> it gets happy around 17 mhz. Everything else close enough the Kenwood is
> happy.
>
> 20 is annoying me!
>
>

4883. Re: [SkyWires] Steve's Low Loop Resonance Test Results

Yahoo group: SkyWires
Date: 2015-06-20 14:00:28 UTC
From: Andy
Topic: 4810 Message: 4883

"It is a myth that antennas very low to the ground work better for NVIS
than when they are higher up."

I didn't say that it was. But there is evidence that it might be under
some circumstances. Claiming that it is myth does not make it so.

"The radiation angle is the same for these antennas when they are close
the ground as it is when they are ¼ wavelength in the air."

Pretty much so, yes. Although we rely on antenna modeling for that. Even
the modeling does show differences. The change in directivity amounts to
several dBs, maybe as much as 10 or more at lower angles.

"However the ground losses increase as we move it closer to the ground,
and as we get real close, the ground losses shoot way up."

Sure do.

"So a 80m dipole 15’ off of the ground is worse than one 40’ off of the
ground in all cases, NVIS, DX, anything."

Except that some find **by their own personal experience** that they are
better able to get successful contacts and more S/N with a lower antenna.
(I myself have not experienced this.)

Damn the theory, damn what the antenna books say (which is mostly theory
anyway); their hands-on experience tells them something, which may or may
not agree with what our imperfect antenna theory and antenna modeling says.

"However is you take the higher antenna and reduce your RF gain, or use
an attenuator, it will be quieter too."

Yes, there definitely is that. There even are NVIS opponents who argue
that NVIS is all horse-doodie anyway, because you can get the same effect
by switching in your attenuator.

And then there are those who find otherwise, that a low antenna behaves
differently than just switching in an attenuator with a higher antenna.

Is it because the theory and the modeling are wrong? Is it something that
the models show us but we don't interpret right? Is it something in their
particular environments that the models do not account for? Is it what
they were smoking? I don't know.

"Cebik did a paper on this once."

With all respect to Mr. Cebik, just about all his work is based on antenna
mathematical modeling, which is an imperfect "science." I respect just

about everything L.B. Cebik wrote and I go to (or used to go to) his works first when I had a question about a type of antenna. But I also realize there are limits to what the modeling shows us. NEC, even NEC-4, don't "do" grounds right. It's a collection of approximations, which, when taken correctly, work pretty well most of the time, if you avoid doing certain things. But it is not the rule by which the world (i.e., physics) works. I would trust Maxwell a lot more than I trust Cebik and Lewallen and Lawrence Livermore. But the problem is that you can't do very much practical with Maxwell's equations, the way you can with NEC.

IIRC, Fiedler's work was mainly based on practical experiments, not modeling, and he found even very low antennas had their place and were useful.

Regards,
Andy

4884. New file uploaded to SkyWires

Yahoo group: SkyWires
Date: 2015-06-20 14:04:53 UTC
From: SkyWires@yahoogroups.com
Topic: 1641 Message: 4884

Hello,

This email message is a notification to let you know that
a file has been uploaded to the Files area of the SkyWires
group.

File : /Fair-Rite Toroid part numbers.xls
Uploaded by : everettsharp74 <everettsharp@...>
Description : Fair-Rite Toroid part numbers and prices

You can access this file at the URL:
https://groups.yahoo.com/neo/groups/SkyWires/files/Fair-Rite%20Toroid%20part%20numbers.xls

To learn more about file sharing for your group, please visit:
https://help.yahoo.com/kb/index?page=content&y=PROD_GRPS&locale=en_US&id=SLN15398

Regards,

everettsharp74 <everettsharp@...>

4885. modeling versus experimentation

Yahoo group: SkyWires
Date: 2015-06-20 14:28:21 UTC
From: Evan Rolek
Topic: 1641 Message: 4885

Like they say, all models are wrong/limited BUT some models are useful.

Models and such can be a starting point but site specifics can alter one's real world results.

The best antenna on paper doesn't yield as many contacts as a poor antenna that is actually installed.

Let's all enjoy our beloved hobby.

(stepping down from my soapbox...)

73,

Evan, K9SQG

4886. Re: [SkyWires] modeling versus experimentation

Yahoo group: SkyWires
Date: 2015-06-20 14:29:46 UTC
From: Gordon McCleery
Topic: 1641 Message: 4886

THANK-YOU for stepping down.....Mac

On Sat, 6/20/15, Evan Rolek k9sqg@... [SkyWires] <SkyWires@yahoogroups.com> wrote:

Subject: [SkyWires] modeling versus experimentation
To: SkyWires@yahoogroups.com
Date: Saturday, June 20, 2015, 10:28 AM

Like they
say, all models are wrong/limited BUT some models are
useful.

Models and such can be a starting point but site
specifics can alter one's real world
results.

The best antenna on paper doesn't yield as many
contacts as a poor antenna that is actually
installed.

Let's all enjoy our beloved hobby.

(stepping down from my soapbox...)

73,

Evan, K9SQG

4887. Re: [SkyWires] New file uploaded to SkyWires

Yahoo group: SkyWires
Date: 2015-06-20 14:32:20 UTC
From: Everett Sharp
Topic: 1641 Message: 4887

Guys,

Loadstone is a good place to buy ferrite, if you are buying several of the same thing. They don't list their prices, only the inventory on hand. You will need to send them a email to get cost and shipping charges.

I posted this as an XL spread sheet so that others can add to it and repost it with any added information.

Everett N8CNP

Sent from my iPad

> On Jun 20, 2015, at 9:04 AM, SkyWires@yahoogroups.com wrote:
>
>
> Hello,
>
> This email message is a notification to let you know that
> a file has been uploaded to the Files area of the SkyWires
> group.
>
> File : /Fair-Rite Toroid part numbers.xls
> Uploaded by : everettsharp74 <everettsharp@...m>
> Description : Fair-Rite Toroid part numbers and prices
>
> You can access this file at the URL:
>
https://groups.yahoo.com/neo/groups/SkyWires/files/Fair-Rite%20Toroid%20part%20numbers.xls
>
> To learn more about file sharing for your group, please visit:
> https://help.yahoo.com/kb/index?page=content&y=PROD_GRPS&locale=en_US&id=SLN15398
>
> Regards,
>
> everettsharp74 <everettsharp@...>
>

4888. Andy and Rick's NVIS discussion

Yahoo group: SkyWires
Date: 2015-06-20 14:45:27 UTC
From: Rick - DJ0IP / NJ0IP
Topic: 4810 Message: 4888

(Changed the subject line; far too many topics already going on under that old subject line)

Andy,

We are beginning to approach full agreement.

We are fully in-sync on believing in practical experience and not placing too much faith in modeling.
Though modeling is generally my starting point before going to the field.

My opinion is, if the model does not support the practical experience, then the model is wrong.

But those on the other side of the fence claim, if the practical experience does not agree with the model, then we measured wrong.

So my reply is then:
THE RUBBER HITS THE ROAD ON THE AIR, NOT ON THE KEYBOARD.

The proof of the pudding . . . is A/B tests run over a longer period of time, not just once for ten minutes.

My question to those who claim their low dipole is better is, have they actually compared both?
Or are they just getting good results with a low antenna and stating an opinion.

So let me re-phrase my one statement and see if we can agree:

"It is a myth to claim that antennas low to the ground are always better NVIS antennas than those that are higher. In fact I would say that if the antenna is between 1/8 and 1/4 wavelength high, it is generally better than close to the ground antennas – though there are exceptions."

I can supply you with some backup examples, but not here. It’s what I did in the military 3 or 4 wars ago (hi). Back then we actually used hf for important stuff.

Most transceivers today are too sensitive.
This results in everything being louder, including the noise.

The modern cure is to switch in Noise Blankers and Digital Signal Processing Noise Reduction. Long before we had all of that, we just turned down the RF gain until we got rid of the noise and simply listened to a much weaker signal, but perfectly in the clear.

I still operate like that.
In fact the S-Meter in my radio always shows the signal strength of the wanted signal, even when I turn on a pre-amp, or throw in attenuation. It is rare that I ever use the NR or NB. It is also rare that my RF gain is above 50%.

Maxwell is my bible. I re-read his “Reflections” every now and again, lest I forget and start believing some of the marketing hype spewed out by the vendors!

Joe Ham has gone SWR crazy. And it's not his fault. The manufacturers have reduced the size of components in all the radios, then lowered the acceptable SWR rating of the radio. Then the vendors throw gasoline on the fire, telling Joe that he needs a $1000 antenna tuner to compensate for his bad antenna (with its 2.5:1 SWR). So Joe soon believes that 2.5:1 is a bad SWR, when indeed it can be a very outstanding SWR in some cases. As Maxwell said, to low of SWR can sometimes kill us!

I am unfamiliar with IIRC (Fiedler). It sounds like a "must read."
I will have to find that and read it.
A quick google found nothing.
Where can I find it?

73 - Rick, DJ0IP
(Nr. Frankfurt am Main)

From: SkyWires@yahoogroups.com [mailto:SkyWires@yahoogroups.com]
Sent: Saturday, June 20, 2015 4:00 PM
To: SkyWires@yahoogroups.com
Subject: Re: [SkyWires] Steve's Low Loop Resonance Test Results

"It is a myth that antennas very low to the ground work better for NVIS than when they are higher up."

I didn't say that it was. But there is evidence that it might be under some circumstances. Claiming that it is myth does not make it so.

"The radiation angle is the same for these antennas when they are close the ground as it is when they are ¼ wavelength in the air."

Pretty much so, yes. Although we rely on antenna modeling for that. Even the modeling does show differences. The change in directivity amounts to several dBs, maybe as much as 10 or more at lower angles.

"However the ground losses increase as we move it closer to the ground, and as we get real close, the ground losses shoot way up."

Sure do.

"So a 80m dipole 15’ off of the ground is worse than one 40’ off of the ground in all cases, NVIS, DX, anything."

Except that some find **by their own personal experience** that they are better able to get successful contacts and more S/N with a lower antenna. (I myself have not experienced this.)

Damn the theory, damn what the antenna books say (which is mostly theory anyway); their hands-on experience tells them something, which may or may not agree with what our imperfect antenna theory and antenna modeling says.

"However is you take the higher antenna and reduce your RF gain, or use an attenuator, it will be quieter too."

Yes, there definitely is that. There even are NVIS opponents who argue that NVIS is all horse-doodie anyway, because you can get the same effect by switching in your attenuator.

And then there are those who find otherwise, that a low antenna behaves differently than just switching in an attenuator with a higher antenna.

Is it because the theory and the modeling are wrong? Is it something that the models show us but we don't interpret right? Is it something in their particular environments that the models do not account for? Is it what they were smoking? I don't know.

"Cebik did a paper on this once."

With all respect to Mr. Cebik, just about all his work is based on antenna mathematical modeling, which is an imperfect "science." I respect just about everything L.B. Cebik wrote and I go to (or used to go to) his works first when I had a question about a type of antenna. But I also realize there are limits to what the modeling shows us. NEC, even NEC-4, don't "do" grounds right. It's a collection of approximations, which, when taken correctly, work pretty well most of the time, if you avoid doing certain things. But it is not the rule by which the world (i.e., physics) works. I would trust Maxwell a lot more than I trust Cebik and Lewallen and Lawrence Livermore. But the problem is that you can't do very much practical with Maxwell's equations, the way you can with NEC.

IIRC, Fiedler's work was mainly based on practical experiments, not modeling, and he found even very low antennas had their place and were useful.

Regards,
Andy

4889. RE: [SkyWires] modeling versus experimentation

Yahoo group: SkyWires
Date: 2015-06-20 14:57:05 UTC
From: Rick - DJ0IP / NJ0IP
Topic: 1641 Message: 4889

“The best antenna on paper doesn't yield as many contacts
as a poor antenna that is actually installed.”

Now that was the best thing I’ve read in a long time.
Well said, Evan!

Even when we build an antenna that doesn’t work as planned, we still learn from the experience!

73 - Rick, DJ0IP
(Nr. Frankfurt am Main)

From: SkyWires@yahoogroups.com [mailto:SkyWires@yahoogroups.com]
Sent: Saturday, June 20, 2015 4:28 PM
To: SkyWires@yahoogroups.com
Subject: [SkyWires] modeling versus experimentation

Like they say, all models are wrong/limited BUT some models are useful.

Models and such can be a starting point but site specifics can alter one's real world results.

The best antenna on paper doesn't yield as many contacts as a poor antenna that is actually installed.

Let's all enjoy our beloved hobby.

(stepping down from my soapbox...)

73,

Evan, K9SQG

4890. Re: [SkyWires] Steve's Low Loop Resonance Test Results

Yahoo group: SkyWires
Date: 2015-06-20 15:04:25 UTC
From: WA8JXM
Topic: 4810 Message: 4890

On 19/06/2015 10:07, 'Rick - DJ0IP / NJ0IP' Rick@... [SkyWires] wrote:
> This means even an inverted V (abt. 50 Ohms) fed with openwire on its fundamental is going to present a load of 12.5 Ohms if you run with a 4:1 balun!

Rick, that is incorrect. The impedance seen at the transmitter end will depend on the length and impedance of the open wire, which acts as a transformer. A quarter wave section of 200 ohm open wire feeding a 50 ohm load will present a feed impedance of about 500 ohms. A quarter (or 3/4) wave section of 400 ohm open wire will present a feed impedance of around 1000 ohms and a 4:1 reduction balun would be more appropriate than a 1:1 balun.

It all depends on the length and impedance of the open wire, but it will be a transformer on quarter wave lengths and on most in between wavelengths. Only on a half wave length will it reflect the impedance of the antenna.

Ken WA8JXM

4891. Using City Trees

Yahoo group: SkyWires
Date: 2015-06-20 15:07:34 UTC
From: slr_65@...
Topic: 4810 Message: 4891

To use a city tree I think it was in how i asked. We have a code enforcement guy that goes around actually looking for stuff. He was out and about. I stopped him and got to chatting with what he was doing, when I found out who he was it occurred to me to ask, but I didn't ask if I could directly, we got to discussing the trees and how they fined someone for trimming one...he was fined because he went nuts and litterally left a tall stump. If they're in the power lines call them, if it's on your side away from the lines you can do it within reason. They allow Holiday lights to be placed in them which think about it, you got power running up a tree. I then asked if all that were OK, could I hide a wire antenna in them? He said sure, no big structures of course, but wire would be OK. If they damage it during tree trimming they are not responsible. Vadalism should be kept in mind. Getting the feedline out of the tree to the shack needs some thought since it's not really temporary like holiday lighting, but putting a pipe under the sidewalk or something is fine with them. Basically I didn't ask if I could install an antenna in a tree, I asked if I could run a wire in a tree and pointed out it was much safer than the other stuff they allow, he said fine, he'd even send a letter confirming our discussion, so I'm sure I'll be able to get a wire in them. Two maples, kinda messed up from storm and ant damage, but the city trims and hoses their trees with termidor a couple times a year so the trees are recovering and not being damaged further, should be there a while yet. About 35' tall, about 50' apart.

4892. Re: [SkyWires] Steve's Low Loop Resonance Test Results [1 Attachment]

Yahoo group: SkyWires
Date: 2015-06-20 15:17:44 UTC
From: WA8JXM
Topic: 4810 Message: 4892

On 19/06/2015 10:27, Joe nss@... [SkyWires] wrote:
> Ohh I remember those days, been a ham since 1975 and like my old Drake
> TR-4, if the plate had a nice sharp dip, and the load a nice sharp
> peak, I ran with it. sometimes SWR that was like 4 to 1 but that old
> Drake with those sweep tubes did not care one bit as long as the plate
> dipped and the load peaked it was happy.

The Drake TR-4 was very limited compared to older equipment like the Johnson Viking II. The only "antenna" that it ever failed to load was a 3' fishing pole on 160m. 80m and up, it would load it! I had wire running between the wash line hooks in the basement and it loaded it fine on 2.2 MHz MARS frequencies! (Note I said it loaded the antenna, I didn't say how good the antenna was. But during special operations I would have 2 or 3 rigs on at the same time and antennas were a compromise.

Ken WA8JXM

4893. RE: [SkyWires] Steve's Low Loop Resonance Test Results

Yahoo group: SkyWires
Date: 2015-06-20 15:29:12 UTC
From: Rick - DJ0IP / NJ0IP
Topic: 4810 Message: 4893

You are correct Ken. My mistake.
My 12.5 Ohms is what would be seen at the feedpoint if you inserted the 4:1 balun there.

And I agree with your transformation examples.

My point is, the 4:1 balun should not be used at the matchbox because its ability to impede common mode current is limited to a narrow impedance range. The 1:1 balun will work much better in this respect when SWR is high (at the matchbox).

The matchbox is there to do the matching and the balun is there it keep common mode current out of the equipment.

The worst case example is when the antenna system impedance at the matchbox is already low. With the 1:1 it remains whatever it is. With the 4:1 it is 4x lower, which is very bad.

With openwire, it is best to use a matchbox that has a very broad matching range and if it is not symmetrical by design, use a 1:1 balun between it and the feedline.

73 - Rick, DJ0IP
(Nr. Frankfurt am Main)

From: SkyWires@yahoogroups.com [mailto:SkyWires@yahoogroups.com]
Sent: Saturday, June 20, 2015 5:04 PM
To: SkyWires@yahoogroups.com
Subject: Re: [SkyWires] Steve's Low Loop Resonance Test Results

On 19/06/2015 10:07, 'Rick - DJ0IP / NJ0IP' Rick@... [SkyWires] wrote:
> This means even an inverted V (abt. 50 Ohms) fed with openwire on its fundamental is going to present a load of 12.5 Ohms if you run with a 4:1 balun!

Rick, that is incorrect. The impedance seen at the transmitter end
will depend on the length and impedance of the open wire, which acts as
a transformer. A quarter wave section of 200 ohm open wire feeding a
50 ohm load will present a feed impedance of about 500 ohms. A quarter
(or 3/4) wave section of 400 ohm open wire will present a feed
impedance of around 1000 ohms and a 4:1 reduction balun would be more
appropriate than a 1:1 balun.

It all depends on the length and impedance of the open wire, but it will
be a transformer on quarter wave lengths and on most in between
wavelengths. Only on a half wave length will it reflect the impedance
of the antenna.

Ken WA8JXM

4894. RE: [SkyWires] Steve's Low Loop Resonance Test Results

Yahoo group: SkyWires
Date: 2015-06-20 15:29:24 UTC
From: joel1847@...
Topic: 4810 Message: 4894

This is not entirely correct. Just by reducing the RF gain, you are only reducing the noise that you are *hearing* not the actual noise itself. If your noise level is 6 db and the signal being transmitted 3k miles away is only 3 db, you are still going to only hear that local noise. You won't hear that 3db signal at all and reducing the RF gain won't change that.

Joel
kj6dif
norcal

So a 80m dipole 15’ off of the ground is worse than one 40’ off of the ground in all cases, NVIS, DX, anything.
Although it might be quieter as far as noise goes.
However is you take the higher antenna and reduce your RF gain, or use an attenuator, it will be quieter too.
Cebik did a paper on this once. Perhaps I can find it. I’ll have to search my files.

73 - Rick, DJ0IP
(Nr. Frankfurt am Main)

4895. RE: [SkyWires] Using City Trees

Yahoo group: SkyWires
Date: 2015-06-20 15:33:27 UTC
From: Rick - DJ0IP / NJ0IP
Topic: 4810 Message: 4895

That sure sounds encouraging.
However if it were me, I would only use the trees as corner supports.
I wouldn’t run openwire to them.
Thin wires are not really intrusive, but openwire is an eyesore to non-hams.
It's probably better to connect the feedline elsewhere.

73 - Rick, DJ0IP
(Nr. Frankfurt am Main)

From: SkyWires@yahoogroups.com [mailto:SkyWires@yahoogroups.com]
Sent: Saturday, June 20, 2015 5:08 PM
To: SkyWires@yahoogroups.com
Subject: [SkyWires] Using City Trees

To use a city tree I think it was in how i asked. We have a code enforcement guy that goes around actually looking for stuff. He was out and about. I stopped him and got to chatting with what he was doing, when I found out who he was it occurred to me to ask, but I didn't ask if I could directly, we got to discussing the trees and how they fined someone for trimming one...he was fined because he went nuts and litterally left a tall stump. If they're in the power lines call them, if it's on your side away from the lines you can do it within reason. They allow Holiday lights to be placed in them which think about it, you got power running up a tree. I then asked if all that were OK, could I hide a wire antenna in them? He said sure, no big structures of course, but wire would be OK. If they damage it during tree trimming they are not responsible. Vadalism should be kept in mind. Getting the feedline out of the tree to the shack needs some thought since it's not really temporary like holiday lighting, but putting a pipe under the sidewalk or something is fine with them. Basically I didn't ask if I could install an antenna in a tree, I asked if I could run a wire in a tree and pointed out it was much safer than the other stuff they allow, he said fine, he'd even send a letter confirming our discussion, so I'm sure I'll be able to get a wire in them. Two maples, kinda messed up from storm and ant damage, but the city trims and hoses their trees with termidor a couple times a year so the trees are recovering and not being damaged further, should be there a while yet. About 35' tall, about 50' apart.

4896. RE: [SkyWires] Steve's Low Loop Resonance Test Results

Yahoo group: SkyWires
Date: 2015-06-20 15:34:41 UTC
From: joel1847@...
Topic: 4810 Message: 4896

I wish I could raise it higher Rick. Getting it above the orchard trees and it starts getting into the wind which requires a whole lot of supports for a wire that's over a quarter mile long. By keeping it below the canopy, I can run it safely through trees and use the trees as support points using electric fence insulators. Far from ideal, I know. But it's what I have up right now. Until I can figure something else out.

Joel
kj6dif
norcal

Well I will reply to my own dumb post below.
It can help once the antenna is high enough.
But increasing the height to at least 1/8 wavelength will do more than laying a ground screen under it.

73 - Rick, DJ0IP
(Nr. Frankfurt am Main)

4897. Retro Radios

Yahoo group: SkyWires
Date: 2015-06-20 15:47:49 UTC
From: Rick - DJ0IP / NJ0IP
Topic: 4810 Message: 4897

Ken,

You boys up north must have had more money than we did down south.
My pocket book only sufficed for a Viking Ranger.
It could basically load anything, but I did use a J.V. Kilowatt matchbox when running my openwire-fed 80m dipole. That was 1963.

My RX was an old military HRO which I got through army MARS.
It had sliding coils, rather than plug in modules.
My dream RX was the Drake 2C but I never owned one.

73 - Rick, DJ0IP
(Nr. Frankfurt am Main)

From: SkyWires@yahoogroups.com [mailto:SkyWires@yahoogroups.com]
Sent: Saturday, June 20, 2015 5:18 PM
To: SkyWires@yahoogroups.com
Subject: Re: [SkyWires] Steve's Low Loop Resonance Test Results

On 19/06/2015 10:27, Joe nss@... [SkyWires] wrote:
> Ohh I remember those days, been a ham since 1975 and like my old Drake
> TR-4, if the plate had a nice sharp dip, and the load a nice sharp
> peak, I ran with it. sometimes SWR that was like 4 to 1 but that old
> Drake with those sweep tubes did not care one bit as long as the plate
> dipped and the load peaked it was happy.

The Drake TR-4 was very limited compared to older equipment like the
Johnson Viking II. The only "antenna" that it ever failed to load was a
3' fishing pole on 160m. 80m and up, it would load it! I had wire
running between the wash line hooks in the basement and it loaded it
fine on 2.2 MHz MARS frequencies! (Note I said it loaded the antenna, I
didn't say how good the antenna was. But during special operations I
would have 2 or 3 rigs on at the same time and antennas were a compromise.

Ken WA8JXM

4898. RE: [SkyWires] Steve's Low Loop Resonance Test Results

Yahoo group: SkyWires
Date: 2015-06-20 15:52:40 UTC
From: Rick - DJ0IP / NJ0IP
Topic: 4810 Message: 4898

Joel, that is not a very realistic example.
In your example, I would not hear him at all, regardless of what I did.

In real life, I might have a S5 noise level and a R4-S7 signal.
I reduce the RF gain to the point that the noise vanishes.
The desired signal is S2 without any noise, and is armchair copy; sounds like listening to FM.

This is how I operate daily.
However not every radio will work this way. Some do, some don’t.
I am running a Ten-Tec Eagle.

73 - Rick, DJ0IP
(Nr. Frankfurt am Main)

From: SkyWires@yahoogroups.com [mailto:SkyWires@yahoogroups.com]
Sent: Saturday, June 20, 2015 5:29 PM
To: SkyWires@yahoogroups.com
Subject: RE: [SkyWires] Steve's Low Loop Resonance Test Results

This is not entirely correct. Just by reducing the RF gain, you are only reducing the noise that you are *hearing* not the actual noise itself. If your noise level is 6 db and the signal being transmitted 3k miles away is only 3 db, you are still going to only hear that local noise. You won't hear that 3db signal at all and reducing the RF gain won't change that.

Joel
kj6dif
norcal

So a 80m dipole 15’ off of the ground is worse than one 40’ off of the ground in all cases, NVIS, DX, anything.
Although it might be quieter as far as noise goes.
However is you take the higher antenna and reduce your RF gain, or use an attenuator, it will be quieter too.

Cebik did a paper on this once. Perhaps I can find it. I’ll have to search my files.

73 - Rick, DJ0IP
(Nr. Frankfurt am Main)

4899. Re: [SkyWires] modeling versus experimentation

Yahoo group: SkyWires
Date: 2015-06-20 15:58:14 UTC
From: Rich Schmuke
Topic: 1641 Message: 4899

Evan, I agree with you 100%. Computers say my loop should be higher and would be a cloud burner but it is what it is.
I cheeked it with a full size 40M , raised feed point vertical and a A/B switch. The loop was always better, kept the loop and the 40M is now 30M.

Rich, KdØzz

On Sat, Jun 20, 2015 at 9:28 AM, Evan Rolek k9sqg@... [SkyWires] <SkyWires@yahoogroups.com> wrote:

>
>
> Like they say, all models are wrong/limited BUT some models are useful.
>
> Models and such can be a starting point but site specifics can alter
> one's real world results.
>
> The best antenna on paper doesn't yield as many contacts as a poor
> antenna that is actually installed.
>
> Let's all enjoy our beloved hobby.
>
> (stepping down from my soapbox...)
>
> 73,
>
> Evan, K9SQG
>
>
>
>
>

4900. RE: [SkyWires] Steve's Low Loop Resonance Test Results

Yahoo group: SkyWires
Date: 2015-06-20 16:09:27 UTC
From: Rick - DJ0IP / NJ0IP
Topic: 4810 Message: 4900

Hi Joel,

I always wanted a Porsche; had to settle for a VW Beetle.
Hey, without dreams, what would life be? (!)

At the end of the day, we all have to make the most out of what we have, or as Forest Gump's mom said, "we just have to play the hand the good Lord gave us!"

I'm in a very restricted situation here too.
Found this QTH online while I was still in South Carolina.
My XYL was here already, house hunting.

I directed her to this place, she said "honey it's beautiful" and signed the lease.
It is beautiful for her flower garden.
But we are on a steep mountain side, with a yard sloping about 40 degrees.
No chance to put up a tower or beam.

Using googlemaps I was unable to see the mountain.

I learned two things in that process:
1. Never use googlemaps as the key decision maker
2. Never listen to your XYL…. at least not in matters as important as choosing a QTH.

Here's a shot of my place.
Here you can see why I only have a dipole and not a loop.
http://www.dj0ip.de/about-me/my-qth/
I could only run a wire east-west.

73 - Rick, DJ0IP
(Nr. Frankfurt am Main)

From: SkyWires@yahoogroups.com [mailto:SkyWires@yahoogroups.com]
Sent: Saturday, June 20, 2015 5:35 PM
To: SkyWires@yahoogroups.com
Subject: RE: [SkyWires] Steve's Low Loop Resonance Test Results

I wish I could raise it higher Rick. Getting it above the orchard trees and it starts getting into the wind which requires a whole lot of supports for a wire that's over a quarter mile long. By keeping it below the canopy, I can run it safely through trees and use the trees as support points using electric fence insulators. Far from ideal, I know. But it's what I have up right now. Until I can figure something else out.

Joel
kj6dif
norcal

Well I will reply to my own dumb post below.
It can help once the antenna is high enough.

But increasing the height to at least 1/8 wavelength will do more than laying a ground screen under it.

73 - Rick, DJ0IP
(Nr. Frankfurt am Main)

4901. RE: [SkyWires] modeling versus experimentation

Yahoo group: SkyWires
Date: 2015-06-20 16:20:17 UTC
From: Rick - DJ0IP / NJ0IP
Topic: 1641 Message: 4901

Rich,

I have never understood why people call these cloud burners.
They claim that most (/all) of the power goes straight up.
If we look at the model, there is power going almost everywhere, albeit the strongest direction is up. But there is power elsewhere too.

In 1979 I was on a 10 day DX-Pedition to Andorra.
My call sign was C31SE.
C31 was quite rare back then, especially on SSB. I worked CW and a couple other guys worked SSB.
My only antenna was an 84m (275') loop strung in the trees about 6 to 8m high - (max 26' high).
It was matched with a home-brew matchbox, link-coupled using alligator clips to change bands.

I made hundreds of 80m stateside contacts running just 50w.
Made a few thousand contacts altogether on 80 thru 10.
Only have one picture posted at the moment:
http://www.dj0ip.de/my-expeditions/andorra-1979/
If you look closely above the right side of the tent, you can see the home-brew openwire feedline.

In this case, it's not the model that's wrong but rather the people interpreting it.

73 - Rick, DJ0IP
(Nr. Frankfurt am Main)

From: SkyWires@yahoogroups.com [mailto:SkyWires@yahoogroups.com]
Sent: Saturday, June 20, 2015 5:58 PM
To: SkyWires@yahoogroups.com
Subject: Re: [SkyWires] modeling versus experimentation

Evan, I agree with you 100%. Computers say my loop should be higher and would be a cloud burner but it is what it is.
I cheeked it with a full size 40M , raised feed point vertical and a A/B switch. The loop was always better, kept the loop and the 40M is now 30M.

Rich, KdØzz

On Sat, Jun 20, 2015 at 9:28 AM, Evan Rolek k9sqg@... [SkyWires] <SkyWires@yahoogroups.com> wrote:

Like they say, all models are wrong/limited BUT some models are useful.

Models and such can be a starting point but site specifics can alter one's real world results.

The best antenna on paper doesn't yield as many contacts as a poor antenna that is actually installed.

Let's all enjoy our beloved hobby.

(stepping down from my soapbox...)

73,

Evan, K9SQG

4902. Re: [SkyWires] modeling versus experimentation

Yahoo group: SkyWires
Date: 2015-06-20 16:28:23 UTC
From: Everett Sharp
Topic: 1641 Message: 4902

Rick,

You have a lot of hair in that picture.

Everett

Sent from my iPad

> On Jun 20, 2015, at 11:20 AM, 'Rick - DJ0IP / NJ0IP' Rick@... [SkyWires] <SkyWires@yahoogroups.com> wrote:
>
> Rich,
>
> I have never understood why people call these cloud burners.
> They claim that most (/all) of the power goes straight up.
> If we look at the model, there is power going almost everywhere, albeit the strongest direction is up. But there is power elsewhere too.
>
> In 1979 I was on a 10 day DX-Pedition to Andorra.
> My call sign was C31SE.
> C31 was quite rare back then, especially on SSB. I worked CW and a couple other guys worked SSB.
> My only antenna was an 84m (275') loop strung in the trees about 6 to 8m high - (max 26' high).
> It was matched with a home-brew matchbox, link-coupled using alligator clips to change bands.
>
> I made hundreds of 80m stateside contacts running just 50w.
> Made a few thousand contacts altogether on 80 thru 10.
> Only have one picture posted at the moment:
> http://www.dj0ip.de/my-expeditions/andorra-1979/
> If you look closely above the right side of the tent, you can see the home-brew openwire feedline.
>
> In this case, it's not the model that's wrong but rather the people interpreting it.
>
> 73 - Rick, DJ0IP
> (Nr. Frankfurt am Main)
>
> From: SkyWires@yahoogroups.com [mailto:SkyWires@yahoogroups.com]
> Sent: Saturday, June 20, 2015 5:58 PM
> To: SkyWires@yahoogroups.com
> Subject: Re: [SkyWires] modeling versus experimentation
>
> Evan, I agree with you 100%. Computers say my loop should be higher and would be a cloud burner but it is what it is.

> I cheeked it with a full size 40M , raised feed point vertical and a A/B switch. The loop was always better, kept the loop and the 40M is now 30M.
>
> Rich, KdØzz
>
> On Sat, Jun 20, 2015 at 9:28 AM, Evan Rolek k9sqg@... [SkyWires] <SkyWires@yahoogroups.com> wrote:
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> Like they say, all models are wrong/limited BUT some models are useful.
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> Let's all enjoy our beloved hobby.
>
> (stepping down from my soapbox...)
>
> 73,
>
> Evan, K9SQG
>
>

4904. Re: [SkyWires] Steve's Low Loop Resonance Test Results

Yahoo group: SkyWires
Date: 2015-06-20 17:20:33 UTC
From: WA8JXM
Topic: 4810 Message: 4904

I definitely agree there Rick.

As I said, I have both and experiment to see which works best on the bands of interest. At this moment, I have both in use on different antennas.

Of course it gets complicated when one is using an open wire fed antenna on 160 thorough 6.

We are in agreement.

Ken WA8JXM

On 20/06/2015 11:29, 'Rick - DJ0IP / NJ0IP' Rick@... [SkyWires] wrote:
> The worst case example is when the antenna system impedance at the matchbox is already low.
> With the 1:1 it remains whatever it is. With the 4:1 it is 4x lower, which is very bad.

4905. AW: [SkyWires] Steve's Low Loop Resonance Test Results

Yahoo group: SkyWires
Date: 2015-06-20 17:35:09 UTC
From: siegfried jackstien
Topic: 4810 Message: 4905

> I learned two things in that process:
> 1. Never use googlemaps as the key decision maker

Use google earth

In setting you can select the mountains to be "amplified" by a factor of 3
(easier to see hills and mountains)

Then see that "new qth" from an angle (30-45 degrees) ... and you easy can
see what mountains are around you

> 2. Never listen to your XYL.. at least not in matters as important as
> choosing a QTH.

CANT EXPLAIN IT BETER ... NEVER EVER LET XYL DECIDE THE QTH!!

(or in other words ... rick you have a "lousy" qth ... grin)

Just looked at schaippach via google earth ... man you are really sitting in
a black hole

Greetz

Sigi

4906. Re: [SkyWires] Andy and Rick's NVIS discussion

Yahoo group: SkyWires
Date: 2015-06-20 20:16:27 UTC
From: Andy
Topic: 4810 Message: 4906

"It is a myth to claim that antennas low to the ground are always better NVIS antennas than those that are higher. In fact I would say that if the antenna is between 1/8 and 1/4 wavelength high, it is generally better than close to the ground antennas – though there are exceptions."

I think that hits the nail on the head.

About the 'proof' from people that their very low field-expedient NVIS antenna usually gives them better results than a higher antenna, I can't say. There's at least one guy on an NVIS forum who says he gets as good if not better results most of the time in NVIS situations with his low antenna, but I don't know the thoroughness of his comparisons. I only know they were based on years of observations with others in his general geographical area.

Maxwell ... sorry, this is my mistake for not being clear. We aren't talking about the same Maxwell! I was referring to James Clerk Maxwell, so-called father of the so-called Maxwell's Equations, which govern all electro-magnetics including light waves and radio. (And he came up with them decades before radio was discovered.) I always found it amusing that he and Walt W2DU shared the same last name, but it was coincidental. Many, including Einstein, considered James Clerk Maxwell to have been the greatest physicist in the world since Isaac Newton's time.

Fiedler is LTC David Fiedler, who researched NVIS and wrote (along with Maj Edward Farmer) a small book about it (now out of print) which was a collection of various papers he and others wrote. Much of the contents of the book can be found elsewhere, and the book itself was somewhat limiting.

Regards,
Andy

4907. AW: [SkyWires] Andy and Rick's NVIS discussion

Yahoo group: SkyWires
Date: 2015-06-20 21:19:23 UTC
From: siegfried jackstien
Topic: 4810 Message: 4907

Hmm just thinking a bit

Maybe that guy who had better results with a low antenna had lots of noise
or other stations that were coming in a low angle

And he wanted to speak "locally" (nvis) ....

Lowering the antenna would lower the overall signal (noise, other low angle
stations and the high angle stations also)

The net result could be that with a lower antenna the noise or unwanted
stations were lowered say 20 db while the high angle signals were maybe just
lowered 10db ... the end result would be 10 db plus in signal to noise

So "sometimes" or better say in some cases a lower antenna may help

Dg9bfc

Sigi

> -----Ursprüngliche Nachricht-----
> Von: SkyWires@yahoogroups.com [mailto:SkyWires@yahoogroups.com]
> Gesendet: Samstag, 20. Juni 2015 20:16
> An: SkyWires@yahoogroups.com
> Betreff: Re: [SkyWires] Andy and Rick's NVIS discussion
>
>
>
> "It is a myth to claim that antennas low to the ground are always
> better NVIS antennas than those that are higher. In fact I would say that
> if the antenna is between 1/8 and 1/4 wavelength high, it is generally
> better than close to the ground antennas ☐ though there are exceptions."
>
>
>
> I think that hits the nail on the head.
>
>
> About the 'proof' from people that their very low field-expedient NVIS
> antenna usually gives them better results than a higher antenna, I can't
> say. There's at least one guy on an NVIS forum who says he gets as good
> if not better results most of the time in NVIS situations with his low
> antenna, but I don't know the thoroughness of his comparisons. I only
> know they were based on years of observations with others in his general
> geographical area.
>

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> Maxwell ... sorry, this is my mistake for not being clear. We aren't
> talking about the same Maxwell! I was referring to James Clerk Maxwell,
> so-called father of the so-called Maxwell's Equations, which govern all
> electro-magnetics including light waves and radio. (And he came up with
> them decades before radio was discovered.) I always found it amusing that
> he and Walt W2DU shared the same last name, but it was coincidental.
> Many, including Einstein, considered James Clerk Maxwell to have been the
> greatest physicist in the world since Isaac Newton's time.
>
>
> Fiedler is LTC David Fiedler, who researched NVIS and wrote (along with
> Maj Edward Farmer) a small book about it (now out of print) which was a
> collection of various papers he and others wrote. Much of the contents of
> the book can be found elsewhere, and the book itself was somewhat
> limiting.
>
>
> Regards,
> Andy
>
>
>
>
>

4908. RE: [SkyWires] Slingshots DON'T work!

Yahoo group: SkyWires
Date: 2015-06-20 21:24:12 UTC
From: slr_65@...
Topic: 4752 Message: 4908

OK, it's confirmed...slingshots don't work, well for us anyway, it appears they do for some, but pneumatic canons DO work!

We put a fly casting reel on for the string, just duct taped it on, worked perfect though it did end up making a mouse nests a couple times, I think I'd opt for a covered reel.

Just three shots...50 psi which seemed about right last time with string, that landed on the roof...three houses down! Reduced pressure to 35 psi, hmmm, same darn spot! And the trail was good, but the light string drifted in the wind/high arc and drifted off the trees. We reduced down to 25 psi, aimed very close to the tree tops and a bit uncomfortably angled towards the power lines....and it tracked just effin' perfect! Hopped right where we wanted it, dropped right in the neighbors yard.

We used the light fishing string to haul up some paracord and then the paracord to pull up the wire. No issues pulling. I had to head home, have some stuff for my daughter's wedding preparations going on this evening, so I dunno if he got the wire hooked up yet or not.

I got home with my son and we had the launcher just sitting there...yeah, we popped one over the city trees! 25 psi and one shot, perfect arc right over the tops of them! I left them decorated with orange paracord until tomorrow! 8-) Seriously, these WORK! You DO need the reel though.

Fun stuff!

4909. RE: [SkyWires] Steve's Low Loop Resonance Test Results

Yahoo group: SkyWires
Date: 2015-06-20 21:52:48 UTC
From: Rick - DJ0IP / NJ0IP
Topic: 4810 Message: 4909

Ken,

Of course you are right. There is no question that having both is better than having just [either] one.
However if you only have one, it should be the 1:1.
Should you need a broader matching range than the matchbox can handle, then you can always insert a 4:1 in front of it.

The problem is, most people don't know how to recognize which one they need.
If you only have the 1:1, the biggest problem you can have is, it doesn't find a match on one band or another. But you see that.

If you only have a 4:1, you may think the balun is OK, while at the same time you also incur common mode current in the shack, causing all sorts of silly intermittent problems, and not understand why.
➢ Why does my SDR transceiver sometimes hang?
➢ Why does my fault lamp on the linear sometimes go on (intermittently)?
➢ Why does my power supply sometimes go into fault (pertains to older Ten-Tec power supplies)?
➢ Why is the speed in my keyer sometimes changing?
➢ Lots more, but I'll stop there.
All of this can be the result of common mode current getting into the shack as a result of using a 4:1 balun in front of the matchbox.
Easy cure: don't ever do it.

Most antennas can be matched by most matchboxes.
However when you take the decision to deploy openwire feedline and certain types of antennas, you need to understand that half of the matchboxes on the market can't cope with that, without using a 4:1 balun to help assist in the matching. BUT THAT IS WRONG.

The balun's main job is to block common mode current. If your matchbox can't cope with the impedance range to be matched, you may need to choose a different matchbox, but don't resort to a transformer balun, unless you also assist it by preceding it with a 1:1 balun.

This is not theory I read in a book.
This is experience speaking. I have the burned fingertips to prove it! (hi)

73 - Rick, DJ0IP
(Nr. Frankfurt am Main)

From: SkyWires@yahoogroups.com [mailto:SkyWires@yahoogroups.com]
Sent: Saturday, June 20, 2015 7:21 PM
To: SkyWires@yahoogroups.com
Subject: Re: [SkyWires] Steve's Low Loop Resonance Test Results

I definitely agree there Rick.

As I said, I have both and experiment to see which works best on the
bands of interest. At this moment, I have both in use on different

antennas.

Of course it gets complicated when one is using an open wire fed antenna
on 160 thorough 6.

We are in agreement.

Ken WA8JXM

On 20/06/2015 11:29, 'Rick - DJ0IP / NJ0IP' Rick@... [SkyWires] wrote:
> The worst case example is when the antenna system impedance at the matchbox is already low.
> With the 1:1 it remains whatever it is. With the 4:1 it is 4x lower, which is very bad.

4910. RE: [SkyWires] Andy and Rick's NVIS discussion

Yahoo group: SkyWires
Date: 2015-06-20 21:58:16 UTC
From: Rick - DJ0IP / NJ0IP
Topic: 4810 Message: 4910

FB on the two Maxwells (hi).
Small world.

That sounds like I have little hope of finding the works of Fiedler.

73 - Rick, DJ0IP
(Nr. Frankfurt am Main)

From: SkyWires@yahoogroups.com [mailto:SkyWires@yahoogroups.com]
Sent: Saturday, June 20, 2015 10:16 PM
To: SkyWires@yahoogroups.com
Subject: Re: [SkyWires] Andy and Rick's NVIS discussion

"It is a myth to claim that antennas low to the ground are always better NVIS antennas than those that are higher. In fact I would say that if the antenna is between 1/8 and 1/4 wavelength high, it is generally better than close to the ground antennas – though there are exceptions."

I think that hits the nail on the head.

About the 'proof' from people that their very low field-expedient NVIS antenna usually gives them better results than a higher antenna, I can't say. There's at least one guy on an NVIS forum who says he gets as good if not better results most of the time in NVIS situations with his low antenna, but I don't know the thoroughness of his comparisons. I only know they were based on years of observations with others in his general geographical area.

Maxwell ... sorry, this is my mistake for not being clear. We aren't talking about the same Maxwell! I was referring to James Clerk Maxwell, so-called father of the so-called Maxwell's Equations, which govern all electro-magnetics including light waves and radio. (And he came up with them decades before radio was discovered.) I always found it amusing that he and Walt W2DU shared the same last name, but it was coincidental. Many, including Einstein, considered James Clerk Maxwell to have been the greatest physicist in the world since Isaac Newton's time.

Fiedler is LTC David Fiedler, who researched NVIS and wrote (along with Maj Edward Farmer) a small book about it (now out of print) which was a collection of various papers he and others wrote. Much of the contents of the book can be found elsewhere, and the book itself was somewhat limiting.

Regards,
Andy

4911. RE: [SkyWires] Andy and Rick's NVIS discussion

Yahoo group: SkyWires
Date: 2015-06-20 22:06:41 UTC
From: Rick - DJ0IP / NJ0IP
Topic: 4810 Message: 4911

No, I don☐t agree.

I don☐t think there is that much difference in radiation angle between very
low and 1/8 wl high.
The antennas radiate (or receive) pretty much the same.
The biggest difference is in ground losses.

Here is perhaps the tricky part.
On 80m most of the time, signal strength is not important, at least not for NVIS.
Perhaps for long haul DX.

Just about anything you can put in the air that is close to full size and horizontal is going to receive and radiate fairly well.
What matters here is the signal to noise ratio, not the ultimate strength of the signal.
Low antennas reduce signal strength and noise.
The net change is zero.
So even with a low antenna, you still are able to work just as well as with a higher antenna.

I have to return to what I said earlier. Just reducing gain will often totally eliminate the noise, thus even though the signal to noise ratio never changed, if all you are now hearing is the signal, you get the impression it is much clearer.

73 - Rick, DJ0IP
(Nr. Frankfurt am Main)

From: SkyWires@yahoogroups.com [mailto:SkyWires@yahoogroups.com]
Sent: Saturday, June 20, 2015 11:19 PM
To: SkyWires@yahoogroups.com
Subject: AW: [SkyWires] Andy and Rick's NVIS discussion

Hmm just thinking a bit

Maybe that guy who had better results with a low antenna had lots of noise or other stations that were coming in a low angle

And he wanted to speak "locally" (nvis) ....

Lowering the antenna would lower the overall signal (noise, other low angle stations and the high angle stations also)

The net result could be that with a lower antenna the noise or unwanted stations were lowered say 20 db while the high angle signals were maybe just lowered 10db ... the end result would be 10 db plus in signal to noise

So "sometimes" or better say in some cases a lower antenna may help

Dg9bfc

Sigi

> -----Ursprüngliche Nachricht-----
> Von: SkyWires@yahoogroups.com [mailto:SkyWires@yahoogroups.com]
> Gesendet: Samstag, 20. Juni 2015 20:16
> An: SkyWires@yahoogroups.com
> Betreff: Re: [SkyWires] Andy and Rick's NVIS discussion
>
>
>
> "It is a myth to claim that antennas low to the ground are always
> better NVIS antennas than those that are higher. In fact I would say that
> if the antenna is between 1/8 and 1/4 wavelength high, it is generally
> better than close to the ground antennas □ though there are exceptions."
>
>
>
> I think that hits the nail on the head.
>
>
> About the 'proof' from people that their very low field-expedient NVIS
> antenna usually gives them better results than a higher antenna, I can't
> say. There's at least one guy on an NVIS forum who says he gets as good
> if not better results most of the time in NVIS situations with his low
> antenna, but I don't know the thoroughness of his comparisons. I only
> know they were based on years of observations with others in his general
> geographical area.
>
>
> Maxwell ... sorry, this is my mistake for not being clear. We aren't
> talking about the same Maxwell! I was referring to James Clerk Maxwell,
> so-called father of the so-called Maxwell's Equations, which govern all
> electro-magnetics including light waves and radio. (And he came up with
> them decades before radio was discovered.) I always found it amusing that
> he and Walt W2DU shared the same last name, but it was coincidental.
> Many, including Einstein, considered James Clerk Maxwell to have been the
> greatest physicist in the world since Isaac Newton's time.
>
>
> Fiedler is LTC David Fiedler, who researched NVIS and wrote (along with
> Maj Edward Farmer) a small book about it (now out of print) which was a
> collection of various papers he and others wrote. Much of the contents of
> the book can be found elsewhere, and the book itself was somewhat
> limiting.
>
>
> Regards,

> Andy
>
>
>
>
>

4912. RE: [SkyWires] Slingshots DON'T work!

Yahoo group: SkyWires
Date: 2015-06-20 22:08:47 UTC
From: Rick - DJ0IP / NJ0IP
Topic: 4752 Message: 4912

Nice shot!

73 - Rick, DJ0IP

(Nr. Frankfurt am Main)

From: SkyWires@yahoogroups.com [mailto:SkyWires@yahoogroups.com]
Sent: Saturday, June 20, 2015 11:24 PM
To: SkyWires@yahoogroups.com
Subject: RE: [SkyWires] Slingshots DON'T work!

OK, it's confirmed...slingshots don't work, well for us anyway, it appears they do for some, but pneumatic canons DO work!

We put a fly casting reel on for the string, just duct taped it on, worked perfect though it did end up making a mouse nests a couple times, I think I'd opt for a covered reel.

Just three shots...50 psi which seemed about right last time with string, that landed on the roof...three houses down! Reduced pressure to 35 psi, hmmm, same darn spot! And the trail was good, but the light string drifted in the wind/high arc and drifted off the trees. We reduced down to 25 psi, aimed very close to the tree tops and a bit uncomfortably angled towards the power lines....and it tracked just effin' perfect! Hopped right where we wanted it, dropped right in the neighbors yard.

We used the light fishing string to haul up some paracord and then the paracord to pull up the wire. No issues pulling. I had to head home, have some stuff for my daughter's wedding preparations going on this evening, so I dunno if he got the wire hooked up yet or not.

I got home with my son and we had the launcher just sitting there...yeah, we popped one over the city trees! 25 psi and one shot, perfect arc right over the tops of them! I left them decorated with orange paracord until tomorrow! 8-) Seriously, these WORK! You DO need the reel though.

Fun stuff!

4913. Re: [SkyWires] modeling versus experimentation

Yahoo group: SkyWires
Date: 2015-06-21 02:02:26 UTC
From: Evan Rolek
Topic: 1641 Message: 4913

Mac,

Message received. I'll try to refrain from posts.

73,

Evan

-----Original Message-----
From: Gordon McCleery n4ehx@... [SkyWires] <SkyWires@yahoogroups.com>
To: SkyWires <SkyWires@yahoogroups.com>
Sent: Sat, Jun 20, 2015 10:29 am
Subject: Re: [SkyWires] modeling versus experimentation

THANK-YOU for stepping down.....Mac

On Sat, 6/20/15, Evan Rolek k9sqg@... [SkyWires] <SkyWires@yahoogroups.com> wrote:

Subject: [SkyWires] modeling versus experimentation
To: SkyWires@yahoogroups.com
Date: Saturday, June 20, 2015, 10:28 AM

Like they
say, all models are wrong/limited BUT some models are
useful.

Models and such can be a starting point but site
specifics can alter one's real world
results.

The best antenna on paper doesn't yield as many
contacts as a poor antenna that is actually
installed.

Let's all enjoy our beloved hobby.

(stepping down from my soapbox...)

73,

Evan, K9SQG

4914. RE: [SkyWires] Matchbox Suggestions for Steve

Yahoo group: SkyWires
Date: 2015-06-21 02:03:53 UTC
From: slr_65@...
Topic: 4810 Message: 4914

Thanks for the suggestions, I just ordered the MFJ 993-B.

OK, it has a 4:1 current balun in it, but I sent the balun designs balun in to be converted to a 1:1 current balun, soooo, use it in front of this unit when using ladder line?

Steve

4915. RE: [SkyWires] Matchbox Suggestions for Steve

Yahoo group: SkyWires
Date: 2015-06-21 08:23:47 UTC
From: Rick - DJ0IP / NJ0IP
Topic: 4810 Message: 4915

Sounds great.

You will find that this new tuner matches all bands, so now all you have to do is find a way to raise your loop another 20 ft! (hi)

73 - Rick, DJ0IP

(Nr. Frankfurt am Main)

From: SkyWires@yahoogroups.com [mailto:SkyWires@yahoogroups.com]
Sent: Sunday, June 21, 2015 4:04 AM
To: SkyWires@yahoogroups.com
Subject: RE: [SkyWires] Matchbox Suggestions for Steve

Thanks for the suggestions, I just ordered the MFJ 993-B.

OK, it has a 4:1 current balun in it, but I sent the balun designs balun in to be converted to a 1:1 current balun, soooo, use it in front of this unit when using ladder line?

Steve

4916. RE: [SkyWires] Matchbox Suggestions for Steve

Yahoo group: SkyWires
Date: 2015-06-21 08:32:26 UTC
From: slr_65@...
Topic: 4810 Message: 4916

I even splurged and ordered the interface cable for my radio!

I think the city trees are going to become end posts and we'll tie back to the house eaves for the other two, that will give a 35-40' to 12' slope and lengthen the loop, though part will still be too close to the house. If it works well enough I'll probably put up two posts on the ends of the house and raise, but for tomorrows playing the house will have to do.

4917. Re: [SkyWires] Steve's Low Loop Resonance Test Results

Yahoo group: SkyWires
Date: 2015-06-21 20:25:33 UTC
From: WA8JXM
Topic: 4810 Message: 4917

On 19/06/2015 11:46, 'Rick - DJ0IP / NJ0IP' Rick@... [SkyWires] wrote:
> Unfortunately ATU’s built into our transceivers never have the tuning range of the external ones.
> That would require several more coils and capacitors.

You have heard, of course, "never say never", LOL. Actually the Elecraft K3 internal tuner is quite good (specs say it will match a 10:1 SWR) and it is better than many external tuners I have used. The external Elecraft tuner KAT500 has the same ranges.

While I do agree that most internal tuners are of limited range, I wanted to point out that the Elecraft is significantly better than most. My comparisons to the K3 internal are the Palstar AT2K, SGC-239, LDG RT-100. The K3 internal seems to do better than all of them.

73, Ken WA8JXM

4918. Re: [SkyWires] Slingshots DON'T work!

Yahoo group: SkyWires
Date: 2015-06-21 20:34:16 UTC
From: Rich Schmuke
Topic: 4752 Message: 4918

Nice information Rick. Great job letting us know that you only need 25 psi.
I will pick up a schrader valve and some PVC and try one.

Rich, KdØzz

On Sat, Jun 20, 2015 at 5:08 PM, 'Rick - DJ0IP / NJ0IP' Rick@...
[SkyWires] <SkyWires@yahoogroups.com> wrote:

>
>
> *Nice shot!*
>
> 73 - Rick, DJ0IP
>
> (Nr. Frankfurt am Main)
>
>
>
> *From:* SkyWires@yahoogroups.com [mailto:SkyWires@yahoogroups.com]
> *Sent:* Saturday, June 20, 2015 11:24 PM
> *To:* SkyWires@yahoogroups.com
> *Subject:* RE: [SkyWires] Slingshots DON'T work!
>
>
>
>
>
>
> OK, it's confirmed...slingshots don't work, well for us anyway, it appears
> they do for some, but pneumatic canons DO work!
>
> We put a fly casting reel on for the string, just duct taped it on, worked
> perfect though it did end up making a mouse nests a couple times, I think
> I'd opt for a covered reel.
>
> Just three shots...50 psi which seemed about right last time with string,
> that landed on the roof...three houses down! Reduced pressure to 35 psi,
> hmmm, same darn spot! And the trail was good, but the light string drifted
> in the wind/high arc and drifted off the trees. We reduced down to 25 psi,
> aimed very close to the tree tops and a bit uncomfortably angled towards
> the power lines....and it tracked just effin' perfect! Hopped right where
> we wanted it, dropped right in the neighbors yard.
>
> We used the light fishing string to haul up some paracord and then the
> paracord to pull up the wire. No issues pulling. I had to head home, have
> some stuff for my daughter's wedding preparations going on this evening, so
> I dunno if he got the wire hooked up yet or not.

>
> I got home with my son and we had the launcher just sitting there...yeah,
> we popped one over the city trees! 25 psi and one shot, perfect arc right
> over the tops of them! I left them decorated with orange paracord until
> tomorrow! 8-) Seriously, these WORK! You DO need the reel though.
>
> Fun stuff!
>
>
>

4920. RE: [SkyWires] Steve's Low Loop Resonance Test Results

Yahoo group: SkyWires
Date: 2015-06-21 20:57:32 UTC
From: Rick - DJ0IP / NJ0IP
Topic: 4810 Message: 4920

ABSOLUTELY CORRECT.
All of the Elecraft tuners seem to be exceptions to the rule.
There is only one External Tuner that I know of that has a broader matching range than the K3's tuner, and that's the MFJ-993 (and its stripped down brother, the 991).

73 - Rick, DJ0IP
(Nr. Frankfurt am Main)

From: SkyWires@yahoogroups.com [mailto:SkyWires@yahoogroups.com]
Sent: Sunday, June 21, 2015 10:26 PM
To: SkyWires@yahoogroups.com
Subject: Re: [SkyWires] Steve's Low Loop Resonance Test Results

On 19/06/2015 11:46, 'Rick - DJ0IP / NJ0IP' Rick@... [SkyWires] wrote:
> Unfortunately ATU's built into our transceivers never have the tuning range of the external ones.
> That would require several more coils and capacitors.

You have heard, of course, "never say never", LOL. Actually the
Elecraft K3 internal tuner is quite good (specs say it will match a 10:1
SWR) and it is better than many external tuners I have used. The
external Elecraft tuner KAT500 has the same ranges.

While I do agree that most internal tuners are of limited range, I
wanted to point out that the Elecraft is significantly better than
most. My comparisons to the K3 internal are the Palstar AT2K, SGC-239,
LDG RT-100. The K3 internal seems to do better than all of them.

73, Ken WA8JXM

4921. RE: [SkyWires] Unsubscribe

Yahoo group: SkyWires
Date: 2015-06-21 21:00:31 UTC
From: Rick - DJ0IP / NJ0IP
Topic: 4752 Message: 4921

Joe, it is very easy to unsubscribe, but you can’t do it by sending us all an email.

Simply scroll down to the very bottom line of any email and in tiny print you will see the word “unsubscribe”.

Click it, follow the link, and you are unsubscribed.

Gud luk!

73 - Rick, DJ0IP
(Nr. Frankfurt am Main)

From: SkyWires@yahoogroups.com [mailto:SkyWires@yahoogroups.com]
Sent: Sunday, June 21, 2015 10:55 PM
To: SkyWires@yahoogroups.com
Subject: [SkyWires] Unsubscribe

Unsubscribe

On Jun 21, 2015, at 6:04 PM, "Rich Schmuke rdj@... [SkyWires]" <SkyWires@yahoogroups.com> wrote:

Nice information Rick. Great job letting us know that you only need 25 psi. I will pick up a schrader valve and some PVC and try one.

Rich, KdØzz

On Sat, Jun 20, 2015 at 5:08 PM, 'Rick - DJ0IP / NJ0IP' Rick@... [SkyWires] <SkyWires@yahoogroups.com> wrote:

Nice shot!
73 - Rick, DJ0IP
(Nr. Frankfurt am Main)

From: SkyWires@...m [mailto:SkyWires@yahoogroups.com]
Sent: Saturday, June 20, 2015 11:24 PM
To: SkyWires@yahoogroups.com
Subject: RE: [SkyWires] Slingshots DON'T work!

OK, it's confirmed...slingshots don't work, well for us anyway, it appears they do for some, but pneumatic canons DO work!

We put a fly casting reel on for the string, just duct taped it on, worked perfect though it did end up making a mouse nests a couple times, I think I'd opt for a covered reel.

Just three shots...50 psi which seemed about right last time with string, that landed on the roof...three houses down! Reduced pressure to 35 psi, hmmm, same darn spot! And the trail was good, but the light string drifted in the wind/high arc and drifted off the trees. We reduced down to 25 psi, aimed very close to the tree tops and a bit uncomfortably

angled towards the power lines....and it tracked just effin' perfect! Hopped right where we wanted it, dropped right in the neighbors yard.

We used the light fishing string to haul up some paracord and then the paracord to pull up the wire. No issues pulling. I had to head home, have some stuff for my daughter's wedding preparations going on this evening, so I dunno if he got the wire hooked up yet or not.

I got home with my son and we had the launcher just sitting there...yeah, we popped one over the city trees! 25 psi and one shot, perfect arc right over the tops of them! I left them decorated with orange paracord until tomorrow! 8-) Seriously, these WORK! You DO need the reel though.

Fun stuff!

4922. Re: [SkyWires] Unsubscribe Way at the bottom as seen here

Yahoo group: SkyWires
Date: 2015-06-21 21:10:24 UTC
From: beargyrils@...
Topic: 4922 Message: 4922

In a message dated 6/21/2015 2:00:35 P.M. Pacific Daylight Time, SkyWires@yahoogroups.com writes:

• _Privacy_ (https://info.yahoo.com/privacy/us/yahoo/groups/details.html) • _Unsubscribe_ (mailto:SkyWires-unsubscribe@yahoogroups.com?subject=Unsubscribe) • _Terms of Use_ (https://info.yahoo.com/legal/us/yahoo/utos/terms/)

4923. Re: [SkyWires] Unsubscribe

Yahoo group: SkyWires
Date: 2015-06-21 22:26:37 UTC
From: Joe Earles
Topic: 4752 Message: 4923

Rgr thanks. 73

> On Jun 21, 2015, at 6:30 PM, "'Rick - DJ0IP / NJ0IP' Rick@... [SkyWires]" <SkyWires@yahoogroups.com> wrote:
>
> Joe, it is very easy to unsubscribe, but you can’t do it by sending us all an email.
>
> Simply scroll down to the very bottom line of any email and in tiny print you will see the word “unsubscribe”.
>
> Click it, follow the link, and you are unsubscribed.
>
> Gud luk!
>
> 73 - Rick, DJ0IP
> (Nr. Frankfurt am Main)
>
> From: SkyWires@yahoogroups.com [mailto:SkyWires@yahoogroups.com]
> Sent: Sunday, June 21, 2015 10:55 PM
> To: SkyWires@yahoogroups.com
> Subject: [SkyWires] Unsubscribe
>
> Unsubscribe
>
> On Jun 21, 2015, at 6:04 PM, "Rich Schmuke rdj@... [SkyWires]" <SkyWires@yahoogroups.com> wrote:
>
> Nice information Rick. Great job letting us know that you only need 25 psi. I will pick up a schrader valve and some PVC and try one.
>
> Rich, KdØzz
>
> On Sat, Jun 20, 2015 at 5:08 PM, 'Rick - DJ0IP / NJ0IP' Rick@... [SkyWires] <SkyWires@yahoogroups.com> wrote:
>
> Nice shot!
> 73 - Rick, DJ0IP
> (Nr. Frankfurt am Main)
>
> From: SkyWires@yahoogroups.com [mailto:SkyWires@yahoogroups.com]
> Sent: Saturday, June 20, 2015 11:24 PM
> To: SkyWires@yahoogroups.com
> Subject: RE: [SkyWires] Slingshots DON'T work!
>
>

> OK, it's confirmed...slingshots don't work, well for us anyway, it appears they do for some, but pneumatic canons DO work!
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> We put a fly casting reel on for the string, just duct taped it on, worked perfect though it did end up making a mouse nests a couple times, I think I'd opt for a covered reel.
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> I got home with my son and we had the launcher just sitting there...yeah, we popped one over the city trees! 25 psi and one shot, perfect arc right over the tops of them! I left them decorated with orange paracord until tomorrow! 8-) Seriously, these WORK! You DO need the reel though.
>
> Fun stuff!
>
>

4924. Steve's City tree Loop

Yahoo group: SkyWires
Date: 2015-06-21 23:21:49 UTC
From: slr_65@...
Topic: 4924 Message: 4924

OK, as we pulled up one line slipped off the top of one tree and came down about half way. Really windy today, so no time to reshoot so we ran what we had.

I just ran a wire over the tall tree, half way down the and around the other tree and connected the ends to the low doublet on the front of the house. (hooks and bungies on the corners for straing relief, plus the wire is fairly loose in the trees).

5/9 to Phoenix, AZ! Dropped down and heard 9A7R from Croatia, threw my call out,,,5/9! 8-)

We'll get the rest of the wire over the other tree a bit higher...

Things are getting fun!

Steve, KA0NEB

4925. Re: Steve's City tree Loop

Yahoo group: SkyWires
Date: 2015-06-22 04:28:52 UTC
From: slr_65@...
Topic: 4924 Message: 4925

Germany and southern Mexico off of it too, working well!

4926. Re: [SkyWires] Steve's Low Loop Resonance Test Results

Yahoo group: SkyWires
Date: 2015-06-22 05:18:39 UTC
From: Hans Remeeus
Topic: 4810 Message: 4926

IMHO this 'wide range' depends on your antenna system and the output
power you are using. I have the KX1 and KX3 with built-in a-symmetrical
ATU's. With 2 and 12 Watt output these matching units are doing very
well indeed.

When I use my FTdx5000 with Acom 2000A it's a different situation and
much harder, for all the antennas and matching units I bought/built/used
in the past decades ;-)

73, Hans.

Vriendelijke groeten,
Hans Remeeus (PA1HR/OE3JRC)
http://www.remeeus.eu
http://www.hansremeeus.nl
Communication is about people, the rest is technology.

'Rick - DJ0IP / NJ0IP' Rick@... [SkyWires] schreef op 21-6-2015 om
22:57:
> ABSOLUTELY CORRECT.
> All of the Elecraft tuners seem to be exceptions to the rule.
> There is only one External Tuner that I know of that has a broader matching range than
the K3?s tuner, and that?s the MFJ-993 (and its stripped down brother, the 991).
>
> 73 - Rick, DJ0IP
> (Nr. Frankfurt am Main)
>
> From: SkyWires@yahoogroups.com [mailto:SkyWires@yahoogroups.com]
> Sent: Sunday, June 21, 2015 10:26 PM
> To: SkyWires@yahoogroups.com
> Subject: Re: [SkyWires] Steve's Low Loop Resonance Test Results
>
>
> On 19/06/2015 11:46, 'Rick - DJ0IP / NJ0IP' Rick@... [SkyWires] wrote:
>> Unfortunately ATU?s built into our transceivers never have the tuning range of the
external ones.
>> That would require several more coils and capacitors.
> You have heard, of course, "never say never", LOL. Actually the
> Elecraft K3 internal tuner is quite good (specs say it will match a 10:1
> SWR) and it is better than many external tuners I have used. The
> external Elecraft tuner KAT500 has the same ranges.
>
> While I do agree that most internal tuners are of limited range, I
> wanted to point out that the Elecraft is significantly better than
> most. My comparisons to the K3 internal are the Palstar AT2K, SGC-239,
> LDG RT-100. The K3 internal seems to do better than all of them.

>
> 73, Ken WA8JXM
>
>
>
>
> ------------------------------------
> Posted by: "Rick - DJ0IP / NJ0IP" <Rick@...>
> ------------------------------------
>
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> ------------------------------------
>
> Yahoo Groups Links
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>
>
>

4927. RE: [SkyWires] Steve's Low Loop Resonance Test Results

Yahoo group: SkyWires
Date: 2015-06-22 05:37:30 UTC
From: Rick - DJ0IP / NJ0IP
Topic: 4810 Message: 4927

GM Hans,

Are you coming to Friedrichshafen this weekend?
If so, stop by and see me at the Spiderbeam booth.

73 - Rick, DJ0IP
(Nr. Frankfurt am Main)

From: SkyWires@yahoogroups.com [mailto:SkyWires@yahoogroups.com]
Sent: Monday, June 22, 2015 7:19 AM
To: SkyWires@yahoogroups.com
Subject: Re: [SkyWires] Steve's Low Loop Resonance Test Results

IMHO this 'wide range' depends on your antenna system and the output power
you are using. I have the KX1 and KX3 with built-in a-symmetrical ATU's.
With 2 and 12 Watt output these matching units are doing very well indeed.

When I use my FTdx5000 with Acom 2000A it's a different situation and much
harder, for all the antennas and matching units I bought/built/used in the
past decades ;-)

73, Hans.

Vriendelijke groeten,
Hans Remeeus (PA1HR/OE3JRC)
http://www.remeeus.eu
http://www.hansremeeus.nl
Communication is about people, the rest is technology.
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brother, the 991).

73 - Rick, DJ0IP
(Nr. Frankfurt am Main)

From: SkyWires@yahoogroups.com [mailto:SkyWires@...m]
Sent: Sunday, June 21, 2015 10:26 PM
To: SkyWires@yahoogroups.com
Subject: Re: [SkyWires] Steve's Low Loop Resonance Test Results

On 19/06/2015 11:46, 'Rick - DJ0IP / NJ0IP' Rick@... [SkyWires] wrote:
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While I do agree that most internal tuners are of limited range, I wanted to point out that the Elecraft is significantly better than most. My comparisons to the K3 internal are the Palstar AT2K, SGC-239, LDG RT-100. The K3 internal seems to do better than all of them.

73, Ken WA8JXM

Posted by: "Rick - DJ0IP / NJ0IP" <Rick@...>

Yahoo Groups Links

4928. Re: Steve's City tree Loop

Yahoo group: SkyWires
Date: 2015-06-22 05:38:11 UTC
From: slr_65@...
Topic: 4924 Message: 4928

5/5 to Italy, I'll take it! I forgot how much fun DX was!

4929. Re: [SkyWires] Steve's Low Loop Resonance Test Results

Yahoo group: SkyWires
Date: 2015-06-22 06:05:09 UTC
From: Hans Remeeus
Topic: 4810 Message: 4929

Hello Rick,

Yes, I do! Looking forward to see you again and meet all the others.

I will visit your booth at thursday afternoon. In the morning I will try
to find some interesting parts on the fleemarket... ;-)

73, Hans.

Vriendelijke groeten,
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Communication is about people, the rest is technology.

'Rick - DJ0IP / NJ0IP' Rick@... [SkyWires] schreef op 22-6-2015 om
07:37:
> GM Hans,
>
> Are you coming to Friedrichshafen this weekend?
> If so, stop by and see me at the Spiderbeam booth.
>
> 73 - Rick, DJ0IP
> (Nr. Frankfurt am Main)
>
>
> From: SkyWires@yahoogroups.com [mailto:SkyWires@yahoogroups.com]
> Sent: Monday, June 22, 2015 7:19 AM
> To: SkyWires@yahoogroups.com
> Subject: Re: [SkyWires] Steve's Low Loop Resonance Test Results
>
>
>
> IMHO this 'wide range' depends on your antenna system and the output power
> you are using. I have the KX1 and KX3 with built-in a-symmetrical ATU's.
> With 2 and 12 Watt output these matching units are doing very well indeed.
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> When I use my FTdx5000 with Acom 2000A it's a different situation and much
> harder, for all the antennas and matching units I bought/built/used in the
> past decades ;-)
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> 73, Ken WA8JXM
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> ------------------------------------
> Posted by: "Rick - DJ0IP / NJ0IP" <Rick@...>
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> Posted by: "Rick - DJ0IP / NJ0IP" <Rick@...>
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4930. Friedrichshafen

Yahoo group: SkyWires
Date: 2015-06-22 06:40:23 UTC
From: Rick - DJ0IP / NJ0IP
Topic: 4810 Message: 4930

Hans,

That☐s great.
The Hamfest is not open on Thursday. It opens on Friday.
I will be there setting up the booth on Thursday, in case you do come on
Thursday.

73 - Rick, DJ0IP
(Nr. Frankfurt am Main)

From: SkyWires@yahoogroups.com [mailto:SkyWires@yahoogroups.com]
Sent: Monday, June 22, 2015 8:05 AM
To: SkyWires@yahoogroups.com
Subject: Re: [SkyWires] Steve's Low Loop Resonance Test Results

Hello Rick,

Yes, I do! Looking forward to see you again and meet all the others.

I will visit your booth at thursday afternoon. In the morning I will try to
find some interesting parts on the fleemarket... ;-)

73, Hans.

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73, Ken WA8JXM

Posted by: "Rick - DJ0IP / NJ0IP" <Rick@...>

Yahoo Groups Links

Posted by: "Rick - DJ0IP / NJ0IP" <Rick@...>

Yahoo Groups Links

4931. Re: [SkyWires] Friedrichshafen

Yahoo group: SkyWires
Date: 2015-06-22 07:25:37 UTC
From: Hans Remeeus
Topic: 4810 Message: 4931

:-) Of course. On thursday we drive from PA to DL.

See you on friday!

73, Hans.

Vriendelijke groeten,
Hans Remeeus (PA1HR/OE3JRC)
http://www.remeeus.eu
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Communication is about people, the rest is technology.

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> Thursday.
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4932. Re: Steve's City tree Loop

Yahoo group: SkyWires
Date: 2015-06-23 06:57:44 UTC
From: slr_65@...
Topic: 4924 Message: 4932

I'm not sure if I should change the subject or not...

Feedpoint...but it's kind of specific to my setup, so I'll leave the subject title alone I guess.

I have a 40 meter doublet under the front eaves, fed with 450 ladder line in the middle.

The loop is simply connected to the ends of the doublet, so the loop on the north side is a straight line. The loop then hooks to wire hooked to an insulator and bungie cord tied to a hook in the eaves. The wire goes up into the trees, across and back down to the other corner. Makes a D shape with the straight part on the north side.

Feeding on the high south side would be difficult to get pulled up as we're pulling from east to west. I could feed the east side pretty easily though I think. Or, just leave it where it's at as it's working.

It would be nice to move the feed to the eave right over the window to to the radio room though, and that'd allow for a very short feedline as the station is right inside the window.

Any particular reason to move the feedpoint, or it's working, leave it alone?

4933. AW: [SkyWires] Re: Steve's City tree Loop

Yahoo group: SkyWires
Date: 2015-06-23 09:51:52 UTC
From: siegfried jackstien
Topic: 4924 Message: 4933

If you use 50 ohms ladderline for feeding ... then there is no need to make the feeding line very short (in fact you can make it a few hundred feet long and would not notice any difference) ... loss on the ladderline is VERY low

What I would do is I would model that antenna in mmana ... then see the lobes on the higher bands ... and move the feeding point (if needed) that the lobes point to the locations of greatest distance

Dg9bfc

Sigi

> -----Ursprüngliche Nachricht-----
> Von: SkyWires@yahoogroups.com [mailto:SkyWires@yahoogroups.com]
> Gesendet: Dienstag, 23. Juni 2015 06:58
> An: SkyWires@yahoogroups.com
> Betreff: [SkyWires] Re: Steve's City tree Loop
>
>
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> I'm not sure if I should change the subject or not...
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> Feedpoint...but it's kind of specific to my setup, so I'll leave the
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> an insulator and bungie cord tied to a hook in the eaves. The wire goes
> up into the trees, across and back down to the other corner. Makes a D
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> Feeding on the high south side would be difficult to get pulled up as
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> the radio room though, and that'd allow for a very short feedline as the
> station is right inside the window.
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> Any particular reason to move the feedpoint, or it's working, leave it
> alone?
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>

4934. AW: [SkyWires] Re: Steve's City tree Loop

Yahoo group: SkyWires
Date: 2015-06-23 10:41:17 UTC
From: siegfried jackstien
Topic: 4924 Message: 4934

TYPO 450 ohms ladderline

> -----Ursprüngliche Nachricht-----
> Von: SkyWires@yahoogroups.com [mailto:SkyWires@yahoogroups.com]
> Gesendet: Dienstag, 23. Juni 2015 09:52
> An: SkyWires@yahoogroups.com
> Betreff: AW: [SkyWires] Re: Steve's City tree Loop
>
>
>
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> make
> the feeding line very short (in fact you can make it a few hundred feet
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> and would not notice any difference) ... loss on the ladderline is VERY
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>
> Dg9bfc
>
> Sigi
>
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> > Von: SkyWires@yahoogroups.com [mailto:SkyWires@yahoogroups.com]
> > Gesendet: Dienstag, 23. Juni 2015 06:58
> > An: SkyWires@yahoogroups.com
> > Betreff: [SkyWires] Re: Steve's City tree Loop
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> > station is right inside the window.
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> > Any particular reason to move the feedpoint, or it's working, leave it
> > alone?
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>

4935. Re: AW: [SkyWires] Re: Steve's City tree Loop

Yahoo group: SkyWires
Date: 2015-06-23 23:45:26 UTC
From: slr_65@...
Topic: 4924 Message: 4935

OK, if I get the guesstimates could someone model it...I'm not up to figuring modeling out with my vision.

On the vision front...check up today, slight improvement in both eyes! They weren't expecting improvement in the right one, so that's good news. The good news is actually it's not moving backwards, moving forwards is truly a blessing!

4936. Re: AW: [SkyWires] Re: Steve's City tree Loop

Yahoo group: SkyWires
Date: 2015-06-26 08:20:23 UTC
From: slr_65@...
Topic: 4924 Message: 4936

The new loop is working well...logged Australia tonight!

I seem to have trouble with the carribean though, I can hear them fine, but don't seem to be able to make the trip. I can make Florida, but not as strong as other eastern states it seems.

I'm wondering if it's in a null of my antenna, but if it's in a null then the null affects receive also, correct?

So far about the only direction I haven't heard is north, but then again there's not much in the Dakotas and Canada.

I have heard Canada but I didn't catch where, north of me or west/east.

4937. Re: AW: [SkyWires] Re: Steve's City tree Loop

Yahoo group: SkyWires
Date: 2015-06-27 05:18:22 UTC
From: slr_65@...
Topic: 4924 Message: 4937

Been playing with the new loop and the weak signal propagation reporting software...very interesting, at 5w output from nebraska on 30 meter I'm being heard in the US, Canada, Venezuela, South Africa and Germany!

4938. RE: [SkyWires] Matchbox Suggestions for Steve

Yahoo group: SkyWires
Date: 2015-06-28 22:57:47 UTC
From: slr_65@...
Topic: 4810 Message: 4938

The mfj arrived and is working beautifully! It even matched my short loop to 160 neter, which is something my Dentron could never do!

Thanks for the suggestion, I'm quite happy!

I even ordered the rig cable, so I don't have to worry about reducing power or anything to tune, it does it automatically.

/Steve

4939. RE: [SkyWires] Matchbox Suggestions for Steve

Yahoo group: SkyWires
Date: 2015-06-29 09:58:00 UTC
From: Rick - DJ0IP / NJ0IP
Topic: 4810 Message: 4939

Glad it worked out for you, Steve.

The problem with most people is, they are too lazy to do any research before buying and just like to gripe afterwards if the product does not do as they like.

Nearly every manufacturer publishes the specs of each of its antenna tuner products.
All the buyer has to do is know roughly the required matching range and then do a bit of research to find a box that can match it.

And the second problem is, when they ask things like "what matchbox do you recommend", they are asking for trouble.

Unless I specify what I want the matchbox for, there is not enough information to answer the question. The only correct answer to that question is, "what do you want to do with it?"

If someone answers anyway without asking more questions,and especially with "I've had good luck with XYZ", then that person has no clue what he's talking about and shouldn't be recommending stuff.

In your case you told us exactly what you wanted to do and it was easy to identify a matchbox that would do it.

Gud Luk!

73 - Rick, DJ0IP
(Nr. Frankfurt am Main)

From: SkyWires@yahoogroups.com [mailto:SkyWires@yahoogroups.com]
Sent: Monday, June 29, 2015 12:58 AM
To: SkyWires@yahoogroups.com
Subject: RE: [SkyWires] Matchbox Suggestions for Steve

The mfj arrived and is working beautifully! It even matched my short loop to 160 neter, which is something my Dentron could never do!

Thanks for the suggestion, I'm quite happy!

I even ordered the rig cable, so I don't have to worry about reducing power or anything to tune, it does it automatically.

/Steve

4940. DX Opening Prediction Software or Website?

Yahoo group: SkyWires
Date: 2015-06-29 21:27:47 UTC
From: slr_65@...
Topic: 4940 Message: 4940

I'm enjoying chasing both the WAS award and occasional DX.

I've been kind of random though and I'm thinking there is some science to this, one would need to a pick a time our fellow amateurs would be active, pick the right frequency, have the propagation, etc..

The propagation is probably the biggest variable. I was trying to read up on it and I ran across this software that looks kind of interesting. I hate to install software though unless I really have to, just seems to lead to grief when a system gets loaded up and with my vision I'm not up to reloads unless I gotta, then we'll see if I can pull it off.

DX Atlas: Amateur Radio software http://www.dxatlas.com/HamCap/

http://www.dxatlas.com/HamCap/

DX Atlas: Amateur Rad... http://www.dxatlas.com/HamCap/ High resolution World Map software for Amateur Radio. Geographic and Azimuthal proje...

View on www.dxatlas.com http://www.dxatlas.com/HamCap/
Preview by Yahoo

Has anyone used this software and would care to comment on it?

I"m surprised something like this isn't available on the net somewhere, but I haven't found any, though it just may be a matter of using the right search terms.

I would be interested in any and all suggestions and strategies.

DX isn't the only focus....looking at my WAS map I need figure a way to get the close states, and I seem to be north deficient, though I was hearing Canada this morning when checking out greybelt DX (not too successful this morning, though I did make Puerto Rico 57).

Fun stuff, a great distraction for me right now! When I was a kid Rhode Island and Hawaii kept me from my WAS...last night I worked Rhode Island...and he was a mobile to boot! (on 40 meters, that's a commitment in effort and equipment!)

Steve KA0NEB

4941. Re: [SkyWires] DX Opening Prediction Software or Website?

Yahoo group: SkyWires
Date: 2015-06-29 22:40:25 UTC
From: Skip Guenter
Topic: 4940 Message: 4941

Have you ever tried the WAS nets?
http://www.3905ccn.com/newsite/netsched.htm

On 06/29/2015 04:27 PM, slr_65@... [SkyWires] wrote:
>
> I'm enjoying chasing both the WAS award and occasional DX.
>
> I've been kind of random though and I'm thinking there is some science
> to this, one would need to a pick a time our fellow amateurs would be
> active, pick the right frequency, have the propagation, etc..
>
Skip - K5SRG

4943. Re: [SkyWires] DX Opening Prediction Software or Website?

Yahoo group: SkyWires
Date: 2015-06-29 23:19:43 UTC
From: slr_65@...
Topic: 4940 Message: 4943

Thanks, I'll take a look...I've been using the HHH net the last couple night and am enjoying it, it seems many need Nebraska so I'm kept a little busy.

I also found the Southern Cross DX Net this morning that seems pretty friendly. Aussies were on board but I couldn't hear 'em. Puerto Rico was also on though and I logged them easily.

Fun stuff, you have to appreciate those net controllers!

4944. Re: [SkyWires] DX Opening Prediction Software or Website?

Yahoo group: SkyWires
Date: 2015-06-29 23:24:35 UTC
From: slr_65@...
Topic: 4940 Message: 4944

Wow, that looks pretty neat...I'll give it a go too!

Thanks!

4946. Window feed through for coax, ladder line, etc..

Yahoo group: SkyWires
Date: 2015-06-29 23:44:54 UTC
From: slr_65@...
Topic: 4946 Message: 4946

Hi Guys,

Everything I've done to this point is temporary, of course isn't everything temporary...unless it works! 8-)

To feed the antenna to the shack I'm coming throuh a window as I don't want to put hole through the vynel siding and through the sheetrock.

We have storm windows, there was an upper glass window that slid up a channel and it sat on a screen in the lower part of the channel, then there was a glass window that sat in a channel in front of the screen. Then of course there's the actual wood slider interior window.

For now I've removed the storm windows and screen and rigged a couple boards to support the ladder line coming in and through.

The xyl is rihtfully demanding that be cleaned up a bit...and it needs to be.

OK, upper window can go back in, in place of the screen I'm thinking a piece of plexiglass as it could be easily drilled, cut, etc.. The wires feeding through is a question though, just silicone the penetration, or use some of that uv stable pipe insulation used on a/c unit lines to cushion/seal the hole?

Once in I've seen where MFJ makes some window hookups, but they're kind of pricey. I'm thinking a simple wood frame with plexiglass screwed to it and then I could mount coax or ladder line hookups directly to it. I thought about masonite or something, if it were electrically insulative enough.

Once in the window the shack desk is immediately to the right of the window and is 6' long so any feeds in the shack can be kept short.

I have a balun being rewired to 1:1, should I bring the ladder line into the shack as I am now, or should I mount the balun to the back side of the window feed panel and hook it up there and bring coax on into the shack? If I bring the ladder line into the shack and have the balun in the shack then I could ground the loop during storms easily.

I'm thinking of putting a couple coax feed throughs in the window panel and a set of banana jacks for the ladder line plus a ground bar.

Nothing set in stone, just thinking out loud.

The ladder comes from under the eaves and just hangs down until it enters the window, I'm thinking a hook in the eave with some dacron to a stake and then loosely securing the ladder line to the dacron to keep it from flopping around.

Any thoughts, suggestions, etc. - I'd love to hear how you all route your wires and make it look xyl presentable. (part of my problem is the shack is in a room on the front of the house, I really gotta kick her out of her craft room and claim the back room for my radio

stuff...but she's bigger than me, and meaner...8-D).

Steve KA0NEB

4947. Re: [SkyWires] DX Opening Prediction Software or Website?

Yahoo group: SkyWires
Date: 2015-06-30 02:43:33 UTC
From: slr_65@...
Topic: 4940 Message: 4947

Thanks - I participated tonight and had a hoot of a time!

4948. Re: [SkyWires] Window feed through for coax, ladder line, etc..

Yahoo group: SkyWires
Date: 2015-06-30 11:15:00 UTC
From: Rich Schmuke
Topic: 4946 Message: 4948

Steve , your idea will work just fine. Let me give you a little information. Plexiglass will crack and split , no good for a pass thru. Use polycarbonate (trade name Lexan), you can saw it on a table saw, hand saw, file, drill & tap , shape it any way you want.
http://i1102.photobucket.com/albums/g453/KD0ZZ/PassThru.jpg
You can buy some at any big box store as shatter proof window replacement. Cut two strips for your pass thru, wider than you need, slip into the slot of you window and clear calk the over lap. Cut a little thin strip to take care of the gap where the open window over laps.
Left over parts can be made into a tote for your 2M rig and power supply.
http://i1102.photobucket.com/albums/g453/KD0ZZ/DSC00780.jpg
The little scraps make good center mounts for a dipole, look around in my album and you will see a lot of polycarbonate used even the rack for my HF rig.
http://i1102.photobucket.com/albums/g453/KD0ZZ/Kdzz.jpg

Rich, KdØzz

On Mon, Jun 29, 2015 at 6:44 PM, slr_65@... [SkyWires] <SkyWires@...m> wrote:

>
>
> Hi Guys,
>
> Everything I've done to this point is temporary, of course isn't
> everything temporary...unless it works! 8-)
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> To feed the antenna to the shack I'm coming throuh a window as I don't
> want to put hole through the vynel siding and through the sheetrock.
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> channel and it sat on a screen in the lower part of the channel, then there
> was a glass window that sat in a channel in front of the screen. Then of
> course there's the actual wood slider interior window.
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> Any thoughts, suggestions, etc. - I'd love to hear how you all route your
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> than me, and meaner...8-D).
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> Steve KA0NEB
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4949. Re: [SkyWires] Window feed through for coax, ladder line, etc..

Yahoo group: SkyWires
Date: 2015-06-30 16:25:52 UTC
From: slr_65@...
Topic: 4946 Message: 4949

Thank you Rich, I appreciate that!

The upper window has a channel on the bottom to set over the screen, so it should set on the polycarbonate without needing the joint siliconed. I'll work on it this weekend I think.

To bring the ladder line into the shack or not is the question though. I'm leaning towards doing that. I'm thinking I'll use banana jacks (good quality brass ones of course) at the window panel so I can quickly and easily unplug the ladder line from the current balun and ground it...we do get thunderstorms in Nebraska!

I'll post back as the project develops.

73s,

Steve KA0NEB

4950. Re: AW: [SkyWires] Re: Steve's City tree Loop

Yahoo group: SkyWires
Date: 2015-06-30 16:42:56 UTC
From: slr_65@...
Topic: 4924 Message: 4950

Wow! The City tree loop is working fabulously! I wanna go see if I can get the other half up over the center of the other tree, but I'm hard pressed to mess with success....last night I worked Hawaii, Tasmania and Guam as well as a couple Canooks and some northeastern US states! It was a GOOD night! 8-)

4951. Field Day 565' loop - am I missing something?

Yahoo group: SkyWires
Date: 2015-06-30 17:22:56 UTC
From: ab0re@...
Topic: 4951 Message: 4951

Greetings!

For Field Day this year our local group met at a ball park and were given permission to hang antennas from the light structures. We set up a large horizontal loop antenna using 4 light poles to give the loop a nearly-square layout. I measured the wire before it was hoisted up using a roller-wheel and we checked the resonance feeding it with coax at one of the corners. The resonant points were a bit too low, so we lowered/raised the antennas a few more times to get the dips in the ham bands. I suspect we ended up taking off about 25' more, so perhaps the roller wheel method of measuring was not too accurate.

I was pleased to see that, after tuning, the dips were where they were supposed to be and, being harmonically related as we go from 3550 to 7100, etc. Normally, at this point, I'd simply tap the "tune" button on my K3 to flatten out the elevated SWR. However, I noticed that towards the top of the bands (top of 75M, for instance), the SWR was quite high and I was concerned about feedline loss going through 100' of RG8. So, we swapped out the center insulator and fed it with 300 ohm window line through an MFJ-949E tuner (using a 4:1 balun inside the tuner).

The loop seemed to work okay, but tuning was a bit finicky at places, even with the wide range MFJ-949E tuner. I suspect that's because the 4:1 balun dropped the impedence too low (some places it was showing ~13ohms, whereas others around 1000+ ohms). After seeing how the VSWR was all over the place when fed with ladderline through a 4:1 balun, I'm thinking we may not have made the correct choice. The idea of a loop antenna to use on multiple bands as they're harmonically related kind of blew up in my face, as VSWR at the edges of the band was so high that I didn't feel comfortable using coax, and using ladderline through the balun was finicky to tune, so likely it'd be outside of the tuning range of many internal tuners.

My apologies for asking what's likely been asked many times before:

- Do people who use large horizontal loop antennas typically feed them with coax or ladderline?

- If using ladderline, is a 1:1 or 4:1 (or some other value) balun typically used?

- If one uses a 1/4 wavelength piece of 75ohm feedline at the feedpoint to convert the impedence, what effect does this have on higher-frequency bands (say if the loop were made for 80M with a 234/3.55 x VF matching section of 75ohm coax, what would the VSWR look like on 40M with us having two quarter waves there? It'd essentially be a half wave section of 75ohm coax on 40M which is "invisible" in the overall antenna system; right?)

Due to the issues we had I'm just trying to pick up on what we missed regarding using a horizontal loop on multiple bands. If the answer is to just use the loop on it's design frequency and not the harmonics, the large horizontal loop certainly wouldn't have been the right choice for us. We'd have been better off going with dipoles or OCFDs. That being said, it was quite fun hoisting the loop up to the 40' level and the birds loved a new place to perch, too. :-)

Thanks in advance for any guidance offered,

Dan / ab0re

4952. Re: [SkyWires] Field Day 565' loop - am I missing something?

Yahoo group: SkyWires
Date: 2015-06-30 17:37:07 UTC
From: Don Sanders
Topic: 4951 Message: 4952

I suspect you would have had better operation of the loop if you had bypassed the 4:1 balun and used a 1:1 balun, even a coax ugly balun with RG 213 would have worked.
Yes, others do use coax but not always successfully for multiband use. The best feed is open or ladder line or 300 ohm line. A 1:1 balun should be used at the output of the matchbox.
Using 75 ohm matching line then 50 ohm coax is good for single band use, not multiband.
I tried the SKYLOOP with the 4:1 balun at the antenna and coax to the matchbox.
Then switched to 300 ohm and 1:1 balun to matchbox and was surprised at the 1 to 2 "S" unit improvement.
Short coax runs, less than 50 feet, are not so bad but the losses are up to 10 times what the balanced line has.

Dr. Don HC4/W4BWS

On Tue, Jun 30, 2015 at 12:22 PM, ab0re@... [SkyWires] <SkyWires@yahoogroups.com> wrote:

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> Greetings!
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> For Field Day this year our local group met at a ball park and were given
> permission to hang antennas from the light structures. We set up a large
> horizontal loop antenna using 4 light poles to give the loop a
> nearly-square layout. I measured the wire before it was hoisted up using a
> roller-wheel and we checked the resonance feeding it with coax at one of
> the corners. The resonant points were a bit too low, so we lowered/raised
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> concerned about feedline loss going through 100' of RG8. So, we swapped
> out the center insulator and fed it with 300 ohm window line through an
> MFJ-949E tuner (using a 4:1 balun inside the tuner).

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> Thanks in advance for any guidance offered,

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> Dan / ab0re
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4953. Re: [SkyWires] Field Day 565' loop - am I missing something?

Yahoo group: SkyWires
Date: 2015-06-30 17:56:45 UTC
From: everettsharp@...
Topic: 4951 Message: 4953

Dan,

We also put up a Horizontal loop for field day, it was 574' long. We feed it with 100' of 450 ladder line. We used a MFJ antenna tunner and it worked on all bands without any tuning issues. On Sunday morning it was used on 10 meters the balance of the day and worked very well.

Everett N8CNP

In a message dated 6/30/2015 12:23:07 P.M. Central Daylight Time, SkyWires@yahoogroups.com writes:

Greetings!
For Field Day this year our local group met at a ball park and were given permission to hang antennas from the light structures. We set up a large horizontal loop antenna using 4 light poles to give the loop a nearly-square layout. I measured the wire before it was hoisted up using a roller-wheel and we checked the resonance feeding it with coax at one of the corners. The resonant points were a bit too low, so we lowered/raised the antennas a few more times to get the dips in the ham bands. I suspect we ended up taking off about 25' more, so perhaps the roller wheel method of measuring was not too accurate.
I was pleased to see that, after tuning, the dips were where they were supposed to be and, being harmonically related as we go from 3550 to 7100, etc. Normally, at this point, I'd simply tap the "tune" button on my K3 to flatten out the elevated SWR. How ever, I noticed that towards the top of the bands (top of 75M, for instance), the SWR was quite high and I was concerned about feedline loss going through 100' of RG8. So, we swapped out the center insulator and fed it with 300 ohm window line through an MFJ-949E tuner (using a 4:1 balun inside the tuner).
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My apologies for asking what's likely been asked many times before:
- Do people who use large horizontal loop antennas typically feed them with coax or ladderline?
- If using ladderline, is a 1:1 or 4:1 (or some other value) balun typically used?
- If one uses a 1/4 wavelength piece of 75ohm feedline at the feedpoint to

convert the impedence, what effect does this have on higher-frequency bands (say if the loop were made for 80M with a 234/3.55 x VF matching section of 75ohm coax, what would the VSWR look like on 40M with us having two quarter waves there? It'd essentially be a half wave section of 75ohm coax on 40M which is "invisible" in the overall antenna system; right?)

Due to the issues we had I'm just trying to pick up on what we missed regarding using a horizontal loop on multiple bands. If the answer is to just use the loop on it's design frequency and not the harmonics, the large horizontal loop certainly wouldn't have been the right choice for us. We'd have been better off going with dipoles or OCFDs. That being said, it was quite fun hoisting the loop up to the 40' level and the birds loved a new place to perch, too. :-)

Thanks in advance for any guidance offered,

Dan / ab0re

4954. Re: [SkyWires] Field Day 565' loop - am I missing something?

Yahoo group: SkyWires
Date: 2015-06-30 20:47:12 UTC
From: WA8JXM
Topic: 4951 Message: 4954

I had a large (700') loop fed with open wire. It was extremely difficult to load on 160 and 80. The K3 did a fair job, the Palstart AT2K was very touchy and took several minutes if I could get a match at all. I cut it down to 600' and then 500' (approx). Same results. 4:1 or 1:1 balun, very little difference. It worked okay if I could get it loaded but it wasn't any better than my other antennas. The remnants of that loop are now a 160m OCFD which loads much easier and works all the bands from 160 to 6 (I had a 900 mile QSO on 6m today using it.)

I believe the problem is not the antenna as much as it is the transformer effect of the open wire line. A quarter wave 450 ohm open wire feedline will transform low impedance to high impedance and vice versa. It's not just a piece of low loss feedline, it is an impedance transformer.

Ken WA8JXM

Of course that is true of the feedline on an OCFD too.

On 30/06/2015 13:22, ab0re@... [SkyWires] wrote:
>
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> Greetings!
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> Thanks in advance for any guidance offered,
>
> Dan / ab0re
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>

4955. Re: [SkyWires] Field Day 565' loop - am I missing something?

Yahoo group: SkyWires
Date: 2015-06-30 20:28:02 UTC
From: Evan Rolek
Topic: 4951 Message: 4955

I feed my 40 m horizontal loop with 300 ohm transmitting twinlead for about 30 ft, then a 1:1 current balun, then about 50 ft of RG-213, to a Drake MN-2000 tuner, and works great as my primary monoband, 40 m antenna.

For all other bands I use an 80 m horizontal loop, fed with about 90 ft of 300 ohm transmitting twinlead, and then use a KW Matchbox, Palstar BT-1500A, as my monoband antenna (sometimes used on 40 m though).

Coax is fine for monoband configurations, transmitting 300 ohm twinlead, 450 ohm window line, or true open wire line, are perfect for multiband operation. When I use a balun, it is always a 1:1 current balun. I've never had an antenna where a 4:1 ratio would ever be better.

In a net on Sunday, some hams within 20 miles of me were using inverted Vs and dipoles, and had trouble hearing most of the stations in the net. Possibly due to propagation but the loop suppresses some of the noise and I heard all stations 5x9 (true value, not "contest" reports). Under adverse propagation conditions, I've found over the years that my loops have worked better than my vertical.

73,

Evan, K9SQG

-----Original Message-----
From: ab0re@... [SkyWires] <SkyWires@yahoogroups.com>
To: SkyWires <SkyWires@yahoogroups.com>
Sent: Tue, Jun 30, 2015 1:23 pm
Subject: [SkyWires] Field Day 565' loop - am I missing something?

Greetings!

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- If using ladderline, is a 1:1 or 4:1 (or some other value) balun typically used?

- If one uses a 1/4 wavelength piece of 75ohm feedline at the feedpoint to convert the impedence, what effect does this have on higher-frequency bands (say if the loop were made for 80M with a 234/3.55 x VF matching section of 75ohm coax, what would the VSWR look like on 40M with us having two quarter waves there? It'd essentially be a half wave section of 75ohm coax on 40M which is "invisible" in the overall antenna system; right?)

Due to the issues we had I'm just trying to pick up on what we missed regarding using a horizontal loop on multiple bands. If the answer is to just use the loop on it's design frequency and not the harmonics, the large horizontal loop certainly wouldn't have been the right choice for us. We'd have been better off going with dipoles or OCFDs. That being said, it was quite fun hoisting the loop up to the 40' level and the birds loved a new place to perch, too. :-)

Thanks in advance for any guidance offered,

Dan / ab0re

4956. New file uploaded to SkyWires

Yahoo group: SkyWires
Date: 2015-06-30 21:02:07 UTC
From: SkyWires@yahoogroups.com
Topic: 1641 Message: 4956

Hello,

This email message is a notification to let you know that
a file has been uploaded to the Files area of the SkyWires
group.

File : /Field Day 40 Meter Delta Loop.pdf
Uploaded by : everettsharp74 <everettsharp@...>
Description : Field Day 40 Meter Delta Loop balun experiment

You can access this file at the URL:
https://groups.yahoo.com/neo/groups/SkyWires/files/Field%20Day%2040%20Meter%20Delta%20Loop
.pdf

To learn more about file sharing for your group, please visit:
https://help.yahoo.com/kb/index?page=content&y=PROD_GRPS&locale=en_US&id=SLN15398

Regards,

everettsharp74 <everettsharp@...>

4957. Re: [SkyWires] Window feed through for coax, ladder line, etc..

Yahoo group: SkyWires
Date: 2015-06-30 21:17:05 UTC
From: Rich Schmuke
Topic: 4946 Message: 4957

Steve, you can use any noncorrosive studs , SS, brass or what ever for a pass thru with a polycarbonate sheet. Some people will go off on the deep end .about SS having a higher resistance than silver but it is only the length thru window, no big deal.
I agree with the banana plugs and grounding but I moved mine inside and have them at the balun, I also use a 4:1 or 1:1 switchable balun.
http://i1102.photobucket.com/albums/g453/KD0ZZ/4to11to12.jpg
One time I disconnected the coax from the balun to the tuner but did NOT plug in the ground and woke up in the middle of the night with a static discharge going, pop, pop, pop from the balun to the top of the tuner case.
My loop can build up quite a charge.
You are on the right track with a ground.

Rich, KdØzz

On Tue, Jun 30, 2015 at 11:25 AM, slr_65@... [SkyWires] <SkyWires@yahoogroups.com> wrote:

>
>
> Thank you Rich, I appreciate that!
>
> The upper window has a channel on the bottom to set over the screen, so it
> should set on the polycarbonate without needing the joint siliconed. I'll
> work on it this weekend I think.
>
> To bring the ladder line into the shack or not is the question though.
> I'm leaning towards doing that. I'm thinking I'll use banana jacks (good
> quality brass ones of course) at the window panel so I can quickly and
> easily unplug the ladder line from the current balun and ground it...we do
> get thunderstorms in Nebraska!
>
> I'll post back as the project develops.
>
> 73s,
>
> Steve KA0NEB
>
>

4959. Re: [SkyWires] Field Day 565' loop - am I missing something? [1 Attachment]

Yahoo group: SkyWires
Date: 2015-06-30 21:53:09 UTC
From: WA8JXM
Topic: 4951 Message: 4959

On 30/06/2015 17:24, Joe nss@... [SkyWires] wrote:
> but quarter wave on 160 is half wave on 80 so repeating whats at the
> other end.

Only if it is really a quarter wave. Random lengths (typical for "from the antenna to the shack") will have more or less random results.

Ken WA8JXM

4960. Re: [SkyWires] Window feed through for coax, ladder line, etc..

Yahoo group: SkyWires
Date: 2015-06-30 23:30:45 UTC
From: Skip Guenter
Topic: 4946 Message: 4960

Steve,

I used a piece of scrap 1x4 and then cut two pieces of aluminum sheet (home depot) to fit it. Screwed each sheet to the wood w/ about 8 or 10 small SS sheet metal screws on each side. I ran one (about 1/4") 3" piece of brass threaded rod thru both sides with nuts / washers and tied this to a ground rod on the outside with a few feet of some #6 (or is it #4?) solid copper wire (this ground rod is also tied to the service entry ground rod). On the inside my 'copper pipe' station ground connects to it.

I drilled holes and mounted seven 3" pass-thru SO-239s in it. That grounds the outside of those to earth ground which in turn grounds the shield of the coax at the pass thru. All the antenna coax comes to these and jumpers on the inside take them wherever they are currently plumbed up to. As antenna change over time it's easy to just re-jumper on the inside.

A small extra hole allows a rotor control cable thru. Mount balun on outside wall and a 3' jumper brings that to the pass-thru.

Mine is actually vertically oriented next to a window air unit in the garage but concept is same and provides needed grounding. This one has been in place for a couple of years now w/o issues.

Skip - K5SRG

On 06/30/2015 06:15 AM, Rich Schmuke rdj@... [SkyWires] wrote:
> Steve , your idea will work just fine. Let me give you a little
> information. Plexiglass will crack and split , no good for a pass
> thru. Use polycarbonate (trade name Lexan), you can saw it on a
> table saw, hand saw, file, drill & tap , shape it any way you want.
> http://i1102.photobucket.com/albums/g453/KD0ZZ/PassThru.jpg
> You can buy some at any big box store as shatter proof window
> replacement. Cut two strips for your pass thru, wider than you need,
> slip into the slot of you window and clear calk the over lap. Cut a
> little thin strip to take care of the gap where the open window over
> laps.
> Left over parts can be made into a tote for your 2M rig and power supply.
> http://i1102.photobucket.com/albums/g453/KD0ZZ/DSC00780.jpg
> The little scraps make good center mounts for a dipole, look around in
> my album and you will see a lot of polycarbonate used even the rack
> for my HF rig.
> http://i1102.photobucket.com/albums/g453/KD0ZZ/Kdzz.jpg
>
> Rich, KdØzz

>
> On Mon, Jun 29, 2015 at 6:44 PM, slr_65@...
> <mailto:slr_65@...> [SkyWires] <SkyWires@yahoogroups.com
> <mailto:SkyWires@yahoogroups.com>> wrote:
>
> Hi Guys,
>
> Everything I've done to this point is temporary, of course isn't
> everything temporary...unless it works! 8-)
>
> To feed the antenna to the shack I'm coming throuh a window as I
> don't want to put hole through the vynel siding and through the
> sheetrock.
>
> We have storm windows, there was an upper glass window that slid
> up a channel and it sat on a screen in the lower part of the
> channel, then there was a glass window that sat in a channel in
> front of the screen. Then of course there's the actual wood
> slider interior window.
>
> For now I've removed the storm windows and screen and rigged a
> couple boards to support the ladder line coming in and through.
>
> The xyl is rihtfully demanding that be cleaned up a bit...and it
> needs to be.
>
> OK, upper window can go back in, in place of the screen I'm
> thinking a piece of plexiglass as it could be easily drilled, cut,
> etc.. The wires feeding through is a question though, just
> silicone the penetration, or use some of that uv stable pipe
> insulation used on a/c unit lines to cushion/seal the hole?
>
> Once in I've seen where MFJ makes some window hookups, but they're
> kind of pricey. I'm thinking a simple wood frame with plexiglass
> screwed to it and then I could mount coax or ladder line hookups
> directly to it. I thought about masonite or something, if it were
> electrically insulative enough.
>
> Once in the window the shack desk is immediately to the right of
> the window and is 6' long so any feeds in the shack can be kept short.
>
> I have a balun being rewired to 1:1, should I bring the ladder
> line into the shack as I am now, or should I mount the balun to
> the back side of the window feed panel and hook it up there and
> bring coax on into the shack? If I bring the ladder line into the
> shack and have the balun in the shack then I could ground the loop
> during storms easily.
>
> I'm thinking of putting a couple coax feed throughs in the window
> panel and a set of banana jacks for the ladder line plus a ground bar.

>
> Nothing set in stone, just thinking out loud.
>
> The ladder comes from under the eaves and just hangs down until it
> enters the window, I'm thinking a hook in the eave with some
> dacron to a stake and then loosely securing the ladder line to the
> dacron to keep it from flopping around.
>
> Any thoughts, suggestions, etc. - I'd love to hear how you all
> route your wires and make it look xyl presentable. (part of my
> problem is the shack is in a room on the front of the house, I
> really gotta kick her out of her craft room and claim the back
> room for my radio stuff...but she's bigger than me, and
> meaner...8-D).
>
> Steve KA0NEB
>
>
>
>

--
S. R. 'Skip' Guenter, K5SRG
/3905cc 40m SSB Late Coord
Alt Dir, 5th Call Area
/

4961. Re: [SkyWires] Window feed through for coax, ladder line, etc..

Yahoo group: SkyWires
Date: 2015-07-01 00:50:21 UTC
From: Skip Guenter
Topic: 4946 Message: 4961

Steve,

I see somebody threw a couple envelopes in the 40m bureau for ya. Hope to catch you tonight on 40L @ 0400Z, 7.188.

Skip - K5SRG

On 06/30/2015 04:17 PM, Rich Schmuke rdj@... [SkyWires] wrote:

4962. Re: [SkyWires] Window feed through for coax, ladder line, etc..

Yahoo group: SkyWires
Date: 2015-07-01 01:49:07 UTC
From: slr_65@...
Topic: 4946 Message: 4962

Hi Skip,

Yeah, I gotta get to using the QSL bureaus and I LOVE that we can PayPal for envelopes and stuff with your group! It's also very nice we can download the roster. I participated in the 00:00 net last night. I'm not sure if I'll make the 04:00 tonight or not...I kinda stayed up too late last night and then couldn't get to sleep this morning (I'm taking high dose steroids and they're causing sleep issues). I did get a nap today, we'll see how I hold up as to whether I HF net at all tonight.

Thanks to all you guys that run the nets! It's much appreciated, maybe some day when I get up to speed on their operation, get a better signal out and little more accustomed and adapted to my new low vision I can figure a way to help out...I am the type who likes to get involved with the volunteer groups I join.

4964. Rapid disconnect for non-coax

Yahoo group: SkyWires
Date: 2015-07-01 03:33:58 UTC
From: Evan Rolek
Topic: 4951 Message: 4964

While I can and do disconnect my antenna connections in the shack, I also have rapid disconnects outside for my 300 ohm transmitting twinlead, and have used the same mechanism when I used 450 ohm window line. Basically I use banana plugs and jacks in weather-resistent boxes designed for 110 vac outlets. HOWEVER, one must be cautious with outdoor connections. The plugs and jacks that I use have nickel plating which resists corrosion. In addition, I use sparkplug boot release (a silicon based insulating grease designed for HV ignition systems) to coat the terminals. Not sure what the lifespan is but I have over 10 years on the originals and no problems running legal limit power. As a side note, I can get up from my easy chair, unplug the antennas, move the feedlines away from the house, and be back reading the newspaper all within 5 minutes. With onset of storms, disconnecting the antennas is quite easy.

73,

Evan, K9SQG

4965. RE: [SkyWires] Field Day 565' loop - am I missing something?

Yahoo group: SkyWires
Date: 2015-07-01 08:14:41 UTC
From: Rick - DJ0IP / NJ0IP
Topic: 4951 Message: 4965

Thanks for that Evan.
It is in line with my experience over the years.
I never had a loop permanently installed at home but have used it many times at field day and dxpeditions.
My conclusion was as your; the loop just seems to work better than other wire antennas at similar heights.
And it is usually quieter.

73 - Rick, DJ0IP
(Nr. Frankfurt am Main)

From: SkyWires@yahoogroups.com [mailto:SkyWires@yahoogroups.com]
Sent: Tuesday, June 30, 2015 10:28 PM
To: SkyWires@yahoogroups.com
Subject: Re: [SkyWires] Field Day 565' loop - am I missing something?

I feed my 40 m horizontal loop with 300 ohm transmitting twinlead for about 30 ft, then a 1:1 current balun, then about 50 ft of RG-213, to a Drake MN-2000 tuner, and works great as my primary monoband, 40 m antenna.

For all other bands I use an 80 m horizontal loop, fed with about 90 ft of 300 ohm transmitting twinlead, and then use a KW Matchbox, Palstar BT-1500A, as my monoband antenna (sometimes used on 40 m though).

Coax is fine for monoband configurations, transmitting 300 ohm twinlead, 450 ohm window line, or true open wire line, are perfect for multiband operation. When I use a balun, it is always a 1:1 current balun. I've never had an antenna where a 4:1 ratio would ever be better.

In a net on Sunday, some hams within 20 miles of me were using inverted Vs and dipoles, and had trouble hearing most of the stations in the net. Possibly due to propagation but the loop suppresses some of the noise and I heard all stations 5x9 (true value, not "contest" reports). Under adverse propagation conditions, I've found over the years that my loops have worked better than my vertical.

73,

Evan, K9SQG

-----Original Message-----
From: ab0re@... [SkyWires] <SkyWires@yahoogroups.com>
To: SkyWires <SkyWires@yahoogroups.com>
Sent: Tue, Jun 30, 2015 1:23 pm
Subject: [SkyWires] Field Day 565' loop - am I missing something?

Greetings!

For Field Day this year our local group met at a ball park and were given permission to hang antennas from the light structures. We set up a large horizontal loop antenna using 4 light poles to give the loop a nearly-square layout. I measured the wire before it was hoisted up using a roller-wheel and we checked the resonance feeding it with coax at one of the corners. The resonant points were a bit too low, so we lowered/raised the antennas a few more times to get the dips in the ham bands. I suspect we ended up taking off about 25' more, so perhaps the roller wheel method of measuring was not too accurate.

I was pleased to see that, after tuning, the dips were where they were supposed to be and, being harmonically related as we go from 3550 to 7100, etc. Normally, at this point, I'd simply tap the "tune" button on my K3 to flatten out the elevated SWR. How ever, I noticed that towards the top of the bands (top of 75M, for instance), the SWR was quite high and I was concerned about feedline loss going through 100' of RG8. So, we swapped out the center insulator and fed it with 300 ohm window line through an MFJ-949E tuner (using a 4:1 balun inside the tuner).

The loop seemed to work okay, but tuning was a bit finicky at places, even with the wide range MFJ-949E tuner. I suspect that's because the 4:1 balun dropped the impedence too low (some places it was showing ~13ohms, whereas others around 1000+ ohms). After seeing how the VSWR was all over the place when fed with ladderline through a 4:1 balun, I'm thinking we may not have made the correct choice. The idea of a loop antenna to use on multiple bands as they're harmonically related kind of blew up in my face, as VSWR at the edges of the band was so high that I didn't feel comfortable using coax, and using ladderl ine through the balun was finicky to tune, so likely it'd be outside of the tuning range of many internal tuners.

My apologies for asking what's likely been asked many times before:

- Do people who use large horizontal loop antennas typically feed them with coax or ladderline?

- If using ladderline, is a 1:1 or 4:1 (or some other value) balun typically used?

- If one uses a 1/4 wavelength piece of 75ohm feedline at the feedpoint to convert the impedence, what effect does this have on higher-frequency bands (say if the loop were made for 80M with a 234/3.55 x VF matching section of 75ohm coax, what would the VSWR look like on 40M with us having two quarter waves there? It'd essentially be a half wave section of 75ohm coax on 40M which is "invisible" in the overall antenna system; right?)

Due to the issues we had I'm just trying to pick up on what we missed regarding using a horizontal loop on multiple bands. If the answer is to just use the loop on it's design frequency and not the harmonics, the large horizontal loop certainly wouldn't have been the right choice for us. We'd have been better off going with dipoles or OCFDs. That being said, it was quite fun hoisting the loop up to the 40' level and the birds loved a new place to perch, too. :-)

Thanks in advance for any guidance offered,

Dan / ab0re

4966. RE: [SkyWires] Field Day 565' loop - am I missing something?

Yahoo group: SkyWires
Date: 2015-07-01 11:25:47 UTC
From: Rick - DJ0IP / NJ0IP
Topic: 4951 Message: 4966

This was really useful information, Don.

73 - Rick, DJ0IP

(Nr. Frankfurt am Main)

From: SkyWires@yahoogroups.com [mailto:SkyWires@...m]
Sent: Tuesday, June 30, 2015 7:37 PM

I tried the SKYLOOP with the 4:1 balun at the antenna and coax to the matchbox.

Then switched to 300 ohm and 1:1 balun to matchbox and was surprised at the 1 to 2 "S" unit improvement.

Dr. Don HC4/W4BWS

4967. Re: [SkyWires] Field Day 565' loop - am I missing something?

Yahoo group: SkyWires
Date: 2015-07-01 12:31:59 UTC
From: Rich Schmuke
Topic: 4951 Message: 4967

Dan, my loop is not square but a delta loop. It started out about the same length as you first try. Installed a 4:1 current balun at a corner , RG-8, then had to remove some to get a good SWR in the middle of the 40M band. The main use is 80 & 40. It preforms much better than my full size 40M vertical. I use the auto tuner on mt TS-590.

Rich, KdØzz

On Tue, Jun 30, 2015 at 12:22 PM, ab0re@... [SkyWires] <SkyWires@yahoogroups.com> wrote:

>
>
> Greetings!
>
>
>
> For Field Day this year our local group met at a ball park and were given
> permission to hang antennas from the light structures. We set up a large
> horizontal loop antenna using 4 light poles to give the loop a
> nearly-square layout. I measured the wire before it was hoisted up using a
> roller-wheel and we checked the resonance feeding it with coax at one of
> the corners. The resonant points were a bit too low, so we lowered/raised
> the antennas a few more times to get the dips in the ham bands. I suspect
> we ended up taking off about 25' more, so perhaps the roller wheel method
> of measuring was not too accurate.
>
>
>
> I was pleased to see that, after tuning, the dips were where they were
> supposed to be and, being harmonically related as we go from 3550 to 7100,
> etc. Normally, at this point, I'd simply tap the "tune" button on my K3 to
> flatten out the elevated SWR. However, I noticed that towards the top of
> the bands (top of 75M, for instance), the SWR was quite high and I was
> concerned about feedline loss going through 100' of RG8. So, we swapped
> out the center insulator and fed it with 300 ohm window line through an
> MFJ-949E tuner (using a 4:1 balun inside the tuner).
>
>
>
> The loop seemed to work okay, but tuning was a bit finicky at places, even
> with the wide range MFJ-949E tuner. I suspect that's because the 4:1 balun
> dropped the impedence too low (some places it was showing ~13ohms, whereas
> others around 1000+ ohms). After seeing how the VSWR was all over the
> place when fed with ladderline through a 4:1 balun, I'm thinking we may not
> have made the correct choice. The idea of a loop antenna to use on

> multiple bands as they're harmonically related kind of blew up in my face,
> as VSWR at the edges of the band was so high that I didn't feel comfortable
> using coax, and using ladderline through the balun was finicky to tune, so
> likely it'd be outside of the tuning range of many internal tuners.
>
>
>
> My apologies for asking what's likely been asked many times before:
>
>
>
> - Do people who use large horizontal loop antennas typically feed them
> with coax or ladderline?
>
>
>
> - If using ladderline, is a 1:1 or 4:1 (or some other value) balun
> typically used?
>
>
>
> - If one uses a 1/4 wavelength piece of 75ohm feedline at the feedpoint to
> convert the impedence, what effect does this have on higher-frequency bands
> (say if the loop were made for 80M with a 234/3.55 x VF matching section of
> 75ohm coax, what would the VSWR look like on 40M with us having two quarter
> waves there? It'd essentially be a half wave section of 75ohm coax on 40M
> which is "invisible" in the overall antenna system; right?)
>
>
>
> Due to the issues we had I'm just trying to pick up on what we missed
> regarding using a horizontal loop on multiple bands. If the answer is to
> just use the loop on it's design frequency and not the harmonics, the large
> horizontal loop certainly wouldn't have been the right choice for us. We'd
> have been better off going with dipoles or OCFDs. That being said, it was
> quite fun hoisting the loop up to the 40' level and the birds loved a new
> place to perch, too. :-)
>
>
>
> Thanks in advance for any guidance offered,
>
>
>
> Dan / ab0re
>
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>

4968. RE: [SkyWires] Field Day 565' loop - am I missing something?

Yahoo group: SkyWires
Date: 2015-07-01 13:15:14 UTC
From: Rick - DJ0IP / NJ0IP
Topic: 4951 Message: 4968

I support THIS answer.
Ken is right, the impedance can be all over the map.

The problem is, 450 Ohms is not always 450 Ohms and the velocity factor is rarely what we think it is. You should never assume the vendor gives you the correct number when you ask.

The best thing to do is the measure both with an analyzer.

73 - Rick, DJ0IP
(Nr. Frankfurt am Main)

From: SkyWires@yahoogroups.com [mailto:SkyWires@yahoogroups.com]
Sent: Tuesday, June 30, 2015 11:53 PM

Only if it is really a quarter wave. Random lengths (typical for "from the antenna to the shack") will have more or less random results.

Ken WA8JXM

4969. Re: [SkyWires] Field Day 565' loop - am I missing something?

Yahoo group: SkyWires
Date: 2015-07-01 13:58:22 UTC
From: ab0re@...
Topic: 4951 Message: 4969

Thanks everybody for the helpful info on the horizontal loop concerns I was having. Next time I'll try a 1:1 balun at the tuner vs a 4:1 and still feed the loop with ladderline, or perhaps ditch the loop all together to go with a different multiband antenna such as the OCFD.

As many have pointed out the impedence transformation feeding the loop with ladderline is likely what gave me headaches..... some bands it seemed like a 4:1 would be beneficial, whereas other bands (80M in particular) it would drop the impedence too low. Perhaps the ideal would be a switchable 1:1 / 4:1 balun. I noticed Elecraft offers one, but it doesn't look too hefty compared to the offerings from Balun Designs, etc (the core is pretty small). It would be nice to find a workable solution that'd be well within the range of my K3s built in auto tuner so I had one less piece of equipment to haul to field day.

73,
Dan / ab0re

4970. AW: [SkyWires] Field Day 565' loop - am I missing something?

Yahoo group: SkyWires
Date: 2015-07-01 15:11:34 UTC
From: siegfried jackstien
Topic: 4951 Message: 4970

It is easy to homebrew a switchable 1:1/1:4 balun ...

What I did is I use 2 different length of ladderline (and no switchable balun) ... added length is switched in with just 2 banana plugs

The loop represents a low impedance on the 2 lower bands (for me 160 and 80) ... and with a quarterave line I transform that up in the range of 400 to 500 ohms ... and then back down with a 1:9 ... on higher bands the swr is always well below 1:3 (some exactly spot on 1:1!!) ...

So I have about 18m from loop to shack and add another 20m in between for 160 (and some of the higher bands)

On some bands the short run and on some bands the longer run is needed

Greetz

Sigi

Dg9bfc

> -----Ursprüngliche Nachricht-----
> Von: SkyWires@yahoogroups.com [mailto:SkyWires@yahoogroups.com]
> Gesendet: Mittwoch, 1. Juli 2015 13:58
> An: SkyWires@yahoogroups.com
> Betreff: Re: [SkyWires] Field Day 565' loop - am I missing something?
>
>
>
> Thanks everybody for the helpful info on the horizontal loop concerns I
> was having. Next time I'll try a 1:1 balun at the tuner vs a 4:1 and
> still feed the loop with ladderline, or perhaps ditch the loop all
> together to go with a different multiband antenna such as the OCFD.
>
>
>
> As many have pointed out the impedence transformation feeding the loop
> with ladderline is likely what gave me headaches..... some bands it seemed
> like a 4:1 would be beneficial, whereas other bands (80M in particular) it
> would drop the impedence too low. Perhaps the ideal would be a switchable
> 1:1 / 4:1 balun. I noticed Elecraft offers one, but it doesn't look too
> hefty compared to the offerings from Balun Designs, etc (the core is
> pretty small). It would be nice to find a workable solution that'd be
> well within the range of my K3s built in auto tuner so I had one less
> piece of equipment to haul to field day.
>
>

>
> 73,
>
> Dan / ab0re
>
>
>

4971. RE: [SkyWires] Field Day 565' loop - am I missing something?

Yahoo group: SkyWires
Date: 2015-07-01 15:19:41 UTC
From: Rick - DJ0IP / NJ0IP
Topic: 4951 Message: 4971

Dan,

Building a switchable balun is a piece of cake… provided you can find a heavy duty switch, or hefty relays.
The wiring is dirt simple.

The most important part is, you MUST use dual cores, not a single core.
The single core is liable to cause common mode current issues.

Take a look at the second drawing on my web page:
http://www.dj0ip.de/balun-stuff/1-vs-2-core-baluns/

Here you see two toroids, each wrapped with a bifilar transmission line (may also be twisted pair).
Look carefully to the wiring on the input, vs. the output side.
The inputs are in parallel, the outputs are in series.

All you have to do is device a method to switch the output side from series to parallel and you have a 1:1 balun.

Now the icing on the cake.
If you also device a way to switch the input side from parallel to series, you will have a 3-way balun:
4:1 / 1:1 / 1:4

Why might we need a 1:4?

Well if space is tight, put up a 40m one wavelength loop.
For normal operations, the entire loop is a closed loop.
For 80m operations, if you open the corner opposite the feedpoint, it will work nicely on 80m.
Only problem is, the feedpoint impedance is just 12.5 Ohms (plus/minus depending on height, ground, etc.).
Here you can use the 1:4 balun to transform the 12.5 Ohms up to 50 Ohms.
Voila!

If I were doing this, I would use two FT-240=43 toroids for up to about 750 watts.
For more power you will need 4 toroids, stacking a pair together for each half of the balun.

73 - Rick, DJ0IP
(Nr. Frankfurt am Main)

From: SkyWires@yahoogroups.com [mailto:SkyWires@yahoogroups.com]
Sent: Wednesday, July 01, 2015 3:58 PM
To: SkyWires@yahoogroups.com
Subject: Re: [SkyWires] Field Day 565' loop - am I missing something?

Thanks everybody for the helpful info on the horizontal loop concerns I was having. Next time I'll try a 1:1 balun at the tuner vs a 4:1 and still feed the loop with ladderline, or perhaps ditch the loop all together to go with a different multiband antenna such as the OCFD.

As many have pointed out the impedence transformation feeding the loop with ladderline is likely what gave me headaches..... some bands it seemed like a 4:1 would be beneficial, whereas other bands (80M in particular) it would drop the impedence too low. Perhaps the ideal would be a switchable 1:1 / 4:1 balun. I noticed Elecraft offers one, but it doesn't look too hefty compared to the offerings from Balun Designs, etc (the core is pretty small). It would be nice to find a workable solution that'd be well within the range of my K3s built in auto tuner so I had one less piece of equipment to haul to field day.

73,
Dan / ab0re

4972. Re: [SkyWires] Field Day 565' loop - am I missing something?

Yahoo group: SkyWires
Date: 2015-07-01 21:37:46 UTC
From: hmlong@...
Topic: 4951 Message: 4972

The horizontal loop is an excellent radiator which does not have to be resonant or a square to radiate but needs appropriate low loss driving point impedance matching to work efficiently. Also, maximizing the area inside of the loop will yield optimal results.

Evan's setup with a Palstar BT1500 true balanced antenna tuner and a 1:1 current balun on the input (between the xmtr and the tuning elements) instead of on the tuner output (between the tuning elements and the feedline) with open wire feedline is the optimal way to go.

Most tuners (T type) use 4:1 baluns at the tuner output which is not as efficient when incurring widely varying fundamental band to other band impedance on its output, such as a loop. (Part of the frustration I read in this post.) Most rigs use internal T type tuners too. Unlike the 4:1 balun on the output of a tuner, the 1:1 current balun placed between the rig and the tuning elements will always see its 50ohm designed load - in and out. A true balanced roller inductor tuner transforms the widely varying loads at the feedpoint to the 50 ohm current balun by moving the tuning capacitor across the output for Hi Z and switching it across the input for Lo Z matching. - See the Palstar BT1500 schematic for example at http://www.palstar.com/en/product-manuals/manual_bt1500a.pdf http://www.palstar.com/en/product-manuals/manual_bt1500a.pdf This setup is optimal for multiband operation but you can’t change bands on the fly with a push of a button.
What say?
73 Hank N2MU ...-.- ..

4973. RE: [SkyWires] Field Day 565' loop - am I missing something?

Yahoo group: SkyWires
Date: 2015-07-02 08:30:14 UTC
From: Rick - DJ0IP / NJ0IP
Topic: 4951 Message: 4973

Sorry Hank, but this statement is incorrect.

You wrote:

"Evan's setup with a Palstar BT1500 true balanced antenna tuner and a 1:1 current balun on the input (between the xmtr and the tuning elements) instead of on the tuner output (between the tuning elements and the feedline) with open wire feedline is the optimal way to go."

THIS IS VERY WRONG.

I understand many people believe this, but the real gurus of the industry explain why it is wrong.
You need only read W8JI's explanation or VK2OD's explanation.

Or as Tom Rauch, W8JI put it, "Ironically, moving the balun to the input only works when the balun is not needed!"

THE TUNER-BALUN MUST ALWAYS BE 1:1 CURRENT BALUN AND ON THE ANT SIDE - NO MATTER WHAT!

Also, it should NEVER be located inside of the antenna tuner. It needs to be external and in a non-conductive enclosure, such as plastic.

The two explanations why this is so are long but if you seriously believe the balun belongs on the TX side, you need to read these and either agree or come up with some darn good technical arguments why these two gurus are wrong.

VK2OD: http://owenduffy.net/blog/?p=4578
W8JI: http://www.w8ji.com/tuner_baluns.htm

The W8JI pages are very technical.
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Palstar finally got the message and in the newest BT-1500 has removed the balun from inside the enclosure and now offers a choice of two external baluns.

Slowly but surely the industry is progressing.

73 - Rick, DJ0IP
(Nr. Frankfurt am Main)

From: SkyWires@yahoogroups.com [mailto:SkyWires@yahoogroups.com]
Sent: Wednesday, July 01, 2015 11:38 PM
To: SkyWires@yahoogroups.com
Subject: Re: [SkyWires] Field Day 565' loop - am I missing something?

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What say?
73 Hank N2MU ...-.- ..

4974. RE: [SkyWires] Field Day 565' loop - am I missing something?

Yahoo group: SkyWires
Date: 2015-07-02 08:52:35 UTC
From: Rick - DJ0IP / NJ0IP
Topic: 4951 Message: 4974

Again, replying to my own post:

It is not wrong to have a 1:1 current balun on the input side, but it must not be the only balun.

You MUST have a balun between the matchbox and antenna to keep common mode current out of the equipment.

Failure to do so can result in the tuner being very “hot” (RF-wise).

73 - Rick, DJ0IP

(Nr. Frankfurt am Main)

From: SkyWires@yahoogroups.com [mailto:SkyWires@yahoogroups.com]
Sent: Thursday, July 02, 2015 10:30 AM
To: SkyWires@yahoogroups.com
Subject: RE: [SkyWires] Field Day 565' loop - am I missing something?

Sorry Hank, but this statement is incorrect.

You wrote:

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Also, it should NEVER be located inside of the antenna tuner. It needs to be external and in a non-conductive enclosure, such as plastic.

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4975. AW: [SkyWires] Field Day 565' loop - am I missing something?

Yahoo group: SkyWires
Date: 2015-07-02 09:00:34 UTC
From: siegfried jackstien
Topic: 4951 Message: 4975

Hmmm ... you also can use an unbalanced tuner (balun on input)

I have seen several hams use that ...

A kelllermann balun on input of tuner

A hefty roller inductor and a hefty variable cap

That□s all

3 parts

A balun, a coil and a cap

Dg9bfc

Sigi

> -----Ursprüngliche Nachricht-----
> Von: SkyWires@yahoogroups.com [mailto:SkyWires@yahoogroups.com]
> Gesendet: Donnerstag, 2. Juli 2015 08:53
> An: SkyWires@yahoogroups.com
> Betreff: RE: [SkyWires] Field Day 565' loop - am I missing something?
>
>
>
> Again, replying to my own post:
>
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> It is not wrong to have a 1:1 current balun on the input side, but it must
> not be the only balun.
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> Failure to do so can result in the tuner being very □hot□ (RF-wise).
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> (Nr. Frankfurt am Main)
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>
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> From: SkyWires@yahoogroups.com [mailto:SkyWires@yahoogroups.com]
> Sent: Thursday, July 02, 2015 10:30 AM
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> Also, it should NEVER be located inside of the antenna tuner. It needs to
> be external and in a non-conductive enclosure, such as plastic.
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> What say?
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4976. RE: [SkyWires] Field Day 565' loop - am I missing something?

Yahoo group: SkyWires
Date: 2015-07-02 09:37:18 UTC
From: Rick - DJ0IP / NJ0IP
Topic: 4951 Message: 4976

That is correct and clearly described in Owen Duffy□s long document I recommended everyone read.

HOWEVER the fallacy is, most people believe they need a 4:1 balun. This is wrong.

Owen explains why.

So does Tom Rauch (W8JI).

73 - Rick, DJ0IP

(Nr. Frankfurt am Main)

From: SkyWires@yahoogroups.com [mailto:SkyWires@yahoogroups.com]
Sent: Thursday, July 02, 2015 11:01 AM
To: SkyWires@yahoogroups.com
Subject: AW: [SkyWires] Field Day 565' loop - am I missing something?

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I have seen several hams use that ...

A kelllermann balun on input of tuner

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A balun, a coil and a cap

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Sigi

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4977. Re: [SkyWires] Field Day 565' loop - am I missing something?

Yahoo group: SkyWires
Date: 2015-07-02 12:23:22 UTC
From: enkitec@...
Topic: 4951 Message: 4977

It seems you are describing the PA0FRI S-Match antenna tuner.

http://pa0fri.home.xs4all.nl/ATU/Smatch/smatcheng.htm

73, Mark Jordan PY3SS

On 02-Jul-15 06:00, 'siegfried jackstien' siegfried.jackstien@...
[SkyWires] wrote:
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> Hmmm ... you also can use an unbalanced tuner (balun on input)
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> I have seen several hams use that ...
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> A kelllermann balun on input of tuner
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> That’s all
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> 3 parts
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> A balun, a coil and a cap
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> Dg9bfc
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> Sigi
>

4978. Palstar BT-1500A

Yahoo group: SkyWires
Date: 2015-07-02 18:52:41 UTC
From: Evan Rolek
Topic: 4951 Message: 4978

Information on the Palstar BT-1500A at the Palstar website and dealer information is consistent, that balanced line tuner still has the balun on the input, between the "tuner" and the transmitter, and that balun is inside the BT-1500A. There is no mention of an external balun for this tuner. However, external 1:1 and 4:1 baluns are mentioned in the information for some of the other Palstar tuners. Obviously something has changed and Palstar might have a balun external to that BT-1500A but I'm unable to find any documentation online; eventually it will appear I suspect.

73,

Evan, K9SQG

-----Original Message-----
From: 'Rick - DJ0IP / NJ0IP' Rick@... [SkyWires] <SkyWires@yahoogroups.com>
To: SkyWires <SkyWires@yahoogroups.com>
Sent: Thu, Jul 2, 2015 4:52 am
Subject: RE: [SkyWires] Field Day 565' loop - am I missing something?

Again, replying to my own post:

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73 Hank N2MU ...-.- ..

4979. Re: AW: [SkyWires] Re: Steve's City tree Loop

Yahoo group: SkyWires
Date: 2015-07-03 06:08:15 UTC
From: slr_65@...
Topic: 4924 Message: 4979

I was working on QSL cards tonight, trying to get caught up...I'm spending too much time on the 20 and 40 meter nets ig seems. 8-)

A friend just put a G6RV jr up and was playing and we were talking on the repeater...the Czech Republic was on 20 meters, he couldn't rouse them, so I gave them a call...and logged them! Easily! 8-) Spun the dial and the Slovak Republic was calling CQ DX...logged them too!

My buddy is now scoping trees for a loop! 8-D

4980. RE: AW: [SkyWires] Re: Steve's City tree Loop

Yahoo group: SkyWires
Date: 2015-07-03 06:38:34 UTC
From: Rick - DJ0IP / NJ0IP
Topic: 4924 Message: 4980

The G 5 RV is a simple compromise antenna that is not particularly good.
People believing it is good, based on what they have worked have obviously never used a good antenna.

It has its place in ham radio back yards.
In some cases it requires less space to get on certain bands than other similar antennas.
But there is a price for this! (Performance)

The loop is totally different.
There is a price for the loop too: yard space.
But your are rewarded with performance

73 - Rick, DJ0IP
(Nr. Frankfurt am Main)

From: SkyWires@yahoogroups.com [mailto:SkyWires@yahoogroups.com]
Sent: Friday, July 03, 2015 8:08 AM
To: SkyWires@yahoogroups.com
Subject: Re: AW: [SkyWires] Re: Steve's City tree Loop

I was working on QSL cards tonight, trying to get caught up...I'm spending too much time on the 20 and 40 meter nets ig seems. 8-)

A friend just put a G6RV jr up and was playing and we were talking on the repeater...the Czech Republic was on 20 meters, he couldn't rouse them, so I gave them a call...and logged them! Easily! 8-) Spun the dial and the Slovak Republic was calling CQ DX...logged them too!

My buddy is now scoping trees for a loop! 8-D

4981. Re: AW: [SkyWires] Re: Steve's City tree Loop

Yahoo group: SkyWires
Date: 2015-07-03 08:49:12 UTC
From: Hans Remeeus
Topic: 4924 Message: 4981

Hello Rick,

What could be the reason that I *always* agree with you?

Your posts are marvelous! Keep them rolling!

73, Hans.

Vriendelijke groeten,
Hans Remeeus (PA1HR/OE3JRC)
http://www.remeeus.eu
http://www.hansremeeus.nl
Communication is about people, the rest is technology.

'Rick - DJ0IP / NJ0IP' Rick@... [SkyWires] schreef op 3-7-2015 om
08:38:
> The G 5 RV is a simple compromise antenna that is not particularly good.
> People believing it is good, based on what they have worked have obviously never used a
good antenna.
>
> It has its place in ham radio back yards.
> In some cases it requires less space to get on certain bands than other similar antennas.
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>
>
>
>
> ------------------------------------
> Posted by: "Rick - DJ0IP / NJ0IP" <Rick@...>
> ------------------------------------
>
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> ------------------------------------
>
> Yahoo Groups Links
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4982. RE: AW: [SkyWires] Re: Steve's City tree Loop

Yahoo group: SkyWires
Date: 2015-07-03 09:18:42 UTC
From: Rick - DJ0IP / NJ0IP
Topic: 4924 Message: 4982

Well Hans, then you are also sometimes wrong because I am sometimes wrong.

I was just reading a WiMo catalog today and reading about Palstar matchboxes.

Yesterday I answered an email and I was WRONG.

I am going to write another mail now and correct that.

It was nice finally meeting you in Friedrichshafen last week.

73 - Rick, DJ0IP

(Nr. Frankfurt am Main)

From: SkyWires@yahoogroups.com [mailto:SkyWires@yahoogroups.com]
Sent: Friday, July 03, 2015 10:49 AM
To: SkyWires@yahoogroups.com
Subject: Re: AW: [SkyWires] Re: Steve's City tree Loop

Hello Rick,

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73, Hans.

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My buddy is now scoping trees for a loop! 8-D

Posted by: "Rick - DJ0IP / NJ0IP" <mailto:Rick@...> <Rick@...>

Yahoo Groups Links

4983. AW: AW: [SkyWires] Re: Steve's City tree Loop

Yahoo group: SkyWires
Date: 2015-07-03 09:20:36 UTC
From: siegfried jackstien
Topic: 4924 Message: 4983

... easy answer ... cause rick knows what he writes about

And most of them is not only by reading books or home pages from others ...
but also from real experiences and tests

Dg9bfc

Sigi

> -----Ursprüngliche Nachricht-----
> Von: SkyWires@yahoogroups.com [mailto:SkyWires@yahoogroups.com]
> Gesendet: Freitag, 3. Juli 2015 08:49
> An: SkyWires@yahoogroups.com
> Betreff: Re: AW: [SkyWires] Re: Steve's City tree Loop
>
>
>
>
> Hello Rick,
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> Your posts are marvelous! Keep them rolling!
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> 73, Hans.
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> Vriendelijke groeten,
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> and the Slovak Republic was calling CQ DX...logged them too!
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> My buddy is now scoping trees for a loop! 8-D
>
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>
>
> ------------------------------------
> Posted by: "Rick - DJ0IP / NJ0IP" <Rick@DJ0IP.de>
> <mailto:Rick@...>
> ------------------------------------
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> ------------------------------------
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> Yahoo Groups Links
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4984. BT-1500 and Tuner Baluns

Yahoo group: SkyWires
Date: 2015-07-03 09:34:19 UTC
From: Rick - DJ0IP / NJ0IP
Topic: 4924 Message: 4984

In one of my replies yesterday concerning Tuner Baluns, someone mentioned the BT-1500 and that its balun is on the TX-side "where it belongs."

Normally when we speak of "Tuner Baluns", we are referring to baluns used together with an ASYmmetrical Tuner when feeding it with balanced openwire.

I said we must ALWAYS use a 1:1 Guanella Balun on the ANT side, not the TX side.
This applies to using with asymmetrical tuners.

The Palstar BT-1500 is a "Symmetrical Tuner", NOT an "Asymmetrical Tuner" which means it was designed to connect to a balanced line. As such, it does not require any balun at all on the ANT side. (I confused it with the AT-1500 which Palstar no longer makes.)

Placing a balun (in this case Guanella choke) on the TX side is always a good idea with any tuner, symmetrical or asymmetrical, and I do this with every tuner I have, albeit I use an external choke. In this case, Palstar already has on built in.

I like the BT1500 quite a bit and consider it to be one of the best truly balanced tuners on the market today. Unfortunately there are very few balanced tuners to choose from, and no link-coupled tuner that I know of.

I stand by my statement on which side of the tuner a balun belongs, but this refers to ASYMMETRICAL tuners, not symmetrical tuners.

You will find a very comprehensive list of symmetrical tuner, both past and present on my web site:

High Power:
www.dj0ip.de/antenna-matchboxes/symmetrical-matchboxes/high-power-atu-s/

Low Power:
www.dj0ip.de/antenna-matchboxes/symmetrical-matchboxes/low-power-atu-s/

Sorry for any confusion I may have caused.

73 - Rick, DJ0IP
(Nr. Frankfurt am Main)

4985. AW: [SkyWires] BT-1500 and Tuner Baluns

Yahoo group: SkyWires
Date: 2015-07-03 09:43:00 UTC
From: siegfried jackstien
Topic: 4924 Message: 4985

I nearly fell of my chair yesterday ... but you corrected that today :-) ...
grin

Greetz

Sigi

Ps ... I later realized that you meant those asymmetrical t tuners with the
1:4 on the outside cause nearly all tuners are made that way now ... with
the bt as a BIG exception!!!

> -----Ursprüngliche Nachricht-----
> Von: SkyWires@yahoogroups.com [mailto:SkyWires@yahoogroups.com]
> Gesendet: Freitag, 3. Juli 2015 09:34
> An: SkyWires@yahoogroups.com
> Betreff: [SkyWires] BT-1500 and Tuner Baluns
>
>
>
> In one of my replies yesterday concerning Tuner Baluns, someone mentioned
> the BT-1500 and that its balun is on the TX-side "where it belongs."
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> together with an ASYmmetrical Tuner when feeding it with balanced
> openwire.
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> side.
> This applies to using with asymmetrical tuners.
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> Sorry for any confusion I may have caused.
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> 73 - Rick, DJ0IP
> (Nr. Frankfurt am Main)
>
>
>
>

4986. RE: [SkyWires] BT-1500 and Tuner Baluns

Yahoo group: SkyWires
Date: 2015-07-03 10:11:52 UTC
From: Rick - DJ0IP / NJ0IP
Topic: 4924 Message: 4986

Sigi, the least you could do is send me a private email when I say something silly like that and tell me I☐m fulla-bulla! (hi)

I think my head was on backwards yesterday.

Seriously though, I mixed it up with a normal T-Network that Palstar used to make which was also a 1500, but ☐AT☐, not ☐BT☐.

Palstar at least figured out that the balun NEVER belongs inside the matchbox.

It MUST always be external.

Owen explains why that is, very clearly in his blog (see link sent yesterday).

Palstar offer two external high power baluns for use with their asymmetrical tuners, a 1:1 and a 4:1.

I have heard (but I do not know if true or not) that the Palstar baluns are not very good and that one should rather choose a known good balun such as the Balun Designs Model 1113t ($60).

While in Friedrichshafen I wanted to find out and came armed with a screwdriver, but the dealer would not let me take apart the Palstar balun and look. BUYER BEWARE.

Whenever a dealer or OEM will not let me look inside, I have to assume he has something to hide.

Good balun OEMs such as Balun Designs shows you pictures inside of every product they build!

Believing that OEMs manufacturing baluns know what they are doing is like believing that every politician we elect is an honest man or woman. ☐We☐ have to know what we are doing and tell them what we want. If they can☐t deliver, find someone else who can.

73 - Rick, DJ0IP

(Nr. Frankfurt am Main)

From: SkyWires@yahoogroups.com [mailto:SkyWires@yahoogroups.com]
Sent: Friday, July 03, 2015 11:43 AM
To: SkyWires@yahoogroups.com
Subject: AW: [SkyWires] BT-1500 and Tuner Baluns

I nearly fell of my chair yesterday ... but you corrected that today :-) ... grin

Greetz

Sigi

Ps ... I later realized that you meant those asymmetrical t tuners with the 1:4 on the outside cause nearly all tuners are made that way now ... with the bt as a BIG exception!!!

> -----Ursprüngliche Nachricht-----
> Von: SkyWires@yahoogroups.com [mailto:SkyWires@yahoogroups.com]
> Gesendet: Freitag, 3. Juli 2015 09:34
> An: SkyWires@yahoogroups.com
> Betreff: [SkyWires] BT-1500 and Tuner Baluns
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> Sorry for any confusion I may have caused.
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> 73 - Rick, DJ0IP
> (Nr. Frankfurt am Main)
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>

4987. AW: [SkyWires] BT-1500 and Tuner Baluns

Yahoo group: SkyWires
Date: 2015-07-03 10:36:16 UTC
From: siegfried jackstien
Topic: 4924 Message: 4987

Hmmm ... a good manufacturer would show its tuner either with an open case
... or with a plexi-glass case on a ham fair like Friedrichshafen

(I would do that ... just to show visitors how well it is built ... with how
big parts it is made ... build "like a tank" etc.)

... wrong tool ... you wanted to use a screw driver??

Makita lipo electric drill ... 18v ... switched to fast gear

And see the screws flying trough the complete room

Grin

... yepp sometimes even YOU are a bit hulla bulla ... hi hi

Information overload from friedrichshafen I guess :-)

Greetz

Sigi

Dg9bfc

> -----Ursprüngliche Nachricht-----
> Von: SkyWires@yahoogroups.com [mailto:SkyWires@yahoogroups.com]
> Gesendet: Freitag, 3. Juli 2015 10:12
> An: SkyWires@yahoogroups.com
> Betreff: RE: [SkyWires] BT-1500 and Tuner Baluns
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> Sigi, the least you could do is send me a private email when I say
> something silly like that and tell me I□m fulla-bulla! (hi)
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> I think my head was on backwards yesterday.
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> Seriously though, I mixed it up with a normal T-Network that Palstar used
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> (Nr. Frankfurt am Main)
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> From: SkyWires@yahoogroups.com [mailto:SkyWires@yahoogroups.com]
> Sent: Friday, July 03, 2015 11:43 AM
> To: SkyWires@yahoogroups.com
> Subject: AW: [SkyWires] BT-1500 and Tuner Baluns
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>

>
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> I nearly fell of my chair yesterday ... but you corrected that today :-)
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>
> Greetz
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> Ps ... I later realized that you meant those asymmetrical t tuners with
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> 1:4 on the outside cause nearly all tuners are made that way now ... with
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> > 73 - Rick, DJ0IP
> > (Nr. Frankfurt am Main)
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> >
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>

4988. Re: BT-1500 and Tuner Baluns

Yahoo group: SkyWires
Date: 2015-07-03 12:56:42 UTC
From: hmlong@...
Topic: 4924 Message: 4988

Rick,
I'm the guy that you "flamed" when I choose to share my information with the group regarding my recommendation of the 1:1 balun on the balanced tuner input instead of the output. You said that it was "very wrong."

Well, I see that you corrected yourself and saved me from trying to figure a way to correct your misstatement. The balanced tuner setup is an excellent performer that I have used on my ~550ft loop.

My exploration of information regarding baluns coincides with Jerry Sevick W2FMI's (now unfortunately an SK) book on transmission line transformers and his other writings which I found interesting, and compelling wherein he used Ruthroff's mathematical loop equation derivations; expanded and applied it to balun design, and followed up with empirical results of various constructed balun/choke designs.

Fundamentally resonant long wire loop antennas generally exhibit a workable reactive component at harmonically related frequencies, and hovering typically between 30 and 200 ohms given a decent height above ground. This can be detrimental to balun efficiency while still being reachable to a "T" unbalanced tuner. That is why I prefer the balanced tuner setup with open wire line.

However, sacrificing a few db and using an internal rig T tuner with a balun is very convenient for push button on the fly tuning.

Happy 4th to all state side
73 Hank N2MU ...-.- ..

4989. RE: [SkyWires] Re: BT-1500 and Tuner Baluns

Yahoo group: SkyWires
Date: 2015-07-03 14:23:28 UTC
From: Rick - DJ0IP / NJ0IP
Topic: 4924 Message: 4989

GM Hank,

I certainly apologize to you.

I was pre-heated by a recent article in QST which showed the balun at the wrong side of the tuner.

The misleading point here were words “tuner balun”.
I have never seen anyone speak of a tuner balun for a balanced matchbox.
Normally we are speaking of unbalanced or asymmetrical matchboxes when we speak of tuner baluns.

The balun must be at the point where the change between balanced and unbalanced occurs and with the BT-1500 it is after the matching has completed, on the TX side of the matchbox.

With most matchboxes used in this application, this point is where the transmission line meets the tuner. That’s why it’s called Tuner balun.

As recently as a month ago, Dean Straw had an article published in QST, placing the tuner balun on the TX side of the tuner. Now Dean is arguably one of the smartest men on the planed when it comes to antenna technology. Most of what I know about antennas and transmission lines, I learned from books that he wrote, but nobody knows it all. Apparently he has never worked much with openwire antennas and high power. He got that data point wrong and has mislead a lot of people with that article.

Besides the technical proof to the contrary, (W8JI, G3TXQ, VK2OD), I have the [RF] burnt fingers to prove he’s wrong.
If running an asymmetrical tuner and full legal power, try it both ways, and with all sorts of different openwire fed antennas.
You’ll soon see/feel where the balun belongs!

You have to be careful with Sevick.
No one has written a better book on baluns than his two books on TLTs and building and using baluns, but they are not flawless. He did a great job of showing us just how to build all kinds of baluns but a poor job of pointing out just when to use each of the different kinds. I don't think it was even the intention of the book to do so.
This not only leaves room for [mis]interpretation, it is in practice quite often misinterpreted, then quoted as proof of being right because Sevick said so.

A good example of how this can work against us is with the case of the 4:1 Guanella balun. Sevick show how to build a single core and a dual core version of the 4:1 Guanella, yet never implies that there might be any difference in their usage, when indeed there is significant difference.

The single core works like a champ in networks with floating transmission lines, but can break down entirely in antenna applications. At that point it doesn't fulfill the job of a balun.

This is because hf antenna all have a relationship to ground and are definitely not floating. When ground is introduced to the single core, it not only fails to impede common mode current, it actually generates CMC!

Yet for many years, in fact to this day, most balun manufacturers have no clue about this and every company I know of selling OCFD antennas uses the single core version, which is the major cause of malfunction of OCFD antennas. IMO, that is why the OCFD antenna has such a flaky reputation - misinterpretation of Sevick and then failure to deploy the correct type of balun.

I personally have always been a fan of the link-coupled tuner, such as the Johnson Viking Matchbox or the improved version of it built by Annecke in the 1980s and 90s. We had far less trouble with common mode current using these than we did with any other tuner design.

Since I always had two openwire fed antennas and only one high power (Annecke) symmetrical tuner, the second antenna had to use a tuner and balun. I tried all kinds* of commercial and home brew tuners and all kinds of baluns (the ones recommended by the “exerts”, called “Remote Balun”). I burned up a slew of baluns as well as burnt my fingers and lips all the time.
(*never tried a balanced T or balanced L tuner; I don't know if they even existed back then).

Finally about 15 years ago, K4TAX instructed me to only use a 1:1 current balun on the ANT side of the tuner, and when I did, all of those problems magically went away.

The skyloop only varies between 30 to 200 Ohms, though feedline length can transform that. The situation gets worse when feeding a resonant dipole on an even harmonic frequency. Here the impedance can be thousands of ohms at the feedpoint and all over the map at the TX end of the feedline.

73 - Rick, DJ0IP
(Nr. Frankfurt am Main)

From: SkyWires@yahoogroups.com [mailto:SkyWires@yahoogroups.com]
Sent: Friday, July 03, 2015 2:57 PM
To: SkyWires@yahoogroups.com
Subject: [SkyWires] Re: BT-1500 and Tuner Baluns

Rick,
I’m the guy that you “flamed” when I choose to share my information with the group regarding my recommendation of the 1:1 balun on the balanced tuner input instead of the output. You said that it was “very wrong.”

Well, I see that you corrected yourself and saved me from trying to figure a way to correct your misstatement. The balanced tuner setup is an excellent performer that I have used on my ~550ft loop.

My exploration of information regarding baluns coincides with Jerry Sevick W2FMI’s (now unfortunately an SK) book on transmission line transformers and his other writings which I found interesting, and compelling wherein he used Ruthroff’s mathematical loop equation derivations; expanded and applied it to balun design, and followed up with empirical results of various constructed balun/choke designs.

Fundamentally resonant long wire loop antennas generally exhibit a workable reactive component at harmonically related frequencies, and hovering typically between 30 and 200 ohms given a decent height above ground. This can be detrimental to balun efficiency while still being reachable to a “T” unbalanced tuner. That is why I prefer the balanced tuner setup with open wire line.

However, sacrificing a few db and using an internal rig T tuner with a balun is very convenient for push button on the fly tuning.

Happy 4th to all state side
73 Hank N2MU ...-.- ..

4990. Re: [SkyWires] BT-1500 and Tuner Baluns

Yahoo group: SkyWires
Date: 2015-07-06 03:49:17 UTC
From: Andy
Topic: 4924 Message: 4990

Rick,

I still don't follow you, and have a rather hard time believing some things you write, although I would like to. So many things you write contradict what you previously wrote, or appear to do so. (I am setting aside most of the mistake about the BT1500/AT1500.)

But addressing this one, that still seems wrong:

"Palstar at least figured out that the balun NEVER belongs inside the matchbox.
It MUST always be external."

And yet, the balun is internal in Palstar's BT1500A balanced antenna tuner, the same one that I believe you said they got it right (i.e., NOT the AT-1500).

Why does Palstar still not get it right, even after they figured it out?

More importantly, why MUST it be external?

The only two reasons I can see for having it external, are (1) airflow, if the balun gets really hot (in which case you probably have worse problems to worry about), and (2) to make it easier for the owner to replace the manufacturer's balun with one that is better. Other than that, I can think of no reason why the balun "MUST" be external.

In fact, isn't it better being internal? The connection from it to the TX side of the matchbox, is probably coax, because most matchboxes have an SO-239 as the signal input port -- although I'm willing to accept that a matchbox/ATU might exist that has binding post inputs on the TX/amp side. So with the balun external to the matchbox, and given the fact that the SO-239 probably does not "float", and connects to the chassis, that would make the entire matchbox case "hot". Not a good idea!

Whereas if the balun is internal to the matchbox case, the case stays at ~ground potential and all the balanced circuitry is inside, cleanly isolated from the case.

Yes? No?

Owen Duffy seems to prefer an external balun to get better airflow, and to reduce stray common-mode capacitance. I find it hard to believe that the latter is not easy to avoid.

Is there a commercial matchbox out there that comes in two or more shielded enclosures?

Regards,
Andy

4991. RE: [SkyWires] BT-1500 and Tuner Baluns

Yahoo group: SkyWires
Date: 2015-07-06 05:50:20 UTC
From: Rick - DJ0IP / NJ0IP
Topic: 4924 Message: 4991

GM Andy,

When talking about matchboxes, we have to understand that there are two classes of matchboxes, symmetrical and asymmetrical.

It is also important to understand that there are about 30 or 40 matchboxes (or antenna tuner, if you prefer) on the market but only about 4 of them are symmetrical matchboxes and these represent only about 1% of the market. ALL others are asymmetrical.

As such, when we speak about matchboxes at all, we are nearly always speaking about asymmetrical matchboxes.

Asymmetrical matchboxes require a balun to keep common mode current out of and off of the matchbox.
This is generally known as the "Tuner Balun."

So when I see the words Tuner Balun, I associate them with the balun on the output side of the tuner, between the antenna and the tuner.

>>> More below, directly below your text.

73 - Rick, DJ0IP
(Nr. Frankfurt am Main)

From: SkyWires@yahoogroups.com [mailto:SkyWires@yahoogroups.com]
Sent: Monday, July 06, 2015 5:49 AM
To: SkyWires@yahoogroups.com
Subject: Re: [SkyWires] BT-1500 and Tuner Baluns

Rick,

I still don't follow you, and have a rather hard time believing some things you write, although I would like to. So many things you write contradict what you previously wrote, or appear to do so. (I am setting aside most of the mistake about the BT1500/AT1500.)

>>> No problem, I did not understand baluns for the first 48 years of my ham career. I thought I did but kept learning what I had previously understood was either partially or totally wrong. My learning resources (in alphabetical order) were G3TXQ, GM3SEK, K9YC, VK2OD, W7EL, W8JI, and of course Sevick, W2FMI.

But addressing this one, that still seems wrong:

"Palstar at least figured out that the balun NEVER belongs inside the matchbox.
It MUST always be external."

And yet, the balun is internal in Palstar's BT1500A balanced antenna tuner, the same one that I believe you said they got it right (i.e., NOT the AT-1500).

>>> Let's leave this BT-1500 out of the story for now and stick with tuner baluns. If you like we can talk about this one separately. Totally different situation. Of course its balun is in the right place with this type of matchbox, but it is not the typical "tuner balun." When I said Palstar got it right, I meant that for their asymmetrical matchboxes (i.e. AT-2K), where they dumped the internal 4:1 balun and offered an external 1:1 choke balun.

Why does Palstar still not get it right, even after they figured it out?

>>> I don't believe I said it quite like that. I said Palstar got it right with respect to moving the balun outside and dumping the 4:1 internal balun. That part is certainly right.

>>> There's more to the story:

>>>1. They offer a choice of external balun, either 1:1 or 4:1. Now the 4:1 might occasionally be batter for matching very high impedances, but in that case it is worthless for rejecting common mode current, thus is no balun at all. You must always have a 1:1 current balun as the tuner balun and if you tuner cannot match the required range, either adjust the length of feedline or insert a 1:4 transformer (which by the way can be a 4:1 balun). The naming is very tricking here. With the transformer, we want to step up from 50 to 200 Ohms (1 to 4), but when we use a balun to do that, we use a 4:1. Balun naming typically splits the word in two: BAL - UN, and we state the number for the BAL side first, then we state the number for the UN side second. Confusing indeed! Apparently Palstar still doesn't understand what happens to a 4:1 balun when it does not see a perfect match. Much different than when a 1:1 balun does not see a perfect match!

>>>2. BASED ON HEAR-SAY information, not known facts to me, I have heard that the new external Palstar balun is not good. I have heard of it burning up, the user looked inside and found it was inferior. Can't remember the details, but my first take was, "OK to buy the Palstar, but buy the balun elsewhere, or wrap your own."

More importantly, why MUST it be external?

The only two reasons I can see for having it external, are (1) airflow, if the balun gets really hot (in which case you probably have worse problems to worry about), and (2) to make it easier for the owner to replace the manufacturer's balun with one that is better. Other than that, I can think of no reason why the balun "MUST" be external.

>>>Well those are already two good reasons. When it's getting really hot, you are not using enough cores. Perhaps you need 2, 3, or even 4 cores. These generally won't fit inside. If it does get hot and burn up, I prefer it to do that outside of the matchbox, not inside.

In fact, isn't it better being internal? The connection from it to the TX side of the matchbox, is probably coax, because most matchboxes have an SO-239 as the signal input port --

>>> Yes, it is coax but I don't see that it makes any difference. The line between the matching network (coil and capacitors) is should be Teflon coax to either the balun, or the SO-239. Maybe I didn't understand your point.

although I'm willing to accept that a matchbox/ATU might exist that has binding post inputs on the TX/amp side.

>>>Why this? All TX today have coaxial outputs. Besides, the balun is on the ANT side of the matchbox, not the TX side (remember, we are leaving the BT-1500 out of this).

So with the balun external to the matchbox, and given the fact that the SO-239 probably does not "float", and connects to the chassis, that would make the entire matchbox case "hot". Not a good idea!

>>> No hotter than when feeding coax to it. Remember, RF current flows in two directions and when we have coax instead of openwire, it flows directly through the SO-239 and onto the chassis. But this is differential current (good current). It is the common mode current that is dangerous and if we don't choke it before it reaches the matchbox, it will do nasty things in our shack.

>>> Andy, the primary job of the balun is to remove common mode current from the scenario by impeding it. A really good choke balun in between the matchbox and the antenna will remove common mode current. The problem is, you can't buy really good choke baluns. The stuff the OEMs are selling us don't use ferrite with high enough permeability. Duffy points this out. Of course they work OK a lot of times, but whenever we are confronted with a bad case of common mode current, they are insufficient.

>>>With coax, there is absolutely no difference. The RF current between the TX and Antenna needs two wires. It is alternating and always flowing to and from the antenna. The amount of current is (supposed to be) exactly the same in both wires, regardless of whether they are parallel or in the form of a coax. They are also 180 degrees out of phase at any one point along the transmission line.

>>> Please keep in mind that although openwire feedline has just 2 wires, coax feedline has 3 wires: 1) center conductor; 2) inside surface of the shield; 3) outer surface of the shield.

>>> Differential RF current (the good stuff) flows on 1 and 2. Common mode current flows on 3. 1 and 2 are supposed to be equal all the time, but eventually 2 meets 3 (at the SO-239) and unbalances the scenario - unless we choke the common mode current sufficiently before it reaches the chassis.

>>> Common mode current is an additional current flowing on just one of the two wires, thus unbalancing the normal current flow. W7EL does a good tutorial of this in his paper on what baluns do and how they do it. The balun's most important job is to block this, thus keeping the flow of current in the transmission line equal.

Whereas if the balun is internal to the matchbox case, the case stays at ~ground potential and all the balanced circuitry is inside, cleanly isolated from the case.

Yes? No?

>>> NO! (hi); The circuitry inside is UN-balanced, not balanced. Half of it goes to ground. Only the 4 symmetrical matchboxes are balanced inside. Once the current flows through the balun (regardless of whether it is internal or external), it enters the matchbox where one side is grounded, so it flows on the chassis. But this is the differential current (the good current), not the common current - assuming your balun is doing its job. So that's alright.

Owen Duffy seems to prefer an external balun to get better airflow, and to reduce stray common-mode capacitance. I find it hard to believe that the latter is not easy to avoid.

>>> I fully agree with the latter. We need to avoid stray capacitance. Every commercial matchbox with an internal balun has always had the balun strapped to the chassis, with just a tiny piece of insulating material. This is not good. If the matchbox case were plastic and you had lots of air inside, then you could probably mount it inside and be good.

>>>One of the simplest and effective baluns to build is simply coax wrapped onto PVC. Most people simply wrap it scramble-wound (less good), or close-wound onto PVC (better). However I take it one step farther and wrap a nylon rope between the individual turns of the coax to help reduce mutual capacitance.
See: http://www.dj0ip.de/my-station/oklahoma-2010/

Is there a commercial matchbox out there that comes in two or more shielded enclosures?

>>> Not that I know of and I don't understand why you would want that.

>>> Final thoughts on this: The sole purpose of the balun is to keep common mode current (CMC) OUT of the shack and equipment. CMC is a funny, unpredictable beast and just how much you might have depends on many things, including the power level that you are running. It is ludicrous to believe that one single balun that fits inside of the matchbox will always be capable of fighting of CMC, no matter what. Sometimes we get by with practically nothing (i.e. operating QRP) but sometimes we need a ton of CMI (common mode impedance). In which case we will need to beef up the balun considerably.

>>Placing the balun outside gives us the flexibility to scale the balun's choking ability when required.

>>> "Balun" is a very complex subject and the biggest problem with them exists between the ears of the operator. They seem to believe a balun is a balun is a balun and as long as they have anything called "balun" they are alright. NOT!

Regards,
Andy

4992. TUNER BALUNS

Yahoo group: SkyWires
Date: 2015-07-06 16:46:54 UTC
From: Rick - DJ0IP / NJ0IP
Topic: 4924 Message: 4992

Few subjects have been so terribly misunderstood in our hobby as tuner balun.
It’s bad enough that the poor hams don’t understand it.

Worse yet, apparently none of the antenna tuner manufacturers fully understand it, but at least they are starting to come close. Both Palstar and MFJ (including Ameritron) have changed their tuner balun strategy at least once in the past 5 or 6 years. Neither are without flaws in their approach.

Just as bad are the balun manufacturers. Most of them have no clue about which baluns fit which applications. They simply build them all, offer them all for sale and leave the choice up to the ham. If they recommend something at all, quite often it is wrong. One exception here is Balun Designs. Bob is quite knowledgeable.

Today I have written a paper on this topic in layman terms, using as little technology as possible in the explanation. I hope it is clear to most readers.

At the bottom of the page I list several links to professional sites where the technical justification for what I have written is explained in very technical terms.

The final link is to one of my own pages, where I simply have a list of links to even more related and supporting documents.

I clearly do NOT consider myself a technical guru.
I’m more of a technical blogger, relying on others to supply the meat.
I try to remove the math and explain to others the benefit in using the correct solutions rather than the popular solution.

Here's the link to the page:
http://www.dj0ip.de/balun-stuff/tuner-baluns/

73 - Rick, DJ0IP
(Nr. Frankfurt am Main)

4993. One radio, two headphones?

Yahoo group: SkyWires
Date: 2015-07-22 03:32:48 UTC
From: slr_65@...
Topic: 4993 Message: 4993

Hi Guys,

My son is getting interested in the radio, but I like to use headphones so I'd like to split the headphone output so we could use a pair.

My Kenwood is mono audio but it puts it out on both channels, so it's compatible with mono or stereo headphones.

I'm thinking one of those headphone splitters that has an input and then four outputs, each with it's own volume control, would be the move. Something like this:

Pyle-Pro PHA40 4-Channel Stereo Headphone Amplifier, Free Shipping, New http://www.ebay.com/itm/Pyle-Pro-PHA40-4-Channel-Stereo-Headphone-Amplifier-Free-Shipping-New-/141414508408?pt=LH_DefaultDomain_0&hash=item20ecf62778

http://www.ebay.com/itm/Pyle-Pro-PHA40-4-Channel-Stereo-Headphone-Amplifier-Free-Shipping-New-/141414508408?pt=LH_DefaultDomain_0&hash=item20ecf62778

Pyle-Pro PHA40 4-C... http://www.ebay.com/itm/Pyle-Pro-PHA40-4-Channel-Stereo-Headphone-Amplifier-Free-Shipping-New-/141414508408?pt=LH_DefaultDomain_0&hash=item20ecf62778 The new PHA40 from Pyle answers the need for a headphone distribution amplifier with profes...

View on www.ebay.com http://www.ebay.com/itm/Pyle-Pro-PHA40-4-Channel-Stereo-Headphone-Amplifier-Free-Shipping-New-/141414508408?pt=LH_DefaultDomain_0&hash=item20ecf62778
Preview by Yahoo

Am I on the right path here?

Thanks!

Steve, KA0NEB

4994. Re: [SkyWires] One radio, two headphones?

Yahoo group: SkyWires
Date: 2015-07-22 04:05:18 UTC
From: Andy
Topic: 4993 Message: 4994

"Am I on the right path here?"

That probably works fine.

The simplest method, is just a "Y" splitter cable with one plug and two jacks. The rig's headphone output probably doesn't mind driving the parallel impedance of both headphones (there could be exceptions, but extremely rare). But if one person wants it louder and the other quieter, then you have a problem. Also, if one headphone is mono and the other stereo, the mono one probably shorts out the right channel of the stereo headphones.

The amplified headphone DA would be the most versatile, but costs more, and needs power.

Regards,
Andy

4996. Re: [SkyWires] One radio, two headphones?

Yahoo group: SkyWires
Date: 2015-07-23 19:01:00 UTC
From: slr_65@...
Topic: 4993 Message: 4996

Thanks guys!

I think I'll give one of the Pyles a shot.

4997. AW: [SkyWires] One radio, two headphones?

Yahoo group: SkyWires
Date: 2015-07-23 19:15:13 UTC
From: siegfried jackstien
Topic: 4993 Message: 4997

Use a y connector ... and 2 computer headsets

Most of them have an inline volume control and so using an y connector
should work fine

Saved money can be spent elsewhere in the hobby ... grin

Dg9bfc

Sigi

> -----Ursprüngliche Nachricht-----
> Von: SkyWires@yahoogroups.com [mailto:SkyWires@yahoogroups.com]
> Gesendet: Donnerstag, 23. Juli 2015 19:01
> An: SkyWires@yahoogroups.com
> Betreff: Re: [SkyWires] One radio, two headphones?
>
>
>
> Thanks guys!
>
> I think I'll give one of the Pyles a shot.
>
>

4998. Anyone tried multiple turns of wire on SkyLoop?

Yahoo group: SkyWires
Date: 2015-07-24 04:40:09 UTC
From: w6mob@...
Topic: 4998 Message: 4998

All

I had good success with modeling and building a 283 feet loop at about 40 feet high.
I remember that for smaller loop, at least, increasing the area and/or the number of turns of wire will improve the voltage across the terminals.
So my question is has anyone tried to use multiple turns or wire? If so what type of results did you see?
I wanted to ask before I go and try to put up 4 or 8 turns of 283 feet all ziptied together.

Cheers
Mick
W6MOB

4999. Antenna wire?

Yahoo group: SkyWires
Date: 2015-07-24 04:55:57 UTC
From: kc8ddq@aol.com
Topic: 4999 Message: 4999
Attachments: 2 described; binary payloads are missing from this source WARC

[Attachment content not displayed]

5000. Re: [SkyWires] Antenna wire?

Yahoo group: SkyWires
Date: 2015-07-24 12:49:48 UTC
From: Rich Schmuke
Topic: 5000 Message: 5000

Copper covered steel will hold up, silver plated is a little better but
hard to find at a good price.

Rich, KdØzz

On Thu, Jul 23, 2015 at 11:55 PM, 'kc8ddq@...' kc8ddq@...
[SkyWires] <SkyWires@yahoogroups.com> wrote:

>
>
> Hey everyone. I'm getting ready to put up a longwire for HF. What is the
> best type of wire to use?
>
> Thanks
> Paul
> kc8ddqataoldotcom
>
>
> Sent on the new Sprint Network
>
>
>

5001. Re: [SkyWires] Antenna wire?

Yahoo group: SkyWires
Date: 2015-07-24 13:07:04 UTC
From: everettsharp@...
Topic: 5000 Message: 5001

Paul,

I like and use Flexweave, 14 gage, with the Poly covering. I am using 275', supported in 4 corners. It is running in and around trees. You can order the wire from Wireman, https://www.thewireman.com/antennap.html it is his item 542.

I don't know how you plan on feeding it, if you are going to use coax, then you might want to look in the files section of the SkyWires at a article that I posted "Loop Balun Experiment". It has a lot of information that might be of value to you.

Everett N8CNP

In a message dated 7/24/2015 7:50:00 A.M. Central Daylight Time, SkyWires@yahoogroups.com writes:

Copper covered steel will hold up, silver plated is a little better but hard to find at a good price.

Rich, KdØzz

On Thu, Jul 23, 2015 at 11:55 PM, '_kc8ddq@aol.com_ (mailto:kc8ddq@aol.com) ' _kc8ddq@aol.com_ (mailto:kc8ddq@aol.com) [SkyWires] <_SkyWires@yahoogroups.com_ (mailto:SkyWires@yahoogroups.com) > wrote:

Hey everyone. I'm getting ready to put up a longwire for HF. What is the best type of wire to use?

Thanks
Paul
kc8ddqataoldotcom

Sent on the new Sprint Network

5002. Re: [SkyWires] Anyone tried multiple turns of wire on SkyLoop?

Yahoo group: SkyWires
Date: 2015-07-24 13:07:44 UTC
From: Rich Schmuke
Topic: 4998 Message: 5002

I have a 550ft horizontal delta loop and have often wondered the same, if a extra run would help.
What would your spacing be?? Would you run the wires in a parallel setup or series?? Please keep us informed.

Rich, KdØzz

On Thu, Jul 23, 2015 at 11:40 PM, w6mob@... [SkyWires] <SkyWires@yahoogroups.com> wrote:

>
>
> All
>
>
> I had good success with modeling and building a 283 feet loop at about 40
> feet high.
>
> I remember that for smaller loop, at least, increasing the area and/or the
> number of turns of wire will improve the voltage across the terminals.
>
> So my question is has anyone tried to use multiple turns or wire? If so
> what type of results did you see?
>
> I wanted to ask before I go and try to put up 4 or 8 turns of 283 feet all
> ziptied together.
>
>
> Cheers
>
> Mick
>
> W6MOB
>
>
>

5003. Re: [SkyWires] Antenna wire?

Yahoo group: SkyWires
Date: 2015-07-24 15:02:39 UTC
From: Evan Rolek
Topic: 5000 Message: 5003

Unlike most, I don't have a "one size fits all" choice for antenna wire. When selecting antenna wire the considerations for me are power handling, conductivity, resistance to airborne contaminants, mechanical strength, and visual cross section. Ease of use and cost are in there but only as tie breakers. I really enjoyed using the "copper rope" or woven copper strands that are available from a number of vendors; I used the insulated style. Easy to use, easy to solder, etc. etc. but does have limits when subject to falling tree limbs, hi hi. For my current applications (horizontal loops in trees) I use #13 stranded copperweld, insulated, with a tough black jacket. The black color aids in disguise among the trees, it is strong, and works well. But, my selection is optimum for my particular installation and in no way is it one size fits all. Durability with regard to falling tree limbs is a big issue with me and the current antennas have held up well for 10 years. In this day and age, there are probably few QTHs where bare wire is acceptable due to moisture and contaminants.

Good luck with your selection and installation!

73,

Evan, K9SQG

-----Original Message-----
From: Rich Schmuke rdj@... [SkyWires] <SkyWires@yahoogroups.com>
To: SkyWires <SkyWires@yahoogroups.com>
Sent: Fri, Jul 24, 2015 8:49 am
Subject: Re: [SkyWires] Antenna wire?

Copper covered steel will hold up, silver plated is a little better but hard to find at a good price.

Rich, KdØzz

On Thu, Jul 23, 2015 at 11:55 PM, ' kc8ddq@...' kc8ddq@... [SkyWires] <SkyWires@yahoogroups.com> wrote:

Hey everyone. I'm getting ready to put up a longwire for HF. What is the best type of wire to use?

Thanks

Paul

kc8ddqataoldotcom

Sent on the new Sprint Network

5004. RE: [SkyWires] Antenna wire?

Yahoo group: SkyWires
Date: 2015-07-24 15:59:33 UTC
From: Rick - DJ0IP / NJ0IP
Topic: 5000 Message: 5004

Well I like wire that doesn’t stretch.
This is especially important in some of the multi-band antennas I build.
For me, Copperweld is the only way to go.
I use WIREMAN CQ531/532/534 wire.

73 - Rick, DJ0IP
(Nr. Frankfurt am Main)

From: SkyWires@yahoogroups.com [mailto:SkyWires@yahoogroups.com]
Sent: Friday, July 24, 2015 5:03 PM
To: SkyWires@yahoogroups.com
Subject: Re: [SkyWires] Antenna wire?

Unlike most, I don't have a "one size fits all" choice for antenna wire. When selecting antenna wire the considerations for me are power handling, conductivity, resistance to airborne contaminants, mechanical strength, and visual cross section. Ease of use and cost are in there but only as tie breakers. I really enjoyed using the "copper rope" or woven copper strands that are available from a number of vendors; I used the insulated style. Easy to use, easy to solder, etc. etc. but does have limits when subject to falling tree limbs, hi hi. For my current applications (horizontal loops in trees) I use #13 stranded copperweld, insulated, with a tough black jacket. The black color aids in disguise among the trees, it is strong, and works well. But, my selection is optimum for my particular installation and in no way is it one size fits all. Durability with regard to falling tree limbs is a big issue with me and the current antennas have held up well for 10 years. In this day and age, there are probably few QTHs where bare wire is acceptable due to moisture and contaminants.

Good luck with your selection and installation!

73,

Evan, K9SQG

-----Original Message-----
From: Rich Schmuke rdj@... [SkyWires] <SkyWires@yahoogroups.com>
To: SkyWires <SkyWires@yahoogroups.com>
Sent: Fri, Jul 24, 2015 8:49 am
Subject: Re: [SkyWires] Antenna wire?

Copper covered steel will hold up, silver plated is a little better but hard to find at a good price.

Rich, KdØzz

On Thu, Jul 23, 2015 at 11:55 PM, ' kc8ddq@...' kc8ddq@... [SkyWires] <SkyWires@yahoogroups.com> wrote:

Hey everyone. I'm getting ready to put up a longwire for HF. What is the best type of wire to use?

Thanks
Paul
kc8ddqataoldotcom

Sent on the new Sprint Network

5005. [SkyWires] Antenna wire?

Yahoo group: SkyWires
Date: 2015-07-24 17:10:44 UTC
From: Casy_ch
Topic: 5000 Message: 5005

Hi Rick

I suppose you have been sweating as well up there!

Here I am using Swiss army insulated telephone cable with succes over the years. Very nice indeed and cheap surplus.

73 de Jean-Claude, HB3YDH

Betreff: RE: [SkyWires] Antenna wire?
Datum: Fri, 24 Jul 2015 17:59:33 +0200
Von: 'Rick - DJ0IP / NJ0IP' Rick@... [SkyWires]
<SkyWires@yahoogroups.com>
Antwort an: SkyWires@yahoogroups.com
An: SkyWires@yahoogroups.com

Well I like wire that doesn’t stretch.
This is especially important in some of the multi-band antennas I build.
For me, Copperweld is the only way to go.
I use WIREMAN CQ531/532/534 wire.

73 - Rick, DJ0IP
(Nr. Frankfurt am Main)

From: SkyWires@yahoogroups.com [mailto:SkyWires@yahoogroups.com]
Sent: Friday, July 24, 2015 5:03 PM
To: SkyWires@yahoogroups.com
Subject: Re: [SkyWires] Antenna wire?

Unlike most, I don't have a "one size fits all" choice for antenna wire. When selecting antenna wire the considerations for me are power handling, conductivity, resistance to airborne contaminants, mechanical strength, and visual cross section. Ease of use and cost are in there but only as tie breakers. I really enjoyed using the "copper rope" or woven copper strands that are available from a number of vendors; I used the insulated style. Easy to use, easy to solder, etc. etc. but does have limits when subject to falling tree limbs, hi hi. For my current applications (horizontal loops in trees) I use #13 stranded copperweld, insulated, with a tough black jacket. The black color aids in disguise among the trees, it is strong, and works well. But, my selection is optimum for my particular installation and in no way is it one size fits all. Durability with regard to falling tree limbs is a big issue with me and the current antennas have held up well for 10 years. In this day and age, there are probably few QTHs where bare wire is acceptable due to moisture and contaminants.

Good luck with your selection and installation!

73,

Evan, K9SQG

-----Original Message-----
From: Rich Schmuke rdj@... [SkyWires] <SkyWires@yahoogroups.com>
To: SkyWires <SkyWires@yahoogroups.com>
Sent: Fri, Jul 24, 2015 8:49 am
Subject: Re: [SkyWires] Antenna wire?

Copper covered steel will hold up, silver plated is a little better but hard to find at a good price.

Rich, KdØzz

On Thu, Jul 23, 2015 at 11:55 PM, ' kc8ddq@...' kc8ddq@... [SkyWires] <SkyWires@yahoogroups.com> wrote:

Hey everyone. I'm getting ready to put up a longwire for HF. What is the best type of wire to use?

Thanks
Paul
kc8ddqataoldotcom

5006. RE: [SkyWires] Antenna wire?

Yahoo group: SkyWires
Date: 2015-07-24 17:32:30 UTC
From: Rick - DJ0IP / NJ0IP
Topic: 5000 Message: 5006

Hi Jean Claude

Yes, we’re not accustomed to this much heat.

I canceled several outdoor activities during the past couple of weeks.

I used to use US Army twisted pair, but I like the WIREMAN stuff much better. Don’t have to full with untwisting it.

The price is steep “by the foot” but I usually buy in 5 or 10 MILE increments. It’s a bit cheaper that way! (hi)

73 - Rick, DJ0IP

(Nr. Frankfurt am Main)

From: SkyWires@yahoogroups.com [mailto:SkyWires@yahoogroups.com]
Sent: Friday, July 24, 2015 7:11 PM
To: SkyWires@yahoogroups.com
Subject: [SkyWires] Antenna wire?

Hi Rick

I suppose you have been sweating as well up there!

Here I am using Swiss army insulated telephone cable with succes over the years. Very nice indeed and cheap surplus.

73 de Jean-Claude, HB3YDH

Betreff:

RE: [SkyWires] Antenna wire?

Datum:

Fri, 24 Jul 2015 17:59:33 +0200

Von:

'Rick - DJ0IP / NJ0IP' Rick@dj0ip.de [SkyWires] <mailto:SkyWires@yahoogroups.com>
<SkyWires@yahoogroups.com>

Antwort an:

SkyWires@yahoogroups.com

An:

SkyWires@yahoogroups.com

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This is especially important in some of the multi-band antennas I build.
For me, Copperweld is the only way to go.
I use WIREMAN CQ531/532/534 wire.

73 - Rick, DJ0IP
(Nr. Frankfurt am Main)

From: SkyWires@yahoogroups.com [mailto:SkyWires@yahoogroups.com]
Sent: Friday, July 24, 2015 5:03 PM
To: SkyWires@...m
Subject: Re: [SkyWires] Antenna wire?

Unlike most, I don't have a "one size fits all" choice for antenna wire. When selecting antenna wire the considerations for me are power handling, conductivity, resistance to airborne contaminants, mechanical strength, and visual cross section. Ease of use and cost are in there but only as tie breakers. I really enjoyed using the "copper rope" or woven copper strands that are available from a number of vendors; I used the insulated style. Easy to use, easy to solder, etc. etc. but does have limits when subject to falling tree limbs, hi hi. For my current applications (horizontal loops in trees) I use #13 stranded copperweld, insulated, with a tough black jacket. The black color aids in disguise among the trees, it is strong, and works well. But, my selection is optimum for my particular installation and in no way is it one size fits all. Durability with regard to falling tree limbs is a big issue with me and the current antennas have held up well for 10 years. In this day and age, there are probably few QTHs where bare wire is acceptable due to moisture and contaminants.

Good luck with your selection and installation!

73,

Evan, K9SQG

-----Original Message-----
From: Rich Schmuke rdj@... [SkyWires] <mailto:SkyWires@yahoogroups.com>
<SkyWires@yahoogroups.com>
To: SkyWires <mailto:SkyWires@yahoogroups.com> <SkyWires@yahoogroups.com>
Sent: Fri, Jul 24, 2015 8:49 am
Subject: Re: [SkyWires] Antenna wire?

Copper covered steel will hold up, silver plated is a little better but hard to find at a good price.

Rich, KdØzz

On Thu, Jul 23, 2015 at 11:55 PM, ' kc8ddq@aol.com' kc8ddq@... [SkyWires]
<mailto:SkyWires@yahoogroups.com> <SkyWires@yahoogroups.com> wrote:

Hey everyone. I'm getting ready to put up a longwire for HF. What is the best type of wire to use?

Thanks
Paul
kc8ddqataoldotcom

5007. Re: [SkyWires] Anyone tried multiple turns of wire on SkyLoop?

Yahoo group: SkyWires
Date: 2015-07-24 17:49:37 UTC
From: w6mob@...
Topic: 4998 Message: 5007

Rich,

I was asuming I would bundle them tightly with zip ties and run them in series. So if I ran 4 loops I would have a total of 1,132 feet around an approx 80x60 rectangle.
I am going to try to model it in Eznec before I try to build. Plus asking the group for advice.

Cheers
Mick

5008. Re: [SkyWires] Antenna wire?

Yahoo group: SkyWires
Date: 2015-07-24 18:42:35 UTC
From: WA8JXM
Topic: 5000 Message: 5008

I do not understand your comment. Bare copper, or decent copperweld
holds up very well long term.

Ken WA8JXM

On 24/07/2015 11:02, Evan Rolek k9sqg@... [SkyWires] wrote:
> In this day and age, there are probably few QTHs where bare wire is
> acceptable due to moisture and contaminants.

5009. Re: [SkyWires] Anyone tried multiple turns of wire on SkyLoop?

Yahoo group: SkyWires
Date: 2015-07-24 19:12:18 UTC
From: Rich Schmuke
Topic: 4998 Message: 5009

The far leg of my delta lop is thru some trees.
http://i1102.photobucket.com/albums/g453/KD0ZZ/160%20Loop/trees010_zpse5180867.jpg
I was not able to get my wire to the top because of multiple interference.
I made a antenna launcher from PVC and now can go over the top. I am now
wonder if I should add a higher wire and what effect would two wires
have. My spacing would vary so there would be a small difference in length..
Slightly wider bandwidth??

Rich, KdØzz

On Fri, Jul 24, 2015 at 12:49 PM, w6mob@... [SkyWires] <
SkyWires@yahoogroups.com> wrote:

>
>
> Rich,
>
> I was asuming I would bundle them tightly with zip ties and run them in
> series. So if I ran 4 loops I would have a total of 1,132 feet around an
> approx 80x60 rectangle.
> I am going to try to model it in Eznec before I try to build. Plus asking
> the group for advice.
>
> Cheers
> Mick
>
>
>

5010. RE: [SkyWires] Anyone tried multiple turns of wire on SkyLoop?

Yahoo group: SkyWires
Date: 2015-07-24 20:32:09 UTC
From: Rick - DJ0IP / NJ0IP
Topic: 4998 Message: 5010

I don’t think that is a good idea. There will be too much mutual coupling. It would be better to space them, but I have no idea how much spacing is required.

73 - Rick, DJ0IP

(Nr. Frankfurt am Main)

From: SkyWires@yahoogroups.com [mailto:SkyWires@yahoogroups.com]
Sent: Friday, July 24, 2015 7:50 PM
To: SkyWires@yahoogroups.com
Subject: Re: [SkyWires] Anyone tried multiple turns of wire on SkyLoop?

Rich,

I was asuming I would bundle them tightly with zip ties and run them in series. So if I ran 4 loops I would have a total of 1,132 feet around an approx 80x60 rectangle.

I am going to try to model it in Eznec before I try to build. Plus asking the group for advice.

Cheers

Mick

5011. Re: [SkyWires] Antenna wire?

Yahoo group: SkyWires
Date: 2015-07-24 20:23:21 UTC
From: Evan Rolek
Topic: 5000 Message: 5011

Ken,

The life of the antenna wire depends on the contaminants in the air in the respective QTH. Too, depending on the contaminants, there might be an interaction with amount of rain and other forms of moisture. At my QTH, there is always abrasion due to tree limbs coming down (sometimes not seen for weeks and hanging limbs cause abrasion via movement due to wind), squirrels trying out the conductors, etc. In addition, areas near the ocean salt spray are particularly vulnerable to the effects of the atmosphere on bare copper and aluminum. With uninsulated copperweld, abrasion of the outer layer of copper (which varies in thickness by brand) exposes the steel core which then rusts and ultimately vulnerable to failure. Again, for me, I've had excellent experience with insulated, stranded copperweld, #13, but it may or may not be suitable for others and their respective goals and constraints. I am more than pleased with the lifespan of my current antenna wire.

73,

Evan, K9SQG

-----Original Message-----
From: WA8JXM wa8jxm@... [SkyWires] <SkyWires@yahoogroups.com>
To: SkyWires <SkyWires@yahoogroups.com>
Sent: Fri, Jul 24, 2015 2:49 pm
Subject: Re: [SkyWires] Antenna wire?

I do not understand your comment. Bare copper, or decent copperweld
holds up very well long term.

Ken WA8JXM

On 24/07/2015 11:02, Evan Rolek k9sqg@... [SkyWires] wrote:
> In this day and age, there are probably few QTHs where bare wire is
> acceptable due to moisture and contaminants.

5012. Re: Antenna wire?

Yahoo group: SkyWires
Date: 2015-07-25 01:59:28 UTC
From: hmlong@...
Topic: 5000 Message: 5012

Hi Paul,
Do you mean a Loop or a Long Wire Antenna? You will get a lot of contradictory feedback on this subject, but, here are my thoughts...

If you think that there is a chance for branches and leaves to contact the wire you might want to consider insulated stranded copper wire which very marginally affects the electrical length and 12awg wire can be purchased at Home Depot type stores or electrical supply.

Personally I don’t like copperweld as it is difficult to work with and if it is cheap it will rust through and disappear. The fine multi-strand flexweave with insulation did not work well for me with 2 problems. If the insulation gets cut or chafed (say at the insulator tie points) you will get moisture trapped inside the wire and make it weak and difficult to fix. Splicing it is very difficult to do once oxidized inside the fine strands of the wire. However the 12awg flexweave's supple property is great for making insulated open wire feed line with spreaders un-compromised by icing problems (unlike the typically sold ladder line) as long as it is not stressed, cut, or chafed.

I had good results with 12Awg 7 strand all copper wire that I purchased from therfc.com in PA purchased by the foot (owner is Joel - will help with recommendation) which was strong enough to hold up as a 550ft loop around my yard for 12 years now and light enough to be workable and pulled with minimal catenary droop. It will last a long time, doesn’t fatigue or stretch, and if it does need repair it is easily fixed with spiral tying and solder. I found that out after Superstorm Sandy dropped trees on my antenna wire. Additionally it is strong enough to withstand icing up in the winter if that is of concern and support lines should be strong and not too big of a diameter to prevent large icing buildup on them with the resulting sag - and it’s fun to watch the birds try to stay balanced on the line as it sways.... Putting up a large loop is fun, and good exercise after walking a few miles to adjust the tie points.

That’s my 2 copper cents....
73 Hank N2MU ...-.- ..

5013. SARK100 Help

Yahoo group: SkyWires
Date: 2015-07-25 01:59:49 UTC
From: slr_65@...
Topic: 5013 Message: 5013

OK the SARK 100 Mini 60 arrived and I've played with it just a little bit.

The display is kind of small for me to read, but magnifying glass brings it up nicely.

I layed with my manual tuner and got the SWR to 1.0 to 1, but put the SARK on and it says my SWR is aroound 5 to 1? And, adjusting the tuner doesn't seem to make much difference to it.

Do these need calibrated, or does it need to put more out or something?

5014. Re: SARK100 Help

Yahoo group: SkyWires
Date: 2015-07-25 04:05:40 UTC
From: slr_65@...
Topic: 5013 Message: 5014

I found a manual for them...it appears this may be due to low battery power. I assumed because it powered on it was good to go, but I plugged it into the usb port and the light lit up red and it's been charging for a bit now, we'll see how it behaves when it's fully charged.

Now to figure out the software for it...fun with low vision...

5015. RE: [SkyWires] SARK100 Help

Yahoo group: SkyWires
Date: 2015-07-25 05:45:18 UTC
From: Rick - DJ0IP / NJ0IP
Topic: 5013 Message: 5015

The SARK has instructions for building 3 dummy loads.

The dummy loads are used to calibrate the device.

Dummy loads are made of resistors.

In each case, I used 2 tiny 1/4w resistors to get within 1% of the required value.

I built each dummy into a RCA Phono Plug.

I plug the dummies into the SARK by using an adapter from Phono to PL-259.

YES, you should calibrate it.

73 - Rick, DJ0IP

(Nr. Frankfurt am Main)

From: SkyWires@yahoogroups.com [mailto:SkyWires@yahoogroups.com]
Sent: Saturday, July 25, 2015 4:00 AM
To: SkyWires@yahoogroups.com
Subject: [SkyWires] SARK100 Help

OK the SARK 100 Mini 60 arrived and I've played with it just a little bit.

The display is kind of small for me to read, but magnifying glass brings it up nicely.

I layed with my manual tuner and got the SWR to 1.0 to 1, but put the SARK on and it says my SWR is aroound 5 to 1? And, adjusting the tuner doesn't seem to make much difference to it.

Do these need calibrated, or does it need to put more out or something?

5016. Another Antenna Question

Yahoo group: SkyWires
Date: 2015-07-25 06:08:37 UTC
From: kc8ddq@...
Topic: 5016 Message: 5016

Hey all,

I'm getting ready to put up a Rohn H50 telescoping mast. The antemnnas that I will be putting on it are a Par OA-50 for 6 meter, a Par OA-144 for 2 meter, a Diamond X50 on top, and a 9:1 Balun Designs balun with a 50-60 foot longwire. Don't have a large enough lot for a longer run. I plan on setting a 4x6x10 treated post 4 feet into the ground with concrete. That would leave 6 feet above ground to bolt the telescoper to. I will be using mast clamps that I got from Penninger Radio to mount the mast. My question is do you all think that will be sturdy enough to work? I won't be able to guy it off as I don't have the room for the lines. Any opinions appreciated.

73
Paul

5017. Re: [SkyWires] Another Antenna Question

Yahoo group: SkyWires
Date: 2015-07-25 06:35:44 UTC
From: Evan Rolek
Topic: 5016 Message: 5017

Paul,

If I'm not mistaken, Rohn requires guying of that mast. That's a fair amount of wind loading at the top combined with the asymmetric force of the longwire. Scares me and I'm fearless...but I'll defer to the experts in this user group.

73,

Evan, K9SQG

-----Original Message-----
From: kc8ddq@... [SkyWires] <SkyWires@yahoogroups.com>
To: skywires <skywires@yahoogroups.com>; ham-antennas <ham-antennas@yahoogroups.com>
Sent: Sat, Jul 25, 2015 2:20 am
Subject: [SkyWires] Another Antenna Question

Hey all,

I'm getting ready to put up a Rohn H50 telescoping mast. The antemnnas that I will be putting on it are a Par OA-50 for 6 meter, a Par OA-144 for 2 meter, a Diamond X50 on top, and a 9:1 Balun Designs balun with a 50-60 foot longwire. Don't have a large enough lot for a longer run. I plan on setting a 4x6x10 treated post 4 feet into the ground with concrete. That would leave 6 feet above ground to bolt the telescoper to. I will be using mast clamps that I got from Penninger Radio to mount the mast. My question is do you all think that will be sturdy enough to work? I won't be able to guy it off as I don't have the room for the lines. Any opinions appreciated.

73

Paul

5018. Re: [SkyWires] Another Antenna Question

Yahoo group: SkyWires
Date: 2015-07-25 06:41:13 UTC
From: Skip Guenter
Topic: 5016 Message: 5018

Paul,

No guys on an H50!

Frankly, my guess it will kink and fold over in the first 20mph wind if it's only attached at 6' off the ground. Top section is probably the leading candidate.

Rule of thumb going up any pipe is a guy wire every 10' (maybe 12'). Yea, yea, I've seen 20ft of pipe with something like an X50 on it but eventually they come down. If you don't have room for guys then I gotta ask... What's it gonna hit when it comes down?

On 07/25/2015 01:08 AM, kc8ddq@... [SkyWires] wrote:
>
> Hey all,
> I'm getting ready to put up a Rohn H50 telescoping mast. The
> antemnnas that I will be putting on it are a Par OA-50 for 6 meter, a
> Par OA-144 for 2 meter, a Diamond X50 on top, and a 9:1 Balun Designs
> balun with a 50-60 foot longwire. Don't have a large enough lot for a
> longer run. I plan on setting a 4x6x10 treated post 4 feet into the
> ground with concrete. That would leave 6 feet above ground to bolt the
> telescoper to. I will be using mast clamps that I got from Penninger
> Radio to mount the mast. My question is do you all think that will be
> sturdy enough to work? I won't be able to guy it off as I don't have
> the room for the lines. Any opinions appreciated.
> 73
> Paul
>

--
S. R. 'Skip' Guenter, K5SRG
/3905cc 40m SSB Late Coord
Alt Dir, 5th Call Area
/

5019. RE: [SkyWires] Another Antenna Question

Yahoo group: SkyWires
Date: 2015-07-25 06:44:31 UTC
From: Rick - DJ0IP / NJ0IP
Topic: 5016 Message: 5019

Paul,

Opinions are worthless.
That kind of question needs to be sent to the manufacturer of the mast.
If we all tell you "sure, that should work" and you put it up and it comes down in the first storm, guess who gets hosed!

Also, the hf antenna you are building is pretty lousy. Like buying a Yugo when you need a car. Sure you will be able to load it with a tuner but performance will be marginal.
You have a nice station. The antenna is the most important link in the chain.
If that□s all one can do, then fine. But I□m sure you can do a lot better.

73 - Rick, DJ0IP
(Nr. Frankfurt am Main)

From: SkyWires@yahoogroups.com [mailto:SkyWires@yahoogroups.com]
Sent: Saturday, July 25, 2015 8:09 AM
To: skywires@yahoogroups.com; ham-antennas@yahoogroups.com
Subject: [SkyWires] Another Antenna Question

Hey all,

I'm getting ready to put up a Rohn H50 telescoping mast. The antemnnas that I will be putting on it are a Par OA-50 for 6 meter, a Par OA-144 for 2 meter, a Diamond X50 on top, and a 9:1 Balun Designs balun with a 50-60 foot longwire. Don't have a large enough lot for a longer run. I plan on setting a 4x6x10 treated post 4 feet into the ground with concrete. That would leave 6 feet above ground to bolt the telescoper to. I will be using mast clamps that I got from Penninger Radio to mount the mast. My question is do you all think that will be sturdy enough to work? I won't be able to guy it off as I don't have the room for the lines. Any opinions appreciated.

73
Paul

5020. Re: [SkyWires] Another Antenna Question

Yahoo group: SkyWires
Date: 2015-07-25 07:00:10 UTC
From: kc8ddq@...
Topic: 5016 Message: 5020

It isnt going to be fully extended. Per Columbus code it cant be over 35 feet high.

In a message dated 7/25/2015 2:35:50 A.M. Eastern Daylight Time, SkyWires@yahoogroups.com writes:

Paul,

If I'm not mistaken, Rohn requires guying of that mast. That's a fair amount of wind loading at the top combined with the asymmetric force of the longwire. Scares me and I'm fearless...but I'll defer to the experts in this user group.

73,

Evan, K9SQG

-----Original Message-----
From: kc8ddq@... [SkyWires] <SkyWires@yahoogroups.com>
To: skywires <skywires@yahoogroups.com>; ham-antennas <ham-antennas@yahoogroups.com>
Sent: Sat, Jul 25, 2015 2:20 am
Subject: [SkyWires] Another Antenna Question

Hey all,

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73
Paul

5021. Re: [SkyWires] Another Antenna Question

Yahoo group: SkyWires
Date: 2015-07-25 07:42:09 UTC
From: Skip Guenter
Topic: 5016 Message: 5021

Then up my predicted doom wind to 25mph.

On 07/25/2015 02:00 AM, kc8ddq@... [SkyWires] wrote:
>
> It isnt going to be fully extended. Per Columbus code it cant be over
> 35 feet high.
> In a message dated 7/25/2015 2:35:50 A.M. Eastern Daylight Time,
> SkyWires@yahoogroups.com writes:
>
> Paul,
>
>
> If I'm not mistaken, Rohn requires guying of that mast. That's a
> fair amount of wind loading at the top combined with the
> asymmetric force of the longwire. Scares me and I'm
> fearless...but I'll defer to the experts in this user group.
>
> 73,
>
> Evan, K9SQG
>
>
> -----Original Message-----
> From: kc8ddq@... [SkyWires] <SkyWires@yahoogroups.com>
> To: skywires <skywires@yahoogroups.com>; ham-antennas
> <ham-antennas@yahoogroups.com>
> Sent: Sat, Jul 25, 2015 2:20 am
> Subject: [SkyWires] Another Antenna Question
>
> Hey all,
> I'm getting ready to put up a Rohn H50 telescoping mast. The
> antemnnas that I will be putting on it are a Par OA-50 for 6
> meter, a Par OA-144 for 2 meter, a Diamond X50 on top, and a 9:1
> Balun Designs balun with a 50-60 foot longwire. Don't have a large
> enough lot for a longer run. I plan on setting a 4x6x10 treated
> post 4 feet into the ground with concrete. That would leave 6 feet
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> question is do you all think that will be sturdy enough to work? I
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> lines. Any opinions appreciated.
> 73
> Paul
>
>

--
S. R. 'Skip' Guenter, K5SRG/
/

5022. RE: [SkyWires] Another Antenna Question

Yahoo group: SkyWires
Date: 2015-07-25 08:23:24 UTC
From: Rick - DJ0IP / NJ0IP
Topic: 5016 Message: 5022

I work for a company that manufactures and sells amateur radio antennas and masts internationally.

I get asked that question 2 or 3 times per week.

The answer is in plain English (or German if you prefer): follow the recommended guying instructions.

If someone erects one of our masts lower, we have instructions for that too.

Failure to follow the manufacturer’s guying instructions may result in the insurance company rejecting the claim.

I STRONGLY ADVISE TO CONSULT THE MANUFACTURER and follow his advice.

73 - Rick, DJ0IP

(Nr. Frankfurt am Main)

From: SkyWires@yahoogroups.com [mailto:SkyWires@yahoogroups.com]
Sent: Saturday, July 25, 2015 9:00 AM
To: SkyWires@yahoogroups.com
Subject: Re: [SkyWires] Another Antenna Question

It isnt going to be fully extended. Per Columbus code it cant be over 35 feet high.

In a message dated 7/25/2015 2:35:50 A.M. Eastern Daylight Time, SkyWires@yahoogroups.com writes:

Paul,

If I'm not mistaken, Rohn requires guying of that mast. That's a fair amount of wind loading at the top combined with the asymmetric force of the longwire. Scares me and I'm fearless...but I'll defer to the experts in this user group.

73,

Evan, K9SQG

-----Original Message-----
From: kc8ddq@... [SkyWires] <SkyWires@yahoogroups.com>
To: skywires <skywires@yahoogroups.com>; ham-antennas <ham-antennas@yahoogroups.com>
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73

Paul

5023. AW: [SkyWires] Re: SARK100 Help

Yahoo group: SkyWires
Date: 2015-07-25 10:29:40 UTC
From: siegfried jackstien
Topic: 5013 Message: 5023

https://www.dropbox.com/s/ky44kcsqqfha4xz/sark100_package.zip?dl=0

here you will find any thing that i found for the sark100

software, documents etc.

you will find two different windows software

plus command line soft (has to be started with a batch file) that makes csv files that later can be opened with zplots (excel sheet)

(so three different things to try on a win pc)

Plus android software (add a bt module to mini60/sark100 to test swr wire-less) ... that should run on a smart-phone or tablet

greetz

sigi

ps feel free to ask if you have questions

> -----Ursprüngliche Nachricht-----
> Von: SkyWires@yahoogroups.com [mailto:SkyWires@yahoogroups.com]
> Gesendet: Samstag, 25. Juli 2015 04:06
> An: SkyWires@yahoogroups.com
> Betreff: [SkyWires] Re: SARK100 Help
>
>
>
> I found a manual for them...it appears this may be due to low battery
> power. I assumed because it powered on it was good to go, but I plugged
> it into the usb port and the light lit up red and it's been charging for a
> bit now, we'll see how it behaves when it's fully charged.
>
> Now to figure out the software for it...fun with low vision...
>
>

5024. AW: [SkyWires] Another Antenna Question

Yahoo group: SkyWires
Date: 2015-07-25 11:12:56 UTC
From: siegfried jackstien
Topic: 5016 Message: 5024

Just dont park your car below the mast when you have stormy weather ... grin

.... or say it short .... RTFM

Dg9bfc

Sigi

> -----Ursprüngliche Nachricht-----
> Von: SkyWires@yahoogroups.com [mailto:SkyWires@yahoogroups.com]
> Gesendet: Samstag, 25. Juli 2015 08:23
> An: SkyWires@...m
> Betreff: RE: [SkyWires] Another Antenna Question
>
>
>
> I work for a company that manufactures and sells amateur radio antennas
> and masts internationally.
>
> I get asked that question 2 or 3 times per week.
>
>
>
> The answer is in plain English (or German if you prefer): follow the
> recommended guying instructions.
>
> If someone erects one of our masts lower, we have instructions for that
> too.
>
> Failure to follow the manufacturer□s guying instructions may result in the
> insurance company rejecting the claim.
>
>
>
> I STRONGLY ADVISE TO CONSULT THE MANUFACTURER and follow his advice.
>
>
>
> 73 - Rick, DJ0IP
>
> (Nr. Frankfurt am Main)
>
>
>
> From: SkyWires@yahoogroups.com [mailto:SkyWires@yahoogroups.com]

> Sent: Saturday, July 25, 2015 9:00 AM
> To: SkyWires@yahoogroups.com
> Subject: Re: [SkyWires] Another Antenna Question
>
>
>
>
>
> It isnt going to be fully extended. Per Columbus code it cant be over 35
> feet high.
>
>
>
> In a message dated 7/25/2015 2:35:50 A.M. Eastern Daylight Time,
> SkyWires@yahoogroups.com writes:
>
>
>
> Paul,
>
>
>
> If I'm not mistaken, Rohn requires guying of that mast. That's a
> fair amount of wind loading at the top combined with the asymmetric force
> of the longwire. Scares me and I'm fearless...but I'll defer to the
> experts in this user group.
>
>
>
> 73,
>
>
>
> Evan, K9SQG
>
>
>
>
>
> -----Original Message-----
> From: kc8ddq@... [SkyWires] <SkyWires@yahoogroups.com>
> To: skywires <skywires@yahoogroups.com>; ham-antennas <ham-
> antennas@yahoogroups.com>
> Sent: Sat, Jul 25, 2015 2:20 am
> Subject: [SkyWires] Another Antenna Question
>
>
>
> Hey all,

>
> I'm getting ready to put up a Rohn H50 telescoping mast. The
> antemnnas that I will be putting on it are a Par OA-50 for 6 meter, a Par
> OA-144 for 2 meter, a Diamond X50 on top, and a 9:1 Balun Designs balun
> with a 50-60 foot longwire. Don't have a large enough lot for a longer
> run. I plan on setting a 4x6x10 treated post 4 feet into the ground with
> concrete. That would leave 6 feet above ground to bolt the telescoper to.
> I will be using mast clamps that I got from Penninger Radio to mount the
> mast. My question is do you all think that will be sturdy enough to work?
> I won't be able to guy it off as I don't have the room for the lines. Any
> opinions appreciated.
>
> 73
>
> Paul
>
>

5025. Re: [SkyWires] Another Antenna Question

Yahoo group: SkyWires
Date: 2015-07-25 12:12:54 UTC
From: WA8JXM
Topic: 5016 Message: 5025

Evan is, of course, correct. Read the Rohn brochure on that mast. It REQUIRES 3 or 4 guys AT 5 LEVELS.. It would never survive unguyed, even without antennas on it. Heck, even Rohn 25 TOWER requires guys when used higher than 35'.

For what you want, you need a freestanding tower, such as BX-48, or something from Heights or Texas Towers or one of the other vendors. A telescoping tubing mast will not do it.

Good luck.

Ken WA8JXM

On 25/07/2015 02:35, Evan Rolek k9sqg@... [SkyWires] wrote:
>
>
> Paul,
>
> If I'm not mistaken, Rohn requires guying of that mast. That's a fair
> amount of wind loading at the top combined with the asymmetric force
> of the longwire. Scares me and I'm fearless...but I'll defer to the
> experts in this user group.
>
> 73,
>
> Evan, K9SQG
>
>
> -----Original Message-----
> From: kc8ddq@... [SkyWires] <SkyWires@yahoogroups.com>
> To: skywires <skywires@yahoogroups.com>; ham-antennas
> <ham-antennas@yahoogroups.com>
> Sent: Sat, Jul 25, 2015 2:20 am
> Subject: [SkyWires] Another Antenna Question
>
> Hey all,
> I'm getting ready to put up a Rohn H50 telescoping mast. The
> antemnnas that I will be putting on it are a Par OA-50 for 6 meter, a
> Par OA-144 for 2 meter, a Diamond X50 on top, and a 9:1 Balun Designs
> balun with a 50-60 foot longwire. Don't have a large enough lot for a
> longer run. I plan on setting a 4x6x10 treated post 4 feet into the
> ground with concrete. That would leave 6 feet above ground to bolt the
> telescoper to. I will be using mast clamps that I got from Penninger
> Radio to mount the mast. My question is do you all think that will be
> sturdy enough to work? I won't be able to guy it off as I don't have
> the room for the lines. Any opinions appreciated.

> 73
> Paul
>

5027. Re: [SkyWires] Another Antenna Question

Yahoo group: SkyWires
Date: 2015-07-25 12:51:07 UTC
From: kc8ddq@aol.com
Topic: 5027 Message: 5027
Attachments: 2 described; binary payloads are missing from this source WARC

[Attachment content not displayed]

5028. Re: [SkyWires] Re: [ham-antennas] Another Antenn a Question [1 Attachment]

Yahoo group: SkyWires
Date: 2015-07-25 13:00:11 UTC
From: kc8ddq@aol.com
Topic: 5028 Message: 5028
Attachments: 2 described; binary payloads are missing from this source WARC

[Attachment content not displayed]

5029. Re: [SkyWires] Re: [ham-antennas] Another Antenna Question

Yahoo group: SkyWires
Date: 2015-07-25 13:31:03 UTC
From: WA8JXM
Topic: 5016 Message: 5029

No, it will not work.

What will work is a 20' mast (maybe 25) as the center support for an inverted v. Feed it with ladder line if you want multiple bands. With a good tuner, that will work up through 6m. You could put simple small ground plane for 2m on top of such a mast. If all you can get is 35' of wire horizontally, then it will operate 20-6m, probably even 30m. 40m with poor performance.

I actually have a 160m off center fed dipole that works all the way to 6m. That's another option, locate the mast off center of the antenna and feed it as an OCFD.

73,
Ken WA8JXM

On 25/07/2015 09:00, 'kc8ddq@...' kc8ddq@... [SkyWires] wrote:
>
>
> So you all don't think if it was bolted to a eight foot 4x6 that is
> set in 4 foot of concrete that it would be sturdy enough? I just got
> the Rohn H50 last night. Hope I can return it.

5031. Re: [SkyWires] Another Antenna Question

Yahoo group: SkyWires
Date: 2015-07-25 13:19:28 UTC
From: WA8JXM
Topic: 5016 Message: 5031

Yes, it's on the website.

On 25/07/2015 08:51, 'kc8ddq@...' kc8ddq@... [SkyWires] wrote:
> Well the FM on the pole was all tore up so that isn't possible unless
> it is on the web site. I

5032. RE: [SkyWires] Another Antenna Question

Yahoo group: SkyWires
Date: 2015-07-25 13:44:32 UTC
From: Rick - DJ0IP / NJ0IP
Topic: 5016 Message: 5032

Paul, it would be easy enough to get on hf. There are plenty of ways.
But you need to master clear your brain of what you have read in the antenna books or seen at the QTH of 98% of the other hams.

I use lightweight telescoping fiberglass poles for all of my wire antennas.
There are elcheapos which aren't worth 1/10 of their cheap price, then there is the good quality stuff which will last a long time.

You didn't say what bands you are trying to get on.
If it's only 40m and above, then it's a piece of cake.
As an example you might build or buy one of these:
http://www.aerial-51.com/model-404-ul/
With a 40' telescoping fiberglass pole, you can mount it's feedpoint 37' in the air and droop the ends down to about an 8' or 10' level, tied off to anything.
Removing the top two segments of that fiberglass pole puts it at 34'. Within your legal limits.

If you want to get on 80m, here is an antenna that will get you on the air on ALL hf bands from 80 thru 10m:
http://www.dj0ip.de/vertical-antennas/simple-multi-band-vertical/
It is a very good performer on 40 through 10m and works fair on 80m.
You do need a special matchbox for it; probably can't match it on 80 with a auto-tuner.
I use an MFJ-974B. An old Johnson Viking Matchbox will usually work, but you sometimes need to play with feedline lengths to get it to work on all bands.
Again, this antenna works on a 40' telescoping fiberglass pole. I use the poles from Spiderbeam. They are good quality, but not cheap.

You can mount these poles anywhere in the yard, very easily.
I usually just pound a piece of angle iron into the ground and strap the pole to it.
Example: http://www.dj0ip.de/spiderbeam/fiberglass-spiderpole/pole-base-mount/
The one pictured there is actually a 60 ft. pole.
I have an 80m OCFD attached to it.

Of course these won't work with all of your VHF antennas, but they will get you a good signal on hf.

73 - Rick, DJ0IP
(Nr. Frankfurt am Main)

From: SkyWires@yahoogroups.com [mailto:SkyWires@yahoogroups.com]
Sent: Saturday, July 25, 2015 2:51 PM
To: SkyWires@yahoogroups.com
Subject: Re: [SkyWires] Another Antenna Question

Well the FM on the pole was all tore up so that isn't possible unless it is on the web site. I live in a duplex so any type of tower isn't possible. Had a very nice antenna system at my previous house but lost that due to medical bills and job cut backs. So am

just looking to get something put back up. Columbus, Ohio code says I can have a telescoping tower as long as it isn't over 35 feet and I have to stay back 5 feet from the property line. Was able to get approval from th property owner to do the pole and longwire.

Paul
kc8ddq

Sent on the new Sprint Network

5035. Re: [SkyWires] Another Antenna Question

Yahoo group: SkyWires
Date: 2015-07-25 16:32:59 UTC
From: kc8ddq@aol.com
Topic: 5027 Message: 5035
Attachments: 2 described; binary payloads are missing from this source WARC

[Attachment content not displayed]

5036. Re: [SkyWires] Re: [ham-antennas] Another Antenn a Question

Yahoo group: SkyWires
Date: 2015-07-25 16:36:09 UTC
From: kc8ddq@aol.com
Topic: 5036 Message: 5036
Attachments: 2 described; binary payloads are missing from this source WARC

[Attachment content not displayed]

5037. Re: [SkyWires] Another Antenna Question

Yahoo group: SkyWires
Date: 2015-07-25 17:06:56 UTC
From: Skip Guenter
Topic: 5016 Message: 5037

OK, Here's the answer you want...

Yea, It'll work fine. Put it up right after you by that $1M personal liability policy.

On 07/25/2015 11:32 AM, 'kc8ddq@...' kc8ddq@... [SkyWires] wrote:
>
> I was looking at using my Par OA50 for 6 meter, Par OA144 for 2 meter
> and a Diamond X50 for 2/70 fm. Then just run a long wire off the top.
> All the antennas are fairly small. The H50 won't be completely extended.
>
> Sent on the new Sprint Network
>
> ----- Reply message -----
> From: "'Rick - DJ0IP / NJ0IP' Rick@... [SkyWires]"
> <SkyWires@yahoogroups.com>
> To: <SkyWires@yahoogroups.com>
> Subject: [SkyWires] Another Antenna Question
> Date: Sat, Jul 25, 2015 9:44 AM
>
> Paul, it would be easy enough to get on hf. There are plenty of ways.
> But you need to master clear your brain of what you have read in the
> antenna books or seen at the QTH of 98% of the other hams.
>
> I use lightweight telescoping fiberglass poles for all of my wire
> antennas.
> There are elcheapos which aren’t worth 1/10 of their cheap price, then
> there is the good quality stuff which will last a long time.
>
> You didn’t say what bands you are trying to get on.
> If it’s only 40m and above, then it’s a piece of cake.
> As an example you might build or buy one of these:
> http://www.aerial-51.com/model-404-ul/
> With a 40’ telescoping fiberglass pole, you can mount it’s feedpoint
> 37’ in the air and droop the ends down to about an 8’ or 10’ level,
> tied off to anything.
> Removing the top two segments of that fiberglass pole puts it at 34’.
> Within your legal limits.
>
> If you want to get on 80m, here is an antenna that will get you on the
> air on ALL hf bands from 80 thru 10m:
> http://www.dj0ip.de/vertical-antennas/simple-multi-band-vertical/
> It is a very good performer on 40 through 10m and works fair on 80m.
> You do need a special matchbox for it; probably can't match it on 80
> with a auto-tuner.

> I use an MFJ-974B. An old Johnson Viking Matchbox will usually work,
> but you sometimes need to play with feedline lengths to get it to work
> on all bands.
> Again, this antenna works on a 40' telescoping fiberglass pole. I use
> the poles from Spiderbeam. They are good quality, but not cheap.
>
> You can mount these poles anywhere in the yard, very easily.
> I usually just pound a piece of angle iron into the ground and strap
> the pole to it.
> Example:
> http://www.dj0ip.de/spiderbeam/fiberglass-spiderpole/pole-base-mount/
> The one pictured there is actually a 60 ft. pole.
> I have an 80m OCFD attached to it.
>
> Of course these won't work with all of your VHF antennas, but they
> will get you a good signal on hf.
>
> 73 - Rick, DJ0IP
> (Nr. Frankfurt am Main)
>
> From: SkyWires@yahoogroups.com [mailto:SkyWires@yahoogroups.com]
> Sent: Saturday, July 25, 2015 2:51 PM
> To: SkyWires@yahoogroups.com
> Subject: Re: [SkyWires] Another Antenna Question
>
> Well the FM on the pole was all tore up so that isn't possible unless
> it is on the web site. I live in a duplex so any type of tower isn't
> possible. Had a very nice antenna system at my previous house but lost
> that due to medical bills and job cut backs. So am just looking to get
> something put back up. Columbus, Ohio code says I can have a
> telescoping tower as long as it isn't over 35 feet and I have to stay
> back 5 feet from the property line. Was able to get approval from th
> property owner to do the pole and longwire.
>
> Paul
> kc8ddq
>
> Sent on the new Sprint Network
>
>

--
S. R. 'Skip' Guenter, K5SRG
/3905cc 40m SSB Late Coord
Alt Dir, 5th Call Area
/

5038. Re: [SkyWires] Re: [ham-antennas] Another Antenn a Question [1 Attachment]

Yahoo group: SkyWires
Date: 2015-07-25 16:33:53 UTC
From: kc8ddq@aol.com
Topic: 5028 Message: 5038
Attachments: 2 described; binary payloads are missing from this source WARC

[Attachment content not displayed]

5039. RE: [SkyWires] Another Antenna Question

Yahoo group: SkyWires
Date: 2015-07-25 19:19:49 UTC
From: Rick - DJ0IP / NJ0IP
Topic: 5016 Message: 5039

A.M.E.N.

73 - Rick, DJ0IP

(Nr. Frankfurt am Main)

From: SkyWires@yahoogroups.com [mailto:SkyWires@yahoogroups.com]
Sent: Saturday, July 25, 2015 7:07 PM
To: SkyWires@yahoogroups.com
Subject: Re: [SkyWires] Another Antenna Question

OK, Here's the answer you want...

Yea, It'll work fine. Put it up right after you by that $1M personal liability policy.

On 07/25/2015 11:32 AM, 'kc8ddq@...' kc8ddq@... [SkyWires] wrote:

I was looking at using my Par OA50 for 6 meter, Par OA144 for 2 meter and a Diamond X50 for 2/70 fm. Then just run a long wire off the top. All the antennas are fairly small. The H50 won't be completely extended.

Sent on the new Sprint Network

----- Reply message -----
From: "'Rick - DJ0IP / NJ0IP' Rick@... [SkyWires]" <mailto:SkyWires@yahoogroups.com> <SkyWires@yahoogroups.com>
To: <mailto:SkyWires@yahoogroups.com> <SkyWires@yahoogroups.com>
Subject: [SkyWires] Another Antenna Question
Date: Sat, Jul 25, 2015 9:44 AM

Paul, it would be easy enough to get on hf. There are plenty of ways.
But you need to master clear your brain of what you have read in the antenna books or seen at the QTH of 98% of the other hams.

I use lightweight telescoping fiberglass poles for all of my wire antennas.
There are elcheapos which aren’t worth 1/10 of their cheap price, then there is the good quality stuff which will last a long time.

You didn’t say what bands you are trying to get on.
If it’s only 40m and above, then it’s a piece of cake.
As an example you might build or buy one of these:
http://www.aerial-51.com/model-404-ul/
With a 40’ telescoping fiberglass pole, you can mount it’s feedpoint 37’ in the air and droop the ends down to about an 8’ or 10’ level, tied off to anything.
Removing the top two segments of that fiberglass pole puts it at 34’. Within your legal limits.

If you want to get on 80m, here is an antenna that will get you on the air on ALL hf bands from 80 thru 10m:
http://www.dj0ip.de/vertical-antennas/simple-multi-band-vertical/
It is a very good performer on 40 through 10m and works fair on 80m.
You do need a special matchbox for it; probably can't match it on 80 with a auto-tuner.
I use an MFJ-974B. An old Johnson Viking Matchbox will usually work, but you sometimes need to play with feedline lengths to get it to work on all bands.
Again, this antenna works on a 40' telescoping fiberglass pole. I use the poles from Spiderbeam. They are good quality, but not cheap.

You can mount these poles anywhere in the yard, very easily.
I usually just pound a piece of angle iron into the ground and strap the pole to it.
Example: http://www.dj0ip.de/spiderbeam/fiberglass-spiderpole/pole-base-mount/
The one pictured there is actually a 60 ft. pole.
I have an 80m OCFD attached to it.

Of course these won't work with all of your VHF antennas, but they will get you a good signal on hf.

73 - Rick, DJ0IP
(Nr. Frankfurt am Main)

From: SkyWires@yahoogroups.com [mailto:SkyWires@yahoogroups.com]
Sent: Saturday, July 25, 2015 2:51 PM
To: SkyWires@yahoogroups.com
Subject: Re: [SkyWires] Another Antenna Question

Well the FM on the pole was all tore up so that isn't possible unless it is on the web site. I live in a duplex so any type of tower isn't possible. Had a very nice antenna system at my previous house but lost that due to medical bills and job cut backs. So am just looking to get something put back up. Columbus, Ohio code says I can have a telescoping tower as long as it isn't over 35 feet and I have to stay back 5 feet from the property line. Was able to get approval from th property owner to do the pole and longwire.

Paul
kc8ddq

Sent on the new Sprint Network

--
S. R. 'Skip' Guenter, K5SRG
3905cc 40m SSB Late Coord
Alt Dir, 5th Call Area

5040. Re: [SkyWires] Another Antenna Question

Yahoo group: SkyWires
Date: 2015-07-25 21:46:00 UTC
From: kc8ddq@aol.com
Topic: 5027 Message: 5040
Attachments: 2 described; binary payloads are missing from this source WARC

[Attachment content not displayed]

5041. Re: [SkyWires] Another Antenna Question

Yahoo group: SkyWires
Date: 2015-07-25 19:20:47 UTC
From: kc8ddq@aol.com
Topic: 5027 Message: 5041
Attachments: 2 described; binary payloads are missing from this source WARC

[Attachment content not displayed]

5042. Re: AW: [SkyWires] Re: SARK100 Help

Yahoo group: SkyWires
Date: 2015-07-25 22:02:39 UTC
From: slr_65@...
Topic: 5013 Message: 5042

Thank you Sigi!

Yep, the problem was simply the batteries needing charged...and they took forever to charge, 10-12 hours.

Now that they are charged up it seems to be working fine, my manual Dentron tuner adjusts the SWR and when checked with the rig it is spot on, and if I use the MFJ auto tuner and tune it for a freq and then use the analyzer it agrees with the auto tuner, so it appears it's working fine and it appears it is already calibrated, though I'll probably order the stuff to make the calibration loads anyway for future use.

Now to figure out which pc software...

5043. Re: AW: [SkyWires] Re: SARK100 Help

Yahoo group: SkyWires
Date: 2015-07-26 01:55:14 UTC
From: slr_65@...
Topic: 5013 Message: 5043

Hi Sigi,

I'm looking at the SARK 100 package you kindly uploaded for me and I'm trying to figure out what it all is.

Remember, I'm vision impaired so I just may not be seeing / reading something correctly.

Android_soft - this folder contains Android software

Documents - Contains various pics and documents.

Ftdi_driver - Contains the executable USB / Com Port driver for Windows 7/8.

Sark 100_Gerber - I don't know.

SARK100_SwrAnalyzer_BL - I don't know, I think maybe its got something to do with the firmware for the unit?

Sark 100_WIN - Windows software to download data from the analyzer. It appears this will generate an eXcel csv file?

Google translated read_me.txt:
Windows software
if you have created a shortcut on the
desktop then properties ... and the
file name to comport indicate (see
picture) no longer have to manually
adjust the you can if you use BT easy
to create 2 different shortcuts one for
USB and one for BT.

Sark100_win_install - This appears to be another Windows software program to link to the analyzer? It appears different that the one just above?

Terminal - I don't know, it has a bootloader program, so possibly something to do with the units firmware?

WinPCC-Sark100 - Another Windows software program to link to the analyzer?

Z-Plots - DOS based software to link to the analyzer, can create eXcel compatible files.

Google translated read_me.txt:
the file z_plots.bat edit text editor
PCC sark100 (Proggi located in this folder)

-c COM port
-s start frequency
-e end frequency
-t increment (in Hz everything !!!)

-o filename to be saved under the sweep

after you have saved several sweeps ... you can then look with sark100-zpolts.xls, edit, compare multiple (up to 4 different antennas compare on a display)

Thanks!

Steve

5044. Re: AW: [SkyWires] Re: SARK100 Help

Yahoo group: SkyWires
Date: 2015-07-26 04:13:35 UTC
From: slr_65@...
Topic: 5013 Message: 5044

Been playing a bit...

Sark100_win_install - actually opens an installer and installs the program to the programs menu. Easy enough to use program, but no way I can see to save the data.

Sark 100_WIN - Looks and functions exactly like the program above, does not install to the programs menu, just click and it runs.

WinPCC-Sark100 - Appears to be the most useful program. It doesn't install either, just runs when you click on it. It allows saving the data. It will export to an eXcel spreadsheet, though the spreadsheet headings are just x and y for most columns.

5045. AW: AW: [SkyWires] Re: SARK100 Help

Yahoo group: SkyWires
Date: 2015-07-26 09:51:55 UTC
From: siegfried jackstien
Topic: 5013 Message: 5045

Comments interlaced in text below

>
> Hi Sigi,

HI :-)

>
> I'm looking at the SARK 100 package you kindly uploaded for me and I'm
> trying to figure out what it all is.
>
> Remember, I'm vision impaired so I just may not be seeing / reading
> something correctly.
>
> Android_soft - this folder contains Android software
>

If you have a sark100 or mini60 and added a bt module to it then you can use the android soft on a smartpone or tablet ... nice for antenna tests on fieldday cause you do not need to carry a pc with you

> Documents - Contains various pics and documents.

In that folder you also will find info how to add bt to sark100/mini60

A picture from sark pcb showing the connections towards bt modulwe etc.

>
> Ftdi_driver - Contains the executable USB / Com Port driver for Windows
> 7/8.
>

Yepp ... that is ftdi driver for usb port

> Sark 100_Gerber - I don't know.

Gerber files ... contains the pcb in gerber format (and that is used from many pcb companies for manufacturing pcb) ... not needed for a user but originally the sark was an open source project from a Spanish ham ... and he also developed the pcb and case for the sark ... and those gerber files ...are from his project

>
> SARK100_SwrAnalyzer_BL - I don't know, I think maybe its got something to
> do with the firmware for the unit?

Correct ... bl means bootloader

If you did not buy a unit from china but have a complete homebrewed analyzer ... then you have to get the program inside in some way

> Sark 100_WIN - Windows software to download data from the analyzer. It
> appears this will generate an eXcel csv file?
>
> Google translated read_me.txt:
> Windows software
> if you have created a shortcut on the
> desktop then properties ... and the
> file name to comport indicate (see
> picture) no longer have to manually
> adjust the you can if you use BT easy
> to create 2 different shortcuts one for
> USB and one for BT.

This is how you add the used comport to the windows shortcut (so you do not have to select the port manually after start of the soft)

And when you have usb and bt ... just make two different shortcuts on your desktop ... one for usb and the other for bt

> Sark100_win_install - This appears to be another Windows software program
> to link to the analyzer? It appears different that the one just above?

I accidently put that soft two times inside that package ... one is a zipped file and the other is the folder with the soft ready to use

That is why folder name is nearly the same ... sark 100 win and sark100 win install ...

> Terminal - I don't know, it has a bootloader program, so possibly
> something to do with the units firmware?

Correct ... not needed for a user ... just if you have a homebrewed one you need that
> WinPCC-Sark100 - Another Windows software program to link to the analyzer?
>

That is the second win software that I found for the sark ... try out if you more like the first or the second one :-)

> Z-Plots - DOS based software to link to the analyzer, can create eXcel
> compatible files.

Yepp ... that is the dos box software for the sark

You have to edit the batchfile before you can use it

>
> Google translated read_me.txt:
> the file z_plots.bat edit text editor
> PCC sark100 (Proggi located in this folder)
>
> -c COM port
> -s start frequency
> -e end frequency
> -t increment (in Hz everything !!!)
> -o filename to be saved under the sweep
>
> after you have saved several sweeps ... you can then look with sark100-
> zpolts.xls, edit, compare multiple (up to 4 different antennas compare on
> a display)

After you made a few sweeps (with different filenames) you can open the saved csv files with the excelsheet (zplots xls) ...why do I like to use the dosbox software is ... it is easy to use (edit batchfile, make a sweep, again edit batchfile ... and so on) ... and I can then later use the stored sweeps with the excel sheet and compare up to four sweeps in one picture

With the win soft above you can not do that (win soft is for life data while dosbox is more for working with the data later)

.... but anyway ... it is best to have all software and use that one that you need in that right moment ... sometimes it is the dosbox soft ... and sometimes it is the win soft

.....

Hope that helps

Greetz

Sigi

Dg9bfc

5046. Direct hit...

Yahoo group: SkyWires
Date: 2015-07-27 00:12:27 UTC
From: auto_row_tate@...
Topic: 5046 Message: 5046

Update on the loop... I have had 1000 foot of wireman solid 14 gauge clad up at 70 feet for about a year now. I fed it with 450 ohm ladder line about 60 feet into a 4:1 dx engineering balun 5kw. From there 15 feet of lmr400 into the shack. In the shack is a palstar hf auto, ameritron 1306, icom 7600... The loop has worked extremely well for me on all bands 160-10m. I was blessed to work VK and JA on the loop (160m) both RX and TX on loop only and 1200w.
Yesterday I took a direct hit to the loop which melted about 90 percent of the ladder line. After investigation, the loop wire is fine, it was the ladder line that was the weak link, maybe to my benefit... I did have the gear unplugged. I have new line on order and hope to have it back on the air soon. I will be moving it a touch further from the house after this strike. Everyone keep it safe out there, large loops can be a pain but worth the results ,

Jay kb8o

5047. Re: [SkyWires] Direct hit...

Yahoo group: SkyWires
Date: 2015-07-27 00:43:04 UTC
From: Evan Rolek
Topic: 5046 Message: 5047

Jay,

That's why I use weather resistant quick-disconnects outside so I can disconnect my loops from the house in stormy times. Glad YOU didn't get burned.

73,

Evan, K9SQG

-----Original Message-----
From: auto_row_tate@... [SkyWires] <SkyWires@yahoogroups.com>
To: SkyWires <SkyWires@yahoogroups.com>
Sent: Sun, Jul 26, 2015 8:12 pm
Subject: [SkyWires] Direct hit...

Update on the loop... I have had 1000 foot of wireman solid 14 gauge clad up at 70 feet for about a year now. I fed it with 450 ohm ladder line about 60 feet into a 4:1 dx engineering balun 5kw. From there 15 feet of lmr400 into the shack. In the shack is a palstar hf auto, ameritron 1306, icom 7600... The loop has worked extremely well for me on all bands 160-10m. I was blessed to work VK and JA on the loop (160m) both RX and TX on loop only and 1200w.

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Jay kb8o

5048. Re: AW: AW: [SkyWires] Re: SARK100 Help

Yahoo group: SkyWires
Date: 2015-07-27 01:15:18 UTC
From: slr_65@...
Topic: 5013 Message: 5048

Hi Sigi,

I'm updating my notes -thanks!

Did you know that there the ZPlots spreadsheet is a several versions behind?

It doesn't appear it's customized for the SARK as the new one seems to work for me.

Download the new version here:

AC6LA Software - Zplots http://ac6la.com/zplots1.html

http://ac6la.com/zplots1.html

AC6LA Software - Zplots http://ac6la.com/zplots1.html Buttons available on the various sheets are: Load Data: Read a data file from one of the above...

View on ac6la.com http://ac6la.com/zplots1.html
Preview by Yahoo

5049. New file uploaded to SkyWires

Yahoo group: SkyWires
Date: 2015-07-27 05:24:47 UTC
From: SkyWires@yahoogroups.com
Topic: 1641 Message: 5049

Hello,

This email message is a notification to let you know that
a file has been uploaded to the Files area of the SkyWires
group.

File : /KA0NEB Files/160-10m_sweep.csv
Uploaded by : slr_65 <slr_65@...>
Description : SARK100 160-10 sweep of my loop antenna

You can access this file at the URL:
https://groups.yahoo.com/neo/groups/SkyWires/files/KA0NEB%20Files/160-10m_sweep.csv

To learn more about file sharing for your group, please visit:
https://help.yahoo.com/kb/index?page=content&y=PROD_GRPS&locale=en_US&id=SLN15398

Regards,

slr_65 <slr_65@...>

5050. Re: AW: AW: [SkyWires] Re: SARK100 Help

Yahoo group: SkyWires
Date: 2015-07-27 06:04:04 UTC
From: slr_65@...
Topic: 5013 Message: 5050

OK, I think I'm getting the hang of the SARK100 software.

I'm wih Sigi here, I think I like the DOS software invoked by batch files.

I did a sweep of my loop antenna from 160 to 10 meters with .1mhz steps and uploaded it.

Interesting thing here. I'm using a 1:1 tuner balun from Balun Designs. My MFJ auto tuner can find a 1:1 match for every band, including 160, except 15 meter, the best it can do there is 1.5:1. The auto tuner has a built in 4:1 current balun and if I hook the antenna up to it then it finds a 1:1 match on every band.

5051. RE: AW: AW: [SkyWires] Re: SARK100 Help

Yahoo group: SkyWires
Date: 2015-07-27 07:48:21 UTC
From: Rick - DJ0IP / NJ0IP
Topic: 5013 Message: 5051

Man, 1.5:1 is the same as a 1.0:1 as far as performance goes.
Forget it.
If it really bugs you, just add 4’ of openwire feedline to the feedline and try again.
But it’s majoring in minors to try and get it better!

The autotuner's balun may find a 1:1 match on every band, but you might also have common mode current problems when using it. Perhaps not. The 1:1 balun will kill the CMC for sure.

73 - Rick, DJ0IP
(Nr. Frankfurt am Main)

From: SkyWires@yahoogroups.com [mailto:SkyWires@yahoogroups.com]
Sent: Monday, July 27, 2015 8:04 AM
To: SkyWires@yahoogroups.com
Subject: Re: AW: AW: [SkyWires] Re: SARK100 Help

OK, I think I'm getting the hang of the SARK100 software.

I'm wih Sigi here, I think I like the DOS software invoked by batch files.

I did a sweep of my loop antenna from 160 to 10 meters with .1mhz steps and uploaded it.

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5052. AW: AW: AW: [SkyWires] Re: SARK100 Help

Yahoo group: SkyWires
Date: 2015-07-27 09:05:24 UTC
From: siegfried jackstien
Topic: 5013 Message: 5052

You should also do a sweep with a 1:4 or higher and no tuner ... and with different length of ladderline (and a bit of pruning on the loop??)

I can do a sweep with a 1:1 and with a 1:9 ... and both show low swr spots ... but on different bands

What I use here is also a tuned length of ladderline ... a shorter run from loop to shack ... and another length is added on some bands with just two banana plugs

With that setup I could set my sweet spots exactly where I wanted them (three days of pruning loop and ladderline with several try and error runs ... that was BEFORE I had a sark!!!!)

What I use her is a homebrewed 1:9 ... reason is

I use the ladderline as a transformer ... from low ohms (cause the loop is low in wavelength on the lower bands) up to 400 to 500 ohms and with the balun back down to 50 ohms ... on higher bands the impedance of the big loop is more in the several hundred ohms range and then the ladderline is almost matched (and almost no transforming does happen) ... and so I also have a few hundred ohms on shack end (and with that balun back down to 50)

On most of the bands I do need no tuner at all (or only on band edges)... and on the other bands it is well below 1:3 ... more in the 1:2 range(and so low tuner loss)

Greetz

Sigi

Dg9bfc

> -----Ursprüngliche Nachricht-----
> Von: SkyWires@...m [mailto:SkyWires@yahoogroups.com]
> Gesendet: Montag, 27. Juli 2015 06:04
> An: SkyWires@yahoogroups.com
> Betreff: Re: AW: AW: [SkyWires] Re: SARK100 Help
>
>
>
> OK, I think I'm getting the hang of the SARK100 software.
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> I'm wih Sigi here, I think I like the DOS software invoked by batch files.
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> and uploaded it.

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> Interesting thing here. I'm using a 1:1 tuner balun from Balun Designs.
> My MFJ auto tuner can find a 1:1 match for every band, including 160,
> except 15 meter, the best it can do there is 1.5:1. The auto tuner has a
> built in 4:1 current balun and if I hook the antenna up to it then it
> finds a 1:1 match on every band.
>
>

5053. RE: [SkyWires] Anyone tried multiple turns of wire on SkyLoop?

Yahoo group: SkyWires
Date: 2015-07-27 13:26:14 UTC
From: tom armour
Topic: 4998 Message: 5053

I have a large spool of old 2 conductor military communication wire that I tried this with. This is basically ruggedized 16 gauge zip cord.

I put up a 270' piece of wire in a loop about 35 feet high and fed with about 65' of 450 ohm ladder line. The ladder line connects to a 4-1 balun then several feet of coax into the shack. I use a tuner.

Most of my on air tests were done on 80m and not very scientific. I do not have any of my measurements documented, but I might be able to find some 1-30MHZ SWR plots on my old computer of each of the three below.

First: I tried it with both conductors tied together for one 270' loop
-This worked well.

Second: I configured it so each side of the ladder line fed different conductors and did a crossover between the two conductors making two turns of 270'.
-This worked ok but not as well as the single loop.

Third: I cut the crossover and let the ends dangle down a few inches so they were not too close together essentially making a 540' doublet.
-this worked better that both the other two configurations.

Those are my experiences with a single and double turned loop.

Tom - wa4ta

To: SkyWires@yahoogroups.com
From: SkyWires@...m
Date: Fri, 24 Jul 2015 08:07:44 -0500
Subject: Re: [SkyWires] Anyone tried multiple turns of wire on SkyLoop?

I have a 550ft horizontal delta loop and have often wondered the same, if a extra run would help.
What would your spacing be?? Would you run the wires in a parallel setup or series?? Please keep us informed.
Rich, KdØzz

On Thu, Jul 23, 2015 at 11:40 PM, w6mob@... [SkyWires] <SkyWires@yahoogroups.com> wrote:

All

I had good success with modeling and building a 283 feet loop at about 40 feet high.
I remember that for smaller loop, at least, increasing the area and/or the number of turns of wire will improve the voltage across the terminals.
So my question is has anyone tried to use multiple turns or wire? If so what type of results did you see?
I wanted to ask before I go and try to put up 4 or 8 turns of 283 feet all ziptied together.

Cheers
Mick
W6MOB

5054. AW: [SkyWires] Anyone tried multiple turns of wire on SkyLoop?

Yahoo group: SkyWires
Date: 2015-07-27 14:01:23 UTC
From: siegfried jackstien
Topic: 4998 Message: 5054

Your 540 doublet was not a doublet but still a 270 loop

Reason ... the close coupling of the wires made it act like one thicker wire

And that is also the reason why the setup with crossover did not work well

You were almost short circuiting your energy

Dg9bfc

Sigi

> -----Ursprüngliche Nachricht-----
> Von: SkyWires@yahoogroups.com [mailto:SkyWires@yahoogroups.com]
> Gesendet: Montag, 27. Juli 2015 13:26
> An: SkyWires@yahoogroups.com
> Betreff: RE: [SkyWires] Anyone tried multiple turns of wire on SkyLoop?
>
>
>
> I have a large spool of old 2 conductor military communication wire that I
> tried this with. This is basically ruggedized 16 gauge zip cord.
>
> I put up a 270' piece of wire in a loop about 35 feet high and fed with
> about 65' of 450 ohm ladder line. The ladder line connects to a 4-1 balun
> then several feet of coax into the shack. I use a tuner.
>
> Most of my on air tests were done on 80m and not very scientific. I do
> not have any of my measurements documented, but I might be able to find
> some 1-30MHZ SWR plots on my old computer of each of the three below.
>
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> -This worked well.
>
> Second: I configured it so each side of the ladder line fed different
> conductors and did a crossover between the two conductors making two turns
> of 270'.
> -This worked ok but not as well as the single loop.
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> Third: I cut the crossover and let the ends dangle down a few inches so
> they were not too close together essentially making a 540' doublet.
> -this worked better that both the other two configurations.
>
> Those are my experiences with a single and double turned loop.
>
> Tom - wa4ta

>
>
> _____
>
> To: SkyWires@yahoogroups.com
> From: SkyWires@yahoogroups.com
> Date: Fri, 24 Jul 2015 08:07:44 -0500
> Subject: Re: [SkyWires] Anyone tried multiple turns of wire on SkyLoop?
>
>
>
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> a extra run would help.
> What would your spacing be?? Would you run the wires in a parallel setup
> or series?? Please keep us informed.
>
>
> Rich, KdØzz
>
>
> On Thu, Jul 23, 2015 at 11:40 PM, w6mob@...m [SkyWires]
> <SkyWires@yahoogroups.com> wrote:
>
>
>
>
>
>
> All
>
>
> I had good success with modeling and building a 283 feet loop at
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> I remember that for smaller loop, at least, increasing the area
> and/or the number of turns of wire will improve the voltage across the
> terminals.
> So my question is has anyone tried to use multiple turns or wire? If
> so what type of results did you see?
> I wanted to ask before I go and try to put up 4 or 8 turns of 283
> feet all ziptied together.
>
>
> Cheers
> Mick
> W6MOB
>
>
>
>
>
>
>

5055. RE: AW: AW: [SkyWires] Re: SARK100 Help

Yahoo group: SkyWires
Date: 2015-07-27 15:36:31 UTC
From: slr_65@...
Topic: 5013 Message: 5055

Hi Rick,

Yeah, i wasn't worried about it, just something I noticed.

5056. Re: AW: AW: AW: [SkyWires] Re: SARK100 Help

Yahoo group: SkyWires
Date: 2015-07-27 18:19:28 UTC
From: slr_65@...
Topic: 5013 Message: 5056

Hi Sigi,

Thanks for the tips!

Unfortunately I only have the one external balun and since I'm low vision building my own isn't really an option for me any more.

As long as the loop works with my auto tuner I'm happy, and it's been working extermely well! I've worked over 30 countries in the last month or so!

I'm hard pressed to mess iwth success, but I'm looking at moving the feedpoint to a spot that's more asthetically appealing to the wife and while I'm at it I think we'll see if we can get the west end up a little higher in the second tree (we had it higher but it slipped off a branch and the wind that day was strong enough that reshooting was an option). Hopefully the mods don't cause any issues!

Take care, thanks for the input and the SARK100 help!!!

73s,

Steve

5057. Re: Direct hit...

Yahoo group: SkyWires
Date: 2015-07-27 21:47:22 UTC
From: kc8ddq@...
Topic: 5046 Message: 5057

Jay. Glad your strike wasn't any worse than it was. Especially you health and safety. Lightening is SO unpredictable.

Evan. If you see this, what quick disconnect do you use. I've always disconnected all my coax fed equipment and all power cables when my equipment isn't in use. Would be interested in installing some kind of disconnect outside as well.

Paul

5058. RE: [SkyWires] Re: Direct hit...

Yahoo group: SkyWires
Date: 2015-07-27 22:08:01 UTC
From: Rick - DJ0IP / NJ0IP
Topic: 5046 Message: 5058

On that topic, has anyone tried using the biggest set of Anderson PowerPole connectors.

Seems they would be ideal – mounted separately of course, not side by side.

73 - Rick, DJ0IP

(Nr. Frankfurt am Main)

From: SkyWires@yahoogroups.com [mailto:SkyWires@yahoogroups.com]
Sent: Monday, July 27, 2015 11:47 PM
To: SkyWires@yahoogroups.com
Subject: [SkyWires] Re: Direct hit...

Jay. Glad your strike wasn't any worse than it was. Especially you health and safety. Lightening is SO unpredictable.

Evan. If you see this, what quick disconnect do you use. I've always disconnected all my coax fed equipment and all power cables when my equipment isn't in use. Would be interested in installing some kind of disconnect outside as well.

Paul

5059. Re: Direct hit...

Yahoo group: SkyWires
Date: 2015-07-27 22:28:54 UTC
From: auto_row_tate@...
Topic: 5046 Message: 5059

Paul I use the Molex connects from Radio shack , same ones that are on the back of the Icom radios for the antenna tuner... I have used them for a year, once an awhile you have to squeeze the female connector a little closed but they have worked fine for me and the 2 outside connectors are just about right spacing for 450 ohm line... I have new stuff ordered to repair my antenna, and This time I am moving it about 8 feet from the house, and when not in use I will have another Molex plug straight to a ground rod... My thought is the only way to be safe is to disconnect and move the feed into the house as far away as possible...

Jay KB8O

5060. AW: [SkyWires] Re: Direct hit...

Yahoo group: SkyWires
Date: 2015-07-27 22:46:27 UTC
From: siegfried jackstien
Topic: 5046 Message: 5060

I just use banana plugs (and sockets) ... if contacts become bad I replace them with new ones ... reliable and cheap ... and if something hits your antenna wire (no not a strike ... I mean mechanical).. then the bananas pull out without any damage ... works fine here

And if you also have some connectors at your ground rod before house entrance ... then it is easy to connect the ladderline to ground OUTSIDE of the house

I do not know if grounding does the strike move towards your house (but I have heard that strikes love grounded metal structures in the air) :-)

Better keep that high power out of your house

Dg9bfc

Sigi

> -----Ursprüngliche Nachricht-----
> Von: SkyWires@yahoogroups.com [mailto:SkyWires@yahoogroups.com]
> Gesendet: Montag, 27. Juli 2015 22:29
> An: SkyWires@yahoogroups.com
> Betreff: [SkyWires] Re: Direct hit...
>
>
>
> Paul I use the Molex connects from Radio shack , same ones that are on the
> back of the Icom radios for the antenna tuner... I have used them for a
> year, once an awhile you have to squeeze the female connector a little
> closed but they have worked fine for me and the 2 outside connectors are
> just about right spacing for 450 ohm line... I have new stuff ordered to
> repair my antenna, and This time I am moving it about 8 feet from the
> house, and when not in use I will have another Molex plug straight to a
> ground rod... My thought is the only way to be safe is to disconnect and
> move the feed into the house as far away as possible...
>
> Jay KB8O
>
>

5061. Re: [SkyWires] Re: Direct hit...

Yahoo group: SkyWires
Date: 2015-07-27 23:05:22 UTC
From: Evan Rolek
Topic: 5046 Message: 5061

My system uses banana plugs and jacks BUT the higher priced ones with nickel plating to resist rust. They are in a weatherproof enclosure and I've not had any failures in almost 10 years of use. The terminals are mounted to a speaker plate that is used to make connections with hi-fi installations. I've used this at legal limit power levels and have not had any failures or problems and it is very quick to disconnect or reconnect.

73,

Evan, K9SQG

-----Original Message-----
From: 'siegfried jackstien' siegfried.jackstien@... [SkyWires] <SkyWires@yahoogroups.com>
To: SkyWires <SkyWires@yahoogroups.com>
Sent: Mon, Jul 27, 2015 6:49 pm
Subject: AW: [SkyWires] Re: Direct hit...

I just use banana plugs (and sockets) ... if contacts become bad I replace them with new ones ... reliable and cheap ... and if something hits your antenna wire (no not a strike ... I mean mechanical).. then the bananas pull out without any damage ... works fine here

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I do not know if grounding does the strike move towards your house (but I have heard that strikes love grounded metal structures in the air) :-)

Better keep that high power out of your house

Dg9bfc

Sigi

> -----Ursprüngliche Nachricht-----
> Von: SkyWires@yahoogroups.com [mailto:SkyWires@yahoogroups.com]
> Gesendet: Montag, 27. Juli 2015 22:29
> An: SkyWires@yahoogroups.com
> Betreff: [SkyWires] Re: Direct hit...
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>
>
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> just about right spacing for 450 ohm line... I have new stuff ordered to

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> house, and when not in use I will have another Molex plug straight to a
> ground rod... My thought is the only way to be safe is to disconnect and
> move the feed into the house as far away as possible...
>
> Jay KB8O
>
>

5062. Re: AW: AW: AW: [SkyWires] Re: SARK100 Help

Yahoo group: SkyWires
Date: 2015-07-29 18:46:26 UTC
From: slr_65@...
Topic: 5013 Message: 5062

Does anyone know what power plug size the Mini60 needs?

The specs say it's a 2.1mm center pin and that usually just comes with a 5.5mm outter barrel, so that's what I ordered and the outter barrel is too big and it won't fit in the hole.

It looks like the standard smaller diameter sizes are:
4.8 X 1.7mm
4.0 X 1.7mm
3.5 X 1.35mm

5063. DC Power distribution in the shack

Yahoo group: SkyWires
Date: 2015-07-30 18:40:43 UTC
From: slr_65@...
Topic: 5063 Message: 5063

I'm looking at a nice way to handle DC power distribution in the shack and I'd like to have quick disconnects, I see MFJ makes a DC power strip that uses banana jacks but I'm using banana jacks on my ladder line and you can plug banana jacks in wrong. I'm not worried about myself, but I'm low vision and they don't know the cause of my problem, so can't guarantee it won't get worse so others may be plugging and unplugging my stuff in the future, so I want to make things idiot proof.

.

What I want is a power strip with plugs that can't be plugged in wrong...I'm thinking a regular a/c power strip is what I want, but again - I want it idiot proof, so diverting one to DC use isn't a good idea...but what about a foreign power strip? Maybe a European or Australian one?

.

Anyone done anything like this, or how do the majority handle DC power distribution?

.

If worse comes to worse, ti doesn't have to be quick disconnect, I could probably get by fine with a simple screw type terminal strip, but quick disconnect is just really nice.

.

Looking forward to hearing about what others use.

.

73s,

Steve KA0NEB

5064. AW: [SkyWires] DC Power distribution in the shack

Yahoo group: SkyWires
Date: 2015-07-30 19:11:27 UTC
From: siegfried jackstien
Topic: 5063 Message: 5064

Anderson power poles (just google them)

There are similar power strips that you have seen with banana plugs
available that have these wonderful Anderson connectors instead of banana
plugs ... (if I remember right I also have seen a combined one with BOTH
connectors ontop)

An few examples here

http://briandorey.com/post/powerpole-fused-distribution-board.aspx

http://www.powerwerx.com/powerpole-power-distribution/rigrunner-4005h-horizo
ntal.html

http://www.westmountainradio.com/rigrunner.php

etc. etc.

you will find a dozen different solutions with these Anderson connectors

and ... they are foolproof :-)

dg9bfc

sigi

> -----Ursprüngliche Nachricht-----
> Von: SkyWires@yahoogroups.com [mailto:SkyWires@yahoogroups.com]
> Gesendet: Donnerstag, 30. Juli 2015 18:41
> An: SkyWires@yahoogroups.com
> Betreff: [SkyWires] DC Power distribution in the shack
>
>
>
> I'm looking at a nice way to handle DC power distribution in the shack and
> I'd like to have quick disconnects, I see MFJ makes a DC power strip that
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> won't get worse so others may be plugging and unplugging my stuff in the
> future, so I want to make things idiot proof.
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> What I want is a power strip with plugs that can't be plugged in
> wrong...I'm thinking a regular a/c power strip is what I want, but again -
> I want it idiot proof, so diverting one to DC use isn't a good idea...but
> what about a foreign power strip? Maybe a European or Australian one?
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> Anyone done anything like this, or how do the majority handle DC power

> distribution?
> .
> If worse comes to worse, ti doesn't have to be quick disconnect, I could
> probably get by fine with a simple screw type terminal strip, but quick
> disconnect is just really nice.
> .
> Looking forward to hearing about what others use.
> .
> 73s,
>
> Steve KA0NEB
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>

5065. RE: [SkyWires] DC Power distribution in the shack

Yahoo group: SkyWires
Date: 2015-07-30 19:21:00 UTC
From: Rick - DJ0IP / NJ0IP
Topic: 5063 Message: 5065

Anderson PowerPole

73 - Rick, DJ0IP

(Nr. Frankfurt am Main)

From: SkyWires@yahoogroups.com [mailto:SkyWires@yahoogroups.com]
Sent: Thursday, July 30, 2015 8:41 PM
To: SkyWires@yahoogroups.com
Subject: [SkyWires] DC Power distribution in the shack

I'm looking at a nice way to handle DC power distribution in the shack and I'd like to have quick disconnects, I see MFJ makes a DC power strip that uses banana jacks but I'm using banana jacks on my ladder line and you can plug banana jacks in wrong. I'm not worried about myself, but I'm low vision and they don't know the cause of my problem, so can't guarantee it won't get worse so others may be plugging and unplugging my stuff in the future, so I want to make things idiot proof.
.
What I want is a power strip with plugs that can't be plugged in wrong...I'm thinking a regular a/c power strip is what I want, but again - I want it idiot proof, so diverting one to DC use isn't a good idea...but what about a foreign power strip? Maybe a European or Australian one?
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Anyone done anything like this, or how do the majority handle DC power distribution?
.
If worse comes to worse, ti doesn't have to be quick disconnect, I could probably get by fine with a simple screw type terminal strip, but quick disconnect is just really nice.
.
Looking forward to hearing about what others use.
.
73s,

Steve KA0NEB

5066. AW: [SkyWires] DC Power distribution in the shack

Yahoo group: SkyWires
Date: 2015-07-30 20:21:01 UTC
From: siegfried jackstien
Topic: 5063 Message: 5066

Hi rick

I was faster ... grin :-)

Dg9bfc

Sigi

> -----Ursprüngliche Nachricht-----
> Von: SkyWires@yahoogroups.com [mailto:SkyWires@yahoogroups.com]
> Gesendet: Donnerstag, 30. Juli 2015 19:21
> An: SkyWires@yahoogroups.com
> Betreff: RE: [SkyWires] DC Power distribution in the shack
>
>
>
> Anderson PowerPole
>
> 73 - Rick, DJ0IP
>
> (Nr. Frankfurt am Main)
>
>
>
> From: SkyWires@yahoogroups.com [mailto:SkyWires@yahoogroups.com]
> Sent: Thursday, July 30, 2015 8:41 PM
> To: SkyWires@yahoogroups.com
> Subject: [SkyWires] DC Power distribution in the shack
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> I'm looking at a nice way to handle DC power distribution in the shack and
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> Anyone done anything like this, or how do the majority handle DC power
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> If worse comes to worse, ti doesn't have to be quick disconnect, I could
> probably get by fine with a simple screw type terminal strip, but quick
> disconnect is just really nice.
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> Looking forward to hearing about what others use.
> .
> 73s,
>
> Steve KA0NEB
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>

5067. Re: [SkyWires] DC Power distribution in the shack

Yahoo group: SkyWires
Date: 2015-07-30 20:31:18 UTC
From: Mickey Baker
Topic: 5063 Message: 5067

Yep - Power Poles are the way to do this. Red positive, black negative, cheap, you can likely get premade power cords for your radios with PowerPoles on them. They won't plug in backwards, they're low loss, high current, great connectors.

MFJ has good powerpole stuff, as does powerwerx:
http://www.powerwerx.com/

73,

Mickey N4MB

On Thu, Jul 30, 2015 at 4:21 PM, 'siegfried jackstien'
siegfried.jackstien@... [SkyWires] <SkyWires@yahoogroups.com> wrote:

>
>
> Hi rick
>
> I was faster ... grin :-)
>
> Dg9bfc
>
> Sigi
>
> > -----Ursprüngliche Nachricht-----
> > Von: SkyWires@yahoogroups.com [mailto:SkyWires@yahoogroups.com]
> > Gesendet: Donnerstag, 30. Juli 2015 19:21
> > An: SkyWires@yahoogroups.com
> > Betreff: RE: [SkyWires] DC Power distribution in the shack
> >
> >
> >
> > Anderson PowerPole
> >
> > 73 - Rick, DJ0IP
> >
> > (Nr. Frankfurt am Main)
> >
> >
> >
> > From: SkyWires@yahoogroups.com [mailto:SkyWires@yahoogroups.com]
> > Sent: Thursday, July 30, 2015 8:41 PM
> > To: SkyWires@yahoogroups.com
> > Subject: [SkyWires] DC Power distribution in the shack
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> > Looking forward to hearing about what others use.
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> > 73s,
> >
> > Steve KA0NEB
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Mickey Baker, N4MB
Fort Lauderdale, FL
*“Tell me, and I will listen. Show me, and I will understand. Involve me,
and I will learn.” *Teton Lakota, American Indian Saying.

5068. RE: [SkyWires] DC Power distribution in the shack

Yahoo group: SkyWires
Date: 2015-07-30 21:55:44 UTC
From: Rick - DJ0IP / NJ0IP
Topic: 5063 Message: 5068

Correct: Red is Black and Plus is Minus

73 - Rick, DJ0IP

(Nr. Frankfurt am Main)

From: SkyWires@yahoogroups.com [mailto:SkyWires@yahoogroups.com]
Sent: Thursday, July 30, 2015 10:31 PM
To: SkyWires@yahoogroups.com
Subject: Re: [SkyWires] DC Power distribution in the shack

Yep - Power Poles are the way to do this. Red positive, black negative, cheap, you can likely get premade power cords for your radios with PowerPoles on them. They won't plug in backwards, they're low loss, high current, great connectors.

MFJ has good powerpole stuff, as does powerwerx:

http://www.powerwerx.com/

73,

Mickey N4MB

On Thu, Jul 30, 2015 at 4:21 PM, 'siegfried jackstien' siegfried.jackstien@... [SkyWires] <SkyWires@yahoogroups.com> wrote:

Hi rick

I was faster ... grin :-)

Dg9bfc

Sigi

> -----Ursprüngliche Nachricht-----
> Von: SkyWires@...m [mailto:SkyWires@yahoogroups.com]
> Gesendet: Donnerstag, 30. Juli 2015 19:21
> An: SkyWires@yahoogroups.com
> Betreff: RE: [SkyWires] DC Power distribution in the shack
>
>
>
> Anderson PowerPole
>
> 73 - Rick, DJ0IP
>
> (Nr. Frankfurt am Main)
>

>
>
> From: SkyWires@yahoogroups.com [mailto:SkyWires@yahoogroups.com]
> Sent: Thursday, July 30, 2015 8:41 PM
> To: SkyWires@yahoogroups.com
> Subject: [SkyWires] DC Power distribution in the shack
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> I'm looking at a nice way to handle DC power distribution in the shack and
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> Looking forward to hearing about what others use.
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> 73s,
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> Steve KA0NEB
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>

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Mickey Baker, N4MB
Fort Lauderdale, FL
“Tell me, and I will listen. Show me, and I will understand. Involve me, and I will learn.”
Teton Lakota, American Indian Saying.

5070. AW: [SkyWires] DC Power distribution in the shack

Yahoo group: SkyWires
Date: 2015-07-31 04:19:23 UTC
From: siegfried jackstien
Topic: 5063 Message: 5070

And green/yellow is for what?!? (just kidding)

Dg9bfc

Sigi

> -----Ursprüngliche Nachricht-----
> Von: SkyWires@yahoogroups.com [mailto:SkyWires@yahoogroups.com]
> Gesendet: Donnerstag, 30. Juli 2015 21:56
> An: SkyWires@yahoogroups.com
> Betreff: RE: [SkyWires] DC Power distribution in the shack
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>
> Correct: Red is Black and Plus is Minus
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>
> 73 - Rick, DJ0IP
>
> (Nr. Frankfurt am Main)
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>
> From: SkyWires@yahoogroups.com [mailto:SkyWires@yahoogroups.com]
> Sent: Thursday, July 30, 2015 10:31 PM
> To: SkyWires@yahoogroups.com
> Subject: Re: [SkyWires] DC Power distribution in the shack
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> Yep - Power Poles are the way to do this. Red positive, black negative,
> cheap, you can likely get premade power cords for your radios with
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> current, great connectors.
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> MFJ has good powerpole stuff, as does powerwerx:
>
> http://www.powerwerx.com/
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> 73,
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> Mickey N4MB
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> On Thu, Jul 30, 2015 at 4:21 PM, 'siegfried jackstien'
> siegfried.jackstien@... [SkyWires] <SkyWires@yahoogroups.com>
> wrote:
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> Hi rick
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> I was faster ... grin :-)
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> Dg9bfc
>
> Sigi
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> > -----Ursprüngliche Nachricht-----
> > Von: SkyWires@yahoogroups.com [mailto:SkyWires@yahoogroups.com]
> > Gesendet: Donnerstag, 30. Juli 2015 19:21
> > An: SkyWires@yahoogroups.com
> > Betreff: RE: [SkyWires] DC Power distribution in the shack
> >
> >
> >
> > Anderson PowerPole
> >
> > 73 - Rick, DJ0IP
> >
> > (Nr. Frankfurt am Main)
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> >
> > From: SkyWires@yahoogroups.com [mailto:SkyWires@yahoogroups.com]
> > Sent: Thursday, July 30, 2015 8:41 PM
> > To: SkyWires@yahoogroups.com
> > Subject: [SkyWires] DC Power distribution in the shack
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> > Looking forward to hearing about what others use.
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> > 73s,
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> > Steve KA0NEB
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> Mickey Baker, N4MB
> Fort Lauderdale, FL
> ☐Tell me, and I will listen. Show me, and I will understand. Involve me,
> and I will learn.☐ Teton Lakota, American Indian Saying.

>
>

5071. RE: [SkyWires] DC Power distribution in the shack

Yahoo group: SkyWires
Date: 2015-07-31 06:01:46 UTC
From: Rick - DJ0IP / NJ0IP
Topic: 5063 Message: 5071

PowerPoles don't come in green or yellow, do they?

I've only seen red and black.

73 - Rick, DJ0IP

(Nr. Frankfurt am Main)

From: SkyWires@yahoogroups.com [mailto:SkyWires@yahoogroups.com]
Sent: Friday, July 31, 2015 6:19 AM
To: SkyWires@yahoogroups.com
Subject: AW: [SkyWires] DC Power distribution in the shack

And green/yellow is for what?!? (just kidding)

Dg9bfc

Sigi

5072. AW: [SkyWires] DC Power distribution in the shack

Yahoo group: SkyWires
Date: 2015-07-31 07:28:43 UTC
From: siegfried jackstien
Topic: 5063 Message: 5072

I mean the wire ... not the connector (in dl known as safety ground in 3 wire systems)

Greetz

Sigi

Dg9bfc

Red is blue and plus is minus ... black goes to the water line and green yellow is for the lehrling

> -----Ursprüngliche Nachricht-----
> Von: SkyWires@yahoogroups.com [mailto:SkyWires@yahoogroups.com]
> Gesendet: Freitag, 31. Juli 2015 06:02
> An: SkyWires@yahoogroups.com
> Betreff: RE: [SkyWires] DC Power distribution in the shack
>
>
>
> PowerPoles don□t come in green or yellow, do they?
>
> I□ve only seen red and black.
>
> 73 - Rick, DJ0IP
>
> (Nr. Frankfurt am Main)
>
>
>
> From: SkyWires@yahoogroups.com [mailto:SkyWires@...m]
> Sent: Friday, July 31, 2015 6:19 AM
> To: SkyWires@yahoogroups.com
> Subject: AW: [SkyWires] DC Power distribution in the shack
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>
> And green/yellow is for what?!? (just kidding)
>
> Dg9bfc
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> Sigi
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5075. RE: [SkyWires] DC Power distribution in the shack

Yahoo group: SkyWires
Date: 2015-07-31 17:43:33 UTC
From: John Hamilton
Topic: 5063 Message: 5075

I have obtained them in all colors except brown. Including pink and grey.
See Powerworx.

73, Jon, ad7aw

From: SkyWires@yahoogroups.com [mailto:SkyWires@yahoogroups.com]
Sent: Thursday, July 30, 2015 23:02
To: SkyWires@yahoogroups.com
Subject: RE: [SkyWires] DC Power distribution in the shack

PowerPoles don't come in green or yellow, do they?

I've only seen red and black.

73 - Rick, DJ0IP

(Nr. Frankfurt am Main)

From: SkyWires@yahoogroups.com [mailto:SkyWires@yahoogroups.com]
Sent: Friday, July 31, 2015 6:19 AM
To: SkyWires@yahoogroups.com
Subject: AW: [SkyWires] DC Power distribution in the shack

And green/yellow is for what?!? (just kidding)

Dg9bfc

Sigi

5076. DX Spotting

Yahoo group: SkyWires
Date: 2015-08-08 23:37:06 UTC
From: slr_65@...
Topic: 5076 Message: 5076

I've been using DXSummit to help locate DX. I like it, but I wish it had more configurable filters. i.e I'd like to be able to just see spots in the general class portion of the band, spots only reported by US stations, etc..

I know there's a lot of software out there for spotting, but I'm low vision and reading up and researching it all is hard and has my head swimming...save me some time, what do you guys use?

73s,

Steve, KA)NEB

5077. RE: [SkyWires] DX Spotting

Yahoo group: SkyWires
Date: 2015-08-09 07:21:53 UTC
From: Rick - DJ0IP / NJ0IP
Topic: 5076 Message: 5077

Take a look at DX Heat.

www.dxheat.com

I believe its filters are more programmable.

73 - Rick, DJ0IP

(Nr. Frankfurt am Main)

From: SkyWires@yahoogroups.com [mailto:SkyWires@yahoogroups.com]
Sent: Sunday, August 09, 2015 1:37 AM
To: SkyWires@yahoogroups.com
Subject: [SkyWires] DX Spotting

I've been using DXSummit to help locate DX. I like it, but I wish it had more configurable filters. i.e I'd like to be able to just see spots in the general class portion of the band, spots only reported by US stations, etc..

I know there's a lot of software out there for spotting, but I'm low vision and reading up and researching it all is hard and has my head swimming...save me some time, what do you guys use?

73s,

Steve, KA)NEB

5078. Forsale: Icom IC 7800 & ICOM IC 756 PRO 3 with ICOM PS 125.

Yahoo group: SkyWires
Date: 2015-08-09 07:35:05 UTC
From: jgrimes781@...
Topic: 5078 Message: 5078

Forsale: Icom IC 7800 & ICOM IC 756 PRO 3 with ICOM PS 125.

Callsign: KJ6DBP
Email: kj6dbp@usa.com

Icom IC-7800 Low usage in Non Smoking Environment.
This rig has always been covered when not in use.
The rig is in mint as new condition.

Icom IC-7800 version 2 with 3 Roofing filters (15,6 & 3 kHz) and current 3.10 firmware.

Also included:
Icom SP-20 Speaker
Heil PR 780 dynamic cardioid microphone
Heil Pro Set iC boom/mic/headset combo
Heil HMM-iC hand mic
Heil HS-2 hand switch
Heil CB-1 mic base stand

$4,350 and you'll pay the shipping fee.

ICOM IC 756 PRO 3 and ICOM PS 125 matching Power Supply for sale.
Also Included:
Icom Manual, Power cord, Nifty Mini Manual, Icom HM 36 had mike and original brochure.
This radio is in excellent condition, has lived in a non smoking household and has no repairs and or modifications. I am the original owner.

$1,300 and you'll pay the shipping fee.

Callsign: KJ6DBP
Email: kj6dbp@usa.com

Norma J Grimes

73

5079. Re: DX Spotting

Yahoo group: SkyWires
Date: 2015-08-09 17:39:40 UTC
From: John Wilson
Topic: 5076 Message: 5079

Look at DXLAB suiteIt is free and offers anything you would want to do.yahoo group available the spotter is called spot collectorYou use other parts of suite that will put you on DX. freq. with mouse click.You can setup to only spot a band all bands, spot all modes are just one.If looking for a particular dx station or country,
you can setup for voice alarm to to let you know.Hope this helps73 John K5JRW

5080. Re: DX Spotting

Yahoo group: SkyWires
Date: 2015-08-09 18:03:37 UTC
From: slr_65@...
Topic: 5076 Message: 5080

Thanks guys, I'll check those out this afternoon!

5081. Phased dipoles

Yahoo group: SkyWires
Date: 2015-08-09 18:12:16 UTC
From: slr_65@...
Topic: 5081 Message: 5081

Take a look at WA5UTK's QRZ page, very interesting antenna! Two 40 meter dipoles 30' apart and phased with a homebrew device.

5082. Re: DX Spotting

Yahoo group: SkyWires
Date: 2015-08-10 05:45:01 UTC
From: slr_65@...
Topic: 5076 Message: 5082

The DXLab Suite is really cool, but unfortunately it doesn't get along with my need for high contrast fonts - it leaves the main section white with light text which just washes out with my vision. If you have good vision though, check it out!

I think DXHeat will do what I want...thanks guys!

5083. FORSALE!! Icom IC-7000 & ICOM IC-775DSP.

Yahoo group: SkyWires
Date: 2015-08-15 08:35:13 UTC
From: jgrimes781@...
Topic: 5083 Message: 5083

FORSALE!! Icom IC-7000 & ICOM IC-775DSP.

ICOM IC 7000
It comes with the original box, cables, remote head kit, microphone and microphone hanger clip. Also included is a Heil ICM microphone, LDG AT100-Pro Autotuner with cables and the LDG's original box. I am a non-smoker and the original owner.

Price : $850.00 + Shipping.

ICOM IC-775DSP.
Voice synthesizer Module UT-66 Installed. All filter slots filled & Mars Mod Completed. Original Icom shipping boxes. Original Operating Manual and a Original Service Manual. Mint Rack Handles included. Hand microphone HM-36 Included.

Price : $1350.00 + Shipping.

kj6dbp,
NJ Grimes
Email: njgrimes73@yahoo.com
73

5084. JSX Array

Yahoo group: SkyWires
Date: 2015-10-03 21:09:12 UTC
From: n6jsx@...
Topic: 5084 Message: 5084

I was going to make a big 160m loop until I got an epiphany of how to make it much better. Fist since YGroups does not allow diagrams to these posts let me explain what I'm up too.

I live in the country (on a lot sliced off a farmers field). I am putting up four ~30' towers (free standing) on basically the corners of my lot to just hold wires. The array will be near 200' square with my home in the middle and coincidentally a 30' TV tower almost directly in the middle of this square. Since my lot is north-south the towers will be in the NE/NW/SE/SW corners.

My initial intention was to put up a 160m full wave square loop using 450-ladder line feed - my intent was to make it an all-band loop using my roller-L tuner. But a few weeks ago I had an epiphany that should give me a much improved directivity if instead I make four 160m quarter-wave elements from the center tower and select what element would be connected to give me a four direction V-Beams or two-Dipoles. V-Beams will be due N/S/E/W and dipole NW-SE & NE-SW. I intend to use 33' of 450-ladder from the tower top controller to the base connect to an UglyBalun (RF choke) to coax into the house/shack to the tuner.

The trick is making a four-antenna wire tower mounted controller. At first this seems like a no brain'er until you start looking at the details of this controller and taking into account safety, parasitic radiation, ESD/lightening, etc. At present it looks like I'll need three sets of four relays DPDT.
First, four-relay set to select-connect an element to one side of the feedline;
Second, four-relay set to select-connect the other element to the feedline;
however, when each of these select relays are made I want to insure the same element cannot be shorted to the feedline.
Third, four-relay set to allow float or ground switching of the unused elements;
than a single relay at the feed to flip the elements to the feedline just to see if any cause-n-affect.
Ya it gets complex which also means I need to run a multi-conductor cable up to the tower controller and I'm likely to design a PCB to simplify the wiring. The Base controller will have banks for relay control switches and LED's to indicate what is HOT-connected, all this will be using 12VDC. The fun of electronics-HAMdom.

I've searched for anyone else who has made a similar array to nothing on the web. I've been researching my extensive Antenna library and cannot find the answers I seek.

My questions are:
1. When the array is not in use should I float all wires (minimize lightening leaders and ESD hits)?
2. When using two elements for a V-Beam or Dipole should the other unused elements (in the same RF plane) be grounded or floating? Will they pose parasitic radiation concerns messing up the active element VSWR?

Please if you're going to answer - give a sound reason for your answer, not just hear-say. Thanks

N6JSX /8, MS-EET

5085. Re: [SkyWires] JSX Array

Yahoo group: SkyWires
Date: 2015-10-03 21:41:48 UTC
From: Ken
Topic: 5084 Message: 5085

What band(s) are you going to use this on? You say a 160m loop, if your prime interest is 160 (or even 80m), your height (30') and shortness of the v-beams will cancel any directivity. And the 90 degree +/- angle is too wide for much directivity on the higher bands were the wire length might start to get long enough to be useful. Study the antenna books to see how long and how high you need a vee beam to be useful.

73,
Ken WA8JXM

On 10/3/15 5:09 PM, n6jsx@... [SkyWires] wrote:
>
>
> I was going to make a big 160m loop until I got an epiphany of how to
> make it much better. Fist since YGroups does not allow diagrams to
> these posts let me explain what I'm up too.
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> Please if you're going to answer - give a sound reason for your
> answer, not just hear-say. Thanks
>
> N6JSX /8, MS-EET
>
>
>
>
>

5086. Re: [SkyWires] JSX Array

Yahoo group: SkyWires
Date: 2015-10-03 21:59:26 UTC
From: n6jsx@...
Topic: 5084 Message: 5086

160-6m, hence the 33' of 450-ladder line to UBalun to roller-L tuner....
height is fixed, the element lengths are fixed to 160m...

I can only get what I get - optimal no but hell of a lot more than I got today or others will ever have....

N6JSX

5087. Re: [SkyWires] JSX Array

Yahoo group: SkyWires
Date: 2015-10-03 23:56:25 UTC
From: Ken
Topic: 5084 Message: 5087

My personal experience, I started out with a 700' loop, had great difficulty loading it on 160 and 80, cut it down to 500', a bit better but still a major effort. It did not perform any better than a 160m inverted vee. Finally, I cut it down to a 160m OCFD which loads easily on all bands 160-6 and does well.

73, Ken WA8JXM

On 10/3/15 5:59 PM, n6jsx@... [SkyWires] wrote:
> 160-6m, hence the 33' of 450-ladder line to UBalun to roller-L tuner....
> height is fixed, the element lengths are fixed to 160m...
>
> I can only get what I get - optimal no but hell of a lot more than I
> got today or others will ever have....

5088. Re: [SkyWires] JSX Array

Yahoo group: SkyWires
Date: 2015-10-04 16:47:13 UTC
From: Evan Rolek
Topic: 5084 Message: 5088

Whether one puts up an array of verticals, horizontal loop, etc. the first question should be, "What are my goals?" Is stateside coverage most important? DX? Both? To me, a horizontal loop and a 4-square, or whatever other antennas are considered, can't be compared directly unless one knows what parameters one is trying to optimize, or minimize for that matter. For example, reducing noise (via a horizontal loop) requires a different approach than trying to direct the RF energy toward a particular country (via a 4-square array, beam, etc.).

Having said that, and having used vertical antennas for years (but currently use only horizontal loops) as well as inverted L antennas, I've found that connecting an RF choke between the element and ground, or a high value carbon resistor(s) in the 100K to 200K range, will bleed off static electricity that builds up due to wind, blowing snow, etc. No, it does not afford protection against a direct lightening strike and that's why I disconnected the coax where it enters the house and moved it 15 ft away when storms approached or during long periods of inactivity.

Unfortunately, I can't provide any sound experimental research findings to support the basis for the above. I merely drew upon the experience of others (LB Cebik, ARRL, etc.) and proceeded accordingly.

-----Original Message-----
From: n6jsx@... [SkyWires] <SkyWires@yahoogroups.com>
To: SkyWires <SkyWires@yahoogroups.com>
Sent: Sat, Oct 3, 2015 5:09 pm
Subject: [SkyWires] JSX Array

I was going to make a big 160m loop until I got an epiphany of how to make it much better. Fist since YGroups does not allow diagrams to these posts let me explain what I'm up too.

I live in the country (on a lot sliced off a farmers field). I am putting up four ~30' towers (free standing) on basically the corners of my lot to just hold wires. The array will be near 200' square with my home in the middle and coincidentally a 30' TV tower almost directly in the middle of this square. Since my lot is north-south the towers will be in the NE/NW/SE/SW corners.

My initial intention was to put up a 160m full wave square loop using 450-ladder line feed - my intent was to make it an all-band loop using my roller-L tuner. But a few weeks ago I had an epiphany that should give me a much improved directivity if instead I make four 160m quarter-wave elements from the center tower and select what element would b e connected to give me a four direction V-Beams or two-Dipoles. V-Beams will be due N/S/E/W and dipole NW-SE & NE-SW. I intend to use 33' of 450-ladder from the tower top controller to the base connect to an UglyBalun (RF choke) to coax into the house/shack to the tuner.

The trick is making a four-antenna wire tower mounted controller. At first this seems like a no brain'er until you start looking at the details of this controller and taking into account safety, parasitic radiation, ESD/lightening, etc. At present it looks like I'll need three sets of four relays DPDT.

First, four-relay set to select-connect an element to one side of the feedline;
Second, four-relay set to select-connect the other element to the feedline;
however, when each of these select relays are made I want to insure the same element cannot be shorted to the feedline.
&nbs p; Third, four-relay set to allow float or ground switching of the unused elements; than a single relay at the feed to flip the elements to the feedline just to see if any cause-n-affect.
Ya it gets complex which also means I need to run a multi-conductor cable up to the tower controller and I'm likely to design a PCB to simplify the wiring. The Base controller will have banks for relay control switches and LED's to indicate what is HOT-connected, all this will be using 12VDC. The fun of electronics-HAMdom.

I've searched for anyone else who has made a similar array to nothing on the web. I've been researching my extensive Antenna library and cannot find the answers I seek.

My questions are:
1. When the array is not in use should I float all wires (minimize lightening leaders and ESD hits)?
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Please if you're going to answer - give a sound reason for your answer, not just hear-say. Thanks

N6JSX /8, MS-EET

5089. Re: [SkyWires] JSX Array

Yahoo group: SkyWires
Date: 2015-10-04 17:36:09 UTC
From: Everettsharp
Topic: 5084 Message: 5089

A standard one wave length loop works very well, so why deviate from what works. I have posted in the file section, an article about my 80 meter loop. It covers all bands 80 through 6 meter, with the exception of 60 meters. I feed it with coax and any of my rigs with a built antenna tuner will tune it. It works great for stateside and DX.

Everett N8CNP

Sent from my iPhone

> On Oct 4, 2015, at 11:47 AM, Evan Rolek k9sqg@... [SkyWires] <SkyWires@yahoogroups.com> wrote:
>
> Whether one puts up an array of verticals, horizontal loop, etc. the first question should be, "What are my goals?" Is stateside coverage most important? DX? Both? To me, a horizontal loop and a 4-square, or whatever other antennas are considered, can't be compared directly unless one knows what parameters one is trying to optimize, or minimize for that matter. For example, reducing noise (via a horizontal loop) requires a different approach than trying to direct the RF energy toward a particular country (via a 4-square array, beam, etc.).
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> Having said that, and having used vertical antennas for years (but currently use only horizontal loops) as well as inverted L antennas, I've found that connecting an RF choke between the element and ground, or a high value carbon resistor(s) in the 100K to 200K range, will bleed off static electricity that builds up due to wind, blowing snow, etc. No, it does not afford protection against a direct lightening strike and that's why I disconnected the coax where it enters the house and moved it 15 ft away when storms approached or during long periods of inactivity.
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> -----Original Message-----
> From: n6jsx@yahoo.com [SkyWires] <SkyWires@yahoogroups.com>
> To: SkyWires <SkyWires@yahoogroups.com>
> Sent: Sat, Oct 3, 2015 5:09 pm
> Subject: [SkyWires] JSX Array
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> N6JSX /8, MS-EET
>
>

5090. Knife switch for ladderline

Yahoo group: SkyWires
Date: 2015-10-21 14:48:36 UTC
From: Mickey Baker
Topic: 5090 Message: 5090

New old stock Levitron DPDT knife switches - No affiliation to seller:

https://www.etsy.com/listing/248352696/new-old-stock-double-pole-knife-switch?ref=shop_home_active_1&ga_search_query=knife%2Bswitch&ga_search_type=user_shop_ttt_id_8817341

Mickey Baker, N4MB
Fort Lauderdale, FL
*“Tell me, and I will listen. Show me, and I will understand. Involve me, and I will learn.” *Teton Lakota, American Indian Saying.

5091. Affects of tilting the loop?

Yahoo group: SkyWires
Date: 2015-10-23 19:28:45 UTC
From: slr_65@...
Topic: 5091 Message: 5091

Hi Guys,

Been a while...I had a heart attack and it's been an adventure, I have a tendancy to flat line (happened once during stent install, and two other occasions following stent install during recovery!)!

I feeling much better though.

My loop is strung in the trees, is about 210' in circumference and is tilted from about 12' to about 45'. The south end is the high end, it's fed in the middle of the low end on the north.

It works DX wonderfully! Especially central Europe, I'm almost tired of talking to Croatia, Slovenia, etc.! It also goes to the south pacific easily, I can work Hawaii, the Cook Islands, New Zealand and Australia most any time I hear them.

A friend lives just a block away, he strung a loop in the trees too, but he was able to keep the loop horizontal. He's a bit longer than mine too, probably 325' or so in the loop.

I run a Kenwood TS-590SG and a MFJ-993b auto tuner. He runs a Yaesu FT-101EE and an MFJ manual tuner. My rig hits 100 watts on the nose, his runs about 120, shouldn't be much difference on the other end.

I can get out much better, in fact yesterday he got frustrated trying to work a Brazillian station, called me on the repeater and I gave it shot...first try I made it 59.

I realize my speech processor and stuff probably keeps a little more average power, but still, I would think he should be a bit more successful as this isn't the first instance. I don't mean to make sound like he doesn't get out, he does, but it seems I do better, wattage is essentially the same, so I'm wondering if it's the old vs new equipment, or because my loop is tilted, or "just is"?

I've thought about toosing a loop essentially vertically over my trees just to see what it does, but then I thought that this experiment has surely been ran, so I'll just ask!

73's

Steve, KA0NEB (/EA as of a couple nights ago - passed my Extra exam!!!)

5092. Re: [SkyWires] Affects of tilting the loop?

Yahoo group: SkyWires
Date: 2015-10-24 04:26:30 UTC
From: Evan Rolek
Topic: 5091 Message: 5092

Steve,

Glad you are still with us! I'm just waiting on having my application to the Silent Key Club approved.

If I understand the two antenna configurations, slope alone of the horizontal loop would not account for the differences. Why? Well, your antenna is tilted to the north, Brazil is to the south. Slope does affect the radiation pattern, more so as the antenna frequency goes up. In fact, slope can improve radiation pattern toward the direction of the slope as one goes higher in frequency depending on conditions; as the frequency is increased, there can be more penetration/absorption of the ionosphere as the angle approaches 90 deg where as a shallower angle might see a little more reflection than absorption/penetration. These are vague generalizations based upon limited research and I've not found a truly credible, physics based source yet.

There might be some site specifics at work here, equipment factors, etc. Since you didn't mention the height of his antenna, there is no way to compare the two antennas by going to the modeling research for answers. It is even possible that his antenna has a lower angle of radiation than yours and thus might not have favored Brazil on that single test.

Hopefully the experts will chime in and provide some guidance. I'm always eager to learn.

73,

Evan, K9SQG

-----Original Message-----
From: slr_65@... [SkyWires] <SkyWires@yahoogroups.com>
To: SkyWires <SkyWires@yahoogroups.com>
Sent: Fri, Oct 23, 2015 3:28 pm
Subject: [SkyWires] Affects of tilting the loop?

Hi Guys,

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I've thought about toosing a loop essentially vertically over my trees just to see what it does, but then I thought that this experiment has surely been ran, so I'll just ask!

73's

Steve, KA0NEB (/EA as of a couple nights ago - passed my Extra exam!!!)

5093. Re: [SkyWires] Affects of tilting the loop?

Yahoo group: SkyWires
Date: 2015-10-24 04:30:31 UTC
From: Evan Rolek
Topic: 5091 Message: 5093

PS In addition to knowing the height of the other fellow's antenna, it would be interesting to know what band you're on in order to put things in perspective in terms of wavelength above local terrain.

-----Original Message-----
From: slr_65@... [SkyWires] <SkyWires@yahoogroups.com>
To: SkyWires <SkyWires@yahoogroups.com>
Sent: Fri, Oct 23, 2015 3:28 pm
Subject: [SkyWires] Affects of tilting the loop?

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5094. Re: [SkyWires] Affects of tilting the loop?

Yahoo group: SkyWires
Date: 2015-10-26 15:17:55 UTC
From: slr_65@...
Topic: 5091 Message: 5094

Hi Evan,

LOL! Yeah, I'm hoping my app for the SK club is on hold for a bit too!

The other antenna is horizontal at about 40', we've only played on 10 meter because he's a Tech.

I continue to be amazed at how well my loop works, in the CQ contest over the weekend I logged 55 DX entities and I was busy with other things and didn't get to spend as much time at it as I wanted to!

5095. Logging software

Yahoo group: SkyWires
Date: 2015-10-26 15:26:40 UTC
From: slr_65@...
Topic: 5095 Message: 5095

Hi Guys,

I'm using QRZ's log right now, mostly because being a web page it gets along very well with my high contrast color scheme needs for my poor vision.

It doesn't export to cabrillo though (though it does to adif), and it doesn't interface to the rig or anything.

I can deal with QRZ for normal casual use, but for contesting I think I'd like something better.

What do you guys use?

73s,

Steve, KA0NEB

5096. Re: [SkyWires] Logging software

Yahoo group: SkyWires
Date: 2015-10-26 15:30:59 UTC
From: DC
Topic: 5095 Message: 5096

Steve:

For contesting N1MM software. However, for overall software including
contesting and rig control -- Log4om.
Best of all, it's free.

Richard
K7SD

On 10/26/2015 8:26 AM, slr_65@... [SkyWires] wrote:
>
> Hi Guys,
>
> I'm using QRZ's log right now, mostly because being a web page it gets
> along very well with my high contrast color scheme needs for my poor
> vision.
>
> It doesn't export to cabrillo though (though it does to adif), and it
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> What do you guys use?
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> 73s,
>
> Steve, KA0NEB
>
>
>

5097. Re: [SkyWires] Affects of tilting the loop?

Yahoo group: SkyWires
Date: 2015-10-26 15:47:47 UTC
From: DC
Topic: 5091 Message: 5097

There are a lot of factors to consider such as; height above ground, ground conductivity, obstructions, etc. But, that said, a vertically polarized antenna generally has a lower take-off angle than horz. My 80 meter full size delta loop in a 110' pine tree is tilted at approximately 45 degrees with the projected lobes aimed at Europe (using antenna modeling software). The lower wire is 60' high and the antenna is fed about 1/3rd up a 45 degree side with 450 ohm ladder line to a 1:1 current balum with two foot of coax into my tuner. It is a DX beast on 40 meters and sometimes outperforms my tribander on the higher bands. The sides are different lengths since I used existing pine trees for tie-downs. It helps that I am on top of a 1800 foot hill.

Richard
K7SD

On 10/26/2015 8:17 AM, slr_65@... [SkyWires] wrote:
>
> Hi Evan,
>
> LOL! Yeah, I'm hoping my app for the SK club is on hold for a bit too!
>
> The other antenna is horizontal at about 40', we've only played on 10
> meter because he's a Tech.
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> things and didn't get to spend as much time at it as I wanted to!
>
>

5098. Re: [SkyWires] Affects of tilting the loop?

Yahoo group: SkyWires
Date: 2015-10-26 17:23:07 UTC
From: Evan Rolek
Topic: 5091 Message: 5098

Hmmmm, at that height, and 10 M, things start getting strange. I'd encourage you to look at the horizontal and vertical propagation plots for your/his antennas. They can be found in L. B. Cebik's book sold by MFJ, on his website, and possibly online.

Like you, I enjoy my horizontal loop antennas (one an 80 meter variant and the other a 40 meter model). The 1-2 S unit reduction in noise is well worth it.

Have a great week!

-----Original Message-----
From: slr_65@... [SkyWires] <SkyWires@yahoogroups.com>
To: SkyWires <SkyWires@yahoogroups.com>
Sent: Mon, Oct 26, 2015 11:18 am
Subject: Re: [SkyWires] Affects of tilting the loop?

Hi Evan,

LOL! Yeah, I'm hoping my app for the SK club is on hold for a bit too!

The other antenna is horizontal at about 40', we've only played on 10 meter because he's a Tech.

I continue to be amazed at how well my loop works, in the CQ contest over the weekend I logged 55 DX entities and I was busy with other things and didn't get to spend as much time at it as I wanted to!

5099. Re: [SkyWires] Logging software

Yahoo group: SkyWires
Date: 2015-10-26 18:48:43 UTC
From: slr_65@...
Topic: 5095 Message: 5099

Hi Richard, I've tried Log4OM, but it doesn't get along with the high contrast color scheme I need. I may contact the author though, most of the time it's not too difficult to add a little more appearance control in, and when you can talk directly to the author you get answers, and hopefully results, much faster than with large commercial software.

5100. Re: [SkyWires] Logging software

Yahoo group: SkyWires
Date: 2015-10-26 18:55:35 UTC
From: Evan Rolek
Topic: 5095 Message: 5100

Apparently software developers don't always research the topic to find "forbidden color combinations" nor "preferred color combinations" and thus produce an interface along the lines of "Well, I can use it, therefore it is usable." Nobody ever accused developers of adhering to usability standards or preferred practices for ham radio software or equipment.

-----Original Message-----
From: slr_65@... [SkyWires] <SkyWires@yahoogroups.com>
To: SkyWires <SkyWires@yahoogroups.com>
Sent: Mon, Oct 26, 2015 2:48 pm
Subject: Re: [SkyWires] Logging software

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5101. Re: [SkyWires] Affects of tilting the loop?

Yahoo group: SkyWires
Date: 2015-10-26 18:58:42 UTC
From: slr_65@...
Topic: 5091 Message: 5101

I'll see what I can find Evan, but book reading is hard for me. PDF if it's OCR'd is good as I can flip to white text on black background, scanned ones are hard, I have to extract the images adn flip their collors with a graphics program. Actual books I just gotta tough it out with a bright light and a magnifier, but I usually avoid that.

Probably waaay to manh variables to get a handle on it. It's a really odd shape as it's just tossed through the trees, plus all the other variables.

It does well though! His loop is longer and encompasses more area though, so I would expect it to do as well, if not better, but it doesn't seem to, this isn't an isolated incident, it happens a lot, but it may be related to the other equipment or something - his Yaesu does't have a speech processor or anything, so his average power is less, his audio sounds fine here - the few times we've qso'd on hf (usually we'd just UHF it or just walk down the street, LOL!), but perhaps at a distance it may sound different.

Who knows, it's interesting that verticals have a lower take off angle, I may try tossing a wire over the two trees vertically and see what it does just for something to do.

Good to hear from everyone, it's GREAT to be feeling better and radio playing again! I didn't think I was quite ready to take my Extra test, but a buddy wanted to take his General and wanted company, so I went anyway...I'm glad I did! The Extra bands were hopping during the contest!

73s,

Steve

5102. RE: [SkyWires] Logging software

Yahoo group: SkyWires
Date: 2015-10-26 20:24:34 UTC
From: Rick - DJ0IP / NJ0IP
Topic: 5095 Message: 5102

For contesting, “WinTest”. Simply the best.

73 - Rick, DJ0IP

(Nr. Frankfurt am Main)

From: SkyWires@yahoogroups.com [mailto:SkyWires@yahoogroups.com]
Sent: Monday, October 26, 2015 4:31 PM
To: SkyWires@yahoogroups.com
Subject: Re: [SkyWires] Logging software

Steve:

For contesting N1MM software. However, for overall software including contesting and rig control -- Log4om.
Best of all, it's free.

Richard
K7SD

On 10/26/2015 8:26 AM, slr_65@... [SkyWires] wrote:

Hi Guys,

I'm using QRZ's log right now, mostly because being a web page it gets along very well with my high contrast color scheme needs for my poor vision.

It doesn't export to cabrillo though (though it does to adif), and it doesn't interface to the rig or anything.

I can deal with QRZ for normal casual use, but for contesting I think I'd like something better.

What do you guys use?

73s,

Steve, KA0NEB

5103. Re: [SkyWires] Affects of tilting the loop?

Yahoo group: SkyWires
Date: 2015-10-26 22:21:46 UTC
From: Evan Rolek
Topic: 5091 Message: 5103

Steve,

Congratulations on your licensing and antenna experiments.

And on the topic of antennas, I'd say give them the test of time and see how things work out. Isolated observations don't yield much insight about RF patterns, hi hi. Regardless of what online research would indicate, there are always site specific things than can alter experiences.

73,

Evan

-----Original Message-----
From: slr_65@... [SkyWires] <SkyWires@yahoogroups.com>
To: SkyWires <SkyWires@yahoogroups.com>
Sent: Mon, Oct 26, 2015 2:59 pm
Subject: Re: [SkyWires] Affects of tilting the loop?

I'll see what I can find Evan, but book reading is hard for me. PDF if it's OCR'd is good as I can flip to white text on black background, scanned ones are hard, I have to extract the images adn flip their collors with a graphics program. Actual books I just gotta tough it out with a bright light and a magnifier, but I usually avoid that.

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Good to hear from everyone, it's GREAT to be feeling better and radio playing again! I didn't think I was quite ready to take my Extra test, but a buddy wanted to take his General and wanted company, so I went anyway...I'm glad I did! The Extra bands were hopping during the contest!

73s,

Steve

5104. Re: [SkyWires] Logging software

Yahoo group: SkyWires
Date: 2015-10-27 01:20:14 UTC
From: DC
Topic: 5095 Message: 5104

Evan:

Good idea. I contacted them on their forum and had a answer in less
than 2 hours.

Richard
K7SD
> Hi Richard, I've tried Log4OM, but it doesn't get along with the high
> contrast color scheme I need. I may contact the author though, most
> of the time it's not too difficult to add a little more appearance
> control in, and when you can talk directly to the author you get
> answers, and hopefully results, much faster than with large commercial
> software.
>

5105. Best long wire lenths

Yahoo group: SkyWires
Date: 2015-11-13 14:15:47 UTC
From: kd1ia
Topic: 5105 Message: 5105

Hi All settingup an alternate statioln as Im currently Bed bound most of the time. I was wondering what (IF any the recomended Long wire lenghts would be for mostly 40/80/(160 Sometimes) I have a good old tuner and a ts680 to help with tall this. Not looking to do gand busters. Just check into Ecars/mid cars during the day. Perhaps OMISS and CCN inthe evening. thanks for any help!

de John ko1h

5106. Re: [SkyWires] Best long wire lenths

Yahoo group: SkyWires
Date: 2015-11-13 14:27:20 UTC
From: Rob Stewart
Topic: 5105 Message: 5106

Hi John,
I found this web site to be interesting reading:
Random Wire Antennas - Best Lengths To Use For Random Wire

| |
| | | | | | | |
| Random Wire Antennas - Best Lengths To Use For Rand... The "Best" Random Wire Antenna Lengths Random wire lengths you should and should not use! Jack, VE3EED - SK Updated 07-08-2013 |
| |
| View on www.hamuniverse.com | Preview by Yahoo |
| |
| |

73 John WA3JRS

On Friday, November 13, 2015 9:15 AM, "'kd1ia' kd1ia@... [SkyWires]" <SkyWires@yahoogroups.com> wrote:

Hi All settingup an alternate statioln as Im currently Bed bound most of the time. I was wondering what (IF any the recomended Long wire lenghts would be for mostly 40/80/(160 Sometimes) I have a good old tuner and a ts680 to help with tall this. Not looking to do gand busters. Just check into Ecars/mid cars during the day. Perhaps OMISS and CCN inthe evening. thanks for any help! de John ko1h

5107. RE: [SkyWires] Best long wire lenths

Yahoo group: SkyWires
Date: 2015-11-13 14:29:29 UTC
From: rick@dj0ip.de
Topic: 5105 Message: 5107
Attachments: 2 described; binary payloads are missing from this source WARC

☐Good old tuner☐ is pretty meaningless.

It all depends on just how good it is.

There is of course never any such thing as ☐best☐ of anything.

It☐s always horses for courses.

What works well is a long wire that is ½ wavelength on the lowest frequency to be used.

But of course it is very high impedance and requires a matchbox that can handle very high voltage.

The best matchbox for that specific antenna is an L-Network.

The advantage of the hal fwavelength rather than the quarter wavelength is that it can be very efficient with just a single wire counterpoise (quarter wavelength), whereas a quarter wavelength, though easier to match, requires a good radial network to be efficient.

You might start by telling us what your tuner actually is.

73

Rick, DJ0IP

From: SkyWires@yahoogroups.com [mailto:SkyWires@yahoogroups.com]
Sent: Friday, November 13, 2015 3:16 PM
To: ko1h; sky wires
Subject: [SkyWires] Best long wire lenths

Hi All settingup an alternate statioln as Im currently Bed bound most of the time. I was wondering what (IF any the recomended Long wire lenghts would be for mostly 40/80/(160 Sometimes) I have a good old tuner and a ts680 to help with tall this. Not looking to do gand busters. Just check into Ecars/mid cars during the day. Perhaps OMISS and CCN inthe evening. thanks for any help!

de John ko1h

5108. RE: [SkyWires] Best long wire lenths

Yahoo group: SkyWires
Date: 2015-11-13 14:31:31 UTC
From: rick@dj0ip.de
Topic: 5105 Message: 5108

Yes, the table on that link is good if you do not have a really good tuner… which few people have when it comes to matching long wires.

From: SkyWires@yahoogroups.com [mailto:SkyWires@yahoogroups.com]
Sent: Friday, November 13, 2015 3:27 PM
To: SkyWires@yahoogroups.com; ko1h
Subject: Re: [SkyWires] Best long wire lenths

Hi John,

I found this web site to be interesting reading:

Random Wire Antennas - Best Lengths To Use For Random Wire
<http://www.hamuniverse.com/randomwireantennalengths.html>

<http://www.hamuniverse.com/randomwireantennalengths.html> image

<http://www.hamuniverse.com/randomwireantennalengths.html> Random Wire Antennas - Best Lengths To Use For Rand...

The "Best" Random Wire Antenna Lengths Random wire lengths you should and should not use! Jack, VE3EED - SK Updated 07-08-2013

<http://www.hamuniverse.com/randomwireantennalengths.html> View on www.hamuniverse.com

Preview by Yahoo

73

John WA3JRS

On Friday, November 13, 2015 9:15 AM, "'kd1ia' kd1ia@... [SkyWires]" <SkyWires@yahoogroups.com> wrote:

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de John ko1h

5109. Re: [SkyWires] Best long wire lenths

Yahoo group: SkyWires
Date: 2015-11-13 16:45:21 UTC
From: Evan Rolek
Topic: 5105 Message: 5109

John,

The various antenna books list some "best to avoid" lengths but they are only very coarse guidelines. Why? Part of the issue is the downlead from the long wire which becomes part of the total antenna length. Also, long wires are prone to matching problems since they are typically high impedance, sometimes very high, and also may have RF in the shack problems. It is usually advisable to have a good ground attached to the antenna tuner to minimize such issues. Too, if one wants to be creative, traps can be installed in the long wire to make it "appropriate" length for the various bands.

Glad to see you're staying on the air! This is a great hobby that we have.

73,

Evan, K9SQG

-----Original Message-----
From: 'kd1ia' kd1ia@... [SkyWires] <SkyWires@yahoogroups.com>
To: ko1h <ko1h@...t>; sky wires <skywires@yahoogroups.com>
Sent: Fri, Nov 13, 2015 9:15 am
Subject: [SkyWires] Best long wire lenths

Hi All settingup an alternate statioln as Im currently Bed bound most of the time. I was wondering what (IF any the recomended Long wire lenghts would be for mostly 40/80/(160 Sometimes) I have a good old tuner and a ts680 to help with tall this. Not looking to do gand busters. Just check into Ecars/mid cars during the day. Perhaps OMISS and CCN inthe evening. thanks for any help!

de John ko1h

5110. Re: [SkyWires] Best long wire lenths

Yahoo group: SkyWires
Date: 2015-11-13 16:54:47 UTC
From: kd1ia
Topic: 5105 Message: 5110

It works It has a random wire input and its even rated well oln the review site(I know this don't mean much) But for me Its old its a tuner and I like it therefore "good ole tuner' 8)

----- Original Message -----
From: 'rick@...' Rick@... [SkyWires]
To: SkyWires@yahoogroups.com
Sent: Friday, November 13, 2015 9:29 AM
Subject: RE: [SkyWires] Best long wire lenths

"Good old tuner" is pretty meaningless.

It all depends on just how good it is.

There is of course never any such thing as "best" of anything.

It's always horses for courses.

What works well is a long wire that is ½ wavelength on the lowest frequency to be used.

But of course it is very high impedance and requires a matchbox that can handle very high voltage.

The best matchbox for that specific antenna is an L-Network.

The advantage of the hal fwavelength rather than the quarter wavelength is that it can be very efficient with just a single wire counterpoise (quarter wavelength), whereas a quarter wavelength, though easier to match, requires a good radial network to be efficient.

You might start by telling us what your tuner actually is.

73

Rick, DJ0IP

From: SkyWires@yahoogroups.com [mailto:SkyWires@yahoogroups.com]
Sent: Friday, November 13, 2015 3:16 PM
To: ko1h; sky wires
Subject: [SkyWires] Best long wire lenths

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de John ko1h

No virus found in this message.
Checked by AVG - www.avg.com
Version: 2016.0.7227 / Virus Database: 4460/10991 - Release Date: 11/13/15

5111. RE: [SkyWires] Best long wire lenths

Yahoo group: SkyWires
Date: 2015-11-13 17:12:10 UTC
From: rick@dj0ip.de
Topic: 5105 Message: 5111

Any reason you don☐t just answer the question?
What tuner is it.

While you have some time on your hands, you might want to read up on antenna theory.
We have a double-edge sword here with the longwire antenna.
What works best as a radiator is quite a challenge for most antenna tuners.

Recommended long wire lengths found in many online lists are often chosen based on their ease of being matched with lesser matchboxes ☐ not by their ability to radiate efficiently.

If your tuner is good enough, the half wavelength is the best length.
If not, then you must avoid this length, as has been recommended by others.

At the end of the day, everything works, as long as your matchbox will match it.

A good rating on review sites in not really very meaningful.
Most people don't understand matchboxes well enough to rate them.
If they did, they wouldn't call them antenna tuners!

In any case I wish you a speedy recovery.

73
Rick, DJ0IP

From: SkyWires@...m [mailto:SkyWires@yahoogroups.com]
Sent: Friday, November 13, 2015 5:55 PM
To: SkyWires@yahoogroups.com
Subject: Re: [SkyWires] Best long wire lenths

It works It has a random wire input and its even rated well oln the review site(I know this don't mean much) But for me Its old its a tuner and I like it therefore "good ole tuner' 8)

----- Original Message -----
From: 'rick@...' Rick@... [SkyWires]
To: SkyWires@yahoogroups.com
Sent: Friday, November 13, 2015 9:29 AM
Subject: RE: [SkyWires] Best long wire lenths

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You might start by telling us what your tuner actually is.
73
Rick, DJ0IP
From: SkyWires@yahoogroups.com [mailto:SkyWires@yahoogroups.com]
Sent: Friday, November 13, 2015 3:16 PM
To: ko1h; sky wires
Subject: [SkyWires] Best long wire lenths

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de John ko1h
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5112. Re: [SkyWires] Best long wire lenths

Yahoo group: SkyWires
Date: 2015-11-13 17:38:55 UTC
From: kd1ia
Topic: 5105 Message: 5112

Yes its down in my workshop and atm I cant climb stairs. Its an old MFJ tuner. I believe its a mfj 944. I had to go through ehams reviews to find it as my son has not brought up the gear from downstairs that I need yet.

Sorry about the confusion

ko1h
----- Original Message -----
From: 'rick@...' Rick@... [SkyWires]
To: SkyWires@yahoogroups.com
Sent: Friday, November 13, 2015 12:12 PM
Subject: RE: [SkyWires] Best long wire lenths

Any reason you don't just answer the question?
What tuner is it.

While you have some time on your hands, you might want to read up on antenna theory.
We have a double-edge sword here with the longwire antenna.
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If your tuner is good enough, the half wavelength is the best length.
If not, then you must avoid this length, as has been recommended by others.

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A good rating on review sites in not really very meaningful.
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If they did, they wouldn't call them antenna tuners!

In any case I wish you a speedy recovery.

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Rick, DJ0IP

From: SkyWires@yahoogroups.com [mailto:SkyWires@yahoogroups.com]
Sent: Friday, November 13, 2015 5:55 PM
To: SkyWires@yahoogroups.com
Subject: Re: [SkyWires] Best long wire lenths

It works It has a random wire input and its even rated well oln the review site(I know this don't mean much) But for me Its old its a tuner and I like it therefore "good ole tuner' 8)

----- Original Message -----
From: 'rick@...' Rick@... [SkyWires]
To: SkyWires@yahoogroups.com
Sent: Friday, November 13, 2015 9:29 AM
Subject: RE: [SkyWires] Best long wire lenths

"Good old tuner" is pretty meaningless.
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Rick, DJ0IP
From: SkyWires@yahoogroups.com [mailto:SkyWires@yahoogroups.com]
Sent: Friday, November 13, 2015 3:16 PM
To: ko1h; sky wires
Subject: [SkyWires] Best long wire lenths

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Version: 2016.0.7227 / Virus Database: 4460/10991 - Release Date: 11/13/15

5113. RE: [SkyWires] Best long wire lenths

Yahoo group: SkyWires
Date: 2015-11-13 23:30:07 UTC
From: rick@dj0ip.de
Topic: 5105 Message: 5113

OK John,

There was no 944 matchbox but there were various 94x tuners (i.e., 941, 945, etc.), all basically the same circuit, with just features making the difference.

Basically these were (and still are) T-Network matchboxes with a □moderate□ matching range.
They use 208pF for each of the capacitors.
This would not be enough to match the impedance of a half wavelength wire, so it will be important to avoid the half wavelength.
If you can be about 1/16 to 1/8 wavelength away from the half wavelength length (preferably longer, otherwise less), then you will have no problem matching with this matchbox.

Efficiency will be down a little but probably only cost about one S-Unit. This can of course be avoided if you put down several radials but that is probably not an option.

Regardless of what length you choose, you MUST use a counterpoise. The counterpoise can be simply ¼ wavelength of wire for the lowest band that you plan to use.
Under the circumstances, you should probably pass on 160m.

¼ wavelength on 80m is about 66 ft. You have to run this wire somewhere. It should be insulated wire (not bare copper), attach to the ground terminal of the matchbox and then run along the ground (back out the window then along the ground, etc. However if you are upstairs in the house, you may need to run it inside the house. That□s a lot of wire for inside the house. It can run zig-zag, around corners, etc. How and where doesn□t matter; the length does. It needs to be 66 ft. long for 80m or 33 ft. long for 40m.

The antenna I was referring to earlier is what I ran while going to college (U. of Florida) back in the 60□s.
I was very active as net control station in the National Traffic System with this antenna.

The old WRL Antenna Matchbox I used had a single coil and a single capacitor but the capacitor was at least 500 pf.
800pF would be better for this task. This is what is needed for matching half wavelength wires. But then they go like a house on fire!

As I understand it, the main task is to just get on the air on several bands. In that case, just about anything works.
Don□t forget to tune the matchbox at reduced power (20w or so), then AFTER finding the match, increase power.

Gud luk with the antenna.
Sorry I can☐t be there to help you, but Lufthansa is currently on strike!
;-)

73
Rick, DJ0IP

From: SkyWires@yahoogroups.com [mailto:SkyWires@yahoogroups.com]
Sent: Friday, November 13, 2015 6:39 PM
To: SkyWires@yahoogroups.com
Subject: Re: [SkyWires] Best long wire lenths

Yes its down in my workshop and atm I cant climb stairs. Its an old MFJ
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ko1h
----- Original Message -----
From: 'rick@...' Rick@... [SkyWires]
To: SkyWires@yahoogroups.com
Sent: Friday, November 13, 2015 12:12 PM
Subject: RE: [SkyWires] Best long wire lenths

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If they did, they wouldn't call them antenna tuners!

In any case I wish you a speedy recovery.

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Rick, DJ0IP

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Sent: Friday, November 13, 2015 5:55 PM

To: SkyWires@yahoogroups.com
Subject: Re: [SkyWires] Best long wire lenths

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Sent: Friday, November 13, 2015 9:29 AM
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Version: 2016.0.7227 / Virus Database: 4460/10991 - Release Date: 11/13/15

5114. RE: [SkyWires] Best Long Wire Lengths

Yahoo group: SkyWires
Date: 2015-11-14 12:41:53 UTC
From: Bill - KK4XO
Topic: 5114 Message: 5114

I've had good results using a 9:1 UNUN with a 124.5 foot sloping wire as described at the Balun Designs web site:

http://tinyurl.com/o7kuh4j

-

This configuration requires a counterpoise wire or wires for best results and works well on all bands from 160m to 6m, yet doesn't take up a great amount of real estate.

73 – Bill, KK4XO

5115. RE: [SkyWires] Best Long Wire Lengths

Yahoo group: SkyWires
Date: 2015-11-14 14:16:46 UTC
From: rick@dj0ip.de
Topic: 5114 Message: 5115

Bill,

Please define “good results”.

Did you run any A/B tests and compare it to other antennas?

I only tried the 9:1 balun once, had a single counterpoise laying on the ground.

In the A/B tests compared to a trap dipole for 80/40/20, the LW was always 2 to 4 S-Units worse.

It’s a fair antenna if the goal is to just get on a bunch of bands and you need a decent SWR.

But if you want a good signal, you can certainly do a lot better than that.

There is no mystery around this stuff.

Efficiency (%) = (RR / (RR + RG)) x 100

RR = radiation resistance

RG = ground resistance

Of course there is a 3rd resistive component, the resistance of the wire itself and theoretically it should be considered but it is so trivial compared to RR and RG that there’s no need to bother.

73

Rick, DJ0IP

From: SkyWires@yahoogroups.com [mailto:SkyWires@yahoogroups.com]
Sent: Saturday, November 14, 2015 1:42 PM
To: SkyWires@yahoogroups.com
Subject: RE: [SkyWires] Best Long Wire Lengths

I’ve had good results using a 9:1 UNUN with a 124.5 foot sloping wire as described at the Balun Designs web site:

http://tinyurl.com/o7kuh4j

-

This configuration requires a counterpoise wire or wires for best results and works well on all bands from 160m to 6m, yet doesn’t take up a great amount of real estate.

73 – Bill, KK4XO

5116. Re[2]: [SkyWires] Best Long Wire Lengths

Yahoo group: SkyWires
Date: 2015-11-14 17:17:35 UTC
From: Chris Wilson
Topic: 5114 Message: 5116

Hello Rick

Saturday, November 14, 2015

I am curious as to how one might measure these figures, would my
AIM4170 antenna analyser give sufficient information? Here's a link to
the later 4300 model, which is functionally almost identical. Thanks.

http://www.w5big.com/AIM4300.htm

> There is no mystery around this stuff.

> Efficiency (%) = (RR / (RR + RG)) x 100

> RR = radiation resistance

> RG = ground resistance

>

> Of course there is a 3rd resistive component, the resistance of the
> wire itself and theoretically it should be considered but it is so
> trivial compared to RR and RG that there’s no need to bother.

>

> 73

> Rick, DJ0IP

--
Best regards,
Chris mailto:chris@...

5117. RE: Re[2]: [SkyWires] Best Long Wire Lengths

Yahoo group: SkyWires
Date: 2015-11-14 21:15:19 UTC
From: rick@dj0ip.de
Topic: 5114 Message: 5117

Good question.

Very few people are able to measure ground resistance.

There have been a few documents published explaining how it can be done, but it is WAY beyond the means of most people.

Radiation resistance for popular antennas is known.

A halfwave dipole in theory has 72 ohms.

A quarter wave vertical has half that, or 36 Ohms.

The ground resistance is what it is and we can’t really change it… unless we lay down a lot of radials.

Let’s say it’s 20 Ohms, a not so untypical value.

In theory the efficiency would be (36/36+20) x 100 = 64%

You can measure the antenna with a simple antenna analyzer.

It will show you the impedance, expressed in Ohms + Reactance (either capacitive or inductive).

For instance it might read 25 Ohms –j125 .

The 25 Ohms is the restive portion of the antenna.

This can of course be measured with your AIM.

But I don’t really know what to tell you about measuring ground resistance.

In any case, the higher the radiation resistance, the less negative impact the influence of ground resistance will have.

Or, stated another way, the lower the radiation resistance, the higher the need to improve the ground with radials.

If you have the room, I find it easier to extend the length of the wire in air than to lay down a bunch of radials.

But then you need a matchbox that will cope with the resulting high voltage.

73

Rick, DJ0IP

From: SkyWires@...m [mailto:SkyWires@yahoogroups.com]
Sent: Saturday, November 14, 2015 6:18 PM

To: SkyWires@yahoogroups.com
Subject: Re[2]: [SkyWires] Best Long Wire Lengths

Hello Rick

Saturday, November 14, 2015

I am curious as to how one might measure these figures, would my AIM4170 antenna analyser give sufficient information? Here's a link to the later 4300 model, which is functionally almost identical. Thanks.

http://www.w5big.com/AIM4300.htm

> There is no mystery around this stuff.

> Efficiency (%) = (RR / (RR + RG)) x 100

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> Of course there is a 3rd resistive component, the resistance of the
> wire itself and theoretically it should be considered but it is so
> trivial compared to RR and RG that there’s no need to bother.

>

> 73

> Rick, DJ0IP

--
Best regards,
Chris mailto:chris@...

5118. Evaluating an antenna

Yahoo group: SkyWires
Date: 2015-11-17 23:35:22 UTC
From: kl7rs@...
Topic: 5118 Message: 5118

I'd like to make a suggestion to the group. When evaluating or reporting on a particular antenna, please try to refrain from saying how good the antenna is unless you are able to compare it to another reference antenna through the use of a simple A/B switch.

The internet is full of people praising an antenna while never comparing it to anything else through the use of a simple A/B switch. Some folks will say something like - "This new antenna does way better than the one I had up 3 months ago". Or "I can talk to everyone I can hear" or "signals seem louder" or "swr is flat across the bands", or "I had a qso with a guy in Brazil last night". This is meaningless dribble.

Short of using expensive rf measuring equipment, one of the best and inexpensive way I have found to tell how well an antenna works is by immediately comparing it with another antenna using a simple A/B switch. This comparison is done during the same exact conditions and revels a lot about an antennas performance and characteristics.

If you want to try a new antenna design, I highly suggest you leave your present antenna in place. If you don't have a present antenna, at least put up a simple dipole or vertical. Next, put up the new antenna as clear from the original / reference antenna as possible. Sometimes this is hard and the two antennas end up being pretty close. So what, you will still get a reasonable comparison. Run both antennas into a A/B switch and try switching back and forth between the two antennas during QSOs over the course of several days and nights. Even using this method, it doesn't tell you that the antenna is good or not, it just tells you weather it is better, the same or worse than your dipole or what ever reference antenna your comparing it to.

You'll be amazed at how well this method works and how much you'll learn from the process. Besides, its also lots of fun! Since this was explained to me, I have always tried to have at least one reference antenna in the air at all times. Lots of us are limited in space. I know - I have a small lot and also live in an HOA which is even more of a reason to strive to have the most efficient antenna you can under the given circumstances.

Lets say you have a vertical antenna and your using it as your reference antenna. Your main antenna is a standard center fed dipole but your thinking of replacing it with a OCF dipole but you don't have enough room to run both at the same time. First you make a bunch of TX / RX comparisons between your center fed dipole and your vertical. Night, day, dx, local, etc. Write down the comparisons. Example, Lets say that on 20 m when talking with a friend in Chicago during the afternoon, the dipole pretty consistently about 1 S unit stronger than the vertical on both TX and RX. Next, take down the center fed dipole and put up the OCF in its place. Now make another comparison with your friend in Chicago on 20 m in the afternoon. Switch between the vertical and the OCF. Now lets say you notice that the OCF is giving you about 2 s units better signal than the vertical. Well, simple math says its about 1 s unit better than the center fed dipole. Now you really know something. You have some actual data to backup your hunch that the OCF may be a better antenna than what you were previously using. To be sure of this, you'll have to make these comparisons over the course of several days and nights and on all of the bands you normally operate on. You'll now have some data that you can go back and look at if you ever decide to try to improve on

the OCF and maybe replace it with a loop, zep, double zep, G5RV, ZS6BKW, long wire, etc....

Better yet, publish comparisons on any antennas your testing. This type of information is really worth sharing and I'm pretty sure everyone in the group will enjoy it. When you do post your comparisons, make sure you include particulars on both the reference antenna and the one your testing. You'll want to include things like how high it is, orientation, material its made of, lengths of radiators, number and length of radials, frequencies of comparisons, and of course the difference in TX and RX signal strengths you've recorded.

Just saying "I tried antenna X and it seems to work real well", is pretty meaningless.

5120. RE: [SkyWires] Evaluating an antenna

Yahoo group: SkyWires
Date: 2015-11-18 06:41:32 UTC
From: rick@dj0ip.de
Topic: 5118 Message: 5120

OUTSTANDING post Norm,

Thanks for suggesting this.

The only thing I would add is that 40m is a bit different.
It is not one band, it is 3 bands. Perhaps 4.
That's because the difference in its performance during daytime operation and night time operation is as different as, well, night and day. But there is more to it than that. We have dawn and dusk.

1. Daytime, 40m is a great NIVS band for working local friends

2. Night time, 40m is a great DX band and you can easily work the entire world on this band if you have a good antenna.

3. Dawn and dusk (grey time), 40m behaves much different. You can often work both NVIS and DX at the same time. The angle that the DX signals are arriving changes rapidly and during A/B tests, you sometimes see both antennas being better and worse, every 10 to 20 seconds.

My point: especially on 40m, it is very important to record exactly the time of day and if its early morning or evening, time of year is interesting. For instance it's 7:30 AM here right now and dark as can be. Yet two months ago it was broad daylight at this time.

I can show you a couple examples of what Norm was referring to. They are on my web.

I've done this a few times and sometimes recorded hundreds of QSOs or at least SWL reports. I currently only have two such tests posted. They were over a very controversial antenna.

I'm still looking for the file that has extensive data from a magnetic loop test.
If I ever find it, I will post it here too.

See: http://www.dj0ip.de/antenna-tests/80m-eh-antenna/

73
Rick, DJ0IP

From: SkyWires@yahoogroups.com [mailto:SkyWires@yahoogroups.com]
Sent: Wednesday, November 18, 2015 12:35 AM
To: SkyWires@yahoogroups.com
Subject: [SkyWires] Evaluating an antenna

I'd like to make a suggestion to the group. When evaluating or reporting on a particular antenna, please try to refrain from saying how good the antenna is unless you are able to compare it to another reference antenna through the use of a simple A/B switch.

The internet is full of people praising an antenna while never comparing it to anything else through the use of a simple A/B switch. Some folks will say something like - "This new antenna does way better than the one I had up 3 months ago". Or "I can talk to everyone I

can hear" or "signals seem louder" or "swr is flat across the bands", or "I had a qso with a guy in Brazil last night". This is meaningless dribble.

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Lets say you have a vertical antenna and your using it as your reference antenna. Your main antenna is a standard center fed dipole but your thinking of replacing it with a OCF dipole but you don't have enough room to run both at the same time. First you make a bunch of TX / RX comparisons between your center fed dipole and your vertical. Night, day, dx, local, etc. Write down the comparisons. Example, Lets say that on 20 m when talking with a friend in Chicago during the afternoon, the dipole pretty consistently about 1 S unit stronger than the vertical on both TX and RX. Next, take down the center fed dipole and put up the OCF in its place. Now make another comparison with your friend in Chicago on 20 m in the afternoon. Switch between the vertical and the OCF. Now lets say you notice that the OCF is giving you about 2 s units better signal than the vertical. Well, simple math says its about 1 s unit better than the center fed dipole. Now you really know something. You have some actual data to backup your hunch that the OCF may be a better antenna than what you were previously using. To be sure of this, you'll have to make these comparisons over the course of several days and nights and on all of the bands you normally operate on. You'll now have some data that you can go back and look at if you ever decide to try to improve on the OCF and maybe replace it with a loop, zep, double zep, G5RV, ZS6BKW, long wire, etc....

Better yet, publish comparisons on any antennas your testing. This type of information is really worth sharing and I'm pretty sure everyone in the group will enjoy it. When you do post your comparisons, make sure you include particulars on both the reference antenna and the one your testing. You'll want to include things like how high it is, orientation, material its made of, lengths of radiators, number and length of radials, frequencies of comparisons, and of course the difference in TX and RX signal strengths you've recorded.

Just saying "I tried antenna X and it seems to work real well", is pretty meaningless.

5121. Re: [SkyWires] Evaluating an antenna

Yahoo group: SkyWires
Date: 2015-11-18 12:16:09 UTC
From: beargyrils@...
Topic: 5118 Message: 5121

Hey Rick,Some time ago a ham from Finland sent me a link to a chart and it showed where the gray line was
http://www.smeter.net/propagation/views/current-gray-line.php

I never tried this one and lost the other link. BOB AF2Q
In a message dated 11/17/2015 10:41:58 P.M. Pacific Standard Time, SkyWires@yahoogroups.com writes:

My point: especially on 40m, it is very important to record exactly the time of day and if its early morning or evening, time of year is interesting. For instance it’s 7:30 AM here right now and dark as can be. Yet two months ago it was broad daylight at this time.

5122. RE: [SkyWires] Evaluating an antenna

Yahoo group: SkyWires
Date: 2015-11-18 12:37:14 UTC
From: rick@dj0ip.de
Topic: 5118 Message: 5122

Hi Bob,

Well it’s not a chart, it’s a moving pattern.
It moves 24 hours per day, and it’s size and shape changes every single day by just a tiny bit.

Most of the common contesting logging programs has this feature integrated.
I log with Win-Test.
When it starts to get dusk, I click the Icon and see the grey line pattern so I know which way to turn my 40m beam.
Doesn’t help me much though, because I don’t have a 40m beam. (hi)

It’s simply amazing the amount of software propagation tools available now days.
Makes me wonder how I ever worked so many countries back in the days before we all had computers!

Thanks for sharing the link Bob.
I hadn’t seen this one before.

73
Rick, DJ0IP

From: SkyWires@yahoogroups.com [mailto:SkyWires@yahoogroups.com]
Sent: Wednesday, November 18, 2015 1:16 PM
To: SkyWires@yahoogroups.com
Subject: Re: [SkyWires] Evaluating an antenna

Hey Rick,Some time ago a ham from Finland sent me a link to a chart and it showed where the gray line was
http://www.smeter.net/propagation/views/current-gray-line.php

I never tried this one and lost the other link. BOB AF2Q
In a message dated 11/17/2015 10:41:58 P.M. Pacific Standard Time,
SkyWires@yahoogroups.com writes:
My point: especially on 40m, it is very important to record exactly the time of day and if its early morning or evening, time of year is interesting. For instance it’s 7:30 AM here right now and dark as can be. Yet two months ago it was broad daylight at this time.

5123. Re: [SkyWires] Evaluating an antenna

Yahoo group: SkyWires
Date: 2015-11-18 12:54:40 UTC
From: beargyrils@...
Topic: 5118 Message: 5123

Hi Rick,
Too bad they have no software to make sunspots :-)
BOB AF2Q

In a message dated 11/18/2015 4:37:20 A.M. Pacific Standard Time,
SkyWires@yahoogroups.com writes:

It’s simply amazing the amount of software propagation tools available now
days.
Makes me wonder how I ever worked so many countries back in the days
before we all had computers!

5124. RE: [SkyWires] Evaluating an antenna

Yahoo group: SkyWires
Date: 2015-11-18 13:25:08 UTC
From: rick@dj0ip.de
Topic: 5118 Message: 5124

Take that to a hamfest and sell it.

You’d be a millionaire overnight!

From: SkyWires@yahoogroups.com [mailto:SkyWires@yahoogroups.com]
Sent: Wednesday, November 18, 2015 1:55 PM
To: SkyWires@yahoogroups.com
Subject: Re: [SkyWires] Evaluating an antenna

Hi Rick,

Too bad they have no software to make sunspots :-)

BOB AF2Q

In a message dated 11/18/2015 4:37:20 A.M. Pacific Standard Time, SkyWires@yahoogroups.com writes:

It’s simply amazing the amount of software propagation tools available now days.
Makes me wonder how I ever worked so many countries back in the days before we all had computers!

5125. Re: Evaluating an antenna

Yahoo group: SkyWires
Date: 2015-11-18 16:07:46 UTC
From: kl7rs@...
Topic: 5118 Message: 5125

There are a bunch of software apps out there that show you grey line. If I remember correctly, HRD does this as well.

5126. AW: [SkyWires] Evaluating an antenna

Yahoo group: SkyWires
Date: 2015-11-18 23:08:02 UTC
From: siegfried jackstien
Topic: 5118 Message: 5126

Hello Rick

Just sent you a prediction software that is very useful (via direct mail)

Try it out

You easy can see at what time propagation goes where (and where terminator/greyline is etc.)

You even can do a prediction of signal level (if you know antenna gain and transmitted power)

Greetz

Sigi

Dg9bfc

> -----Ursprüngliche Nachricht-----
> Von: SkyWires@yahoogroups.com [mailto:SkyWires@yahoogroups.com]
> Gesendet: Mittwoch, 18. November 2015 12:37
> An: SkyWires@yahoogroups.com
> Betreff: RE: [SkyWires] Evaluating an antenna
>
>
>
> Hi Bob,
>
> Well it□s not a chart, it□s a moving pattern.
> It moves 24 hours per day, and it□s size and shape changes every single
> day by just a tiny bit.
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> I log with Win-Test.
> When it starts to get dusk, I click the Icon and see the grey line pattern
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> Doesn□t help me much though, because I don□t have a 40m beam. (hi)
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> before we all had computers!
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> Thanks for sharing the link Bob.
> I hadn□t seen this one before.

>
> 73
> Rick, DJ0IP
>
> From: SkyWires@yahoogroups.com [mailto:SkyWires@yahoogroups.com]
> Sent: Wednesday, November 18, 2015 1:16 PM
> To: SkyWires@yahoogroups.com
> Subject: Re: [SkyWires] Evaluating an antenna
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> Hey Rick,Some time ago a ham from Finland sent me a link to a chart and it
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> Yet two months ago it was broad daylight at this time.
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5127. Re: AW: [SkyWires] Evaluating an antenna

Yahoo group: SkyWires
Date: 2015-11-19 05:36:10 UTC
From: Edward McCann
Topic: 5118 Message: 5127

Share?

Sent from my iPhone

> On Nov 18, 2015, at 3:08 PM, 'siegfried jackstien' siegfried.jackstien@... [SkyWires] <SkyWires@yahoogroups.com> wrote:
>
> Hello Rick
>
> Just sent you a prediction software that is very useful (via direct mail)
>
> Try it out
>
> You easy can see at what time propagation goes where (and where
> terminator/greyline is etc.)
>
> You even can do a prediction of signal level (if you know antenna gain and
> transmitted power)
>
> Greetz
>
> Sigi
>
> Dg9bfc
>
> > -----Ursprüngliche Nachricht-----
> > Von: SkyWires@yahoogroups.com [mailto:SkyWires@yahoogroups.com]
> > Gesendet: Mittwoch, 18. November 2015 12:37
> > An: SkyWires@yahoogroups.com
> > Betreff: RE: [SkyWires] Evaluating an antenna
> >
> >
> >
> > Hi Bob,
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> > Well it’s not a chart, it’s a moving pattern.
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> > 73
> > Rick, DJ0IP
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> > Sent: Wednesday, November 18, 2015 1:16 PM
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> > Yet two months ago it was broad daylight at this time.
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5128. AW: AW: [SkyWires] Evaluating an antenna

Yahoo group: SkyWires
Date: 2015-11-19 09:12:40 UTC
From: siegfried jackstien
Topic: 5118 Message: 5128

https://www.dropbox.com/s/4d2ewkelkzqelae/Funkprognose.zip?dl=1

here you can grab it

dg9bfc

sigi

> -----Ursprüngliche Nachricht-----
> Von: SkyWires@yahoogroups.com [mailto:SkyWires@yahoogroups.com]
> Gesendet: Donnerstag, 19. November 2015 05:36
> An: SkyWires@yahoogroups.com
> Betreff: Re: AW: [SkyWires] Evaluating an antenna
>
>
>
> Share?
>
> Sent from my iPhone
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> On Nov 18, 2015, at 3:08 PM, 'siegfried jackstien'
> siegfried.jackstien@... [SkyWires] <SkyWires@yahoogroups.com>
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> Just sent you a prediction software that is very useful (via direct
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> You easy can see at what time propagation goes where (and where
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> Greetz
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> Dg9bfc
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> > Gesendet: Mittwoch, 18. November 2015 12:37
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> > Betreff: RE: [SkyWires] Evaluating an antenna
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> >
> >
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> >
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5129. Re: AW: AW: [SkyWires] Evaluating an antenna

Yahoo group: SkyWires
Date: 2015-11-19 19:13:27 UTC
From: Edward McCann
Topic: 5118 Message: 5129

Danke.
Eine Kleine Nachtmusic to you.
Nice looking visual, visible on Mac
Need to open on MIcrosoft in due course.
73,
AG6CX

Sent from my iPhone

> On Nov 19, 2015, at 1:12 AM, 'siegfried jackstien' siegfried.jackstien@freenet.de
[SkyWires] <SkyWires@yahoogroups.com> wrote:
>
> https://www.dropbox.com/s/4d2ewkelkzqelae/Funkprognose.zip?dl=1
>
> here you can grab it
>
> dg9bfc
>
> sigi
>
> > -----Ursprüngliche Nachricht-----
> > Von: SkyWires@yahoogroups.com [mailto:SkyWires@yahoogroups.com]
> > Gesendet: Donnerstag, 19. November 2015 05:36
> > An: SkyWires@yahoogroups.com
> > Betreff: Re: AW: [SkyWires] Evaluating an antenna
> >
> >
> >
> > Share?
> >
> > Sent from my iPhone
> >
> > On Nov 18, 2015, at 3:08 PM, 'siegfried jackstien'
> > siegfried.jackstien@... [SkyWires] <SkyWires@yahoogroups.com>
> > wrote:
> >
> >
> >
> >
> >
> > Hello Rick
> >
> > Just sent you a prediction software that is very useful (via direct
> > mail)
> >

> > Try it out
> >
> > You easy can see at what time propagation goes where (and where
> > terminator/greyline is etc.)
> >
> > You even can do a prediction of signal level (if you know antenna
> > gain and
> > transmitted power)
> >
> > Greetz
> >
> > Sigi
> >
> > Dg9bfc
> >
> > > -----Ursprüngliche Nachricht-----
> > > Von: SkyWires@yahoogroups.com [mailto:SkyWires@yahoogroups.com]
> > > Gesendet: Mittwoch, 18. November 2015 12:37
> > > An: SkyWires@yahoogroups.com
> > > Betreff: RE: [SkyWires] Evaluating an antenna
> > >
> > >
> > >
> > > Hi Bob,
> > >
> > > Well it’s not a chart, it’s a moving pattern.
> > > It moves 24 hours per day, and it’s size and shape changes every
> > single
> > > day by just a tiny bit.
> > >
> > > Most of the common contesting logging programs has this feature
> > > integrated.
> > > I log with Win-Test.
> > > When it starts to get dusk, I click the Icon and see the grey line
> > pattern
> > > so I know which way to turn my 40m beam.
> > > Doesn’t help me much though, because I don’t have a 40m beam. (hi)
> > >
> > > It’s simply amazing the amount of software propagation tools
> > available now
> > > days.
> > > Makes me wonder how I ever worked so many countries back in the
> > days
> > > before we all had computers!
> > >
> > > Thanks for sharing the link Bob.
> > > I hadn’t seen this one before.
> > >
> > > 73
> > > Rick, DJ0IP

> > >
> > > From: SkyWires@yahoogroups.com [mailto:SkyWires@yahoogroups.com]
> > > Sent: Wednesday, November 18, 2015 1:16 PM
> > > To: SkyWires@yahoogroups.com
> > > Subject: Re: [SkyWires] Evaluating an antenna
> > >
> > > Hey Rick,Some time ago a ham from Finland sent me a link to a
> > chart and it
> > > showed where the gray line was
> > > http://www.smeter.net/propagation/views/current-gray-line.php
> > >
> > > I never tried this one and lost the other link. BOB AF2Q
> > > In a message dated 11/17/2015 10:41:58 P.M. Pacific Standard Time,
> > > SkyWires@yahoogroups.com writes:
> > > My point: especially on 40m, it is very important to record
> > exactly the
> > > time of day and if its early morning or evening, time of year is
> > > interesting. For instance it’s 7:30 AM here right now and dark as
> > can be.
> > > Yet two months ago it was broad daylight at this time.
> > >
> > >
> > >
> > >
> > >
> >
> >
> >
> >
>
>

5130. Multi-band Horizontal Loop - No Tuner

Yahoo group: SkyWires
Date: 2015-12-17 16:48:38 UTC
From: kl7rs@...
Topic: 5130 Message: 5130

I've been all over the internet reading about Horizontal Loops. Geeze there is a lot of information out there.

What I'm looking for is reliable and acurate information regarding the construction of a multi-band loop that does not require a tuner. If this is possible?

5131. RE: [SkyWires] Multi-band Horizontal Loop - No Tuner

Yahoo group: SkyWires
Date: 2015-12-17 17:02:41 UTC
From: rick@dj0ip.de
Topic: 5130 Message: 5131

This depends a lot on your radio.
If you have one of those Japanese specials that folds back power beginning at 1.5:1 SWR, then you are out of luck.

If you have a really good radio, such as any Ten-Tec, it will play at 100w into a 3:1 SWR all day long WITHOUT folding back power. Then your chances are very good.

However the one I'm thinking of was erected pretty much in the clear.
If I recall correctly, yours runs around your house. Don't know how much that would affect it.

The specialist on this is Everett, N4CY (formerly N8CNP)
I have some info on my web:
http://www.dj0ip.de/loop-antennas/8-band-horizontal-loop/

73 - Rick, DJ0IP
(Nr. Frankfurt, Germany)

From: SkyWires@yahoogroups.com [mailto:SkyWires@yahoogroups.com]
Sent: Thursday, December 17, 2015 5:49 PM
To: SkyWires@...m
Subject: [SkyWires] Multi-band Horizontal Loop - No Tuner

I've been all over the internet reading about Horizontal Loops. Geeze there is a lot of information out there.

What I'm looking for is reliable and acurate information regarding the construction of a multi-band loop that does not require a tuner. If this is possible?

5132. Re: [SkyWires] Multi-band Horizontal Loop - No Tuner

Yahoo group: SkyWires
Date: 2015-12-17 17:13:28 UTC
From: everettsharp@...
Topic: 5130 Message: 5132

The loop that Rick mentions and you will find in the files section, works well with the my Icom 7600 built in antenna tuner and my K3S built in antenna tuner. I am able to use it on 80 through 6 meters, with the exception of 60 meters. My loop is strung between trees in my back yard and is the best wire antenna I have ever had.
Everett N4CY

In a message dated 12/17/2015 11:02:50 A.M. Central Standard Time, SkyWires@yahoogroups.com writes:

This depends a lot on your radio.
If you have one of those Japanese specials that folds back power beginning at 1.5:1 SWR, then you are out of luck.

If you have a really good radio, such as any Ten-Tec, it will play at 100w into a 3:1 SWR all day long WITHOUT folding back power. Then your chances are very good.

However the one I'm thinking of was erected pretty much in the clear.
If I recall correctly, yours runs around your house. Don't know how much that would affect it.

The specialist on this is Everett, N4CY (formerly N8CNP)
I have some info on my web:
http://www.dj0ip.de/loop-antennas/8-band-horizontal-loop/

73 - Rick, DJ0IP
(Nr. Frankfurt, Germany)

From: SkyWires@yahoogroups.com [mailto:SkyWires@yahoogroups.com]
Sent: Thursday, December 17, 2015 5:49 PM
To: SkyWires@yahoogroups.com
Subject: [SkyWires] Multi-band Horizontal Loop - No Tuner

I've been all over the internet reading about Horizontal Loops. Geeze there is a lot of information out there.

What I'm looking for is reliable and acurate information regarding the construction of a multi-band loop that does not require a tuner. If this is possible?

5133. Re: [SkyWires] Multi-band Horizontal Loop - No Tuner

Yahoo group: SkyWires
Date: 2015-12-17 17:21:53 UTC
From: Mickey Baker
Topic: 5130 Message: 5133

I use a similar loop, about 580' that resonates amost idetically to the one on DJ0IP's web site, except lower on each band. At some point, I'm going to go lop off another 5 feet, but it's working so well I hate to mess with it.

Mickey, N4MB

Mickey Baker, N4MB
Fort Lauderdale, FL
*“Tell me, and I will listen. Show me, and I will understand. Involve me, and I will learn.” *Teton Lakota, American Indian Saying.

On Thu, Dec 17, 2015 at 12:02 PM, 'rick@...' Rick@... [SkyWires] <SkyWires@yahoogroups.com> wrote:

>
>
> This depends a lot on your radio.
> If you have one of those Japanese specials that folds back power beginning
> at 1.5:1 SWR, then you are out of luck.
>
> If you have a really good radio, such as any Ten-Tec, it will play at 100w
> into a 3:1 SWR all day long WITHOUT folding back power. Then your chances
> are very good.
>
> However the one I’m thinking of was erected pretty much in the clear.
> If I recall correctly, yours runs around your house. Don’t know how much
> that would affect it.
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> The specialist on this is Everett, N4CY (formerly N8CNP)
> I have some info on my web:
> http://www.dj0ip.de/loop-antennas/8-band-horizontal-loop/
>
> 73 - Rick, DJ0IP
> (Nr. Frankfurt, Germany)
>
> From: SkyWires@yahoogroups.com [mailto:SkyWires@yahoogroups.com]
> Sent: Thursday, December 17, 2015 5:49 PM
> To: SkyWires@yahoogroups.com
> Subject: [SkyWires] Multi-band Horizontal Loop - No Tuner
>
> I've been all over the internet reading about Horizontal Loops. Geeze
> there is a lot of information out there.
>
> What I'm looking for is reliable and acurate information regarding the
> construction of a multi-band loop that does not require a tuner. If this is
> possible?

>
>
>

5134. Re: [SkyWires] Multi-band Horizontal Loop - No Tuner

Yahoo group: SkyWires
Date: 2015-12-17 17:26:31 UTC
From: Evan Rolek
Topic: 5130 Message: 5134

It somewhat depends on what multi-band means versus all band. Loops are no different than any other antenna in that they don't work all bands, every band, full bandwidth on each band, 1:1 SWR across the bands, excellent for local and DX, and requires no tuner. Many ads seem to imply that but, actual experiences, not so much. A lot of time can indeed be spent pursuing the Holy Grail of antennas...

I've found that the articles and books by L. B. Cebik (SK, W4RNL) give ample information about horizontal loop antennas. The data support the notion that an antenna tuner is warranted, usually an external one since the built-in tuners in the rigs cannot handle anything more than a slight mismatch presented by a linear amplifier with an untuned input.

But let's see what the experts say...

-----Original Message-----
From: kl7rs@... [SkyWires] <SkyWires@yahoogroups.com>
To: SkyWires <SkyWires@yahoogroups.com>
Sent: Thu, Dec 17, 2015 11:48 am
Subject: [SkyWires] Multi-band Horizontal Loop - No Tuner

I've been all over the internet reading about Horizontal Loops. Geeze there is a lot of information out there.

What I'm looking for is reliable and acurate information regarding the construction of a multi-band loop that does not require a tuner. If this is possible?

5135. Re: [SkyWires] Multi-band Horizontal Loop - No Tuner

Yahoo group: SkyWires
Date: 2015-12-17 19:07:43 UTC
From: rdj@...
Topic: 5130 Message: 5135

I have a delta shaped loop, started out with a 500ft roll of 12ga, added about 50ft and adjusted size to a 1 to1 SWR in the middle of the 40M band.
Radio a Kenwood 590
4:1 homemade dual core balun at feed point and RG-8 to radio
Radio tunes fine on 160 thru 40, in use 2 yr
For 20 thru 6m , I use a NA4RR hex beam
I would recommend a delta loop about 80M size w/ 4:1 balun for no tuner at all. Going to 160 size it gets hard to cover the multiples of lengths.
I used a 80M delta loop size for all bands before I added the hex beam.
Here is a chart of SWR readings on my 80M size delta loop
http://i1102.photobucket.com/albums/g453/KD0ZZ/80MLoop_zpsa6e4cfe7.jpeg
When I built my 80M size loop I aimed for the center of 20M, here is a chart of different lengths and shows why a 80M antenna works on several bands
http://i1102.photobucket.com/albums/g453/KD0ZZ/Loop_zps75e5682a.jpg

Rich, Kd0zz

From: SkyWires@yahoogroups.com [mailto:SkyWires@...m]
Sent: Thursday, December 17, 2015 5:49 PM
To: SkyWires@yahoogroups.com
Subject: [SkyWires] Multi-band Horizontal Loop - No Tuner

I've been all over the internet reading about Horizontal Loops. Geeze there is a lot of information out there.

What I'm looking for is reliable and acurate information regarding the construction of a multi-band loop that does not require a tuner. If this is possible?

5137. Horizontal Receiving Loop Questions From A Newbie

Yahoo group: SkyWires
Date: 2016-01-30 06:21:54 UTC
From: deanbianco@...
Topic: 5137 Message: 5137

I plan on installing a large-sized Horizontal Loop as my primary receive-only antenna. Total length of the loop will be roughly 550 feet long. Frequency range of interest is 150 Khz to 30MHz. I want omni-directionality overall. I REQUIRE the lowest man-made noise reduction possible. The height will vary a bit along its length, but I am going to aim for an overall height of 25-30 feet. I will feed it with either 50 ohm or 72 ohm coax. A balun is under consideration, but I lack the proper knowledge here, so:

1. Is a delta loop just as effective as a square? Does one have an advantage over the other? If a delta or a square options become logistically unfeasible for my particular installation (location of the tree supports are going to be a challenge), will an odd-shape work, i.e., a five-sided shape to take advantage of an irregular lot size? Or will this last option seriously degrade performance?

2. What ratio balun should be used? I have seen in my searches values all over the map!! 2:1, 1:1, 10:1, 12:1, 2.5:1, 4:1 have been suggested. This is way too vague. I want to know which balun to use based on science, not guess-work. Or, dare I say this, should I simply forget about using a balun entirely? Just a direct coax feed? Or, still, feed the coax lead-in to a tuner?

3. What type of wire support is recommended? Pulleys? Counterweights? Scree-eyes? Polyester rope? Dacron rope?

4. Where is the best location for the attachment of the down-lead coax on the loop? Is the location performance-based? Mandatory? My desire would be to locate it on the leg nearest the house, so that the coax lead-in can be secured down the mast as it travels to the shack. But if that compromises performance, then I will take heed of what would be a better tapping point.

5. Lastly, would placing a robust surge arrestor (such as the Array Solutions/I.C.E. models or others) in the coax feed, mounted at ground-rod level, effect performance characteristics? or should I forgo this since it might alter the electrical balance of the loop's properties?

I know that this is quite a lot to ask. Further, I acknowledge that this topic has probably been covered a copious amount of times, so I apologize for you regulars in this group!

But I would be so appreciative for a DETAILED response. I may even be privately emailed if that would be in "better form."

Dean

5138. Re: [SkyWires] Horizontal Receiving Loop Questions From A Newbie

Yahoo group: SkyWires
Date: 2016-01-30 06:47:57 UTC
From: Evan Rolek
Topic: 5137 Message: 5138

Dean,

As a non-expert, I can only offer brief comments.

1. Shape is not critical but best performance is when the largest area is encompassed by the loop.

2. No matter what balun you select, it will not have the proper ratio for all frequencies. Feeding a loop with window line or open wire line, with a tuner in the shack, gets around the ratio issue. That is why I dislike baluns when using my loops multiband.

3. Stainless steel hardware is the best to use, along with marine pulleys. I have pulleys in trees, as well as fiberglass poles attached to trees, with a pulley at the end of the pole.

4. For shortwave listening, I'd recommend attaching the feedline closest to the house, with weatherproof quick-disconnects for protection when storms approach.

5. Surge arrestors can help with static buildup, and nearby lightening strikes. I never use them (except the ones internal to my coax switches) and prefer to disconnect my feedlines from the house when storms approach.

73,

Evan, K9SQG

-----Original Message-----
From: deanbianco@... [SkyWires] <SkyWires@yahoogroups.com>
To: SkyWires <SkyWires@yahoogroups.com>
Sent: Sat, Jan 30, 2016 1:21 am
Subject: [SkyWires] Horizontal Receiving Loop Questions From A Newbie

I plan on installing a large-sized Horizontal Loop as my primary receive-only antenna. Total length of the loop will be roughly 550 feet long. Frequency range of interest is 150 Khz to 30MHz. I want omni-directionality overall. I REQUIRE the lowest man-made noise reduction possible. The height will vary a bit along its length, but I am going to aim for an overall height of 25-30 feet. I will feed it with either 50 ohm or 72 ohm coax. A balun is under consideration, but I lack the proper knowledge here, so:

1. Is a delta loop just as effective as a square? Does one have an advantage over the other? If a delta or a square options become logistically unfeasible for my particular installation (location of the tree supports are going to be a challenge), will an odd-shape work, i.e., a five-sided shape to take advantage of an irregular lot size? Or will this last option seriously degrade performanc e?

2. What ratio balun should be used? I have seen in my searches values all over the map!! 2:1, 1:1, 10:1, 12:1, 2.5:1, 4:1 have been suggested. This is way too vague. I want to know which balun to use based on science, not guess-work. Or, dare I say this, should I simply

forget about using a balun entirely? Just a direct coax feed? Or, still, feed the coax lead-in to a tuner?

3. What type of wire support is recommended? Pulleys? Counterweights? Scree-eyes? Polyester rope? Dacron rope?

4. Where is the best location for the attachment of the down-lead coax on the loop? Is the location performance-based? Mandatory? My desire would be to locate it on the leg nearest the house, so that the coax lead-in can be secured down the mast as it travels to the shack. But if that compromises performance, then I will take heed of what would be a better t apping point.

5. Lastly, would placing a robust surge arrestor (such as the Array Solutions/I.C.E. models or others) in the coax feed, mounted at ground-rod level, effect performance characteristics? or should I forgo this since it might alter the electrical balance of the loop's properties?

I know that this is quite a lot to ask. Further, I acknowledge that this topic has probably been covered a copious amount of times, so I apologize for you regulars in this group!

But I would be so appreciative for a DETAILED response. I may even be privately emailed if that would be in "better form."

Dean

5139. Re: [SkyWires] Horizontal Receiving Loop Questions From A Newbie

Yahoo group: SkyWires
Date: 2016-01-30 07:57:14 UTC
From: rdj@...
Topic: 5137 Message: 5139

Dean , I transmit and receive on a 550ft delta loop. At my location the delta shape gives better matching that a sq. Ref the MMANA by m0mcx ,
https://www.youtube.com/watch?v=SOvhetU1_ps

I agree it is hard to find the best matched balun so I use a 4:1 and a 1:1 switchable balun for ladder line, Different band require different baluns.
http://i1102.photobucket.com/albums/g453/KD0ZZ/4to11to12.jpg
http://i1102.photobucket.com/albums/g453/KD0ZZ/4to11to11.jpg

I now run a 550ft delta trimmed, coax fed, with a 4:1 balun to a 1:1 match in the middle of the 40m phone band. Here is a chart from when it was a 80M size

http://i1102.photobucket.com/albums/g453/KD0ZZ/80MLoop_zpsa6e4cfe7.jpeg

I later expanded it to a 160m or 550ft loop. I dont plan on going any larger at this time unless you want to trim some more trees for me.
http://i1102.photobucket.com/albums/g453/KD0ZZ/160%20Loop/trees010_zpse5180867.jpg

More loop info can be found at
http://www.i1wqrlinkradio.com/antype/delta_loop2.html

Rich, Kd0zz

----- Original Message -----

I plan on installing a large-sized Horizontal Loop as my primary receive-only antenna. Total length of the loop will be roughly 550 feet long. Frequency range of interest is 150 Khz to 30MHz. I want omni-directionality overall. I REQUIRE the lowest man-made noise reduction possible. The height will vary a bit along its length, but I am going to aim for an overall height of 25-30 feet. I will feed it with either 50 ohm or 72 ohm coax. A balun is under consideration, but I lack the proper knowledge here, so:

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But I would be so appreciative for a DETAILED response. I may even be privately emailed if that would be in "better form."

Dean

5140. Re: [SkyWires] Horizontal Receiving Loop Questions From A Newbie

Yahoo group: SkyWires
Date: 2016-01-30 11:29:57 UTC
From: Ken
Topic: 5137 Message: 5140

I agree with Evan.

If you want the quietest receive antenna, that may be the one the furtherest from your house and any power lines.

I had a big loop, it was no quieter than my inverted V antennas. My quietest antenna was (and still is) a 35' vertical 175 ft away from the house. Everybody "knows" verticals are noisy on receive. But I can hear stations on that antenna that are "in the mud" on every other antenna I have (I have 5 operational antennas on 40 and 30m.)

If you want to know what balun to use, get an antenna analyzer (I use a Rig Expert AA-54) and see what the actual impedances are at the location you would put a balun. If you feed at a high impedance point and put a 4:1 balun at the other end of a quarter wave of ladder line, the impedance there will be low and a 4:1 will make it too low.

The ARRL handbook recommends NO balun, coax feed, in their section on loop antennas. That's probably a good idea, at least for receive antennas.

I had a 700' loop, later cut down to 600', later cut to 500', later cut to a 160m OCFD, and now currently a 200' center fed dipole. The big loop did nothing special for me.

Ken WA8JXM

On 1/30/16 1:47 AM, Evan Rolek k9sqg@... [SkyWires] wrote:
>
>
> Dean,
>
> As a non-expert, I can only offer brief comments.
>
> 1. Shape is not critical but best performance is when the largest
> area is encompassed by the loop.
>
> 2. No matter what balun you select, it will not have the proper ratio
> for all frequencies. Feeding a loop with window line or open wire
> line, with a tuner in the shack, gets around the ratio issue. That is
> why I dislike baluns when using my loops multiband.
>
> 3. Stainless steel hardware is the best to use, along with marine
> pulleys. I have pulleys in trees, as well as fiberglass poles
> attached to trees, with a pulley at the end of the pole.
>
> 4. For shortwave listening, I'd recommend attaching the feedline

> closest to the house, with weatherproof quick-disconnects for
> protection when storms approach.
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> 5. Surge arrestors can help with static buildup, and nearby
> lightening strikes. I never use them (except the ones internal to my
> coax switches) and prefer to disconnect my feedlines from the house
> when storms approach.
>
> 73,
>
> Evan, K9SQG
>

5141. RE: [SkyWires] Horizontal Receiving Loop Questions From A Newbie

Yahoo group: SkyWires
Date: 2016-01-30 13:24:31 UTC
From: rick@dj0ip.de
Topic: 5137 Message: 5141

The idea of no balun is NONSENSE.

Every feedline picks up common mode current, the closer to the house it comes, the more there is on it.
Common mode current increases the base noise level of the receiver.

You should always insert an RF choke (line isolator) where the feedline enters the house. You can (should) even do this for openwire.

BE SURE AND TWIST THE OPENWIRE FEEDLINE ABOUT ONE TURN PER YARD OF FEEDLINE. This goes a long way to reduce local generated common mode current.

I am putting together some information on how to build chokes for this on my web site. For transmitting, you must use high quality material (only Teflon insulated) due to the high voltage that may occur on some bands, but for receiving you may use wire or coax with standard insulation.

In fact you can simply wrap 13 to 15 turns of thin loud speaker twinline (similar to zip cord) around an FT-140-43 and it will do the trick. This has about 100 Ohms impedance and the short length required (abt. 18 inches) won’t have any noticeable impact on the antenna.

I will try to finish my web page by Monday.
See: http://www.dj0ip.de/open-wire-fed-ant/balanced-line-choke/

73 - Rick, DJ0IP
(Nr. Frankfurt, Germany)

From: SkyWires@yahoogroups.com [mailto:SkyWires@yahoogroups.com]
Sent: Saturday, January 30, 2016 12:30 PM
To: SkyWires@yahoogroups.com
Subject: Re: [SkyWires] Horizontal Receiving Loop Questions From A Newbie

I agree with Evan.

If you want the quietest receive antenna, that may be the one the furtherest from your house and any power lines.

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Ken WA8JXM
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3. Stainless steel hardware is the best to use, along with marine pulleys. I have pulleys in trees, as well as fiberglass poles attached to trees, with a pulley at the end of the pole.

4. For shortwave listening, I'd recommend attaching the feedline closest to the house, with weatherproof quick-disconnects for protection when storms approach.

5. Surge arrestors can help with static buildup, and nearby lightening strikes. I never use them (except the ones internal to my coax switches) and prefer to disconnect my feedlines from the house when storms approach.

73,

Evan, K9SQG

5142. Re: [SkyWires] Horizontal Receiving Loop Questions From A Newbie

Yahoo group: SkyWires
Date: 2016-01-30 17:04:35 UTC
From: Andy
Topic: 5137 Message: 5142

Since it is a receive only antenna, I think that getting a match is unimportant. So a "ballpark" balun could be OK.

I don't follow the notion that feeding a loop with coax and no balun makes any sense. It unbalances the whole loop, which by itself was balanced, and this opens it up for receiving more noise and turning the coax itself into part of the antenna. For quietest operation, I think you need (at minimum a 1:1) balun if fed with coax.

Large horizontal loops are not omni-directional. There is some folklore and hand-waving about this that implies otherwise, but if you analyze them, you'll find they are not. The choice of feedpoint location determines which direction the main lobe goes.

The other thing the feedpoint location does, is change the impedance, so you can choose a corner or the middle of a side, to affect the SWR. But for a receive antenna, I don't think that matters much. At least not on HF (I'm not entirely positive about LF/MF, but I think those too).

Regards,
Andy

5143. Re: [SkyWires] Horizontal Receiving Loop Questions From A Newbie

Yahoo group: SkyWires
Date: 2016-01-30 17:55:36 UTC
From: Evan Rolek
Topic: 5137 Message: 5143

Fellow SkyWires Enthusiasts,

A tremendous amount of information about horizontal loops can be found at the W4RNL (sk) website as well as LB's work documented in the MFJ antenna books (volumes 1 and 2). He did a fair amount of computer analysis and showed plots of radiation patterns as a function of frequency and feedpoint. Also documented resistive and reactive components of the antennas based on frequency, height, etc.

Ran some tests a few years ago and compared my horizontal loop antenna (40 M about 12 ft off the ground fed with window line) with my 1/4 wave vertical mounted on the ground. As has been published, I found the loop to be between 1 and 2 S-units quieter than the vertical. This improved signal to noise ratio on receive.

73,

Evan, K9SQG

-----Original Message-----
From: Andy ai.egrps@... [SkyWires] <SkyWires@yahoogroups.com>
To: SkyWires <SkyWires@yahoogroups.com>
Sent: Sat, Jan 30, 2016 12:05 pm
Subject: Re: [SkyWires] Horizontal Receiving Loop Questions From A Newbie

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Regards,

Andy

5144. Re: [SkyWires] Horizontal Receiving Loop Questions From A Newbie

Yahoo group: SkyWires
Date: 2016-01-30 17:59:37 UTC
From: Everett Sharp
Topic: 5137 Message: 5144

I would recommend using a 4:1 current balun, which will protect the receiver from static build up. To keep CMC down I would use a Common Mode choke, just after the 4:1 balun, which would keep the coax from picking up noise.

Everett N4CY

Sent from my iPad

> On Jan 30, 2016, at 11:04 AM, Andy ai.egrps@... [SkyWires] <SkyWires@yahoogroups.com> wrote:
>
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>
> Regards,
> Andy
>
>
>

5145. RE: [SkyWires] Horizontal Receiving Loop Questions From A Newbie

Yahoo group: SkyWires
Date: 2016-01-30 19:15:45 UTC
From: D. Scott MacKenzie
Topic: 5137 Message: 5145

For shortwave listening, is a horizontal loop the best choice? Since as a general rule it had high angle of radiation, it will tend to pick up high angles. This isn’t always true as I have gotten some god DX on a loop on 80M (Shetlands, Antarctica, Falklands). But, to gain the selectivity (and take up a lot less room), you might want to consider a K9AY. You can select the direction, and it is easy to build.

My $0.02…..

From: SkyWires@yahoogroups.com [mailto:SkyWires@yahoogroups.com]
Sent: Saturday, January 30, 2016 1:00 PM
To: SkyWires@yahoogroups.com
Subject: Re: [SkyWires] Horizontal Receiving Loop Questions From A Newbie

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Regards,

Andy

5146. Re: [SkyWires] Horizontal Receiving Loop Questions From A Newbie

Yahoo group: SkyWires
Date: 2016-01-30 20:25:38 UTC
From: Evan Rolek
Topic: 5137 Message: 5146

As an observation, I worked South Africa last night on 40 meters, using my horizontal loop cut for 80 meters. It all depends on one's goals versus available resources and real estate...

-----Original Message-----
From: 'D. Scott MacKenzie' kb0fhp@... [SkyWires] <SkyWires@yahoogroups.com>
To: SkyWires <SkyWires@yahoogroups.com>
Sent: Sat, Jan 30, 2016 2:15 pm
Subject: RE: [SkyWires] Horizontal Receiving Loop Questions From A Newbie

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To: SkyWires@yahoogroups.com
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Regards,

Andy

5147. RE: [SkyWires] Horizontal Receiving Loop Questions From A Newbie

Yahoo group: SkyWires
Date: 2016-01-30 22:37:54 UTC
From: rick@dj0ip.de
Topic: 5137 Message: 5147

Andy,

Sorry OM, you are a bit skewed from reality.

In all of the below, I'm referring to an 80m or 160m full size loop, not these tiny loops that can also be used for RX antennas. I am also referring to a relatively square loop.

"Where" you feed the loop does not change its impedance nor SWR.
The impedance is determined by length, height, and frequency, but not "where" it is fed.

A balun does help but at the feedpoint, it is probably better to use a 4:1 than a 1:1 if you are going to feed it with coax. An additional 1:1 should be inserted at the house to remove CMC.

The directivity of the loop is HIGHLY frequency dependent.
On it's fundamental it is 98% omni-directional.
On its second harmonic it is still rather Omni directional with some distortion.
On higher harmonics, it develops 4 distinct lobes, off of each of the 4 corners. Its signal strength difference between the 4 corners (at the other end of the QSO) is trivial from a standpoint of radiation pattern on the fundamental frequency.

On higher bands there is directivity off of all 4 corners and here you are correct, the strongest lobe is the one opposite the corner it is fed in, but there is no huge difference to the strength of the other 3 major lobes.
I'll pull a number out of the air and state it as 3 dB (max).

73 - Rick, DJ0IP
(Nr. Frankfurt, Germany)

From: SkyWires@yahoogroups.com [mailto:SkyWires@yahoogroups.com]
Sent: Saturday, January 30, 2016 6:05 PM
To: SkyWires@yahoogroups.com
Subject: Re: [SkyWires] Horizontal Receiving Loop Questions From A Newbie

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Regards,
Andy

5148. RE: [SkyWires] Horizontal Receiving Loop Questions From A Newbie

Yahoo group: SkyWires
Date: 2016-01-30 22:41:16 UTC
From: rick@dj0ip.de
Topic: 5137 Message: 5148
Attachments: 2 described; binary payloads are missing from this source WARC

Evan,

As stated, your test comparison is meaningless.

Especially on 40m, when comparing antennas, if you don’t state time of day and distance of the QSO, it is meaningless. One antenna can be good for DX and bad for local work, or vice versa.

I’m sure you know what was going on but you didn’t give us enough information for it to be meaningful.

Check the same two antennas on transatlantic or transpacific QSOs and see if you still find the loop better.

73 - Rick, DJ0IP

(Nr. Frankfurt, Germany)

From: SkyWires@yahoogroups.com [mailto:SkyWires@yahoogroups.com]
Sent: Saturday, January 30, 2016 6:56 PM
To: SkyWires@yahoogroups.com
Subject: Re: [SkyWires] Horizontal Receiving Loop Questions From A Newbie

Fellow SkyWires Enthusiasts,

A tremendous amount of information about horizontal loops can be found at the W4RNL (sk) website as well as LB's work documented in the MFJ antenna books (volumes 1 and 2). He did a fair amount of computer analysis and showed plots of radiation patterns as a function of frequency and feedpoint. Also documented resistive and reactive components of the antennas based on frequency, height, etc.

Ran some tests a few years ago and compared my horizontal loop antenna (40 M about 12 ft off the ground fed with window line) with my 1/4 wave vertical mounted on the ground. As has been published, I found the loop to be between 1 and 2 S-units quieter than the vertical. This improved signal to noise ratio on receive.

73,

Evan, K9SQG

-----Original Message-----
From: Andy ai.egrps@... [SkyWires] <SkyWires@yahoogroups.com>
To: SkyWires <SkyWires@yahoogroups.com>
Sent: Sat, Jan 30, 2016 12:05 pm
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Regards,

Andy

5149. Re: [SkyWires] Horizontal Receiving Loop Questions From A Newbie

Yahoo group: SkyWires
Date: 2016-01-30 23:10:10 UTC
From: Evan Rolek
Topic: 5137 Message: 5149

Rick,

The comparisons of my 40 M loop and 40 M vertical, for background and atmospheric noise, were made via A-B switching tests, with AVC on fast, and they were consistent.

In terms of propagation, I didn't mention those results. Based on something like 400 observations, for reports of my transmitted signal as well as received signal strength, I noticed that the loop antenna was better than the vertical close in and, as one goes further out they tend to converge in terms of performance. They were equal at about 1,000 miles out. Beyond that, the vertical was better than the loop.

I used what I thought was a reasonable procedure given my equipment and I tried to minimize sources of inaccuracies as best I could by doing A-B instantaneous switching. Given that the results were so consistent, I tend to believe them even though they are faulty. While all my results are faulty, some are useful to me.

73,

Evan, K9SQG

-----Original Message-----
From: 'rick@...' Rick@... [SkyWires] <SkyWires@yahoogroups.com>
To: SkyWires <SkyWires@yahoogroups.com>
Sent: Sat, Jan 30, 2016 5:41 pm
Subject: RE: [SkyWires] Horizontal Receiving Loop Questions From A Newbie

Evan,

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Regards,

Andy

5150. RE: [SkyWires] Horizontal Receiving Loop Questions From A Newbie

Yahoo group: SkyWires
Date: 2016-01-30 23:11:42 UTC
From: D. Scott MacKenzie
Topic: 5137 Message: 5150

Just to clarify, this was from the Midwest USA late in the evening in the winter. A loop does well as it is simple and inexpensive. At typical heights available – say 50 feet or about 9 m, it is pretty much a cloud burner on 80M. On 40, there is some increase in low angle stuff, and I have worked a lot of DX on 40 ad 80M using a loop. However, it has no discrimination. That is why I like something like a K9AY for shortway listening….

From: SkyWires@yahoogroups.com [mailto:SkyWires@yahoogroups.com]
Sent: Saturday, January 30, 2016 2:16 PM
To: SkyWires@yahoogroups.com
Subject: RE: [SkyWires] Horizontal Receiving Loop Questions From A Newbie

For shortwave listening, is a horizontal loop the best choice? Since as a general rule it had high angle of radiation, it will tend to pick up high angles. This isn't always true as I have gotten some god DX on a loop on 80M (Shetlands, Antarctica, Falklands). But, to gain the selectivity (and take up a lot less room), you might want to consider a K9AY. You can select the direction, and it is easy to build.

My $0.02…..

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[mailto:SkyWires@yahoogroups.com]
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Subject: Re: [SkyWires] Horizontal Receiving Loop Questions From A Newbie

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Sent from my iPad

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5151. RE: [SkyWires] Horizontal Receiving Loop Questions From A Newbie

Yahoo group: SkyWires
Date: 2016-01-31 07:28:20 UTC
From: rick@dj0ip.de
Topic: 5137 Message: 5151

GM Evan,

As I said, I believed that “you” know what happened, but your first description did not contain enough info for the rest of us. Now it’s much better.

In general, yes the vertical is noisier, but what matters overall is not the amount of noise but rather the signal to noise difference. When operating 40m or below, it is usually best to turn down the RF gain until the noise is almost gone, and then tune and listen to signals.

Of course for A/B testing there is a difference in RF gain setting. This complicates things.
So it’s best done on two good receivers.
After a couple of days, you swap the antenna between receivers and keep testing.
Normally it won’t make much difference which RX each antenna is on.

THEN you really see (rather “hear”) which one is better.

When I do my testing on 40m, I always record the date, time, station, and a/b reports.
What I found was much the same as what you found, except at dust (especially) and sometimes at twighlight (grey zone work), the condx are rapidly switching and then it was a wash.
Even the same signal would be stronger on one transmission with one antenna and on the next transmission on the other.

There is a second part of the results besides noise, but just as important. When working DX, although the noise may be higher with the vertical, the local QRM (stations out to 800 miles or so) are a couple S-Units weaker and this sometimes improves the signal-to-noise ratio, especially on a crowded band in a large contest.

I concluded, I needed both. Sometimes that additional S-Unit makes the difference between QSO and no QSO.

It’s easy to install a vertical, but we don’t always have room for the loop.
However if we have room for a loop, it doesn’t take much effort to put up a 40m vertical.

73 - Rick, DJ0IP
(Nr. Frankfurt, Germany)

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Evan, K9SQG

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To: SkyWires <SkyWires@yahoogroups.com>
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To: SkyWires <SkyWires@yahoogroups.com>
Sent: Sat, Jan 30, 2016 12:05 pm
Subject: Re: [SkyWires] Horizontal Receiving Loop Questions From A Newbie

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Regards,
Andy

5152. RE: [SkyWires] Horizontal Receiving Loop Questions From A Newbie

Yahoo group: SkyWires
Date: 2016-01-31 07:39:55 UTC
From: rick@dj0ip.de
Topic: 5137 Message: 5152

Good point Scott, “it has no discrimination.”
Well, that is 100% accurate for 80 and 40m, but changes on the higher bands.

When we call an antenna a cloud burner, we mean that a significant amount of the radiation is going straight up which is useless, except for NDSI. Unfortunately this is often misinterpreted to mean that it no good for DX on those bands. This is ludicrous. It is still a good antenna for DX, just not necessarily the best.

In 1979 I activated Andorra, as C31SE.
I was on top of the 2nd highest mountain in the country for about 7 days.
My only antenna was the horizontal loop, one wavelength long, fed with 600 Ohm openwire thru a home-brew link coupled tuner.

My log book is my favorite supporting argument for the claim above that this antenna is still good for DX.
Though only about 25 to 30 feet high, strung through the trees, I made hundreds of DX contacts on 80m.
Each morning I had long stateside pile-ups.
I did a short write up on that, here:
http://www.dj0ip.de/my-expeditions/andorra-1979/

If I could have only one antenna and had enough space, “this” would be it.

BUT DEFINITELY “NOT” MY FIRST CHOICE FOR A LOW BAND RECEIVING ANTENNA!

There are numerous antennas that will do a better job, when used with a good preamplifier.
The K9AY is one of them.

73 - Rick, DJ0IP
(Nr. Frankfurt, Germany)

From: SkyWires@yahoogroups.com [mailto:SkyWires@yahoogroups.com]
Sent: Sunday, January 31, 2016 12:12 AM
To: SkyWires@yahoogroups.com
Subject: RE: [SkyWires] Horizontal Receiving Loop Questions From A Newbie

Just to clarify, this was from the Midwest USA late in the evening in the winter. A loop does well as it is simple and inexpensive. At typical heights available – say 50 feet or about 9 m, it is pretty much a cloud burner on 80M. On 40, there is some increase in low angle stuff, and I have worked a lot of DX on 40 ad 80M using a loop. However, it has no discrimination. That is why I like something like a K9AY for shortway listening….

From: SkyWires@yahoogroups.com [mailto:SkyWires@yahoogroups.com]
Sent: Saturday, January 30, 2016 2:16 PM
To: SkyWires@yahoogroups.com
Subject: RE: [SkyWires] Horizontal Receiving Loop Questions From A Newbie

For shortwave listening, is a horizontal loop the best choice? Since as a general rule it had high angle of radiation, it will tend to pick up high angles. This isn’t always true as I have gotten some god DX on a loop on 80M (Shetlands, Antarctica, Falklands). But, to gain the selectivity (and take up a lot less room), you might want to consider a K9AY. You can select the direction, and it is easy to build.

My $0.02…..

From: SkyWires@yahoogroups.com [mailto:SkyWires@yahoogroups.com]
Sent: Saturday, January 30, 2016 1:00 PM
To: SkyWires@yahoogroups.com
Subject: Re: [SkyWires] Horizontal Receiving Loop Questions From A Newbie

I would recommend using a 4:1 current balun, which will protect the receiver from static build up. To keep CMC down I would use a Common Mode choke, just after the 4:1 balun, which would keep the coax from picking up noise.

Everett N4CY

Sent from my iPad

On Jan 30, 2016, at 11:04 AM, Andy ai.egrps@... [SkyWires] <SkyWires@yahoogroups.com> wrote:

Since it is a receive only antenna, I think that getting a match is unimportant. So a "ballpark" balun could be OK.

I don't follow the notion that feeding a loop with coax and no balun makes any sense. It unbalances the whole loop, which by itself was balanced, and this opens it up for receiving more noise and turning the coax itself into part of the antenna. For quietest operation, I think you need (at minimum a 1:1) balun if fed with coax.

Large horizontal loops are not omni-directional. There is some folklore and hand-waving about this that implies otherwise, but if you analyze them, you'll find they are not. The choice of feedpoint location determines which direction the main lobe goes.

The other thing the feedpoint location does, is change the impedance, so you can choose a corner or the middle of a side, to affect the SWR. But for a receive antenna, I don't think that matters much. At least not on HF (I'm not entirely positive about LF/MF, but I think those too).

Regards,
Andy

5153. Balanced Line Choke

Yahoo group: SkyWires
Date: 2016-01-31 15:25:21 UTC
From: rick@dj0ip.de
Topic: 5137 Message: 5153

I have added details of how to build an effective broadband RF choke (line isolator) for openwire.

Especially when using the loop as a receiving antenna, this kind of choke should be inserted at the shack end of the openwire.

http://www.dj0ip.de/open-wire-fed-ant/balanced-line-choke/

Note: this is NOT the balun I recommend using as the main “Tuner Balun”.

This one is used for cases one would insert a line isolator in a coaxial fed antenna.

73 - Rick, DJ0IP

(Nr. Frankfurt, Germany)

5154. RE: [SkyWires] Horizontal Receiving Loop Questions From A Newbie

Yahoo group: SkyWires
Date: 2016-01-31 21:40:46 UTC
From: D. Scott MacKenzie
Topic: 5137 Message: 5154

Agree completely – a loop for 80M set at a usual height 25-60 feet, has predominately high angle radiation. However, I have worked some juicy DX on 40 and 80M from the Midwest USA. I think my best was HF0POL in the Antarctic.

From: SkyWires@yahoogroups.com [mailto:SkyWires@yahoogroups.com]
Sent: Sunday, January 31, 2016 2:40 AM
To: SkyWires@...m
Subject: RE: [SkyWires] Horizontal Receiving Loop Questions From A Newbie

Good point Scott, “it has no discrimination.”
Well, that is 100% accurate for 80 and 40m, but changes on the higher bands.

When we call an antenna a cloud burner, we mean that a significant amount of the radiation is going straight up which is useless, except for NDSI. Unfortunately this is often misinterpreted to mean that it no good for DX on those bands. This is ludicrous. It is still a good antenna for DX, just not necessarily the best.

In 1979 I activated Andorra, as C31SE.
I was on top of the 2nd highest mountain in the country for about 7 days.
My only antenna was the horizontal loop, one wavelength long, fed with 600 Ohm openwire thru a home-brew link coupled tuner.

My log book is my favorite supporting argument for the claim above that this antenna is still good for DX.
Though only about 25 to 30 feet high, strung through the trees, I made hundreds of DX contacts on 80m.
Each morning I had long stateside pile-ups.
I did a short write up on that, here:
http://www.dj0ip.de/my-expeditions/andorra-1979/

If I could have only one antenna and had enough space, “this” would be it.

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73 - Rick, DJ0IP
(Nr. Frankfurt, Germany)

From: SkyWires@yahoogroups.com <mailto:SkyWires@yahoogroups.com>
[mailto:SkyWires@yahoogroups.com]
Sent: Sunday, January 31, 2016 12:12 AM
To: SkyWires@yahoogroups.com <mailto:SkyWires@yahoogroups.com>
Subject: RE: [SkyWires] Horizontal Receiving Loop Questions From A Newbie

Just to clarify, this was from the Midwest USA late in the evening in the winter. A loop does well as it is simple and inexpensive. At typical heights available – say 50 feet or

about 9 m, it is pretty much a cloud burner on 80M. On 40, there is some increase in low angle stuff, and I have worked a lot of DX on 40 ad 80M using a loop. However, it has no discrimination. That is why I like something like a K9AY for shortway listening….

From: SkyWires@yahoogroups.com <mailto:SkyWires@yahoogroups.com>
[mailto:SkyWires@yahoogroups.com]
Sent: Saturday, January 30, 2016 2:16 PM
To: SkyWires@yahoogroups.com <mailto:SkyWires@yahoogroups.com>
Subject: RE: [SkyWires] Horizontal Receiving Loop Questions From A Newbie

For shortwave listening, is a horizontal loop the best choice? Since as a general rule it had high angle of radiation, it will tend to pick up high angles. This isn’t always true as I have gotten some god DX on a loop on 80M (Shetlands, Antarctica, Falklands). But, to gain the selectivity (and take up a lot less room), you might want to consider a K9AY. You can select the direction, and it is easy to build.

My $0.02…..

From: SkyWires@yahoogroups.com <mailto:SkyWires@yahoogroups.com>
[mailto:SkyWires@yahoogroups.com]
Sent: Saturday, January 30, 2016 1:00 PM
To: SkyWires@yahoogroups.com <mailto:SkyWires@yahoogroups.com>
Subject: Re: [SkyWires] Horizontal Receiving Loop Questions From A Newbie

I would recommend using a 4:1 current balun, which will protect the receiver from static build up. To keep CMC down I would use a Common Mode choke, just after the 4:1 balun, which would keep the coax from picking up noise.

Everett N4CY

Sent from my iPad

On Jan 30, 2016, at 11:04 AM, Andy ai.egrps@... <mailto:ai.egrps@...> [SkyWires] <SkyWires@yahoogroups.com <mailto:SkyWires@yahoogroups.com> > wrote:

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I don't follow the notion that feeding a loop with coax and no balun makes any sense. It unbalances the whole loop, which by itself was balanced, and this opens it up for receiving more noise and turning the coax itself into part of the antenna. For quietest operation, I think you need (at minimum a 1:1) balun if fed with coax.

Large horizontal loops are not omni-directional. There is some folklore and hand-waving about this that implies otherwise, but if you analyze them, you'll find they are not. The choice of feedpoint location determines which direction the main lobe goes.

The other thing the feedpoint location does, is change the impedance, so you can choose a corner or the middle of a side, to affect the SWR. But for a receive antenna, I don't think that matters much. At least not on HF (I'm not entirely positive about LF/MF, but I think those too).

Regards,
Andy

5155. 75 ohm coax for long run

Yahoo group: SkyWires
Date: 2016-02-14 16:44:36 UTC
From: w6mob@...
Topic: 5155 Message: 5155

All

I need just under 1/4 wavelength of 75ohm to match my loop to 50ohm
I was planning 1/4 wave of RG6 then 100feet of LMR400 to the shack.
The price of RG6 is $80 for 500 feet
Price of LMR400 equivalent for 500 feet about $500 both from HSC in Santa Clara.

Any reasons I should not run RG 6 all the way back to the shack. The loss 30MHz is vitually the same.

Thoughts?

Cheers
Mick
W6MOB

5156. Re: [SkyWires] 75 ohm coax for long run

Yahoo group: SkyWires
Date: 2016-02-14 17:14:17 UTC
From: Don Sanders
Topic: 5155 Message: 5156

I ran RG6 from my fan dipoles to the shack, about 70 feet. Works well.
As long as you don't run more than 500 watts at low SWR you are good-to-go.
I did test a 70 foot of the RG6 with a watt meter at both ends compared to
a run of RG8
and the RG6 was as good as the RG8 at 10 meters. Also at 80 and 40 the loss
was low.
Here in Ecuador the RG6 is the only type available.
I buy the good type at $0.50 a meter, similar to the DirecTV type they use,
than the Chinese type that is $0.30 a meter.

Dr. Don HC4/W4BWS

On Sun, Feb 14, 2016 at 11:44 AM, w6mob@... [SkyWires] <
SkyWires@yahoogroups.com> wrote:

>
>
> All
>
>
> I need just under 1/4 wavelength of 75ohm to match my loop to 50ohm
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> I was planning 1/4 wave of RG6 then 100feet of LMR400 to the shack.
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> 30MHz is vitually the same.
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>
> Thoughts?
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> Cheers
>
> Mick
>
> W6MOB
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5157. Re: [SkyWires] 75 ohm coax for long run

Yahoo group: SkyWires
Date: 2016-02-14 17:18:39 UTC
From: Evan Rolek
Topic: 5155 Message: 5157

Mick,

Not sure. Whatever frequency that "1/4 wavelength" refers to will not be 1/4 at frequencies/bands far from that frequency. So depending on the antenna and bands of interest, there could be matching issues. As to "loss at 30 mhz", I'm not an expert and not sure if there is a difference between the two coax types under matched versus mismatched conditions.

Let's see what the experts say. I'd like to learn...

73,

Evan, K9SQG

-----Original Message-----
From: w6mob@... [SkyWires] <SkyWires@yahoogroups.com>
To: SkyWires <SkyWires@yahoogroups.com>
Sent: Sun, Feb 14, 2016 11:44 am
Subject: [SkyWires] 75 ohm coax for long run

All

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The price of RG6 is $80 for 500 feet
Price of LMR400 equivalent for 500 feet about $500 both from HSC in Santa Clara.

Any reasons I should not run RG 6 all the way back to the shack. The loss 30MHz is vitually the same.

Thoughts?

Cheers
Mick
W6MOB

5158. RE: [SkyWires] 75 ohm coax for long run

Yahoo group: SkyWires
Date: 2016-02-14 17:23:58 UTC
From: rick@dj0ip.de
Topic: 5155 Message: 5158

None that I know of! Unless there is a power limit difference.

I would do it.

73 - Rick, DJ0IP

(Nr. Frankfurt, Germany)

From: SkyWires@yahoogroups.com [mailto:SkyWires@yahoogroups.com]
Sent: Sunday, February 14, 2016 5:45 PM
To: SkyWires@yahoogroups.com
Subject: [SkyWires] 75 ohm coax for long run

All

I need just under 1/4 wavelength of 75ohm to match my loop to 50ohm

I was planning 1/4 wave of RG6 then 100feet of LMR400 to the shack.

The price of RG6 is $80 for 500 feet

Price of LMR400 equivalent for 500 feet about $500 both from HSC in Santa Clara.

Any reasons I should not run RG 6 all the way back to the shack. The loss 30MHz is vitually the same.

Thoughts?

Cheers

Mick

W6MOB

5159. Re: 75 ohm coax for long run

Yahoo group: SkyWires
Date: 2016-02-14 19:26:55 UTC
From: w6mob@...
Topic: 5155 Message: 5159

All,

Thanks for the comments. Just to clarify as I forgot in the first message. This is to feed a 15meter single band loop and I only have 100Watts from my FT450D.

So I will try running 75ohm all the way and make sure it is (360*n + 90) degrees. According to SimSmith this would give me <= 1.2 SWR across the whole band.

Cheers
Mick
W6MOB

5160. 80m loop coax fed?

Yahoo group: SkyWires
Date: 2016-02-16 04:51:04 UTC
From: retrohertz@...
Topic: 5160 Message: 5160

Hi All,

I've just erected a full wave 80m loop horizontal, I'm wanting to use this for 80m and 40m only. I was going use ladder line as the feed, but given that the SWR is low on 80 and on the harmonic bands that I want to use (80/40) is there any advantage in using ladder line as feed line? Coaxial cable is clearly going to be easier to install (in my situation)

thanks for your help, hope that makes sense?

73
de Rhett
VK3WE

5161. AW: [SkyWires] 80m loop coax fed?

Yahoo group: SkyWires
Date: 2016-02-16 11:52:33 UTC
From: siegfried jackstien
Topic: 5160 Message: 5161

Hi Rhett

Easy answer

Lower loss when using it as a multiband antenna

imagine that rare dx station that can only be heard on 15m when you use the loop ... but not on the other antenna(s) ... (just an example)

the problem is that even if it is resonant on both bands ... it shows different impedance and so finding a balun to match it to you coax is the problem

maybe you can use a 1:2 and live with the slight mismatch on both bands

(on 80 a 1:1 and on 40 a 1:4 is needed)

.....

On the lowest band it will be low impedance (not the 100 ohms but a bit lower cause most hams have their loop low to ground) .. so then a 1:1 would fit best

On the harmonic bands it is higher (more in a few hundred ohms range)

... there you would need a 1:4 ...

So my guessing is that you MAYBE can use a 1:2

It also depends on your shack setup

Do you wanna use a tuner?? Or use tuner in the rig?? ... or no tuner at all??

Anyway ... a skyloop is my main antenna (168m) and you will love yours like I love mine :-)

Dg9bfc

Sigi

Ps I use ladderline!!!!

> -----Ursprüngliche Nachricht-----
> Von: SkyWires@yahoogroups.com [mailto:SkyWires@yahoogroups.com]
> Gesendet: Dienstag, 16. Februar 2016 04:51
> An: SkyWires@yahoogroups.com
> Betreff: [SkyWires] 80m loop coax fed?
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> Hi All,
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> I've just erected a full wave 80m loop horizontal, I'm wanting to use this
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> thanks for your help, hope that makes sense?
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> 73
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> de Rhett
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> VK3WE
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5162. Re: 80m loop coax fed?

Yahoo group: SkyWires
Date: 2016-02-16 13:31:19 UTC
From: Manary Dave
Topic: 5160 Message: 5162

Hi All
I have a full wave 40 meter horizontal loop that I feed with coax, and constantly get great-amazing signal reports. I use the Alpha Delta “C” connector to hook up the coax. I also use an “ugly balun” just before the coax enters my house. I tried ladder line; but found that it picked up atmospheric noise, and signals were much lower.
That is my experience. If I had enough room I would really like to turn it into and 80 meter horizontal loop. (Horizontal loops are extremely quiet)

Dave L. Manary VE3NKN/VA3NKN
NIAGARA SOUTHERN RAILROAD
162 McNeilly Road
Winona, Ontario
Canada, L8E5J1
Check my Web Site at http://niagarasouthernrailroad.ca

5163. Re: [SkyWires] 80m loop coax fed?

Yahoo group: SkyWires
Date: 2016-02-16 13:32:13 UTC
From: Evan Rolek
Topic: 5160 Message: 5163

I have two horizontal loops, one for 80, and one for 40, and I use both multiband depending on conditions. Have had good experience using 450 ohm window line but switched to 300 ohm transmitting window line due to lower visual cross section (aka, xyl pleaser). The 300 ohm has worked well also. Tuners have included MN-2000, MN-2700, MBVA, Millen 92200, and Palstart BT-1500A, and Johnson KW Matchbox, all of which have worked well on the various bands, except I don't operate 10 meters. Too, the window line is cheaper than coax and my weather proof disconnects are faster to connect and disconnect when storms are present.

73,

Evan, K9SQG

-----Original Message-----
From: 'siegfried jackstien' siegfried.jackstien@... [SkyWires] <SkyWires@yahoogroups.com>
To: SkyWires <SkyWires@yahoogroups.com>
Sent: Tue, Feb 16, 2016 6:56 am
Subject: AW: [SkyWires] 80m loop coax fed?

Hi Rhett

Easy answer

Lower loss when using it as a multiband antenna

imagine that rare dx station that can only be heard on 15m when you use the loop ... but not on the other antenna(s) ... (just an example)

the problem is that even if it is resonant on both bands ... it shows different impedance and so finding a balun to match it to you coax is the problem

maybe you can use a 1:2 and live with the slight mismatch on both bands

(on 80 a 1:1 and on 40 a 1:4 is needed)

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On the lowest band it will be low impedance (not the 100 ohms but a bit lower cause most hams have their loop low to ground) .. so then a 1:1 would fit best

On the harmonic bands it is higher (more in a few hundred ohms range)

... there you would need a 1:4 ...

So my guessing is that you MAYBE can use a 1:2

It also depends on your shack setup

Do you wanna use a tuner?? Or use tuner in the rig?? ... or no tuner at all??

Anyway ... a skyloop is my main antenna (168m) and you will love yours like I love mine :-)

Dg9bfc

Sigi

Ps I use ladderline!!!!

> -----Ursprüngliche Nachricht-----
> Von: SkyWires@yahoogroups.com [mailto:SkyWires@yahoogroups.com]
> Gesendet: Dienstag, 16. Februar 2016 04:51
> An: SkyWires@yahoogroups.com
> Betreff: [SkyWires] 80m loop coax fed?
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> VK3WE
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5164. Re: [SkyWires] Re: 80m loop coax fed?

Yahoo group: SkyWires
Date: 2016-02-16 18:34:05 UTC
From: Ken
Topic: 5160 Message: 5164

Maybe,
sometimes

My horizontal loop was no quieter than my inverted vees (160/80 and 40/30). My quietest antenna is a 35' vertical.

Ken WA8JXM

On 2/16/16 8:31 AM, Manary Dave ve3nkn@... [SkyWires] wrote:
> (Horizontal loops are extremely quiet)

5165. Re: [SkyWires] Re: 80m loop coax fed?

Yahoo group: SkyWires
Date: 2016-02-16 20:19:03 UTC
From: Evan Rolek
Topic: 5160 Message: 5165

Yes, it depends. My 40 m horizontal loop was 1-2 S-units lower in background noise than my 1/4 wave vertical in doing A-B tests at the same time. The loop enabled copying of weak signals I couldn't hear on the vertical. So yes, "Maybe, sometimes" and what works for one might not work for another. Let's keep sharing experiences and we all can learn...

73,

Evan, K9SQG

-----Original Message-----
From: Ken wa8jxm@... [SkyWires] <SkyWires@yahoogroups.com>
To: SkyWires <SkyWires@yahoogroups.com>
Sent: Tue, Feb 16, 2016 1:34 pm
Subject: Re: [SkyWires] Re: 80m loop coax fed?

Maybe,
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40/30). My quietest antenna is a 35' vertical.

Ken WA8JXM

On 2/16/16 8:31 AM, Manary Dave ve3nkn@... [SkyWires] wrote:
> (Horizontal loops are extremely quiet)

5166. Re: [SkyWires] Re: 80m loop coax fed?

Yahoo group: SkyWires
Date: 2016-02-17 17:22:53 UTC
From: winston376@...
Topic: 5160 Message: 5166

Most of the baseband (broadband) antenna 'noise' depends on the specific location and environment that the antenna is located at.

A suburban residential neighborhood with microprocessors in the refrigerators, CFL's, high tension powerlines down the street provides more EM noise than if you were located on a rural location.

Case in point from last friday: my suburban residential location with high tension lines 80 feet away, had a power outage. With my battery powered SDR, the noise floor was a minimum 15 dB less than with the neighborhood powered up. Noise floor with no residential power was about -137 dBm, with power it rose to about -120 dBm. This was on 20 meters and a full wave delta loop 20 feet above the roofline.

Alex

5167. Re: 80m loop coax fed?

Yahoo group: SkyWires
Date: 2016-02-27 17:27:48 UTC
From: kl7rs@...
Topic: 5160 Message: 5167

I sure wish I had the room for a Mega-Loop. They seem to really perform well. Lots of articles on the internet including this one: Full Size Megaloop
http://www.m0xxt.co.uk/index.php?option=com_content&view=article&id=68&Itemid=68

Full Size Megaloop
http://www.m0xxt.co.uk/index.php?option=com_content&view=article&id=68&Itemid=68 M0XXT

View on www.m0xxt.co.uk
http://www.m0xxt.co.uk/index.php?option=com_content&view=article&id=68&Itemid=68
Preview by Yahoo

You actually get some gain and low angle of radiation on this one. It seems it can be fed with coax as well.... I just don't have enough space to install a triangle 54 meters per side. Hmmm, maybe its time to start looking for another house.

5168. Re: [SkyWires] Re: 80m loop coax fed?

Yahoo group: SkyWires
Date: 2016-02-27 20:35:42 UTC
From: rdj@...
Topic: 5160 Message: 5168

I looked at the original set up of M0MCX and his megaloop. I put it up 80M size, It was great, trimmed a few trees*** and now have it 160M size, both coax fed with a home made 4:1 balun, adjusted to a low SWR in the middle of the 40M band. I work very little 160 so a high SWR on 160 is OK with me, my tuner in the radio takes care of that.
*** http://i1102.photobucket.com/albums/g453/KD0ZZ/160%20Loop/trees010_zpse5180867.jpg
A great antenna.

Rich, kd0zz

----- Original Message -----

From: "kl7rs@... [SkyWires]" <SkyWires@yahoogroups.com>
To: SkyWires@yahoogroups.com
Sent: Saturday, February 27, 2016 11:27:48 AM
Subject: [SkyWires] Re: 80m loop coax fed?

I sure wish I had the room for a Mega-Loop. They seem to really perform well. Lots of articles on the internet including this one: Full Size Megaloop

Full Size Megaloop
M0XXT

View on www.m0xxt.co.uk

Preview by Yahoo

You actually get some gain and low angle of radiation on this one. It seems it can be fed with coax as well.... I just don't have enough space to install a triangle 54 meters per side. Hmmm, maybe its time to start looking for another house.

5169. Re: [SkyWires] 80m loop coax fed?

Yahoo group: SkyWires
Date: 2016-02-29 00:31:04 UTC
From: Rhett VK3WE
Topic: 5160 Message: 5169

Hi Sigi,

Thanks heaps for your reply, I have stuck with 450 Ohm ladder line to a 4:1 balun with 6 foot of coax, Really happy with the performance on 80,40 and 30m. I'll try a 1:1 balun at sometime to compare the difference via the IC7600 and internal tuner.

So many variables due to height of the antenna, feedline location and multi bands. Much experimenting to be done.

73

Rhett

On Tue, Feb 16, 2016 at 10:52 PM, 'siegfried jackstien' siegfried.jackstien@... [SkyWires] <SkyWires@yahoogroups.com> wrote:

>
>
> Hi Rhett
>
> Easy answer
>
> Lower loss when using it as a multiband antenna
>
> imagine that rare dx station that can only be heard on 15m when you use the
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> the problem is that even if it is resonant on both bands ... it shows
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> maybe you can use a 1:2 and live with the slight mismatch on both bands
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> (on 80 a 1:1 and on 40 a 1:4 is needed)
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> On the lowest band it will be low impedance (not the 100 ohms but a bit
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> ... there you would need a 1:4 ...
>

> So my guessing is that you MAYBE can use a 1:2
>
> It also depends on your shack setup
>
> Do you wanna use a tuner?? Or use tuner in the rig?? ... or no tuner at
> all??
>
> Anyway ... a skyloop is my main antenna (168m) and you will love yours
> like
> I love mine :-)
>
> Dg9bfc
>
> Sigi
>
> Ps I use ladderline!!!!
>
> > -----Ursprüngliche Nachricht-----
> > Von: SkyWires@yahoogroups.com [mailto:SkyWires@yahoogroups.com]
> > Gesendet: Dienstag, 16. Februar 2016 04:51
> > An: SkyWires@yahoogroups.com
> > Betreff: [SkyWires] 80m loop coax fed?
> >
> >
> >
> > Hi All,
> >
> >
> >
> >
> > I've just erected a full wave 80m loop horizontal, I'm wanting to use
> this
> > for 80m and 40m only. I was going use ladder line as the feed, but given
> > that the SWR is low on 80 and on the harmonic bands that I want to use
> > (80/40) is there any advantage in using ladder line as feed line? Coaxial
> > cable is clearly going to be easier to install (in my situation)
> >
> >
> >
> >
> > thanks for your help, hope that makes sense?
> >
> >
> >
> >
> >
> > 73
> >
> > de Rhett
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> > VK3WE
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>

5170. loop sky wire length vs swr vs loss?

Yahoo group: SkyWires
Date: 2016-03-09 18:37:11 UTC
From: denton sprague
Topic: 5160 Message: 5170

Have a 5 sided 470 ft loop up 30 ft fed with 600 ohm ladder line….works pretty well 160 thru 10 meters.
Am feeding it with about 45 ft of 600 ohm ladder line, to a 4 to 1 high power balun and then about 8 ft of rg-213 coax to shack tuner.
swr is pretty fair…worst is 10 to 1 at 1.8 mhz and radiation pattern according to EZNEC seems to be good.
Height is limited to 30 ft. cannot go higher with ordinances for multiple antenna masts.
I have room to expand loop to full sized 160 meter loop… 470 ft..but would I gain any real world advantage in terms of 160 meter performance, ground losses, swr etc.
EZNEC says no except for maybe a little better efficiency on lower part of 160 meters..and would loose a bit of local signals on 80 thru 40 meters.

5171. New Cutting Edge Antenna

Yahoo group: SkyWires
Date: 2016-04-01 11:27:50 UTC
From: rick@dj0ip.de
Topic: 5171 Message: 5171

The snowless winter has enabled us to do some advanced design work on our antennas these past few months.

These are looking good, but unfortunately won't be ready by Dayton.

See: http://www.dj0ip.de/cutting-edge-ant/

73 - Rick, DJ0IP

(Nr. Frankfurt, Germany)

5172. Loop continues to amaze

Yahoo group: SkyWires
Date: 2016-04-06 23:05:28 UTC
From: ke4nu7@...
Topic: 5172 Message: 5172

Hi, have a 520 ft loop up in a somewhat trapazoid configuration. I feed it with 450 LL into my MFJ tuner. It averages about 50 ft above ground strung between pine trees. Last night I work VK0EK on 40 cw on the first call. Today I worked FT4JA on 20 SSB first call again. This antenna really does well and I would recommend it as a cheap alternative to a tower and beams. My hf beam has been down for maintenance, I haven't had the decent wx to put it back up so I've had to rely on the loop and I couldn't be more pleased. 160 is the one band which is a cloud burner and I don't get any dx with but every other band it tunes up and plays well. Just my 2 cents worth for anyone who can put one up...DO IT ! 73 Alan

5173. Re: [SkyWires] Loop continues to amaze

Yahoo group: SkyWires
Date: 2016-04-07 02:20:47 UTC
From: Bornofthehorses
Topic: 5172 Message: 5173

Running the same loop love it
 Ken
Lead Follow or get the Hell out of the Way
deepdesertsurvival

On Wednesday, April 6, 2016 4:05 PM, "ke4nu7@... [SkyWires]" <SkyWires@yahoogroups.com> wrote:

<!--#yiv0566116894 #yiv0566116894 .yiv0566116894ygrp-photo-title{clear:both;font-size:smaller;height:15px;overflow:hidden;text-align:center;width:75px;}#yiv0566116894 div.yiv0566116894ygrp-photo{background-position:center;background-repeat:no-repeat;background-color:white;border:1px solid black;height:62px;width:62px;}#yiv0566116894 div.yiv0566116894photo-title a, #yiv0566116894 div.yiv0566116894photo-title a:active, #yiv0566116894 div.yiv0566116894photo-title a:hover, #yiv0566116894 div.yiv0566116894photo-title a:visited {text-decoration:none;}#yiv0566116894 div.yiv0566116894attach-table div.yiv0566116894attach-row {clear:both;}#yiv0566116894 div.yiv0566116894attach-table div.yiv0566116894attach-row div {float:left;}#yiv0566116894 p {clear:both;padding:15px 0 3px 0;overflow:hidden;}#yiv0566116894 div.yiv0566116894ygrp-file {width:30px;}#yiv0566116894 div.yiv0566116894attach-table div.yiv0566116894attach-row div div a {text-decoration:none;}#yiv0566116894 div.yiv0566116894attach-table div.yiv0566116894attach-row div div span {font-weight:normal;}#yiv0566116894 div.yiv0566116894ygrp-file-title {font-weight:bold;}#yiv0566116894 --> <!--#yiv0566116894 #yiv0566116894ygrp-mkp {border:1px solid #d8d8d8;font-family:Arial;margin:10px 0;padding:0 10px;}#yiv0566116894 #yiv0566116894ygrp-mkp hr {border:1px solid #d8d8d8;}#yiv0566116894 #yiv0566116894ygrp-mkp #yiv0566116894hd {color:#628c2a;font-size:85%;font-weight:700;line-height:122%;margin:10px 0;}#yiv0566116894 #yiv0566116894ygrp-mkp #yiv0566116894ads {margin-bottom:10px;}#yiv0566116894 #yiv0566116894ygrp-mkp .yiv0566116894ad {padding:0 0;}#yiv0566116894 #yiv0566116894ygrp-mkp .yiv0566116894ad p {margin:0;}#yiv0566116894 #yiv0566116894ygrp-mkp .yiv0566116894ad a {color:#0000ff;text-decoration:none;}-->

Hi, have a 520 ft loop up in a somewhat trapazoid configuration. I feed it with 450 LL into my MFJ tuner. It averages about 50 ft above ground strung between pine trees. Last night I work VK0EK on 40 cw on the first call. Today I worked FT4JA on 20 SSB first call again. This antenna really does well and I would recommend it as a cheap alternative to a tower and beams. My hf beam has been down for maintenance, I haven't had the decent wx to put it back up so I've had to rely on the loop and I couldn't be more pleased. 160 is the one band which is a cloud burner and I don't get any dx with but every other band it tunes up and plays well. Just my 2 cents worth for anyone who can put one up...DO IT ! 73 Alan

5174. Re: [SkyWires] Loop continues to amaze

Yahoo group: SkyWires
Date: 2016-04-07 03:17:46 UTC
From: Evan Rolek
Topic: 5172 Message: 5174

Alan,

As the models predict and our experiences show, as you move higher and higher in frequency above the fundamental frequency, you get more low angle lobes. For DX, the higher the better but it is amazing what a low, horizontal loop can do when propagation is good. With my 40 m horizontal loop 12 ft off the ground, on 40 I've worked consistently into Italy, Canary Islands, South Africa, etc. but the big benefit in my book is the reduced noise with the loop; it's all about signal to noise ratio, not raw signal strength. Enjoy your loop!

73,

Evan, K9SQG

-----Original Message-----
From: ke4nu7@... [SkyWires] <SkyWires@yahoogroups.com>
To: SkyWires <SkyWires@yahoogroups.com>
Sent: Wed, Apr 6, 2016 7:05 pm
Subject: [SkyWires] Loop continues to amaze

Hi, have a 520 ft loop up in a somewhat trapazoid configuration. I feed it with 450 LL into my MFJ tuner. It averages about 50 ft above ground strung between pine trees. Last night I work VK0EK on 40 cw on the first call. Today I worked FT4JA on 20 SSB first call again. This antenna really does well and I would recommend it as a cheap alternative to a tower and beams. My hf beam has been down for maintenance, I haven't had the decent wx to put it back up so I've had to rely on the loop and I couldn't be more pleased. 160 is the one band which is a cloud burner and I don't get any dx with but every other band it tunes up and plays well. Just my 2 cents worth for anyone who can put one up...DO IT ! 73 Alan

5175. New Loop Entheusist - general questions

Yahoo group: SkyWires
Date: 2016-04-08 21:11:02 UTC
From: davekammler@...
Topic: 5175 Message: 5175

Hello,

I guess my biggest issue ... is the feedline .. coax or ladderline.

Second largest issue .. balun or no balun.

I've found the feed line discussion to be the largest point of contention during my

research.

I've read mixed review on whether or not this is a better local/region antenna vs. DX antenna. My strong preference is DX.

My antenna:
Total Length: 43.6m (144ft)(36ft per side)

-- at most I can probably do 300ft but very irregular looop shape maybe 6 or 7 unequal side lengths. Not sure what this will do to the radiation pattern.

Resonant on 40m. (80m would be desirable)

Feedline type: Coax 75ohm or ladderline 300ohm Other? (undetermined)
Feedline Length: 15m-22.7m (50-75ft) (approximate)
Coax feed cable type: (undetermined)

Coax feeder length of 7.7m(25.41ft).(approximate)

Power: Upto 600w

Above Ground Elevated: 7.57m- 9.09m(25 - 30ft)
Balun or no balun? Type?

What type of tuner? Other? I have LDG 200 PRO II and MFJ 949E.

Thanks

73, Dave
KG7WFZ

5176. RE: [SkyWires] New Loop Entheusist - general questions

Yahoo group: SkyWires
Date: 2016-04-08 21:33:26 UTC
From: rick@dj0ip.de
Topic: 5175 Message: 5176

Not enough information to answer the question.
Please send more specifics.

How long and high is the loop?
What bands do you wish to use it on.

The main reason you hear different opinions of anything is because different people have different wants and needs and expectation levels. Most of the time you are getting apples to oranges answers without knowing it.

73 - Rick, DJ0IP
(Nr. Frankfurt, Germany)

From: SkyWires@yahoogroups.com [mailto:SkyWires@yahoogroups.com]
Sent: Friday, April 08, 2016 11:11 PM
To: SkyWires@yahoogroups.com
Subject: [SkyWires] New Loop Entheusist - general questions

Hello,

I guess my biggest issue ... is the feedline .. coax or ladderline.

Second largest issue .. balun or no balun.

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Coax feeder length of 7.7m(25.41ft).(approximate)
Power: Upto 600w
Above Ground Elevated: 7.57m- 9.09m(25 - 30ft)
Balun or no balun? Type?
What type of tuner? Other? I have LDG 200 PRO II and MFJ 949E.

Thanks

73, Dave
KG7WFZ

5177. Re: [SkyWires] New Loop Entheusist - general questions

Yahoo group: SkyWires
Date: 2016-04-08 22:23:41 UTC
From: Dave Kammler
Topic: 5175 Message: 5177

25-30 feet high.80-10m would be great

Thanks

From: "'rick@dj0ip.de' Rick@... [SkyWires]" <SkyWires@yahoogroups.com>
To: SkyWires@yahoogroups.com
Sent: Friday, April 8, 2016 2:33 PM
Subject: RE: [SkyWires] New Loop Entheusist - general questions

  Not enough information to answer the question.
Please send more specifics.

How long and high is the loop?
What bands do you wish to use it on.

The main reason you hear different opinions of anything is because different people have different wants and needs and expectation levels. Most of the time you are getting apples to oranges answers without knowing it.

73 - Rick, DJ0IP
(Nr. Frankfurt, Germany)

From: SkyWires@yahoogroups.com [mailto:SkyWires@yahoogroups.com]
Sent: Friday, April 08, 2016 11:11 PM
To: SkyWires@yahoogroups.com
Subject: [SkyWires] New Loop Entheusist - general questions

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Above Ground Elevated: 7.57m- 9.09m(25 - 30ft)
Balun or no balun? Type?
What type of tuner? Other? I have LDG 200 PRO II and MFJ 949E.

Thanks

73, Dave
KG7WFZ

5178. Re: [SkyWires] New Loop Entheusist - general questions

Yahoo group: SkyWires
Date: 2016-04-08 22:35:34 UTC
From: rdj@...
Topic: 5175 Message: 5178

Ask 6 hams and you will get a dozen answers.
I feed mine with coax and a home made 4:1 Guanella balun.
Delta shape and adjusted to a low SWR in the middle of the 40M band
Used mainly on 40m , I work mostly DX, can work 160 thru 6 but balun is adjusted for lower bands.
Your LDG would be nice but it is not for 600W
Check out delta loop info by m0mcx at
https://www.youtube.com/watch?v=SOvhetU1_ps

Rich, Kd0zz

Subject: [SkyWires] New Loop Entheusist - general questions

Hello,

I guess my biggest issue ... is the feedline .. coax or ladderline.

Second largest issue .. balun or no balun.

I've found the feed line discussion to be the largest point of contention during my research.

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Coax feeder length of 7.7m(25.41ft).(approximate)
Power: Upto 600w
Above Ground Elevated: 7.57m- 9.09m(25 - 30ft)
Balun or no balun? Type?
What type of tuner? Other? I have LDG 200 PRO II and MFJ 949E.

Thanks

73, Dave
KG7WFZ

5179. RE: [SkyWires] New Loop Entheusist - general questions

Yahoo group: SkyWires
Date: 2016-04-08 22:52:53 UTC
From: rick@dj0ip.de
Topic: 5175 Message: 5179

Dave

A loop 25 to 30 ft. high, “square”, and a full wavelength on 80m behaves quite differently on different bands.

• On 80m it is called a cloud burner but this is nonsense. It has a vertical radiation similar to a magnetic loop, in that it radiates more or less in all take-off angles. Its horizontal pattern is omni-directional. DX-wise, it will be slightly weaker than the broadside of a dipole at ½ wavelength height (67 ft.), but certainly just as good as one at 30 ft. height. Off the ends of the dipole it will be significantly better. AND, because it is “also” a cloud burner, it will be better than the dipole for NDIS.

• On 40m it ceases to be a cloud burner but still has a large vertical take-off angle covering from relatively low to moderately high take-off angles. This makes it good for DX and NVIS. Its horizontal pattern begins to resemble a 4-leaf clover with major lobes off of all 4 corners, yet due to its low proximity to earth, it fills in the area between the lobes and still radiates a fairly decent signal – though a couple of S-units down from the major lobes - off of its sides. In my opinion, a 2 wavelength loop antenna for the low bands is the very best “reasonable” wire antenna one can possibly have.

• On 20m it starts to get real interesting for DX. Here the lobes are (horizontally) again much more focused on the 4 corners, with the vertical take-off angle again ranging from low to medium. This makes it outstanding for DX. My experience has been that an 80m horizontal loop has just as strong of a DX signal in the direction of all 4 corners as a 3 element beam or 2 element quad at the same height – and there is no rotor needed.

• 15m is very similar to 20.

• I can’t recall exactly how it was on 10m but it was still very good at DX. In any case it had a very flat take-off angle.

People who call this antenna a cloud burner are those who I call “Text Book Turkeys”.
They live in a world of mental masturbation built on over-rated technology.
They should get off of their lazy arse and simple build one of these and try it.
Then they would change their opinion of this great antenna.

I didn’t build one of these.
I’ve built about 20 of them.
I know.

The icing on the cake is the quietness of the antenna.

And the cherry on the icing is when you open the far end, feed it with a backwards 4:1 balun (i.e. 1:4 balun) and run it effectively on 160m. It’s not a “killer” on that band but it does work quite well.

73 - Rick, DJ0IP
(Nr. Frankfurt, Germany)

From: SkyWires@yahoogroups.com [mailto:SkyWires@yahoogroups.com]
Sent: Saturday, April 09, 2016 12:24 AM
To: SkyWires@yahoogroups.com
Subject: Re: [SkyWires] New Loop Entheusist - general questions

25-30 feet high.
80-10m would be great

Thanks

From: "'rick@...' Rick@... [SkyWires]" <SkyWires@yahoogroups.com>
To: SkyWires@yahoogroups.com
Sent: Friday, April 8, 2016 2:33 PM
Subject: RE: [SkyWires] New Loop Entheusist - general questions

Not enough information to answer the question.
Please send more specifics.

How long and high is the loop?
What bands do you wish to use it on.

The main reason you hear different opinions of anything is because different people have different wants and needs and expectation levels. Most of the time you are getting apples to oranges answers without knowing it.

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From: SkyWires@yahoogroups.com [mailto:SkyWires@yahoogroups.com]
Sent: Friday, April 08, 2016 11:11 PM
To: SkyWires@yahoogroups.com
Subject: [SkyWires] New Loop Entheusist - general questions

Hello,

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I've read mixed review on whether or not this is a better local/region antenna vs. DX antenna. My strong preference is DX.

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-- at most I can probably do 300ft but very irregular looop shape maybe 6 or 7 unequal side lengths. Not sure what this will do to the radiation pattern.

Resonant on 40m. (80m would be desirable)
Feedline type: Coax 75ohm or ladderline 300ohm Other? (undetermined)
Feedline Length: 15m-22.7m (50-75ft) (approximate)
Coax feed cable type: (undetermined)

Coax feeder length of 7.7m(25.41ft).(approximate)
Power: Upto 600w
Above Ground Elevated: 7.57m- 9.09m(25 - 30ft)
Balun or no balun? Type?
What type of tuner? Other? I have LDG 200 PRO II and MFJ 949E.

Thanks

73, Dave
KG7WFZ

5180. Re: [SkyWires] New Loop Entheusist - general questions

Yahoo group: SkyWires
Date: 2016-04-09 03:43:07 UTC
From: Evan Rolek
Topic: 5175 Message: 5180

Dave,

If it is a mono band situation, then coax might work ok; 1:1 or 2:1 balun at the antenna would be ok. Multi band suggests ladder line or window line, with a balun in the shack or a balanced tuner.

These are very coarse notions, installation specifics could alter them.

73,

Evan, K9SQG

-----Original Message-----
From: davekammler@... [SkyWires] <SkyWires@yahoogroups.com>
To: SkyWires <SkyWires@yahoogroups.com>
Sent: Fri, Apr 8, 2016 5:11 pm
Subject: [SkyWires] New Loop Entheusist - general questions

Hello,

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Second largest issue .. balun or no balun.

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Above Ground Elevated: 7.57m- 9.09m(25 - 30ft)
Balun or no balun? Type?

What type of tuner? Other? I have LDG 200 PRO II and MFJ 949E.

Thanks

73, Dave
KG7WFZ

5181. RE: [SkyWires] New Loop Entheusist - general questions

Yahoo group: SkyWires
Date: 2016-04-09 05:53:07 UTC
From: rick@dj0ip.de
Topic: 5175 Message: 5181

Evan,

Until Everett built his loop and fed it with a 4:1 balun, I would have agreed with you.

Now I don’t

See: http://www.dj0ip.de/loop-antennas/8-band-horizontal-loop/

73 - Rick, DJ0IP

(Nr. Frankfurt, Germany)

From: SkyWires@yahoogroups.com [mailto:SkyWires@yahoogroups.com]
Sent: Saturday, April 09, 2016 5:43 AM
To: SkyWires@yahoogroups.com
Subject: Re: [SkyWires] New Loop Entheusist - general questions

Dave,

If it is a mono band situation, then coax might work ok; 1:1 or 2:1 balun at the antenna would be ok. Multi band suggests ladder line or window line, with a balun in the shack or a balanced tuner.

These are very coarse notions, installation specifics could alter them.

73,

Evan, K9SQG

-----Original Message-----
From: davekammler@... [SkyWires] <SkyWires@yahoogroups.com>
To: SkyWires <SkyWires@yahoogroups.com>
Sent: Fri, Apr 8, 2016 5:11 pm
Subject: [SkyWires] New Loop Entheusist - general questions

Hello,

I guess my biggest issue ... is the feedline .. coax or ladderline.

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Above Ground Elevated: 7.57m- 9.09m(25 - 30ft)

Balun or no balun? Type?

What type of tuner? Other? I have LDG 200 PRO II and MFJ 949E.

Thanks

73, Dave

KG7WFZ

5182. Re: [SkyWires] New Loop Entheusist - general questions

Yahoo group: SkyWires
Date: 2016-04-09 12:33:48 UTC
From: rdj@...
Topic: 5175 Message: 5182

I also agree with Everett. My delta loop is a 160 size, fed with RG-8U, and a home made duel rod balun. Balun sketch
http://i1102.photobucket.com/albums/g453/KD0ZZ/2rod.jpg
The same sketch can be used for duel torrid, the rods gave better readings when testing the balun into a dummy load. I tried duel winding's on a single core, duel core and duel rod. Dummy load is a 200 ohm carbon resistor set up.
http://i1102.photobucket.com/albums/g453/KD0ZZ/Balunjpeg_zps41dd0ff6.jpg
I got into my making my own due to high SWR readings into a dummy load with "store" bought baluns.

Rich, Kd0zz

----- Original Message -----

From: "'rick@...' Rick@... [SkyWires]" <SkyWires@yahoogroups.com>
To: SkyWires@yahoogroups.com
Sent: Saturday, April 9, 2016 12:53:07 AM
Subject: RE: [SkyWires] New Loop Entheusist - general questions

Evan,

Until Everett built his loop and fed it with a 4:1 balun, I would have agreed with you.

Now I don’t

See: http://www.dj0ip.de/loop-antennas/8-band-horizontal-loop/

73 - Rick, DJ0IP

(Nr. Frankfurt, Germany)

From: SkyWires@yahoogroups.com [mailto:SkyWires@yahoogroups.com]
Sent: Saturday, April 09, 2016 5:43 AM
To: SkyWires@yahoogroups.com
Subject: Re: [SkyWires] New Loop Entheusist - general questions

Dave,

If it is a mono band situation, then coax might work ok; 1:1 or 2:1 balun at the antenna would be ok. Multi band suggests ladder line or window line, with a balun in the shack or a balanced tuner.

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73,

Evan, K9SQG

-----Original Message-----
From: davekammler@... [SkyWires] < SkyWires@yahoogroups.com >
To: SkyWires < SkyWires@yahoogroups.com >
Sent: Fri, Apr 8, 2016 5:11 pm
Subject: [SkyWires] New Loop Entheusist - general questions

Hello,

I guess my biggest issue ... is the feedline .. coax or ladderline.

Second largest issue .. balun or no balun.

I've found the feed line discussion to be the largest point of contention during my

research.

I've read mixed review on whether or not this is a better local/region antenna vs. DX antenna. My strong preference is DX.

My antenna:

Total Length: 43.6m (144ft)(36ft per side)

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Resonant on 40m. (80m would be desirable)

Feedline type: Coax 75ohm or ladderline 300ohm Other? (undetermined)

Feedline Length: 15m-22.7m (50-75ft) (approximate)

Coax feed cable type: (undetermined)

Coax feeder length of 7.7m(25.41ft). (approximate)

Power: Upto 600w

Above Ground Elevated: 7.57m- 9.09m(25 - 30ft)

Balun or no balun? Type?

What type of tuner? Other? I have LDG 200 PRO II and MFJ 949E.

Thanks

73, Dave

KG7WFZ

5183. Re: [SkyWires] New Loop Entheusist - general questions

Yahoo group: SkyWires
Date: 2016-04-09 13:36:42 UTC
From: Evan Rolek
Topic: 5175 Message: 5183

Rick,

Well, it depends, hi hi. My comments were based upon my experiments and findings that work for "most cases", at least my installations with varying lengths of the loops, heights, feed line lengths, etc. etc. Yes, sometimes one can hit it lucky with various combinations (antenna lengths, heights, and feed line type/length) and then it works for the respective user. But deviations within those parameters might negate the results for others. And some antennas are more sensitive to site specifics than others. Hence, I just provided some overall, "brute force" thoughts that seem to work in most cases. Thanks for that reference/link you sent.

73,

Evan

-----Original Message-----
From: 'rick@...' Rick@... [SkyWires] <SkyWires@yahoogroups.com>
To: SkyWires <SkyWires@yahoogroups.com>
Sent: Sat, Apr 9, 2016 1:54 am
Subject: RE: [SkyWires] New Loop Entheusist - general questions

Evan,

Until Everett built his loop and fed it with a 4:1 balun, I would have agreed with you. Now I don’t
See: http://www.dj0ip.de/loop-antennas/8-band-horizontal-loop/

73 - Rick, DJ0IP
(Nr. Frankfurt, Germany)

From: SkyWires@yahoogroups.com [mailto:SkyWires@yahoogroups.com]
Sent: Saturday, April 09, 2016 5:43 AM
To: SkyWires@yahoogroups.com
Subject: Re: [SkyWires] New Loop Entheusist - general questions

Dave,

If it is a mono band situation, then coax might work ok; 1:1 or 2:1 balun at the antenna would be ok. Multi band suggests ladder line or window line, with a balun in the shack or a balanced tuner.

These are very coarse notions, installation specifics could alter them.

73,

Evan, K9SQG

-----Original Message-----
From: davekammler@... [SkyWires] <SkyWires@yahoogroups.com>
To: SkyWires <SkyWires@yahoogroups.com>
Sent: Fri, Apr 8, 2016 5:11 pm
Subject: [SkyWires] New Loop Entheusist - general questions

Hello,

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Resonant on 40m. (80m would be desirable)

Feedline type: Coax 75ohm or ladderline 300ohm Other? (undetermined)

Feedline Length: 15m-22.7m (50-75ft) (approximate)

Coax feed cable type: (undetermined)

Coax feeder length of 7.7m(25.41ft).(approximate)

Power: Upto 600w

Above Ground Elevated: 7.57m- 9.09m(25 - 30ft)

Balun or no balun? Type?

What type of tuner? Other? I have LDG 200 PRO II and MFJ 949E.

Thanks

73, Dave

KG7WFZ

5184. Re: [SkyWires] New Loop Entheusist - general questions

Yahoo group: SkyWires
Date: 2016-04-09 13:56:10 UTC
From: Siegfried Jackstien
Topic: 5175 Message: 5184

same here as with rick

i have made several loops...and they worked in all places

dg9bfc

sigi

Am 09.04.2016 um 13:36 schrieb Evan Rolek k9sqg@... [SkyWires]:
>
> Rick,
>
>
> Well, it depends, hi hi. My comments were based upon my experiments
> and findings that work for "most cases", at least my installations
> with varying lengths of the loops, heights, feed line lengths, etc.
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> 73,
>
> Evan
>
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> From: 'rick@...' Rick@... [SkyWires] <SkyWires@yahoogroups.com>
> To: SkyWires <SkyWires@yahoogroups.com>
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> Subject: RE: [SkyWires] New Loop Entheusist - general questions
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> Evan,
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> [mailto:SkyWires@yahoogroups.com <mailto:SkyWires@yahoogroups.com?>]
> *Sent:* Saturday, April 09, 2016 5:43 AM
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> *Subject:* Re: [SkyWires] New Loop Entheusist - general questions
> Dave,
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> <SkyWires@yahoogroups.com <mailto:SkyWires@yahoogroups.com>>
> To: SkyWires <SkyWires@yahoogroups.com <mailto:SkyWires@yahoogroups.com>>
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> Thanks
> 73, Dave
> KG7WFZ
>
>

5185. RE: [SkyWires] New Loop Entheusist - general questions

Yahoo group: SkyWires
Date: 2016-04-09 14:02:15 UTC
From: rick@dj0ip.de
Topic: 5175 Message: 5185

I think the fact that the two toroids balun had higher SWR was just bad luck.
The cores were probably much different in permeability.
With my dual toroid baluns I get under 1.1:1 from 3.5 to about 22 MHz, then it slowly rises to just under 1.2:1.

In the several hundred toroids I have wrapped 99% were within 17% of each other, but 3 or 4 were way out in right field and could not be used for that purpose; so I just used them for single core chokes.

The problem is the poor permeability tolerances in toroids or ferrite sticks.
According to W8JI they can easily vary as much as 20%.
This means, with the same number of turns, you have a much different impedance between the two coils which throws the balance off. The SWR rises.

I usually wrap my toroids 100 at a time, measure them all, then put them into matched pairs with less than 1% variance. In fact most are less than 1/2 % variance. This enables me to get such a good SWR curve across the hf spectrum.

Obviously this is not something people will want to do.
And for those of you who doubt I do this, sorry Charlie - I’ve done it many times.
See: http://www.aerial-51.com/quality/ (middle of the page)

There is no electrical advantage of using a toroid instead of a stick or vice versa.
But there is a mechanical advantage using toroids.
Most of the magnetic flux remains inside the donut, so mounting the balun near metal objects does not have much negative influence; it does when using sticks instead of toroids.

Winding both transmission lines on a single stick or toroid is a bad idea.
Your CMI goes to hell in a hand basket when you do that.

73 - Rick, DJ0IP
(Nr. Frankfurt, Germany)

From: SkyWires@yahoogroups.com [mailto:SkyWires@yahoogroups.com]
Sent: Saturday, April 09, 2016 2:34 PM
To: SkyWires@yahoogroups.com
Subject: Re: [SkyWires] New Loop Entheusist - general questions

I also agree with Everett. My delta loop is a 160 size, fed with RG-8U, and a home made duel rod balun. Balun sketch
http://i1102.photobucket.com/albums/g453/KD0ZZ/2rod.jpg
The same sketch can be used for duel torrid, the rods gave better readings when testing the balun into a dummy load. I tried duel winding's on a single core, duel core and duel rod. Dummy load is a 200 ohm carbon resistor set up.
http://i1102.photobucket.com/albums/g453/KD0ZZ/Balunjpeg_zps41dd0ff6.jpg
I got into my making my own due to high SWR readings into a dummy load with "store" bought

baluns.

Rich, Kd0zz

From: "'rick@...' Rick@... [SkyWires]" <SkyWires@yahoogroups.com>
To: SkyWires@yahoogroups.com
Sent: Saturday, April 9, 2016 12:53:07 AM
Subject: RE: [SkyWires] New Loop Entheusist - general questions

Evan,

Until Everett built his loop and fed it with a 4:1 balun, I would have agreed with you. Now I don't
See: http://www.dj0ip.de/loop-antennas/8-band-horizontal-loop/

73 - Rick, DJ0IP
(Nr. Frankfurt, Germany)

From: SkyWires@yahoogroups.com [mailto:SkyWires@yahoogroups.com]
Sent: Saturday, April 09, 2016 5:43 AM
To: SkyWires@yahoogroups.com
Subject: Re: [SkyWires] New Loop Entheusist - general questions

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To: SkyWires <SkyWires@yahoogroups.com>
Sent: Fri, Apr 8, 2016 5:11 pm
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Thanks

73, Dave
KG7WFZ

5186. RE: [SkyWires] New Loop Entheusist - general questions

Yahoo group: SkyWires
Date: 2016-04-09 14:13:40 UTC
From: rick@dj0ip.de
Topic: 5175 Message: 5186

You are totally correct Evan, they do certainly vary from one place to another.
The 2:1 will most likely have a better match on 80m but on the higher bands, the 4:1 will probably be better.

At the end of the day, we must simply try it.
It’s very easy to match 2:1 on a single band, but a 2:1 balun is a bit more difficult.
A 4:1 balun is simple to build.

73 - Rick, DJ0IP
(Nr. Frankfurt, Germany)

From: SkyWires@yahoogroups.com [mailto:SkyWires@yahoogroups.com]
Sent: Saturday, April 09, 2016 3:37 PM
To: SkyWires@yahoogroups.com
Subject: Re: [SkyWires] New Loop Entheusist - general questions

Rick,

Well, it depends, hi hi. My comments were based upon my experiments and findings that work for "most cases", at least my installations with varying lengths of the loops, heights, feed line lengths, etc. etc. Yes, sometimes one can hit it lucky with various combinations (antenna lengths, heights, and feed line type/length) and then it works for the respective user. But deviations within those parameters might negate the results for others. And some antennas are more sensitive to site specifics than others. Hence, I just provided some overall, "brute force" thoughts that seem to work in most cases. Thanks for that reference/link you sent.

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Evan

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From: 'rick@...' Rick@... [SkyWires] <SkyWires@yahoogroups.com>
To: SkyWires <SkyWires@yahoogroups.com>
Sent: Sat, Apr 9, 2016 1:54 am
Subject: RE: [SkyWires] New Loop Entheusist - general questions

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73 - Rick, DJ0IP
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To: SkyWires@yahoogroups.com
Subject: Re: [SkyWires] New Loop Entheusist - general questions

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Evan, K9SQG
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From: davekammler@... [SkyWires] <SkyWires@yahoogroups.com>
To: SkyWires <SkyWires@yahoogroups.com>
Sent: Fri, Apr 8, 2016 5:11 pm
Subject: [SkyWires] New Loop Entheusist - general questions

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Thanks

73, Dave
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5187. RE: [SkyWires] New Loop Entheusist - general questions

Yahoo group: SkyWires
Date: 2016-04-10 10:15:57 UTC
From: rick@dj0ip.de
Topic: 5175 Message: 5187

Dave,

I will put my 3 cents worth below…

73 - Rick, DJ0IP
(Nr. Frankfurt, Germany)

Subject: [SkyWires] New Loop Entheusist - general questions

I guess my biggest issue ... is the feedline .. coax or ladderline.

>> Ladderline will have lower loss, but if we're talking 50 – 75 ft., there will be no noticeable difference (at the other end of the QSO) on the bands where you have an SWR of 4:1 or better AT THE FEEDPOINT. With coax you MUST use a balun; with ladderline you don't need a balun at that point.

Second largest issue .. balun or no balun.

>> Wrong Question. Should read 1, 2, or 3 Baluns?

>> At the feedpoint, you need a balun when using coax. Depending on which bands are more important, a 2:1 balun might be better or a 4:1 might be better. "Location" will also affect this choice. At the end of the day you'll probably have to try both. Once the coax gets to the house, you should always place a 1:1 current choke (which is also a balun) at the house. This can be either a Guanella or a good Maxwell.

>> If ladder line, then no balun is required at the feedpoint, but at the matchbox, do not use the internal balun of the matchbox (if they have one at all). Use an external balun. WE SHOULD ALWAYS USE A 1:1 CURRENT BALUN AS A TUNER BALUN - ALWAYS!!! (NO EXCEPTIONS). In addition, we sometime need to insert a 4:1 balun between the tuner balun and the feedline. This may be either a Ruthroff (voltage) or Guanella (current) balun.

>> If anyone tells you different, then have that person read this page and study the info on the links at the bottom of the page:
http://www.dj0ip.de/balun-stuff/tuner-baluns/

I've found the feed line discussion to be the largest point of contention during my research.

>> with good reason. How well the loop will radiate power depends on how you match and feed it.

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>> The radiation pattern should not be toooo distorted by this. After all it is the current peaks and nodes that determining where RF is radiated, not the shape itself. Identify the 90 degree (electrical) points; specifically feedpoint, and the 1/4, 1/2, 3/4 of the way around the loop.
Then go back and read my earlier post on the radiation pattern of a square (or diamond) loop. Assume each of these points represents one of the corners. Then you'll have a close idea of how it will radiate, by band.

Resonant on 40m. (80m would be desirable)

>> 80m: Piece of Cake. If you open the loop at the 1/2 mark (opposite the feedpoint) and then feed it with a 4:1 Guanella balun - INSERTED UPSIDE DOWN - And then with 50 or 75 Ohm coax to the shack, it will work pretty good on 80m.

>> Opening and closing the loop is also easy. Simply insert an insulator at the halfway point, and solder a quarter wavelength of coax across the insulator; then short the far end of the coax. This stub creates an automatic switch, open on 80m and closed on all other bands.

>> If you use a home-brew 4:1 Guanella balun, it is very easy to switch it to 3 different configurations: 4:1 / 1:1 / 1:4 . You probably won't need the 1:4. A pair of DPDT relays is all that is required to switch back and forth between 4:1 and 1:4. You can even run the switching voltage through the coax.

>> If you use ladderline, again no problem working 80m, as long as you have inserted the auto switch at the halfway mark of the loop. The impedance at the feedpoint is 12.5 Ohms - or close, depending on local surroundings. Run the 300 Ohms to the shack, then through the 1:1 Current Balun, and into the tuner. There will be transmission line transformation on the feedline, so I can't predict what the impedance in the shack will be on 80; you may need to play with feedline length to bring it within the range of your matchbox.

Feedline type: Coax 75ohm or ladderline 300ohm Other? (undetermined)

>> Well personally I prefer ladderline but then it is best to have a real symmetrical matchbox, which neither of your two boxes are. Clearly coax is more convenient.

Feedline Length: 15m-22.7m (50-75ft) (approximate)
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Power: Upto 600w
>> Neither of your two matchboxes will handle this power.

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Balun or no balun? Type?
>> addressed above

What type of tuner? Other? I have LDG 200 PRO II and MFJ 949E.
>> This depends first on what feedline you choose. If you use coax, these two will work. If

you choose openwire, I would look to finding an old Johnson Viking Matchbox, but BE SURE to check inside if the coils are still OK. Often they have melted and are nowhere close to being symmetrical. Otherwise new purchase is quite limited to the MFJ-974 (200w) and for high power, the MFJ-976 or Palstar BT-1500. Here the Palstar would be preferable but it costs more.
There are even better tuners than these but the prices shoot up over $1000.

Thanks
>> You're welcome. 73s and gud luk with the ANT; Rick, DJ0IP

73, Dave
KG7WFZ

5188. RE: [SkyWires] New Loop Entheusist - general questions

Yahoo group: SkyWires
Date: 2016-04-10 10:49:02 UTC
From: rick@dj0ip.de
Topic: 5175 Message: 5188

For clarity, the automatic switch to open and close the loop is a quarter wavelength of coax “on 80 meters.”

You must take its velocity factor into consideration when calculating the length.

So we’re talking about something in the range of 43’ of coax here.

73 - Rick, DJ0IP

(Nr. Frankfurt, Germany)

From: SkyWires@...m [mailto:SkyWires@yahoogroups.com]
Sent: Sunday, April 10, 2016 12:16 PM
To: SkyWires@yahoogroups.com
Subject: RE: [SkyWires] New Loop Entheusist - general questions

Dave,

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Coax feed cable type: (undetermined)
Coax feeder length of 7.7m(25.41ft).(approximate)

Power: Upto 600w
>> Neither of your two matchboxes will handle this power.

Above Ground Elevated: 7.57m- 9.09m(25 - 30ft)

Balun or no balun? Type?
>> addressed above

What type of tuner? Other? I have LDG 200 PRO II and MFJ 949E.
>> This depends first on what feedline you choose. If you use coax, these two will work. If you choose openwire, I would look to finding an old Johnson Viking Matchbox, but BE SURE to check inside if the coils are still OK. Often they have melted and are nowhere close to being symmetrical. Otherwise new purchase is quite limited to the MFJ-974 (200w) and for high power, the MFJ-976 or Palstar BT-1500. Here the Palstar would be preferable but it costs more.
There are even better tuners than these but the prices shoot up over $1000.

Thanks
>> You're welcome. 73s and gud luk with the ANT; Rick, DJ0IP

73, Dave
KG7WFZ

5189. RE: [SkyWires] New Loop Entheusist - general questions

Yahoo group: SkyWires
Date: 2016-04-10 10:51:10 UTC
From: rick@dj0ip.de
Topic: 5175 Message: 5189

Sorry guys, I need to start proof reading better before hitting send.

Mistake in this paragraph:
>> If you use a home-brew 4:1 Guanella balun, it is very easy to switch it to 3 different configurations: 4:1 / 1:1 / 1:4 . You probably won't need the 1:4. A pair of DPDT relays is all that is required to switch back and forth between 4:1 and 1:4. You can even run the switching voltage through the coax.

It should read:
>> If you use a home-brew 4:1 Guanella balun, it is very easy to switch it to 3 different configurations: 4:1 / 1:1 / 1:4 . You probably won't need the ***1:1.*** A pair of DPDT relays is all that is required to switch back and forth between 4:1 and 1:4. You can even run the switching voltage through the coax.

73 - Rick, DJ0IP
(Nr. Frankfurt, Germany)

From: SkyWires@yahoogroups.com [mailto:SkyWires@yahoogroups.com]
Sent: Sunday, April 10, 2016 12:16 PM
To: SkyWires@yahoogroups.com
Subject: RE: [SkyWires] New Loop Entheusist - general questions

Dave,

I will put my 3 cents worth below…

73 - Rick, DJ0IP
(Nr. Frankfurt, Germany)

Subject: [SkyWires] New Loop Entheusist - general questions

I guess my biggest issue ... is the feedline .. coax or ladderline.

>> Ladderline will have lower loss, but if we’re talking 50 – 75 ft., there will be no noticeable difference (at the other end of the QSO) on the bands where you have an SWR of 4:1 or better AT THE FEEDPOINT. With coax you MUST use a balun; with ladderline you don’t need a balun at that point.

Second largest issue .. balun or no balun.

>> Wrong Question. Should read 1, 2, or 3 Baluns?

>> At the feedpoint, you need a balun when using coax. Depending on which bands are more important, a 2:1 balun might be better or a 4:1 might be better. "Location" will also affect this choice. At the end of the day you'll probably have to try both. Once the coax gets to the house, you should always place a 1:1 current choke (which is also a balun) at the house. This can be either a Guanella or a good Maxwell.

>> If ladder line, then no balun is required at the feedpoint, but at the matchbox, do not use the internal balun of the matchbox (if they have one at all). Use an external balun. WE SHOULD ALWAYS USE A 1:1 CURRENT BALUN AS A TUNER BALUN - ALWAYS!!! (NO EXCEPTIONS). In addition, we sometime need to insert a 4:1 balun between the tuner balun and the feedline. This may be either a Ruthroff (voltage) or Guanella (current) balun.

>> If anyone tells you different, then have that person read this page and study the info on the links at the bottom of the page:
http://www.dj0ip.de/balun-stuff/tuner-baluns/

I've found the feed line discussion to be the largest point of contention during my research.

>> with good reason. How well the loop will radiate power depends on how you match and feed it.

I've read mixed review on whether or not this is a better local/region antenna vs. DX antenna. My strong preference is DX.

>> I already wrote a whole nickle's worth on this one in an earlier post.

My antenna:
Total Length: 43.6m (144ft)(36ft per side)
-- at most I can probably do 300ft but very irregular loop shape maybe 6 or 7 unequal side lengths. Not sure what this will do to the radiation pattern.

>> The radiation pattern should not be toooo distorted by this. After all it is the current peaks and nodes that determining where RF is radiated, not the shape itself. Identify the 90 degree (electrical) points; specifically feedpoint, and the 1/4, 1/2, 3/4 of the way around the loop.
Then go back and read my earlier post on the radiation pattern of a square (or diamond) loop. Assume each of these points represents one of the corners. Then you'll have a close idea of how it will radiate, by band.

Resonant on 40m. (80m would be desirable)

>> 80m: Piece of Cake. If you open the loop at the 1/2 mark (opposite the feedpoint) and then feed it with a 4:1 Guanella balun - INSERTED UPSIDE DOWN - And then with 50 or 75 Ohm coax to the shack, it will work pretty good on 80m.

>> Opening and closing the loop is also easy. Simply insert an insulator at the halfway point, and solder a quarter wavelength of coax across the insulator; then short the far end of the coax. This stub creates an automatic switch, open on 80m and closed on all other bands.

>> If you use a home-brew 4:1 Guanella balun, it is very easy to switch it to 3 different configurations: 4:1 / 1:1 / 1:4 . You probably won't need the 1:4. A pair of DPDT relays is all that is required to switch back and forth between 4:1 and 1:4. You can even run the switching voltage through the coax.

>> If you use ladderline, again no problem working 80m, as long as you have inserted the auto switch at the halfway mark of the loop. The impedance at the feedpoint is 12.5 Ohms - or close, depending on local surroundings. Run the 300 Ohms to the shack, then through the 1:1 Current Balun, and into the tuner. There will be transmission line transformation on

the feedline, so I can't predict what the impedance in the shack will be on 80; you may need to play with feedline length to bring it within the range of your matchbox.

Feedline type: Coax 75ohm or ladderline 300ohm Other? (undetermined)

>> Well personally I prefer ladderline but then it is best to have a real symmetrical matchbox, which neither of your two boxes are. Clearly coax is more convenient.

Feedline Length: 15m-22.7m (50-75ft) (approximate)
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Thanks
>> You're welcome. 73s and gud luk with the ANT; Rick, DJ0IP

73, Dave
KG7WFZ

5190. Re: [SkyWires] New Loop Entheusist - general questions

Yahoo group: SkyWires
Date: 2016-04-11 03:20:16 UTC
From: Evan Rolek
Topic: 5175 Message: 5190

Rick,

I concur. And there is a lot to be learned by experimenting thus comparing theory/modeling with application. The models don't do a great job regarding site specifics.

As they say, all models are wrong, but some models are useful. AND the best antenna on paper doesn't yield as many QSOs as an antenna that is actually installed.

73 (drei und siebzig?),

Evan, K9SQG

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From: 'rick@...' Rick@... [SkyWires] <SkyWires@yahoogroups.com>
To: SkyWires <SkyWires@...m>
Sent: Sat, Apr 9, 2016 10:13 am
Subject: RE: [SkyWires] New Loop Entheusist - general questions

You are totally correct Evan, they do certainly vary from one place to another.
The 2:1 will most likely have a better match on 80m but on the higher bands, the 4:1 will probably be better.

At the end of the day, we must simply try it.
It’s very easy to match 2:1 on a single band, but a 2:1 balun is a bit more difficult.
A 4:1 balun is simple to build.

73 - Rick, DJ0IP
(Nr. Frankfurt, Germany)

From: SkyWires@yahoogroups.com [mailto:SkyWires@...m]
Sent: Saturday, April 09, 2016 3:37 PM
To: SkyWires@yahoogroups.com
Subject: Re: [SkyWires] New Loop Entheusist - general questions

Rick,

Well, it depends, hi hi. My comments were based upon my experiments and findings that work for "most cases", at least my installations with varying lengths of the loops, heights, feed line lengths, etc. etc. Yes, sometimes one can hit it lucky with various combinations (antenna lengths, heights, and feed line type/length) and then it works for the respective user. But deviations within those parameters might negate the results for others. And some antennas are more sensitive to site specifics than others. Hence, I just provided some overall, "brute force" thoughts that seem to work in most cases. Thanks for that reference/link you sent.

73,

Evan

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From: 'rick@...' Rick@... [SkyWires] <SkyWires@yahoogroups.com>
To: SkyWires <SkyWires@yahoogroups.com>
Sent: Sat, Apr 9, 2016 1:54 am
Subject: RE: [SkyWires] New Loop Entheusist - general questions

Evan,

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See: http://www.dj0ip.de/loop-antennas/8-band-horizontal-loop/

73 - Rick, DJ0IP
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From: SkyWires@yahoogroups.com [mailto:SkyWires@yahoogroups.com]
Sent: Saturday, April 09, 2016 5:43 AM
To: SkyWires@yahoogroups.com
Subject: Re: [SkyWires] New Loop Entheusist - general questions

Dave,

If it is a mono band situation, then coax might work ok; 1:1 or 2:1 balun at the antenna would be ok. Multi band suggests ladder line or window line, with a balun in the shack or a balanced tuner.

These are very coarse notions, installation specifics could alter them.

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From: davekammler@... [SkyWires] <SkyWires@yahoogroups.com>
To: SkyWires <SkyWires@yahoogroups.com>
Sent: Fri, Apr 8, 2016 5:11 pm
Subject: [SkyWires] New Loop Entheusist - general questions

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What type of tuner? Other? I have LDG 200 PRO II and MFJ 949E.

Thanks

73, Dave
KG7WFZ

5191. RE: [SkyWires] New Loop Entheusist - general questions

Yahoo group: SkyWires
Date: 2016-04-11 05:05:59 UTC
From: rick@dj0ip.de
Topic: 5175 Message: 5191

GM Evan,

I like to hassle the people who do nothing but model ‘til the cows come home.
“ Did you work any DX today on that model ? ” (hi)

But let me be perfectly clear: I am the sales and service manager for Spiderbeam Antennas.
There would not even be a Spiderbeam Yagi if we had not had modeling software.

Next month in QST you will see a review of an antenna I designed. (page 6 and 7).
That antenna likely would not have been possible if we had not modeled it first.

But don’t think the models were spot on.
It took LOTS of hours of field testing and pruning before the antennas actually worked on all bands as they should. And the model didn't do a darn thing to help design the balun. That bit took one year and over 500 hours of field work testing different balun technologies and their ability to cope with the heavy CMC produced by OCFD antennas.

With multi-band antennas, it’s always a 2-sided sword.
You fix one band and throw another out.

The Rubber Hits The Road On-The-Air (NOT on the keyboard)!

73 - Rick, DJ0IP
(Nr. Frankfurt, Germany)

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To: SkyWires@yahoogroups.com
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Thanks

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KG7WFZ

5192. Re: [SkyWires] New Loop Entheusist - general questions

Yahoo group: SkyWires
Date: 2016-04-11 05:27:34 UTC
From: Edward McCann
Topic: 5175 Message: 5192

Ok Rick,

Your review must be in the witness protection program: I can't find it in pages 6-7 of the May QST which arrived today in digital form.

More specifically, where did/ will it appear?

73
Ed McCann
AG6CX

Sent from my iPhone

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5193. RE: [SkyWires] New Loop Entheusist - general questions

Yahoo group: SkyWires
Date: 2016-04-11 12:52:13 UTC
From: rick@dj0ip.de
Topic: 5175 Message: 5193

We moved it from pages 6 and 7 to pages 52 & 53, just to confuse the Russians.

We’re back doing that again.

73 - Rick, DJ0IP

(Nr. Frankfurt, Germany)

From: Edward McCann [mailto:edwmccann@...]
Sent: Monday, April 11, 2016 7:28 AM
To: SkyWires@yahoogroups.com; Rick@dj0ip.de
Cc: edward mccann
Subject: Re: [SkyWires] New Loop Entheusist - general questions

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The 2:1 will most likely have a better match on 80m but on the higher bands, the 4:1 will probably be better.

At the end of the day, we must simply try it.
It’s very easy to match 2:1 on a single band, but a 2:1 balun is a bit more difficult.
A 4:1 balun is simple to build.

73 - Rick, DJ0IP
(Nr. Frankfurt, Germany)

From: SkyWires@yahoogroups.com [mailto:SkyWires@yahoogroups.com]
Sent: Saturday, April 09, 2016 3:37 PM
To: SkyWires@yahoogroups.com
Subject: Re: [SkyWires] New Loop Entheusist - general questions

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Evan

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To: SkyWires <SkyWires@yahoogroups.com>
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Subject: RE: [SkyWires] New Loop Entheusist - general questions

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See: http://www.dj0ip.de/loop-antennas/8-band-horizontal-loop/

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Evan, K9SQG
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From: davekammler@... [SkyWires] <SkyWires@yahoogroups.com>
To: SkyWires <SkyWires@yahoogroups.com>
Sent: Fri, Apr 8, 2016 5:11 pm
Subject: [SkyWires] New Loop Entheusist - general questions

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My antenna:
Total Length: 43.6m (144ft)(36ft per side)
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Resonant on 40m. (80m would be desirable)
Feedline type: Coax 75ohm or ladderline 300ohm Other? (undetermined)
Feedline Length: 15m-22.7m (50-75ft) (approximate)
Coax feed cable type: (undetermined)
Coax feeder length of 7.7m(25.41ft).(approximate)
Power: Upto 600w
Above Ground Elevated: 7.57m- 9.09m(25 - 30ft)
Balun or no balun? Type?
What type of tuner? Other? I have LDG 200 PRO II and MFJ 949E.

Thanks

73, Dave
KG7WFZ

5194. Re: [SkyWires] New Loop Entheusist - general questions

Yahoo group: SkyWires
Date: 2016-04-11 14:11:18 UTC
From: Edw McCann
Topic: 5175 Message: 5194

Roger.
Should have looked.
Be well.
Ed

Sent from my iPhone

> On Apr 11, 2016, at 5:52 AM, 'rick@...' Rick@... [SkyWires] <SkyWires@yahoogroups.com> wrote:
>
> We moved it from pages 6 and 7 to pages 52 & 53, just to confuse the Russians.
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> We’re back doing that again.
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> 73 - Rick, DJ0IP
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> (Nr. Frankfurt, Germany)
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> From: Edward McCann [mailto:edwmccann@...]
> Sent: Monday, April 11, 2016 7:28 AM
> To: SkyWires@yahoogroups.com; Rick@...
> Cc: edward mccann
> Subject: Re: [SkyWires] New Loop Entheusist - general questions
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> Ok Rick,
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> I like to hassle the people who do nothing but model ‘til the cows come home.
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Antennas.
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> Next month in QST you will see a review of an antenna I designed. (page 6 and 7).
> That antenna likely would not have been possible if we had not modeled it first.
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> But don’t think the models were spot on.
> It took LOTS of hours of field testing and pruning before the antennas actually worked on
all bands as they should. And the model didn't do a darn thing to help design the balun.
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technologies and their ability to cope with the heavy CMC produced by OCFD antennas.
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> With multi-band antennas, it’s always a 2-sided sword.
> You fix one band and throw another out.
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> The Rubber Hits The Road On-The-Air (NOT on the keyboard)!
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> From: 'rick@...' Rick@... [SkyWires] <SkyWires@yahoogroups.com>
> To: SkyWires <SkyWires@yahoogroups.com>
> Sent: Sat, Apr 9, 2016 10:13 am
> Subject: RE: [SkyWires] New Loop Entheusist - general questions
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> You are totally correct Evan, they do certainly vary from one place to another.
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> Resonant on 40m. (80m would be desirable)
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> Balun or no balun? Type?
> What type of tuner? Other? I have LDG 200 PRO II and MFJ 949E.
>
> Thanks
>
> 73, Dave
> KG7WFZ
>
>
>

5195. RE: [SkyWires] New Loop Entheusist - general questions

Yahoo group: SkyWires
Date: 2016-04-11 14:20:24 UTC
From: rick@dj0ip.de
Topic: 5175 Message: 5195

And it’s also listed on the front cover. ;-)

73 - Rick, DJ0IP

(Nr. Frankfurt, Germany)

From: SkyWires@yahoogroups.com [mailto:SkyWires@yahoogroups.com]
Sent: Monday, April 11, 2016 4:11 PM
To: SkyWires@yahoogroups.com
Subject: Re: [SkyWires] New Loop Entheusist - general questions

Roger.

Should have looked.

Be well.

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More specifically, where did/ will it appear?

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AG6CX

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Thanks

73, Dave
KG7WFZ

5196. Revisiting the horizontal loop and looking for some solid design criteria

Yahoo group: SkyWires
Date: 2016-05-26 15:21:49 UTC
From: kl7rs@...
Topic: 5196 Message: 5196

I want to build a multi-band 80-6m SkyWire horizontal loop for field day.

Like so many others who have posted here, I have been all over the internet and now feel overwhelmed with all of the contradictions and misleading information out there regarding the design of these loops.

I have seen loop lengths anywhere from 270 - 300 feet, lots of different types and ratios of baluns, coax vs windowed ladder line, and some folks say the length of the ladder line makes no difference yet others say it does because it is in fact a matching transformer (I use a ZS6BKW and tend to believe this wholeheartedly).

So I was hoping to get a few folks to post the SPECIFICS of their working antennas, in an effort to at least get an effecient design that is proven to work as many bands as possible between 80-6 meters.

I'd like to know the following:

Length of wire
height

shape of loop
feed point (corner, edge, etc)
type of feed line (ladder line type, coax type)
how is the feed line connected to the wire (balun / direct connect, etc)
length of the feed line (this appears to be critical)
if you use a balun, choke or both, where are they positioned along the feedline
maybe a list of the bands used and swr readings (without a tuner)

if you use a tuner what is it and where is it placed (at the antenna, shack etc.)
if you use a tuner, are there any bands it has trouble with

From what reading I've done, it appears it is almost impossible to get the loop to be resonant on all of the bands used and many people still use a tuner at the shack to fine tune the antenna. If this is the case, then that's perfectly fine. If I'm wrong in this assumption, please correct me.

My initial design was going to be to use 282 feet of number 14 wire, use a 4:1 current balun at the antenna and then 75 feet of coax back to the station. If a tuner is required, I do have a 300w MFJ auto-tuner that usually does pretty good. After a bunch of reading, I'm confused and would like to know exactly what is working for other folks.

5197. Re: [SkyWires] Revisiting the horizontal loop and looking for some solid design criteria

Yahoo group: SkyWires
Date: 2016-05-26 16:06:34 UTC
From: rdj@...
Topic: 5196 Message: 5197

Here is a chart from my 80m delta loop, good for all bands but 17 and that is not used for field day
http://i1102.photobucket.com/albums/g453/KD0ZZ/80MLoop_zpsa6e4cfe7.jpeg
Here is the layout for my loop, I did make a fine adjustment for best SWR in the middle of the 40M phone band,
http://i1102.photobucket.com/albums/g453/KD0ZZ/80MDelta.jpg
My loop will work on 6M but the 4:1 current balun is not optimized for 6M, it is also adjusted for the lower bands with a center frequency of 10 Mhz

Rich, Kd0zz

----- Original Message -----

From: "kl7rs@... [SkyWires]" <SkyWires@yahoogroups.com>
To: SkyWires@yahoogroups.com
Sent: Thursday, May 26, 2016 10:21:49 AM
Subject: [SkyWires] Revisiting the horizontal loop and looking for some solid design criteria

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5198. Re: [SkyWires] Revisiting the horizontal loop and looking for some solid design criteria

Yahoo group: SkyWires
Date: 2016-05-26 17:25:30 UTC
From: kl7rs@...
Topic: 5196 Message: 5198

Thanks Rich. Your 283 feet falls more inline with the 282 feet that I came up with. What I don't understand is how some folks are using 270-275 feet and still getting them to work multiple bands.

Can you tell me if there is much difference in making the loop a square vs a triangle? I've read where the more area inside the loop, the better the performance.

Norm

5199. RE: [SkyWires] Revisiting the horizontal loop and looking for some solid design criteria

Yahoo group: SkyWires
Date: 2016-05-26 17:43:25 UTC
From: rick@dj0ip.de
Topic: 5196 Message: 5199

"What I don't understand is how some folks are using 270-275 feet and still getting them to work multiple bands."

Height, wire size, wire insulated or not, type of ground below it. THESE all make a difference in the required length.

If running openwire, length is almost unimportant.
Length of feedline changes the impedance in the shack but with a good enough matchbox, that won't make much difference.

If feeding with coax, then length of antenna, and balun type make a very critical difference.
See: http://www.dj0ip.de/loop-antennas/8-band-horizontal-loop/
For one example on how to do it.

73 - Rick, DJ0IP
(Nr. Frankfurt, Germany)

From: SkyWires@yahoogroups.com [mailto:SkyWires@yahoogroups.com]
Sent: Thursday, May 26, 2016 7:26 PM
To: SkyWires@yahoogroups.com
Subject: Re: [SkyWires] Revisiting the horizontal loop and looking for some solid design criteria

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Norm

5200. Re: [SkyWires] Revisiting the horizontal loop and looking for some solid design criteria

Yahoo group: SkyWires
Date: 2016-05-26 23:39:36 UTC
From: rdj@...
Topic: 5196 Message: 5200

Sorry for the mixed up email. Had a storm come thru and lost all, my ISP is thru a satellite like direct tv uses. Bad weather and all is gone.
Check out "mega loop antenna" MMANA info on building a delta loop.
https://www.youtube.com/watch?v=SOvhetU1_ps
Size & shape does matter, I tried a almost square and it was no good, delta loop with 60 degree corners works fine. I cant give you any reading today because it worked so well I changed it to a 160M size. Had to remove a few trees to get it done.
I first put up the 283, 12ga, size then adjusted the loop to a low SWR in the middle of the 40m phone band, (a few feet shorter) I have a full size 40M vertical with a 8 ft high feed point w/sloping radials and the loop always out performs the vertical
Feed point for the delta loop is about 40ft as are the other two points , wire does droop to about 30 between because the tree tops are not too strong.

Rich, Kd0zz

----- Original Message -----

From: rdj@...
To: SkyWires@yahoogroups.com
Sent: Thursday, May 26, 2016 6:09:15 PM
Subject: Re: [SkyWires] Revisiting the horizontal loop and looking for some solid design criteria

Norn, Please note that 283 size was original set up size Idea came from M0mcx and hid "mega loop antenna". See MMANA information at

----- Original Message -----

From: rdj@...
To: SkyWires@yahoogroups.com
Sent: Thursday, May 26, 2016 6:06:36 PM
Subject: Re: [SkyWires] Revisiting the horizontal loop and looking for some solid design criteria

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5201. Re: [SkyWires] Revisiting the horizontal loop and looking for some solid design criteria

Yahoo group: SkyWires
Date: 2016-05-26 18:08:02 UTC
From: Everett Sharp
Topic: 5196 Message: 5201

Hi Norm,

Start long and trim to get it where you want it. To get the best results on the higher bands you will need to be at the low end of 80 meters. I experimented with 2.25:1 and 4:1 baluns, the 4:1 balun is the best.

I have a couple articles in the files section of this site that may be of some value to you with several sweep showing the SWR from 80 through 10, it works on all bands in between with the exception of 60 meters. For my installation I found 275' to be the ideal length using a 4:1 cut tent balun.

Everett N4CY

Sent from my iPad

> On May 26, 2016, at 12:25 PM, kl7rs@yahoo.com [SkyWires] <SkyWires@yahoogroups.com> wrote:
>
> Thanks Rich. Your 283 feet falls more inline with the 282 feet that I came up with. What I don't understand is how some folks are using 270-275 feet and still getting them to work multiple bands.
>
> Can you tell me if there is much difference in making the loop a square vs a triangle? I've read where the more area inside the loop, the better the performance.
>
> Norm
>

5202. RE: [SkyWires] Revisiting the horizontal loop and looking for some solid design criteria

Yahoo group: SkyWires
Date: 2016-05-27 06:47:30 UTC
From: rick@dj0ip.de
Topic: 5196 Message: 5202

Rich,

You must be the first person on the planet to claim the square loop does not work.
It has always worked great for me and I have used it often as full size 80m and 40m versions.

When you say the large loop always works better than the vertical on 40m, that is a very powerful statement.
Obviously for contacts out to about 1000 miles it will blow the vertical away.
How about when working long haul DX, such as Europe or Pacific?

73 - Rick, DJ0IP
(Nr. Frankfurt, Germany)

From: SkyWires@yahoogroups.com [mailto:SkyWires@yahoogroups.com]
Sent: Friday, May 27, 2016 1:40 AM
To: SkyWires@yahoogroups.com
Subject: Re: [SkyWires] Revisiting the horizontal loop and looking for some solid design criteria

Sorry for the mixed up email. Had a storm come thru and lost all, my ISP is thru a satellite like direct tv uses. Bad weather and all is gone.
Check out "mega loop antenna" MMANA info on building a delta loop.
https://www.youtube.com/watch?v=SOvhetU1_ps
Size & shape does matter, I tried a almost square and it was no good, delta loop with 60 degree corners works fine. I cant give you any reading today because it worked so well I changed it to a 160M size. Had to remove a few trees to get it done.
I first put up the 283, 12ga, size then adjusted the loop to a low SWR in the middle of the 40m phone band, (a few feet shorter) I have a full size 40M vertical with a 8 ft high feed point w/sloping radials and the loop always out performs the vertical
Feed point for the delta loop is about 40ft as are the other two points , wire does droop to about 30 between because the tree tops are not too strong.

Rich, Kd0zz

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From: rdj@...
To: SkyWires@yahoogroups.com
Sent: Thursday, May 26, 2016 6:09:15 PM
Subject: Re: [SkyWires] Revisiting the horizontal loop and looking for some solid design criteria

Norn, Please note that 283 size was original set up size Idea came from M0mcx and hid "mega loop antenna". See MMANA information at

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From: rdj@...
To: SkyWires@yahoogroups.com
Sent: Thursday, May 26, 2016 6:06:36 PM
Subject: Re: [SkyWires] Revisiting the horizontal loop and looking for some solid design criteria

Norn, Please note that 283 size was original set up size Idea came from M0mcx and hid "mega loop antenna". See MMANA information at

5203. Re: [SkyWires] Revisiting the horizontal loop and looking for some solid design criteria

Yahoo group: SkyWires
Date: 2016-05-27 10:54:35 UTC
From: rdj@...
Topic: 5196 Message: 5203

Rick I should have said the the "rectangular" shaped loop worked with ladder line but not as well coax fed, the delta loop , 80M size worked good on 40M with a 4:1 balun and coax fed.
The original question was about a antenna for field day use not DX so I would pick the loop for field day. Sorry about the mix up.

Rich, Kd0zz

----- Original Message -----

From: "'rick@...' Rick@... [SkyWires]" <SkyWires@yahoogroups.com>
To: SkyWires@yahoogroups.com
Sent: Friday, May 27, 2016 1:47:30 AM
Subject: RE: [SkyWires] Revisiting the horizontal loop and looking for some solid design criteria

Rich,

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Feed point for the delta loop is about 40ft as are the other two points , wire does droop to about 30 between because the tree tops are not too strong.

Rich, Kd0zz

From: rdj@wildblue.net
To: SkyWires@yahoogroups.com
Sent: Thursday, May 26, 2016 6:09:15 PM
Subject: Re: [SkyWires] Revisiting the horizontal loop and looking for some solid design criteria

Norn, Please note that 283 size was original set up size Idea came from M0mcx and hid "mega loop antenna". See MMANA information at

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To: SkyWires@yahoogroups.com
Sent: Thursday, May 26, 2016 6:06:36 PM
Subject: Re: [SkyWires] Revisiting the horizontal loop and looking for some solid design criteria

Norn, Please note that 283 size was original set up size Idea came from M0mcx and hid "mega loop antenna". See MMANA information at

5204. Re: [SkyWires] Revisiting the horizontal loop and looking for some solid design criteria

Yahoo group: SkyWires
Date: 2016-05-27 13:36:08 UTC
From: Evan Rolek
Topic: 5196 Message: 5204

Typically the horizontal loop is somewhat insensitive to shape based upon my experiments over the past 25 years. I currently have two horizontal loops, one for 40 meters and one for 80 meters and am quite pleased with them.

As Rick has mentioned, performance is a function of distance, so to speak. Several years ago I did some observational tests comparing my 40 M 1/4 wave vertical against my 40 M horizontal loop. Close in, the loop was stronger than the vertical by as much as 20-25 db. As the distance between stations increased to about 1,000 miles, the antennas were equal; beyond that the vertical was stronger than the horizontal loop. This was based upon over 400 observations, receiving and/or transmitting, with A-B switching between antennas.

Too, during the testing, I noticed that the loop was 1-2 S-units lower with regard to background noise.

My loops are very broad in terms of the SWR curve and, by experimenting, I've found that a resonant versus non-resonant loop seems to have minimal to no effect on transmit or receive signal strengths. I don't pretend to understand all the theory, I'm just very pleased with the horizontal loop antennas. And to me, perfect is the enemy of good enough.

73,

Evan, K9SQG

-----Original Message-----
From: 'rick@...' Rick@... [SkyWires] <SkyWires@yahoogroups.com>
To: SkyWires <SkyWires@yahoogroups.com>
Sent: Fri, May 27, 2016 2:47 am
Subject: RE: [SkyWires] Revisiting the horizontal loop and looking for some solid design criteria

Rich,

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How about when working long haul DX, such as Europe or Pacific?

73 - Rick, DJ0IP
(Nr. Frankfurt, Germany)

From: SkyWires@yahoogroups.com [mailto:SkyWires@yahoogroups.com]
Sent: Friday, May 27, 2016 1:40 AM

To: SkyWires@yahoogroups.com
Subject: Re: [SkyWires] Revisiting the horizontal loop and looking for some solid design criteria

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5205. RE: [SkyWires] Revisiting the horizontal loop and looking for some solid design criteria

Yahoo group: SkyWires
Date: 2016-05-27 14:04:35 UTC
From: rick@dj0ip.de
Topic: 5196 Message: 5205

OK, now we FULLY agree.

The loop is fantastic for Field Day.

I used it for many years, until they changed our rules allowing us only one single support mast.

That was the end of the loop’s domination in FD here.

73 - Rick, DJ0IP

(Nr. Frankfurt, Germany)

From: SkyWires@yahoogroups.com [mailto:SkyWires@yahoogroups.com]
Sent: Friday, May 27, 2016 12:55 PM
To: SkyWires@yahoogroups.com
Subject: Re: [SkyWires] Revisiting the horizontal loop and looking for some solid design criteria

Rick I should have said the the "rectangular" shaped loop worked with ladder line but not as well coax fed, the delta loop , 80M size worked good on 40M with a 4:1 balun and coax fed.

The original question was about a antenna for field day use not DX so I would pick the loop for field day. Sorry about the mix up.

Rich, Kd0zz

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To: SkyWires@yahoogroups.com
Sent: Friday, May 27, 2016 1:47:30 AM
Subject: RE: [SkyWires] Revisiting the horizontal loop and looking for some solid design criteria

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How about when working long haul DX, such as Europe or Pacific?

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Sent: Thursday, May 26, 2016 6:09:15 PM
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Subject: Re: [SkyWires] Revisiting the horizontal loop and looking for some solid design criteria

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5206. Re: Revisiting the horizontal loop and looking for some solid design criteria

Yahoo group: SkyWires
Date: 2016-05-27 17:11:51 UTC
From: kl7rs@...
Topic: 5196 Message: 5206

I'm pretty much going to be limited to a standard 80m loop this year, so I won't be putting up a mega-loop.

What I'm hearing is that a 80-6m loop isn't an easily duplicated antenna. Dimensions can vary widely based upon where it is being installed. There doesn't seem to be a widely accepted method of feeding the antenna where specific lengths of coax seem to work well.

I can't even find a widely accepted feed method where the length of the window line is shown to work in most circumstances. I know window line acts as a transformer and it can be pretty hard finding a specific length can be used with a tuner on multiple bands.

Hmmm. I was hoping to cut it once, add a balun if necessary, attach a specific length of window line or coax and pretty much be on the air.

Square vs Delta shape. Since I'm in Arizona, most stations will be east or slightly north east of us and a little over 1,000 miles away.

Maybe a horizontal delta loop supported on 3 supports is a little better way to go. Any comments here?

Does anyone know if the total length of the loop changes much when it is installed as a square vs a delta?

At this point, I'm thinking of starting out with 275' of number 14 thhn directly attached to a 4:1 balun designs dual core current balun. Then about 50-75 feet of LMR-400 to the rig.

I'm still not sure if I want to try 3 supports as a Delta, or 4 supports as a square.

5207. RE: [SkyWires] Re: Revisiting the horizontal loop and looking for some solid design criteria

Yahoo group: SkyWires
Date: 2016-05-27 20:42:54 UTC
From: rick@dj0ip.de
Topic: 5196 Message: 5207

Your problem is there are too many ambiguous things in all that you are talking about.

In free space, there is no difference between the delta or the square… or a circle for that matter.
Here on earth, what's underneath the antenna affects its impedance and resonant frequency.
If you change the shape of the loop and the earth is consistent AND there are no buildings or obstacles for miles around, then nothing should change either. However that is unlikely.

With all of the variables, nobody on the planet can tell you how long to make you antenna.
Start with it long and prune it to resonance.
It makes no difference if you cut excess wire out of one side or a little bit out of all 4 sides.

When I built my loops, I had the feedpoint soldered (of course) so I broke open the loop at the opposite corner (it was square).
This made it easy to take down and store.
It also made it easy at each new location to insert a piece of wire (or cut more off) from the opposite corner.

If you feed with openwire, all of that is unnecessary.
If you feed with coax, then your choice of balun is a good one.
You should only have to prune the length.
As Everette said, in order to have higher bands resonate within the ham bands, you must cut the loop for resonance on the low end of the 80m band. It is very broad-banded so that does not matter much.

The bit about "easy to match" is the real ambiguous part.
Easy to match with what?
If you compare various matchboxes on the market, they are different as night and day.
➢ Some match only 5:1 mismatches (10 Ohms to 250 Ohms)
➢ Some match 10:1 mismatches (5 Ohms to 500 Ohms)
➢ Some match up to 1200, others to 1600, and some up to 2000 or more.

An antenna with feedline length "X" might be easy to match on one matchbox yet difficult/impossible on another.

So start by telling us the impedance matching range of the matchbox you have available.

If you end up not being able to match some particular band, adding 1/8 wavelength more openwire almost always brings that band in and in many cases, just 1/16 wavelength is sufficient. Except for 80m, 15 ft. of feedline or less will bring any band's impedance into a range that can be matched.

OPENWIRE: which openwire? 450 Ohms? 300 Ohms? Well most of the feedline we call 450 Ohms is actually closer to 400 Ohms. Some even less. So when one guy specifies a length and you duplicate it, unless you are using exactly the same make an model of openwire, you won't

get the same results.

Your own suggestion on how you might start is a good one.
You already answered all the important questions.
Next step: just do it.

BTW, I didn't mean to pick on you specifically with all of the above.
I was only trying to point out why we get so many conflicting answers to what we believe is a simple question.

Gud luk and let us know how it turns out.

73 - Rick, DJ0IP
(Nr. Frankfurt, Germany)

From: SkyWires@yahoogroups.com [mailto:SkyWires@yahoogroups.com]
Sent: Friday, May 27, 2016 7:12 PM
To: SkyWires@yahoogroups.com
Subject: [SkyWires] Re: Revisiting the horizontal loop and looking for some solid design criteria

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5208. Re: [SkyWires] Re: Revisiting the horizontal loop and looking for some solid design criteria

Yahoo group: SkyWires
Date: 2016-05-27 21:06:10 UTC
From: Bornofthehorses
Topic: 5196 Message: 5208

I have to agree with Rick it is all about what is under your wire and how close to it you are. I have worked easy 300 designs/configs of loops/ wire ant. some as close to a copy already up but over different ground in a different direction and have completely different reports per swr not even counting matching requirements be it with or with out a balun. Using ladder line, coax and or match box on a 60ft tower or on 20 to 30 ft of pc pipe everything effects the out come. And here is what it all came to if it works ie you hear who you want and can talk to them it is a working system. I have even talked and heard folks on a dang wire fence if it works and does not harm others or your equipment run with it. Do not worry so much about what others say or think if your system should not be working when you know it is, have fun . Ken
KG7CCT

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Posted by: "rick@..." <Rick@...>

Yahoo Groups Links

5209. Re: Revisiting the horizontal loop and looking for some solid design criteria

Yahoo group: SkyWires
Date: 2016-05-28 05:12:52 UTC
From: vk5zuc@...
Topic: 5196 Message: 5209

Length of wire 84m
height 6-8m

shape of loop irregular rectangle
feed point (corner, edge, etc) middle of longest side.
type of feed line (ladder line type, coax type) Electric 1/4 wave of RG11 at 7MHz to antenna (helps lower impedance on 40m) to 20m of RG58 to shack at tuner/radio earthed there.
how is the feed line connected to the wire (balun / direct connect, etc) direct connection.
length of the feed line (this appears to be critical) see above
if you use a balun, choke or both, where are they positioned - clip on ferrites distributed along the feeder.
maybe a list of the bands used and swr readings (1:1 on 80m without a tuner)

if you use a tuner what is it and where is it placed (shack.)
if you use a tuner, are there any bands it has trouble with. 3:1 tuner can be challenged is OK on all frequencies.

5210. RE: [SkyWires] Re: Revisiting the horizontal loop and looking for some solid design criteria

Yahoo group: SkyWires
Date: 2016-05-28 05:25:34 UTC
From: rick@dj0ip.de
Topic: 5196 Message: 5210

People who buy a tuner with less than 10:1 matching range are shooting themselves in the foot.

We always check the typical gas mileage of any car we want to buy BEFORE we buy it.

We also need to check the matching range of the matchbox before we buy it.

Everett has done a lot of work with loops and found 4:1 GUANELLA, DUAL-CORE to work best “at the feedpoint”.

A balun in front of any tuner (in the shack) MUST always be a 1:1. If you disagree, you haven’t done your homework.

See: http://www.dj0ip.de/balun-stuff/tuner-baluns/

73 - Rick, DJ0IP

(Nr. Frankfurt, Germany)

From: SkyWires@yahoogroups.com [mailto:SkyWires@yahoogroups.com]
Sent: Saturday, May 28, 2016 7:13 AM
To: SkyWires@...m
Subject: [SkyWires] Re: Revisiting the horizontal loop and looking for some solid design criteria

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5211. MUSEUM SHIPS WEEKEND EVENT

Yahoo group: SkyWires
Date: 2016-06-03 11:44:45 UTC
From: washephe@...
Topic: 5211 Message: 5211

Battleship New Jersey ARS - Museum Weekend Event http://www.nj2bb.org/museum/

http://www.nj2bb.org/museum/

Battleship New Jersey ARS - Museum Weekend Event http://www.nj2bb.org/museum/ MUSEUM SHIPS WEEKEND EVENT sponsored by The Battleship New Jersey Amateur Radio Station MUSEUM SHIPS WEEKEND June 4-5, 2016 0000Z June ...

View on www.nj2bb.org http://www.nj2bb.org/museum/
Preview by Yahoo

5212. 1400' horizontal loop

Yahoo group: SkyWires
Date: 2016-07-26 23:57:10 UTC
From: ab0re@...
Topic: 5212 Message: 5212

Hello,

I'm at my father in laws place for the week. We finally got around to installing a large horizontal loop around his property. The spacing between the poles (7 total) is 1,360', so I estimate the loop is just shy of 1400' with the wire sag take into consideration. The poles are about 35' high.

After running the loop and hooking up a short piece of coax (10') I was disappointed to see how high the swr was everywhere,. 263:1 to 23:1 on 160m, 6.6:1 to 54:1 in 75/80m, 9:1 to 24:1 on 40m, and 5.8:1 to 8.5:1 on 20m. All measurements were taken with a RigExpert AA-600 analyzer. We tried a second jumper to rule out the idea of the jumper possibly being bad. I'd be happy to send the scan file to anybody with the antscope file if they'd like to take a look at it.

Last time I made a loop we cut it for the lower part of 80m and it also had dips at its harmonics. I'm not seeing any such trends with this loop and am looking for any suggestions.

Did we make the loop too long?

Anybody else in the group have a loop of similar circumference that can share their experiences?

Any idea why 160m in particular is so miserably high for vswr?

Anything else to check?

Thanks in advance for any suggestions that are offered!

73,
Dan / ab0re

5213. Re: [SkyWires] 1400' horizontal loop

Yahoo group: SkyWires
Date: 2016-07-27 01:29:22 UTC
From: kent
Topic: 5212 Message: 5213

Hi Dan,

I have an 1100 ft horizontal loop and I feed it with open wire line thru a 1:1 balun and am able to use it on all bands through 6 meters with a tuner. Much better efficiency that with coax!

My 2 cents worth
Good Luck es 73
Kent
N8ZRD
> On Jul 26, 2016, at 7:57 PM, ab0re@... [SkyWires] <SkyWires@yahoogroups.com> wrote:
>
>
> Hello,
>
>
>
> I'm at my father in laws place for the week. We finally got around to installing a large horizontal loop around his property. The spacing between the poles (7 total) is 1,360', so I estimate the loop is just shy of 1400' with the wire sag take into consideration. The poles are about 35' high.
>
>
>
> After running the loop and hooking up a short piece of coax (10') I was disappointed to see how high the swr was everywhere,. 263:1 to 23:1 on 160m, 6.6:1 to 54:1 in 75/80m, 9:1 to 24:1 on 40m, and 5.8:1 to 8.5:1 on 20m. All measurements were taken with a RigExpert AA-600 analyzer. We tried a second jumper to rule out the idea of the jumper possibly being bad. I'd be happy to send the scan file to anybody with the antscope file if they'd like to take a look at it.
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> Last time I made a loop we cut it for the lower part of 80m and it also had dips at its harmonics. I'm not seeing any such trends with this loop and am looking for any suggestions.
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> Did we make the loop too long?
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> Anybody else in the group have a loop of similar circumference that can share their experiences?

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> Any idea why 160m in particular is so miserably high for vswr?
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> Anything else to check?
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>
> Thanks in advance for any suggestions that are offered!
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> 73,
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> Dan / ab0re
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5214. Re: [SkyWires] 1400' horizontal loop

Yahoo group: SkyWires
Date: 2016-07-27 03:43:24 UTC
From: Dan Starkenburg
Topic: 5212 Message: 5214

Hi Kent,

Thanks for the input. I think 1100' would be spot on for 2 wavelengths on 160m, which would perhaps equate to your success. (Our system is 2.64 wavelengths for 160m). Additionally, I've noticed the impedance of our system is quite low, which would also suggest a 1:1 balun would be a better choice than a 4:1 balun.

Open to other suggestions as well.

73,
Dan / ab0re

Sent from my iPad

> On Jul 26, 2016, at 8:29 PM, kent kelandis@earthlink.net [SkyWires] <SkyWires@yahoogroups.com> wrote:
>
> Hi Dan,
>
>
> I have an 1100 ft horizontal loop and I feed it with open wire line thru a 1:1 balun and am able to use it on all bands through 6 meters with a tuner. Much better efficiency that with coax!
>
> My 2 cents worth
> Good Luck es 73
> Kent
> N8ZRD
>> On Jul 26, 2016, at 7:57 PM, ab0re@... [SkyWires] <SkyWires@yahoogroups.com> wrote:
>>
>>
>> Hello,
>>
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>>
>> I'm at my father in laws place for the week. We finally got around to installing a large horizontal loop around his property. The spacing between the poles (7 total) is 1,360', so I estimate the loop is just shy of 1400' with the wire sag take into consideration. The poles are about 35' high.
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>> After running the loop and hooking up a short piece of coax (10') I was disappointed to see how high the swr was everywhere,. 263:1 to 23:1 on 160m, 6.6:1 to 54:1 in 75/80m, 9:1 to 24:1 on 40m, and 5.8:1 to 8.5:1 on 20m. All measurements were taken with a RigExpert AA-600 analyzer. We tried a second jumper to rule out the idea of the jumper possibly being

bad. I'd be happy to send the scan file to anybody with the antscope file if they'd like to take a look at it.
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>> Last time I made a loop we cut it for the lower part of 80m and it also had dips at its harmonics. I'm not seeing any such trends with this loop and am looking for any suggestions.
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>> Did we make the loop too long?
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>> Anybody else in the group have a loop of similar circumference that can share their experiences?
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>> Any idea why 160m in particular is so miserably high for vswr?
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>> Anything else to check?
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>> Thanks in advance for any suggestions that are offered!
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>> 73,
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>> Dan / ab0re
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5215. Re: [SkyWires] 1400' horizontal loop

Yahoo group: SkyWires
Date: 2016-07-27 05:14:20 UTC
From: Andy
Topic: 5212 Message: 5215

For the 1400 foot loop, a quick-and-dirty EZNEC simulation shows the first resonance around 0.7 MHz, nothing good near the first few ham bands, and the 160 meters SWR is >100. It is very much periodic, with resonances at each harmonic, but they are not good for amateur radio.

I think it does what's expected for a loop of that length. With no attempt to be resonant, it won't show a good SWR all by itself. That doesn't mean you can't use it that way. You just need to feed it with a low-loss line (such as open wire) and add a tuner of some sort to match it, mainly to counteract the reactances due to being so far off-resonance. But if you wanted a low SWR with the loop all by itself, you would need to cut it appropriately.

For the 1100 foot loop, it looks like 2 wavelengths long just below the 160 m band.

The actual impedance would depend on where the loop is fed (you didn't say), and which harmonic we're talking about -- or how far away from resonance.

Andy

5216. Re: [SkyWires] 1400' horizontal loop

Yahoo group: SkyWires
Date: 2016-07-27 05:28:00 UTC
From: Dan Starkenburg
Topic: 5212 Message: 5216

Hi Andy,

The loop is fed at the center of the southern-most leg (in platte, sd). Thanks for running it through eznec for us.

Initial indications are that if we skip one of the poles we can maybe turn this into a ~1100' delta loop which may be more favorable for the ham bands.

Hind sight being 20/20, we probably should've modeled this in eznec prior to having the telephone poles placed, but my father in law had a bunch of poles placed that allow for maximum coverage/flexibility.

73,
Dan / ab0re

Sent from my iPad

> On Jul 27, 2016, at 12:14 AM, Andy ai.egrps@... [SkyWires] <SkyWires@yahoogroups.com> wrote:
>
> For the 1400 foot loop, a quick-and-dirty EZNEC simulation shows the first resonance around 0.7 MHz, nothing good near the first few ham bands, and the 160 meters SWR is >100. It is very much periodic, with resonances at each harmonic, but they are not good for amateur radio.
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> I think it does what's expected for a loop of that length. With no attempt to be resonant, it won't show a good SWR all by itself. That doesn't mean you can't use it that way. You just need to feed it with a low-loss line (such as open wire) and add a tuner of some sort to match it, mainly to counteract the reactances due to being so far off-resonance. But if you wanted a low SWR with the loop all by itself, you would need to cut it appropriately.
>
> For the 1100 foot loop, it looks like 2 wavelengths long just below the 160 m band.
>
> The actual impedance would depend on where the loop is fed (you didn't say), and which harmonic we're talking about -- or how far away from resonance.
>
> Andy
>
>
>

5217. Re: [SkyWires] 1400' horizontal loop

Yahoo group: SkyWires
Date: 2016-07-27 11:40:54 UTC
From: rdj@...
Topic: 5212 Message: 5217

I put up a 550ft delta loop and did a fine adjustment in length for good SWR on 40M. It works with reasonable dips in most ham bands so you should have good luck starting with 1100.

Rich, Kd0zz

----- Original Message -----

From: "Dan Starkenburg ab0re@... [SkyWires]" <SkyWires@yahoogroups.com>
To: SkyWires@yahoogroups.com
Sent: Wednesday, July 27, 2016 12:28:00 AM
Subject: Re: [SkyWires] 1400' horizontal loop

Hi Andy,

The loop is fed at the center of the southern-most leg (in platte, sd). Thanks for running it through eznec for us.

Initial indications are that if we skip one of the poles we can maybe turn this into a ~1100' delta loop which may be more favorable for the ham bands.

Hind sight being 20/20, we probably should've modeled this in eznec prior to having the telephone poles placed, but my father in law had a bunch of poles placed that allow for maximum coverage/flexibility.

73,
Dan / ab0re

Sent from my iPad

On Jul 27, 2016, at 12:14 AM, Andy ai.egrps@... [SkyWires] < SkyWires@yahoogroups.com > wrote:

For the 1400 foot loop, a quick-and-dirty EZNEC simulation shows the first resonance around 0.7 MHz, nothing good near the first few ham bands, and the 160 meters SWR is >100. It is very much periodic, with resonances at each harmonic, but they are not good for amateur radio.

I think it does what's expected for a loop of that length. With no attempt to be resonant, it won't show a good SWR all by itself. That doesn't mean you can't use it that way. You just need to feed it with a low-loss line (such as open wire) and add a tuner of some sort to match it, mainly to counteract the reactances due to being so far off-resonance. But if you wanted a low SWR with the loop all by itself, you would need to cut it appropriately.

For the 1100 foot loop, it looks like 2 wavelengths long just below the 160 m band.

The actual impedance would depend on where the loop is fed (you didn't say), and which harmonic we're talking about -- or how far away from resonance.

Andy

5218. Re: [SkyWires] Field Day 565' loop - am I missing something?

Yahoo group: SkyWires
Date: 2016-07-27 11:44:41 UTC
From: email4utoo@...
Topic: 4951 Message: 5218

HELLO ,
will just share what works here, my Loop is a very Lazy looking sagging long semi square wire ,
approx, 528 to 550 ft in length,(used a roll and added to it to reach my EMT pole masts),, it is Fed with homemade ugly ladder line about 150 ft long , The feed point is about 8-10ft off one mast at about 12ft,so the wire comes down to a V, lol . I will raise it sometime to see what happens, but if it works why fix it ?
Used 12ga insulated , up about 38-40' ft , ON EMT Poles that taper from 2 1/2 up to top at 1" , loosely guyed so very flexable , If i would recommend , it would be larger diameter all the way up ,i have seen couplers some Ham OP is selling that look strong enough , and even tilt up bases .
I use an old Heathkit 2060A Tuner , which has its own Balun- 4:1 , inside , Use this Loop for 160m-10m, now not perfect on 10m but have made many contacts , I usually run 100-400 watts PEP depending on conditions .
on 13 Colonies contest , i had Clean Sweep including GB . It has been Exceptional , and dont ask for pics , Hihi, it is embarassingly Ugly ! LOL , I use an old TS930s ,has tuner, which i bypass , and an oldie Dentron AMp,,, I even lost 2 sections when my one guy on one pole mast bent from winds , and tied it off at lower height and still have Great Signal reports and asked all the time on net to be relay ,LOL

I call my Loop - The Hillbilly Loop , with Fondness ,not as an insult , LOL

Best Wishes, AJ W5HEH

ps had OCF not even close !!!!

5219. Re: [SkyWires] Field Day 565' loop - am I missing something?

Yahoo group: SkyWires
Date: 2016-07-27 12:05:26 UTC
From: rdj@...
Topic: 4951 Message: 5219

I like the name "hillbilly loop" , that also describes mine. I also did a 500ft roll of 12ga and added some. I used a split bolt for easy length adjustment.and had to trim a few trees for a path.
http://i1102.photobucket.com/albums/g453/KD0ZZ/160%20Loop/f5749f13-1228-45a0-9d3a-c87040d38332_zps8eaf1984.jpg
also a picture of my 4:1 x 1:1 switchable balun.
http://i1102.photobucket.com/albums/g453/KD0ZZ/160%20Loop/4to11to12_zps3e1cbb86.jpg

Rich, kd0zz

----- Original Message -----

From: "email4utoo@... [SkyWires]" <SkyWires@yahoogroups.com>
To: SkyWires@yahoogroups.com
Sent: Wednesday, July 27, 2016 6:44:41 AM
Subject: Re: [SkyWires] Field Day 565' loop - am I missing something?

HELLO ,
will just share what works here, my Loop is a very Lazy looking sagging long semi square wire ,
approx, 528 to 550 ft in length,(used a roll and added to it to reach my EMT pole masts),, it is Fed with homemade ugly ladder line about 150 ft long , The feed point is about 8-10ft off one mast at about 12ft,so the wire comes down to a V, lol . I will raise it sometime to see what happens, but if it works why fix it ?
Used 12ga insulated , up about 38-40' ft , ON EMT Poles that taper from 2 1/2 up to top at 1" , loosely guyed so very flexable , If i would recommend , it would be larger diameter all the way up ,i have seen couplers some Ham OP is selling that look strong enough , and even tilt up bases .
I use an old Heathkit 2060A Tuner , which has its own Balun- 4:1 , inside , Use this Loop for 160m-10m, now not perfect on 10m but have made many contacts , I usually run 100-400 watts PEP depending on conditions .
on 13 Colonies contest , i had Clean Sweep including GB . It has been Exceptional , and dont ask for pics , Hihi, it is embarassingly Ugly ! LOL , I use an old TS930s ,has tuner, which i bypass , and an oldie Dentron AMp,,, I even lost 2 sections when my one guy on one pole mast bent from winds , and tied it off at lower height and still have Great Signal reports and asked all the time on net to be relay ,LOL

I call my Loop - The Hillbilly Loop , with Fondness ,not as an insult , LOL

Best Wishes, AJ W5HEH

ps had OCF not even close !!!!

5222. Re: [SkyWires] 1400' horizontal loop

Yahoo group: SkyWires
Date: 2016-07-27 20:36:06 UTC
From: raymond mitchell
Topic: 5212 Message: 5222

I would think 1,150ft or 1,725ft would put you in the digital (or CW) end of 20m - 80m, if you are using insulated wire, where you may not even need a tuner. Most tuners should still tune 160m. I use 575ft (574' that stretched about a foot) and it tunes easy on all of 10m - 80m using a 4:1 balun, 160 tunes without the balun in line.
Abe K7ABE

On Wednesday, July 27, 2016 4:40 AM, "rdj@... [SkyWires]" <SkyWires@yahoogroups.com> wrote:

I put up a 550ft delta loop and did a fine adjustment in length for good SWR on 40M. It works with reasonable dips in most ham bands so you should have good luck starting with 1100.

Rich, Kd0zz

From: "Dan Starkenburg ab0re@... [SkyWires]" <SkyWires@yahoogroups.com>
To: SkyWires@yahoogroups.com
Sent: Wednesday, July 27, 2016 12:28:00 AM
Subject: Re: [SkyWires] 1400' horizontal loop

Hi Andy,
The loop is fed at the center of the southern-most leg (in platte, sd). Thanks for running it through eznec for us.
Initial indications are that if we skip one of the poles we can maybe turn this into a ~1100' delta loop which may be more favorable for the ham bands.
Hind sight being 20/20, we probably should've modeled this in eznec prior to having the telephone poles placed, but my father in law had a bunch of poles placed that allow for maximum coverage/flexibility.
73,Dan / ab0re

Sent from my iPad
On Jul 27, 2016, at 12:14 AM, Andy ai.egrps@... [SkyWires] <SkyWires@yahoogroups.com> wrote:

For the 1400 foot loop, a quick-and-dirty EZNEC simulation shows the first resonance around 0.7 MHz, nothing good near the first few ham bands, and the 160 meters SWR is >100. It is very much periodic, with resonances at each harmonic, but they are not good for amateur radio.
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For the 1100 foot loop, it looks like 2 wavelengths long just below the 160 m band.
The actual impedance would depend on where the loop is fed (you didn't say), and which harmonic we're talking about -- or how far away from resonance.
Andy

5223. For Sale 2KW 4:1 Dual Core, Current Balun (200/50 ohm), with CMC Chokes.

Yahoo group: SkyWires
Date: 2016-08-25 14:38:56 UTC
From: everettsharp@...
Topic: 5223 Message: 5223

I have for sale 2 each;
2KW 4:1 Dual Core, Current Balun (200/50 ohm), with CMC Chokes.
I am asking $110 each, which includes the shipping to the lower 48 states, I also have 3 smaller ones that are also combination of a 4:1 balun and a CMC choke and should be good for 500 watts. I am asking $80 each, which also includes the shipping. I don't think that anyone is building any commercial versions of these baluns?

If any one is interested please contact me off list at everettsharp@aol.com. I can provide more detail if interested,
.Everett N4CY

5224. Re: [SkyWires] For Sale 2KW 4:1 Dual Core, Current Balun (200/50 ohm), with CMC Chokes.

Yahoo group: SkyWires
Date: 2016-08-25 21:44:06 UTC
From: Everett Sharp
Topic: 5223 Message: 5224

I have sold one of the 2KW balun/choke combos and have one left. I have sold two of the 500 watt balun/choke combos and have one left.

Everett N4CY

Sent from my iPad

> On Aug 25, 2016, at 9:38 AM, everettsharp@... [windom_antenna] <windom_antenna@yahoogroups.com> wrote:
>
> I have for sale 2 each;
>
> 2KW 4:1 Dual Core, Current Balun (200/50 ohm), with CMC Chokes.
>
> I am asking $110 each, which includes the shipping to the lower 48 states, I also have 3 smaller ones that are also combination of a 4:1 balun and a CMC choke and should be good for 500 watts. I am asking $80 each, which also includes the shipping. I don't think that anyone is building any commercial versions of these baluns?
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> If any one is interested please contact me off list at everettsharp@.... I can provide more detail if interested,
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> .Everett N4CY
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Sent from my iPad

> On Aug 25, 2016, at 9:38 AM, everettsharp@... [SkyWires] <SkyWires@yahoogroups.com> wrote:
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> I have for sale 2 each;
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> 2KW 4:1 Dual Core, Current Balun (200/50 ohm), with CMC Chokes.

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> If any one is interested please contact me off list at everettsharp@.... I can prov ide more detail if interested,
>
> .Everett N4CY
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5225. Re: [SkyWires] For Sale 2KW 4:1 Dual Core, Current Balun (200/50 ohm), with CMC Chokes.

Yahoo group: SkyWires
Date: 2016-08-28 11:28:22 UTC
From: Everett Sharp
Topic: 5223 Message: 5225

I still have one 500W and one 2KW balun/choke combination still for sale.

Sent from my iPad

> On Aug 25, 2016, at 4:44 PM, Everett Sharp <everettsharp@...> wrote:
>
> I have sold one of the 2KW balun/choke combos and have one left. I have sold two of the 500 watt balun/choke combos and have one left.
>
> Everett N4CY
>
> Sent from my iPad
>
> On Aug 25, 2016, at 9:38 AM, everettsharp@... [windom_antenna] <windom_antenna@yahoogroups.com> wrote:
>
>> I have for sale 2 each;
>>
>> 2KW 4:1 Dual Core, Current Balun (200/50 ohm), with CMC Chokes.
>>
>> I am asking $110 each, which includes the shipping to the lower 48 states, I also have 3 smaller ones that are also combination of a 4:1 balun and a CMC choke and should be good for 500 watts. I am asking $80 each, which also includes the shipping. I don't think that anyone is building any commercial versions of these baluns?
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>>
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>> If any one is interested please contact me off list at everettsharp@.... I can provide more detail if interested,
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>> .Everett N4CY
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> Sent from my iPad

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>> .Everett N4CY
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5226. anyone here used or hear of loop under loop to ground ?

Yahoo group: SkyWires
Date: 2016-08-29 18:23:37 UTC
From: email4utoo@...
Topic: 5226 Message: 5226

Heard an OM ,
who told me of a under loop under his full size horizontal loop , about 5-10% size of the upper loop, about 8-10 ft off the ground connected to Ground Rod . This Fellow had a very strong signal ,, Any of you hear of this or have any ideas ?

TNX and 73s, AJ W5HEH

5227. Re: [SkyWires] anyone here used or hear of loop under loop to ground ?

Yahoo group: SkyWires
Date: 2016-08-29 18:28:53 UTC
From: Lee McDaniel
Topic: 5226 Message: 5227

Yes...very Similar to NVIS with counter poise. It turns it into a horizontal cloud warmer. This can be very good (depending of freq and propagation) to firm signal up closer in to your qth.
   Hope this helps 73 Lee

Sent from Yahoo Mail on Android

On Mon, Aug 29, 2016 at 2:23 PM, email4utoo@... [SkyWires]<SkyWires@yahoogroups.com> wrote:
Heard an OM ,
    who told me of a under loop under his full size horizontal loop , about 5-10% size of the upper loop, about 8-10 ft off the ground connected to Ground Rod . This Fellow had a very strong signal ,, Any of you hear of this or have any ideas ?

 TNX and 73s, AJ W5HEH

5228. Re: [SkyWires] anyone here used or hear of loop under loop to ground ?

Yahoo group: SkyWires
Date: 2016-08-29 18:36:25 UTC
From: Clayton Nall
Topic: 5226 Message: 5228

Is that something like what's described here?
http://www.w9xt.com/page_radio_gadgets_nvis_antenna.html

How do you know this short reflector is really doing anyt hing? Depending on the height of the loop, how do you know the fine performance is not just the cloudwarming nature of the main loop near its fundamental frequency when it's horizontal?

C

On Mon, Aug 29, 2016 at 11:28 AM, Lee McDaniel wb4qoj@... [SkyWires] <SkyWires@yahoogroups.com> wrote:

>
>
> Yes...very Similar to NVIS with counter poise. It turns it into a
> horizontal cloud warmer. This can be very good (depending of freq and
> propagation) to firm signal up closer in to your qth.
>
> Hope this helps 73 Lee
>
> Sent from Yahoo Mail on Android
> <https://overview.mail.yahoo.com/mobile/?.src=Android>
>
>
>
> Heard an OM ,
> who told me of a under loop under his full size horizontal loop ,
> about 5-10% size of the upper loop, about 8-10 ft off the ground connected
> to Ground Rod . This Fellow had a very strong signal ,, Any of you hear of
> this or have any ideas ?
>
> TNX and 73s, AJ W5HEH
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>

--
Clayton Nall
http://www.nallresearch.com
Work: (650) 725-4076
Cell: (617) 850-2062

5229. Re: [SkyWires] anyone here used or hear of loop under loop to ground ?

Yahoo group: SkyWires
Date: 2016-08-29 21:44:49 UTC
From: Evan
Topic: 5226 Message: 5229

AJ,

Sounds like that information is a bit sketchy if not incorrect. First, if one wanted to have a reflector loop under a "driven loop", a lot depends on spacing, NOT just that 8-10 ft off the ground but also the spacing between the driven loop and the reflector, which is a function of wavelength. That "5-10%" figure is incorrect and if anything, it might be 105-110% BUT that has to be approached from the standpoint of the change in the wavelength of the reflector loop based upon proximity to ground. Connecting it to a ground rod is of questionable benefit unless one is concerned about static buildup perhaps.

I've been experimenting and using horizontal loop antennas for almost 30 years and have found them to be quite satisfactory for my operating activities. For those that believe they can't be used for DX, I've worked Antartica, Canary Islands, Italy on a regular basis, Belgium, Germany, India, etc. etc. While not a DXer, I have worked some DX but haven't really tried.

There is a lot of info on the Internet about horizontal loop antennas, and some of it is even correct!

73,

Evan, K9SQG

-----Original Message-----
From: email4utoo@... [SkyWires] <SkyWires@yahoogroups.com>
To: SkyWires <SkyWires@yahoogroups.com>
Sent: Mon, Aug 29, 2016 2:23 pm
Subject: [SkyWires] anyone here used or hear of loop under loop to ground ?

Heard an OM ,
who told me of a under loop under his full size horizontal loop , about 5-10% size of the upper loop, about 8-10 ft off the ground connected to Ground Rod . This Fellow had a very strong signal ,, Any of you hear of this or have any ideas ?

TNX and 73s, AJ W5HEH

5230. Re: [SkyWires] anyone here used or hear of loop under loop to ground ?

Yahoo group: SkyWires
Date: 2016-08-29 23:00:19 UTC
From: Bornofthehorses
Topic: 5226 Message: 5230

Running the same thing on a 80m full size loop at 35ft lower loop at 10ft without a ground will try that now and see how it works out. Ken

On Monday, August 29, 2016 2:44 PM, "Evan k9sqg@... [SkyWires]" <SkyWires@yahoogroups.com> wrote:

5231. Re: [SkyWires] anyone here used or hear of loop under loop to ground ?

Yahoo group: SkyWires
Date: 2016-08-30 01:04:22 UTC
From: email4utoo@...
Topic: 5226 Message: 5231

TNX EVAN , for the info , yes my 160full loop is working well , and have also worked plenty of DX , including Iceland recently thru the pile ups . Had heard and wrote some notes on that one mentioned and wondered if it really would increase signal , and rx. 73s

5232. Re: [SkyWires] anyone here used or hear of loop under loop to ground ?

Yahoo group: SkyWires
Date: 2016-08-30 01:09:48 UTC
From: email4utoo@...
Topic: 5226 Message: 5232

KEN , this OM attached his underloop to a Ground Rod , let us know how yours works out , 73s ALL for sharing , appreciate the input , with other LOOPers , AJ W5HEH

5233. Re: [SkyWires] anyone here used or hear of loop under loop to ground ?

Yahoo group: SkyWires
Date: 2016-08-30 01:11:50 UTC
From: email4utoo@...
Topic: 5226 Message: 5233

CLAYTON, maybe in theory, picture two horizontal loops one over the other ,

5234. Re: [SkyWires] anyone here used or hear of loop under loop to ground ?

Yahoo group: SkyWires
Date: 2016-08-30 03:40:51 UTC
From: Evan
Topic: 5226 Message: 5234

Ham radio, like many things in life, has no free lunch. A reflector under a horizontal loop might help to reduce ground loss depending on local terrain. But the "price" one might pay is changing the radiation pattern. Though not strictly comparable, if one looks at the pattern for a single quad loop, and then a loop with a reflector, one can readily see the difference in radiation patterns. When reflecting reflections via the overhead ionosphere, one can see that altering the incident wave will indeed affect the reflected wave. Whether this is good or bad depends on one's operating goals.

73,

Evan, K9SQG

-----Original Message-----
From: email4utoo@yahoo.com [SkyWires] <SkyWires@yahoogroups.com>
To: SkyWires <SkyWires@yahoogroups.com>
Sent: Mon, Aug 29, 2016 9:11 pm
Subject: Re: [SkyWires] anyone here used or hear of loop under loop to ground ?

CLAYTON, maybe in theory, picture two horizontal loops one over the other ,

5235. Re: [SkyWires] anyone here used or hear of loop under loop to ground ?

Yahoo group: SkyWires
Date: 2016-08-31 04:44:49 UTC
From: Evan
Topic: 5226 Message: 5235

If one has reasonable ground conductivity, a reflector element wouldn't help dramatically, with poor soil it would IF tuned as a reflector for each and every frequency used. I would imagine a chicken wire ground screen, in a pattern just under the antenna and laid on the ground, would help for poor soil conductivity. Based upon my measurements, a 1-2 S-unit reduction in noise is a great benefit with the loop!

-----Original Message-----
From: email4utoo@... [SkyWires] <SkyWires@yahoogroups.com>
To: SkyWires <SkyWires@yahoogroups.com>
Sent: Mon, Aug 29, 2016 9:04 pm
Subject: Re: [SkyWires] anyone here used or hear of loop under loop to ground ?

TNX EVAN , for the info , yes my 160full loop is working well , and have also worked plenty of DX , including Iceland recently thru the pile ups . Had heard and wrote some notes on that one mentioned and wondered if it really would increase signal , and rx. 73s

5236. 500 Watt Balun/Choke For Sale

Yahoo group: SkyWires
Date: 2016-09-29 11:05:25 UTC
From: everettsharp@...
Topic: 5236 Message: 5236

I just finished building 4 more of my 500 watt 4:1 current balun/choke combinations. The design uses 2 F150K cores for the 4:1 balun and a FT140-43 core for the choke. They are all enclosed in a very nice compact package that weights 15.4 oz. All of the hardware is stainless steel and the UHF connector has a Teflon insulator.

The 4:1 balun is wound with 16 gage Thermaleze-Coated Magnet Wire with a Teflon sleeve over the wire. The common mode choke is wound with 17 turns of RG316 coax. I am asking $85, which includes shipping, one of the 4 was sold so there are still 3 left. These will more than likely will be the last that I build to sell. If interested please contact me off list at everettsharp@aol.com. Everett N4CY

5237. New here: A Few Questions....

Yahoo group: SkyWires
Date: 2016-10-03 22:29:59 UTC
From: dustin.willett@...
Topic: 5237 Message: 5237

Hello all - I will be installing a full wave loop on the top of my county courthouse sometime in the near future for EOC/Auxcomm work. I have a few questions (both mechanical and theoretical):
I have read a few comments that reference using a weighted pulley system to both keep tension as well as build in a little "give." I like the concept/idea, but I'm not envisioning how the actual mechanical system would work. Does anyone have a simple diagram that shows how this works? I have a 1000' spool of No. 13 Poly-Stealth antenna wire - I've read several opinions regarding actual length of a full 160-meter loop due to differences in velocity factor, etc... including one very specific reference/preference for 574'. My intent is to erect an antenna that works across as many HF bands as possible, not singling one out specifically at the expense of another. Any thoughts on how many feet of wire would be optimal? I've read/researched a bit, and it seems like there are several folks who go the 4:1 route and several who prefer the 1:1. I'd like to hear anyone's preferences.

I have some challenges that have limited some choices in my design (how far I can run ladder line, etc...), but these are the supplies I currently have on hand (I am willing to consider other options, if there is good cause): the ends of the loop will run approx. 20ft to an Array Solutions 309H surge suppressor via DX Engineering 300ohm ladder line, from there I have a run of approx. 100ft to a Balun Designs Model 1171 - 1:1 ATU Current Balun. I'm currently planning on making this run with doubled 93-ohm RG-62 in a shielded balanced line configuration (By necessity, I have to run through quite a bit of 3/4" EMT, hence no ladder line). Then a short 3' piece of LMR 400 from the 1:1 balun to a Palstar HF-Auto tuner (8:1 matching) and finally an ICOM 9100.

I'd be interested in hearing pros/cons regarding the radio/tuner-side 1:1 current balun with the doubled RG-62 out of the building versus running LMR 400 from the radio/tuner out of the building to an antenna-side 4:1 balun?

I apologize if I've asked for too much heavy lifting - I am the first to admit my weakness in theory and I have gotten quite muddled trying to design this system - any help would be greatly appreciated!

73

Dustin

5238. Re: [SkyWires] New here: A Few Questions....

Yahoo group: SkyWires
Date: 2016-10-04 01:53:33 UTC
From: rdj@...
Topic: 5237 Message: 5238
Attachments: 1 described; binary payloads are missing from this source WARC

----- Original Message -----

From: rdj@...
To: SkyWires@yahoogroups.com
Sent: Monday, October 3, 2016 8:40:29 PM
Subject: Re: [SkyWires] New here: A Few Questions....

Here is a rough sketch of how I support two corners of my delta loop. Let me know it the attachment comes thru, it not email me direct and I will send it.
FYI , I run a 160 size loop, coax fed and a homemade 4:1 balun
http://i1102.photobucket.com/albums/g453/KD0ZZ/4%20to%201/4%20to%201%20008_zps2q5parns.jpg

Lets take one question at a time.

Rich, Kd0zz

----- Original Message -----

From: "dustin.willett@yahoo.com [SkyWires]" <SkyWires@yahoogroups.com>
To: SkyWires@yahoogroups.com
Sent: Monday, October 3, 2016 5:29:59 PM
Subject: [SkyWires] New here: A Few Questions....

Hello all - I will be installing a full wave loop on the top of my county courthouse sometime in the near future for EOC/Auxcomm work. I have a few questions (both mechanical and theoretical):

* I have read a few comments that reference using a weighted pulley system to both keep tension as well as build in a little "give." I like the concept/idea, but I'm not envisioning how the actual mechanical system would work. Does anyone have a simple diagram that shows how this works?
* I have a 1000' spool of No. 13 Poly-Stealth antenna wire - I've read several opinions regarding actual length of a full 160-meter loop due to differences in velocity factor, etc... including one very specific reference/preference for 574'. My intent is to erect an antenna that works across as many HF bands as possible, not singling one out specifically at the expense of another. Any thoughts on how many feet of wire would be optimal?
* I've read/researched a bit, and it seems like there are several folks who go the 4:1 route and several who prefer the 1:1. I'd like to hear anyone's preferences.

I have some challenges that have limited some choices in my design (how far I can run ladder line, etc...), but these are the supplies I currently have on hand (I am willing to consider other options, if there is good cause): the ends of the loop will run approx. 20ft to an Array Solutions 309H surge suppressor via DX Engineering 300ohm ladder line, from there I have a run of approx. 100ft to a Balun Designs Model 1171 - 1:1 ATU Current Balun. I'm currently planning on making this run with doubled 93-ohm RG-62 in a shielded balanced line configuration (By necessity, I have to run through quite a bit of 3/4" EMT, hence no

ladder line). Then a short 3' piece of LMR 400 from the 1:1 balun to a Palstar HF-Auto tuner (8:1 matching) and finally an ICOM 9100.

I'd be interested in hearing pros/cons regarding the radio/tuner-side 1:1 current balun with the doubled RG-62 out of the building versus running LMR 400 from the radio/tuner out of the building to an antenna-side 4:1 balun?

I apologize if I've asked for too much heavy lifting - I am the first to admit my weakness in theory and I have gotten quite muddled trying to design this system - any help would be greatly appreciated!

73

Dustin

5239. Re: 500 Watt Balun/Choke For Sale

Yahoo group: SkyWires
Date: 2016-10-04 09:57:26 UTC
From: everettsharp@...
Topic: 5236 Message: 5239

Guys,

I still have 2 of these balun/choke combinations for sale, they will probably be the last that I offer for sale. If interested the price is $85, which includes shipping. Please contact me off list at everettsharp@aol.com.

Everett N4CY

5240. Re: [SkyWires] New here: A Few Questions....

Yahoo group: SkyWires
Date: 2016-10-04 14:27:40 UTC
From: dustin.willett@...
Topic: 5237 Message: 5240

Thanks! I knew there had to be a simple mechanical solution that I was just not getting. Your attachment came through and makes perfect sense.

Dustin, W2EMA

5241. Re: [SkyWires] New here: A Few Questions....

Yahoo group: SkyWires
Date: 2016-10-04 15:49:38 UTC
From: rdj@...
Topic: 5237 Message: 5241

I use old fashion window sash weights. Pulleys are for clothes line from big box hardware store.

----- Original Message -----

From: "dustin.willett@... [SkyWires]" <SkyWires@yahoogroups.com>
To: SkyWires@yahoogroups.com
Sent: Tuesday, October 4, 2016 9:27:40 AM
Subject: Re: [SkyWires] New here: A Few Questions....

Thanks! I knew there had to be a simple mechanical solution that I was just not getting. Your attachment came through and makes perfect sense.

Dustin, W2EMA

5242. Re: [SkyWires] New here: A Few Questions....

Yahoo group: SkyWires
Date: 2016-10-04 16:48:00 UTC
From: Evan
Topic: 5237 Message: 5242

I use pulleys designed for sailboats, they have Lexan parts, stainless steel sides, and have been up over 15 years with no sign of deterioration. Instead of weights, I use truck tie-downs or bungee-cords.

-----Original Message-----
From: rdj@... [SkyWires] <SkyWires@yahoogroups.com>
To: SkyWires <SkyWires@yahoogroups.com>
Sent: Tue, Oct 4, 2016 11:49 am
Subject: Re: [SkyWires] New here: A Few Questions....

I use old fashion window sash weights. Pulleys are for clothes line from big box hardware store.

From: "dustin.willett@... [SkyWires]" <SkyWires@yahoogroups.com>
To: SkyWires@yahoogroups.com
Sent: Tuesday, October 4, 2016 9:27:40 AM
Subject: Re: [SkyWires] New here: A Few Questions....

Thanks! I knew there had to be a simple mechanical so lution that I was just not getting. Your attachment came through and makes perfect sense.

Dustin, W2EMA

5243. Re: [SkyWires] Re: 500 Watt Balun/Choke For Sale

Yahoo group: SkyWires
Date: 2016-10-06 10:53:35 UTC
From: Everett Sharp
Topic: 5236 Message: 5243

I just have one of the baluns left for sale, there will be no more of the 500 watt baluns after it is sold.

Everett N4CY

Sent from my iPad

> On Oct 4, 2016, at 4:57 AM, everettsharp@... [SkyWires] <SkyWires@yahoogroups.com> wrote:
>
> Guys,
>
>
> I still have 2 of these balun/choke combinations for sale, they will probably be the last that I offer for sale. If interested the price is $85, which includes shipping. Please contact me off list at everettsharp@....
>
> Everett N4CY
>

5244. Where does the loop radiate?

Yahoo group: SkyWires
Date: 2016-10-12 20:52:28 UTC
From: rzar66@...
Topic: 5244 Message: 5244

Hello all.

I'm new here and also a new ham. Last weekend I put up an 80m tilted horizontal loop in my back yard and it is working great. Was able to work Brazil, Puerto Rico, Alaska, and Canada. This being my first HF antenna I am very happy with it so far. The shape of my loop is nearly a perfect square which has me wondering, does my antenna radiate from all sides of the antenna? Do all sides radiate equally? I understand that the loop is omidirectional but is that because all sides of the square radiate?

Thanks
Ryan
W6ZAR

5245. Re: [SkyWires] Where does the loop radiate?

Yahoo group: SkyWires
Date: 2016-10-12 23:07:14 UTC
From: Evan
Topic: 5244 Message: 5245

Ryan,

Not sure I would call the antenna omnidirectional. Why? It depends on a lot of factors including the frequency (and I'll assume you are talking about the fundamental), terrain under the antenna, ground conductivity, buildings or objects in the region, etc. etc. You're best bet is to look at idealized radiation patterns from computer models. LB Cebik, W4RNL, has done extensive work in this area and his findings are available online and in his books. Generally speaking the antenna is radiating straight up and, depending on the vagaries of the ionosphere, it will radiate in many directions. However, there might be nulls and such. In general you can consider it somewhat omnidirectional on the fundamental, and as a generalization it will probably apply to your antenna.

I've been using and experimenting with horizontal loops for over 25 years and have found them suitable for my operating preferences.

73,

Evan, K9SQG

-----Original Message-----
From: rzar66@... [SkyWires] <SkyWires@yahoogroups.com>
To: SkyWires <SkyWires@yahoogroups.com>
Sent: Wed, Oct 12, 2016 4:52 pm
Subject: [SkyWires] Where does the loop radiate?

Hello all.

I'm new here and also a new ham. Last weekend I put up an 80m tilted horizontal loop in my back yard and it is working great. Was able to work Brazil, Puerto Rico, Alaska, and Canada. This being my first HF antenna I am very happy with it so far. The shape of my loop is nearly a perfect square which has me wondering, does my antenna radiate from all sides of the antenna? Do all sides radiate equally? I understand that the loop is omidirectional but is that because all sides of the square radiate?

Thanks
Ryan
W6ZAR

5246. Re: [SkyWires] Where does the loop radiate?

Yahoo group: SkyWires
Date: 2016-10-13 01:39:35 UTC
From: R.S.
Topic: 5244 Message: 5246

Evan,
Thanks for the explanation. I guess what I meant was is the whole 260 feet of the wire radiating around my square shape loop when I transmit?

Sent from Yahoo Mail on Android

On Wed, Oct 12, 2016 at 16:07, Evan k9sqg@... [SkyWires]<SkyWires@yahoogroups.com> wrote:

Ryan,

Not sure I would call the antenna omnidirectional. Why? It depends on a lot of factors including the frequency (and I'll assume you are talking about the fundamental), terrain under the antenna, ground conductivity, buildings or objects in the region, etc. etc.
 You're best bet is to look at idealized radiation patterns from computer models. LB Cebik, W4RNL, has done extensive work in this area and his findings are available online and in his books. Generally speaking the antenna is radiating straight up and, depending on the vagaries of the ionosphere, it will radiate in many directions. However, there might be nulls and such. In general you can consider it somewhat omnidirectional on the fundamental, and as a generalization it will probably apply to your antenna.
I've been using and experimenting with horizontal loops for over 25 years and have found them suitable for my operating preferences.
73,
Evan, K9SQG

-----Original Message-----
From: rzar66@... [SkyWires] <SkyWires@yahoogroups.com>
To: SkyWires <SkyWires@yahoogroups.com>
Sent: Wed, Oct 12, 2016 4:52 pm
Subject: [SkyWires] Where does the loop radiate?

  Hello all.
I'm new here and also a new ham. Last weekend I put up an 80m tilted horizontal loop in my back yard and it is working great. Was able to work Brazil, Puerto Rico, Alaska, and Canada. This being my first HF antenna I am very happy with it so far. The shape of my loop is nearly a perfect square which has me wondering, does my antenna radiate from all sides of the antenna? Do all sides radiate equally? I understand that the loop is omidirectional but is that because all sides of the square radiate?
ThanksRyanW6ZAR

5247. Re: Where does the loop radiate?

Yahoo group: SkyWires
Date: 2016-10-13 17:34:27 UTC
From: Skip Guenter
Topic: 5244 Message: 5247

Ryan,

I think the direct answer is "yes" but I've read or have been told that they usually radiate stronger in the direction opposite the feedpoint but many folks here have much better knowledge on this than I.

/"I guess what I meant was is the whole 260 feet of the wire radiating around my square shape loop when I transmit?"

/Skip

--
S. R. 'Skip' Guenter, K5SRG

5248. Re: [SkyWires] Re: Where does the loop radiate?

Yahoo group: SkyWires
Date: 2016-10-16 21:07:43 UTC
From: R.S.
Topic: 5244 Message: 5248

Skip,
That's what I've read also. That's a good thing for me since the opposite of my feed point is the highest point of my loop. Just worked a station in Colombia on 10m with only 5 watts.
RyanW6ZAR

Sent from Yahoo Mail on Android

On Thu, Oct 13, 2016 at 10:34, Skip Guenter k5srg@...m [SkyWires]<SkyWires@yahoogroups.com> wrote:
Ryan,

I think the direct answer is "yes" but I've read or have been told that they usually radiate stronger in the direction opposite the feedpoint but many folks here have much better knowledge on this than I.

"I guess what I meant was is the whole 260 feet of the wire radiating around my square shape loop when I transmit?"

Skip

--
S. R. 'Skip' Guenter, K5SRG

5249. Auto Couplers

Yahoo group: SkyWires
Date: 2016-10-20 21:29:56 UTC
From: kb7oom@...
Topic: 5249 Message: 5249

I am currently in the planning process of putting up an 80M square HL. Does anyone have any experience using an auto coupler with the same or similar setup? If so, how was the result of the operation? Seriously looking at the SGC-237.

Thanks in advance.

Mark

5250. Re: [SkyWires] Auto Couplers

Yahoo group: SkyWires
Date: 2016-10-20 22:25:07 UTC
From: Evan
Topic: 5249 Message: 5250

Same principles apply to manual tuners. It all depends on the antenna system, bands of interest, and the resulting impedance of the antenna system, resistive AND inductive components. Then it is a matter of whether or not these fall within the matching range of the tuner. Unfortunately, the manufacturers rarely tell you the reactive matching range and instead just talk SWR or the resistive component. Makes the decision process a tad bit more difficult but that's what happens when marketing overpowers the technical folks.

73,

Evan, K9SQG

-----Original Message-----
From: kb7oom@yahoo.com [SkyWires] <SkyWires@yahoogroups.com>
To: SkyWires <SkyWires@yahoogroups.com>
Sent: Thu, Oct 20, 2016 5:29 pm
Subject: [SkyWires] Auto Couplers

I am currently in the planning process of putting up an 80M square HL. Does anyone have any experience using an auto coupler with the same or similar setup? If so, how was the result of the operation? Seriously looking at the SGC-237.

Thanks in advance.

Mark

5251. Re: Auto Couplers

Yahoo group: SkyWires
Date: 2016-10-24 07:19:49 UTC
From: vk5zuc@...
Topic: 5249 Message: 5251

Mark,
I have had an 80M HFWL for years. As its low it is a "cloud warmer" but good for NVIS on 80m but also does work some DX. No tuner needed on 80m. I have used it on all bands with 3:1 internal tuners and coax feed.
40m has the highest impedance so I have a quarter wave section of 75ohm coax in line to help the tuner.
With a 10:1 tuner it is not needed.
Andrew VK5CV

5252. Re: [SkyWires] Re: Auto Couplers

Yahoo group: SkyWires
Date: 2016-11-02 20:43:21 UTC
From: Mark J
Topic: 5249 Message: 5252

Thanks gentlemen. I continue to do more research.
I did a very rough sketch of the layout of my wire route and it turns out to be around 288ft long from end to end, in a sort of trapezoid shape. Since I don't do anything on 160, I figure I should tune up well on the other bands. I own a MFJ 948 (949E w/o the dummy load) and am hoping, by all I have read, with its internal 4:1 balun, it should suffice my tuning and connection requirements. So with that, I am going to give that a try first before making an expensive (to me) purchase. If not, I have friends with other tuners I can try by bypassing the 948's tuner features and using the others to match up.
I am sure it'll work pretty well locally with NVIS on 80m, but am hoping to get out a little ways. I discovered the digital modes last year so am also hoping to finally get a card from Europe.
Regards,MarkKB7OOMKeizer, OR, USA

On Monday, October 24, 2016 12:19 AM, "vk5zuc@... [SkyWires]" <SkyWires@yahoogroups.com> wrote:

Mark,I have had an 80M HFWL for years. As its low it is a "cloud warmer" but good for NVIS on 80m but also does work some DX. No tuner needed on 80m. I have used it on all bands with 3:1 internal tuners and coax feed.40m has the highest impedance so I have a quarter wave section of 75ohm coax in line to help the tuner.With a 10:1 tuner it is not needed.Andrew VK5CV

5253. Beverage

Yahoo group: SkyWires
Date: 2017-03-17 17:01:13 UTC
From: Russ Dearmore
Topic: 5253 Message: 5253

I was wondering how much curve (if any) would I be able to get away with when installing my beverage antenna. I've 5 acres and there are good sized oaks and pecan trees which are laid out somewhat in a question mark configuration. I could run the wire at about 10' high for a distance of 600'. The last 300' would be rather straight. Any advice? Thanks Russ K5ZZR My Heroes Wear Combat Boots! Nothing can stop the man with the right mental attitude from achieving his goal; nothing on earth can help the man with the wrong mental attitude.

5254. New problem with an old loop

Yahoo group: SkyWires
Date: 2017-03-19 16:13:45 UTC
From: slr_65@...
Topic: 5254 Message: 5254

Hi Guys,

.

My loop has been up and allowing me to work the world for a quite a while now, but now I've ran into an issue with it I'd like some help with.

.

My loop is just a length of #12 THHN stranded copper wire shot over a couple trees in my front yard, about 250' in diameter, about 45' high at the highest and 12' high at the lowest. It tilts to the north and is fed at the north (lowest) end with a ladder-lock and 450 window line. The window line is about 25' long. Not an optimal install I realize, but it works very, very well.

.

I can tune it from 80 through 10 with a Dentron Super Tuner with it's internal 4:1 voltage balun (20meter is picky), with a 1:1 Balun Designs tuner current balun (20 meter is picky), and with a Balun Designs 4:1 current balun (20 seems to behave better with this balun).

.

I'm low vision so following a recommendation here, I picked up an MFJ 993b auto tuner. It's worked a treat! With it's internal 4:1 current balun it tunes everything without issue, in fact it will find a match on 160, though I never operate there as it's abviously waaay too short (I rarely operate 80 as I'm near some power lines that generale a lot of noise, though I do occasionally operate there, so I'd like to continue to be able to). I've been very, very happy with it.

.

I recently picked up an Ameritron ALS-600, which will exceed the limits of the 993, so I picked up it's big brother, the 998. WOW! It's BIG! It doesn't have a built in balun. With the 1:1 balun it will tune 40 and 20, and that's it, it'll either rattle the crap out of the relays and never find a match, or it won't even try, it just gives the "Huh? Increase Power" message on the other bands. With the 4:1 balun it will tune 20 through 10, but not 80 or 40, on 80/40 it again either rattles the crap out of the relays and never finds a decent match, or won't try and gives the increase power message.

.

Though the specs are almost identical, it appears the 998 doesn't have the range the 993 does, which is disappointing...I've become very spoiled with my 993, I have the rig interface, so I just switch bands and hit tune and listen for the beep and I'm good to go.

.

I'm going to dig in a little further tomorrow. I'm using a Kenwood TS-590SG with the MFJ rig interface, so I don't have control over the power level when it tunes. I'm wondering if I send a CW carrier with a little extra power if it won't over come the increase power message, I've read that message displays when there's a big mismatch as it's not sensing enough power to trigger a tune. Possibly if I can over come this and get it to tune, then next time it will know where to start and will work with the rig tune button?

.

I could also just put each balun on it's own input to the tuner and then use a knife switch, relays, etc. to switch the antenna to the appropriate balun. That's livable, but still doesn't get me 80 meter.

.

I'm low vision, but not no vision, so if I have to manually tune I can, but again, I'm just spoiled with my 993!

.

I've considered seeing if I could use an Arduino microcontroller to get a more accurate setting dislay on the Dentron - basically interface belt driven potentiometers to the shafts and just read the pot voltages, that should display the settings very accurately. I dunno if RF inside the cabinet would be a problem though.

.

I'm also wondering if a differential T tuner, like the MFJ-986, with it's inherent easier/faster tuning wouldn't be a good choice. I have noticed that my 993 often finds a 1.0 match, but when transmitting it may show a 1.2 or 1.3 match. I've never worried about it as with 100 watts that's trivial, but I've read the solid state ALS-600 lives longer if you keep the SWR below about 1.4 (if I recall, it's safety mechanism kicks in around the 1.8 to 1.9 range). I've noticed in the past that if you tune at 10 watts and then increase power after you find the best match that often the SWR will increase a tad and you can tweak again at the higher power to get the best match, I wonder if this wouldn't be a good habit to get into to make sure the very best match is presented to the ALS.

.

I have a SARK 100 antenna analzyer, but it's on loan to a friend right now. I'll have it back shortly and will run some sweeps if that will help form a plan.

.

Not a huge issue, I'm not off the air or anything, it's just that I've been able to work all the bands very conveniently, and now with the amplifier in the mix things aren't working so smoothly and I'm just trying to find the smoothest path.

.

Thoughts, comments, suggestions?

.

73,

.

Steve, KA0NEB

5256. Re: New problem with an old loop

Yahoo group: SkyWires
Date: 2017-03-19 16:49:07 UTC
From: slr_65@...
Topic: 5254 Message: 5256

I dunno Joe...I LIKE my 993 and I don't really want to release the magic smoke from it! I'm low vision...popping the cover off and troubleshooting / fixing what broke isn't that easy for me these days, and MFJ tends to OVERstate their specs, nothing in that makes me want to see what it can actually handle.

.

I took a tower down last fall and hope to get it up this year with a beam, so if I have to forgoe the amp for a bit, that's fine. Or, if I have to switch baluns with a knife switch, or do a quick tune on a manual tuner, I could live with that.

5257. Re: [SkyWires] New problem with an old loop

Yahoo group: SkyWires
Date: 2017-03-19 17:01:35 UTC
From: Siegfried Jackstien
Topic: 5254 Message: 5257

i would try to add a few metres extra of the ladderline and then see if it better finds a match ...

sometimes with a multiband antenna you are either on a very high or low impedance spot that the tuner can not handle

a few metres of ladderline will shift the impedance "around the smith chart" and you will then find a match with your autotuner

...

i have a fullsize topbandloop (168m) ... works from 160-10m with a low swr ...

on some bands i add an extra length of ladderline to have a better match on the shack end (and so tuner has lower work to do and so lower loss in the complete system)

ladderline has such a low loss that it will not hurt your signal ... in fact with a LONGER line you can have higher signal cause the ladderline adds fewer loss as a tuner would do with very hard to tune impedances

greetz

sigi dg9bfc

ps cause the tuner has to tune the sytem anyway you can make a test setup with adding some single wire with spreaders ... no need to use windowline ... just grab some wire out of your junk box and hold the 2 wires at an inch or two distance with some pvc tape stripes as "spreaders" ... if it works ok then you can go and buy some additional windowline

Am 19.03.2017 um 16:13 schrieb slr_65@... [SkyWires]:
>
> Hi Guys,
> .
> My loop has been up and allowing me to work the world for a quite a
> while now, but now I've ran into an issue with it I'd like some help with.
> .
> My loop is just a length of #12 THHN stranded copper wire shot over a
> couple trees in my front yard, about 250' in diameter, about 45' high
> at the highest and 12' high at the lowest. It tilts to the north and
> is fed at the north (lowest) end with a ladder-lock and 450 window
> line. The window line is about 25' long. Not an optimal install I
> realize, but it works very, very well.
> .

> I can tune it from 80 through 10 with a Dentron Super Tuner with it's
> internal 4:1 voltage balun (20meter is picky), with a 1:1 Balun
> Designs tuner current balun (20 meter is picky), and with a Balun
> Designs 4:1 current balun (20 seems to behave better with this balun).
> .
> I'm low vision so following a recommendation here, I picked up an MFJ
> 993b auto tuner. It's worked a treat! With it's internal 4:1 current
> balun it tunes everything without issue, in fact it will find a match
> on 160, though I never operate there as it's abviously waaay too short
> (I rarely operate 80 as I'm near some power lines that generale a lot
> of noise, though I do occasionally operate there, so I'd like to
> continue to be able to). I've been very, very happy with it.
> .
> I recently picked up an Ameritron ALS-600, which will exceed the
> limits of the 993, so I picked up it's big brother, the 998. WOW!
> It's BIG! It doesn't have a built in balun. With the 1:1 balun it
> will tune 40 and 20, and that's it, it'll either rattle the crap out
> of the relays and never find a match, or it won't even try, it just
> gives the "Huh? Increase Power" message on the other bands. With the
> 4:1 balun it will tune 20 through 10, but not 80 or 40, on 80/40 it
> again either rattles the crap out of the relays and never finds a
> decent match, or won't try and gives the increase power message.
> .
> Though the specs are almost identical, it appears the 998 doesn't have
> the range the 993 does, which is disappointing...I've become very
> spoiled with my 993, I have the rig interface, so I just switch bands
> and hit tune and listen for the beep and I'm good to go.
> .
> I'm going to dig in a little further tomorrow. I'm using a Kenwood
> TS-590SG with the MFJ rig interface, so I don't have control over the
> power level when it tunes. I'm wondering if I send a CW carrier with
> a little extra power if it won't over come the increase power message,
> I've read that message displays when there's a big mismatch as it's
> not sensing enough power to trigger a tune. Possibly if I can over
> come this and get it to tune, then next time it will know where to
> start and will work with the rig tune button?
> .
> I could also just put each balun on it's own input to the tuner and
> then use a knife switch, relays, etc. to switch the antenna to the
> appropriate balun. That's livable, but still doesn't get me 80 meter.
> .
> I'm low vision, but not no vision, so if I have to manually tune I
> can, but again, I'm just spoiled with my 993!
> .
> I've considered seeing if I could use an Arduino microcontroller to
> get a more accurate setting dislay on the Dentron - basically
> interface belt driven potentiometers to the shafts and just read the
> pot voltages, that should display the settings very accurately. I
> dunno if RF inside the cabinet would be a problem though.
> .

> I'm also wondering if a differential T tuner, like the MFJ-986, with
> it's inherent easier/faster tuning wouldn't be a good choice. I have
> noticed that my 993 often finds a 1.0 match, but when transmitting it
> may show a 1.2 or 1.3 match. I've never worried about it as with 100
> watts that's trivial, but I've read the solid state ALS-600 lives
> longer if you keep the SWR below about 1.4 (if I recall, it's safety
> mechanism kicks in around the 1.8 to 1.9 range). I've noticed in the
> past that if you tune at 10 watts and then increase power after you
> find the best match that often the SWR will increase a tad and you can
> tweak again at the higher power to get the best match, I wonder if
> this wouldn't be a good habit to get into to make sure the very best
> match is presented to the ALS.
> .
> I have a SARK 100 antenna analzyer, but it's on loan to a friend right
> now. I'll have it back shortly and will run some sweeps if that will
> help form a plan.
> .
> Not a huge issue, I'm not off the air or anything, it's just that I've
> been able to work all the bands very conveniently, and now with the
> amplifier in the mix things aren't working so smoothly and I'm just
> trying to find the smoothest path.
> .
> Thoughts, comments, suggestions?
> .
> 73,
> .
> Steve, KA0NEB
>
>
>

5258. Re: [SkyWires] New problem with an old loop

Yahoo group: SkyWires
Date: 2017-03-20 00:52:21 UTC
From: slr_65@...
Topic: 5254 Message: 5258

Ah, I'd forgot that Sigi! When you don't use it, you lose it, and the loop has been working so well I haven't looked at antennas in a very long time. I'll try adding some on and see what happens. I've actually been considering running the loop a little differently, I think I can get it a big bigger, and if I do that then the feed point will move from the lower north end to the sloping west edge and the feed will get longer.

I'll play and report back, thanks!

Steve, KA0NEB

5259. Re: New problem with an old loop

Yahoo group: SkyWires
Date: 2017-03-20 14:25:02 UTC
From: hmlong@...
Topic: 5254 Message: 5259

Hello Steve,
My thoughts for your situation.

If you are using open wire ladder line (homebrew works best) perhaps a true balanced tuner, by way of example the Palstar at http://www.palstar.com/en/bt1500a/ may be a better tuner for your problem because it allows the capacitor to be connected to either side of the coils and allows Hi Z or Lo Z looking into the feedline. This will be beneficial to all HF bands for adjustment with lower tuner loss for a 1 wavelength 80m loop that is not very high. Changing the feedline length and/or adding a few feet to the loop can work but without modeling it, it may result in “this band or that band” with lots of fumbling.

Additionally, with the balanced tuner you do not use a balun at the output side of the tuner but rather a 1to1 balun on the input side (rig to tuner) which provides best efficiency for both the balun and tuner. - But, autotune adjustment is out of the question for a balanced tuner unless you spend a fortune.

Given the low sunspots to be with us, if you are considering a tower again, the likely presumption is that it will serve 20m, 17m, 15m, 12m, 10m and perhaps 6m.
and you may find that 160m, 80m and 40m may become your primary interest which would lend to the idea of better loop performance on those bands for the near future. - Hence a balanced all band tuner.

Your comment of:
[[I have noticed that my 993 often finds a 1.0 match, but when transmitting it may show a 1.2 or 1.3 match.]]

This may not be cause for concern because SWR meter diode characteristics are such that as the reflection side diode input voltage increases and exceeds the “zener knee operation” of the diode the diode response becomes more linear as the voltage increases.

If on the other hand the SWR goes much higher this could indicate component break down in the antenna system or spurious output from the transmitter at other frequencies which is not resonant causing additive reflection as power is increased.

Just thinking with my fingers on the keyboard here.

73 Hank N2MU ...-.- ..

5260. Re: New problem with an old loop

Yahoo group: SkyWires
Date: 2017-03-20 17:36:13 UTC
From: gary mankoff
Topic: 5254 Message: 5260

New here .been a ham 53 years , and we now have lots of room to put up a 160 meter loop up high in the oak trees .

Sent from my iPad

5261. Re: [SkyWires] Re: New problem with an old loop

Yahoo group: SkyWires
Date: 2017-03-20 19:12:12 UTC
From: Siegfried Jackstien
Topic: 5254 Message: 5261

make it a ladderline fed loop and you will work all bands with it

dg9bfc sigi

Am 20.03.2017 um 17:36 schrieb gary mankoff garyjm88@... [SkyWires]:
>
> New here .been a ham 53 years , and we now have lots of room to put up
> a 160 meter loop up high in the oak trees .
>
> Sent from my iPad
>
>

5262. Re: New problem with an old loop

Yahoo group: SkyWires
Date: 2017-03-21 01:42:58 UTC
From: slr_65@...
Topic: 5254 Message: 5262

Hi Hank,

.

I really want automatic, but if I gotta manual I'd prefer as few knobs as possible, I think a differential T tuner would work as my Dentron does it well enough and is also a T tuner.

.

The annoying thing is that my 993 tunes this without issue. I didn't have much time tonight, but I put the external baluns on the 993 and it tunes with them just fine, the 1:1 seems to be a little pickier, but it still works. The specs on the two are almost identical, but evidentally the 998 doesn't have the range the 993 does in actual use.

.

I have a tower already, I'm just waiting on warmer weather to install it, so yeah, 20-10 will be handled by it, though I may do something for 40 on it too. Sooo, in the near future I'll just have to tune for 80 and possibly 40, so this won't be as much of an issue, but still...I'm spoiled by my 993 and simply LIKE auto tune!

.

I'll dig in deeper in the next few days. I got my SARK analyzer back, so I'll refresh myself on how to run it and take a few sweeps and see exactly what's being presented and then see if it can help make more of an educated guess on any adjustments.

.

Thanks! I'll post back as I investigate/experiment a bit more, 73,

.

Steve, KA0NEB

5263. Re: New problem with an old loop

Yahoo group: SkyWires
Date: 2017-04-02 23:43:12 UTC
From: slr_65@...
Topic: 5254 Message: 5263

Hi Guys,

I'm just getting back to this...had a small bout with pneumonia.

I have a Sark Mini 60 and the last time I used it Z-Plots worked fine, and I liked using it. Since then it seems the COM port for it has moved up to 13 (I diddle With Arduinos, Teensys, etc. so I imagine something there caused things to move).

All the Windows based software talks to it fine, but Z-Plots will not - gives an error writing the output file, says no data received, and the unit never goes into scan. Does Z-lots have issues with COM ports in the double digits?

Thanks!

Steve

5264. Re: New problem with an old loop

Yahoo group: SkyWires
Date: 2017-04-03 02:12:06 UTC
From: slr_65@...
Topic: 5254 Message: 5264

Not amking much progress on this tonight, I decided to install the drivers for the SARK on my shack computer, a 32 bit Win 7 machine and they're refusing to install - it says it did it, but it's not done, nothing changes in my device manager. Sigh...I bought the SARK almost two years ago, played with it a good bit, it worked fine, and now that I need it it's fighting me all the way! GRRR!

5265. Now THAT'S a Loop Antenna!

Yahoo group: SkyWires
Date: 2017-04-05 16:19:06 UTC
From: kb7oom@...
Topic: 5265 Message: 5265

I have just got back on HF after moving to a new QTH last August and finally finding a dry day (hey, it's Oregon) to get my hexbeam assembled. My skywire loop will go up later this summer.

As I saw that the conditions were open yesterday afternoon on 20m, I thought I would see what and who was on (note: the hexbeam is still sitting on the ground in my back yard waiting for a new rotor for the roof mount...).

On 14.277 (I think it was) I heard a voice and thought he was in the same room. If you haven't heard him before, you will! W0JEE was booming into my radio in NW Oregon from south central TX! I looked at his QRZ page and saw his photos. Four, 110' high salvaged oil pipe painted bright red. 300' apart on sides, in a square pattern. At over 1150 feet in total length, it's basically a double wave 160m loop. What a signal! I am sure he was running some wattage through it, but I was blown away. Plus, do the math - at 20m it become a multi-wave wire. It was amazing.

Check out his page and see his story! Love this hobby! 73s!

Mark - KB7OOM (new vanity call application pending)

5266. Re: Now THAT'S a Loop Antenna!

Yahoo group: SkyWires
Date: 2017-04-06 15:03:58 UTC
From: winston376@...
Topic: 5265 Message: 5266

Heard your conversation yesterday afternoon. He had a very strong signal here in Westminster CA near LA. 'JEE's been on 20 M quite a bit lately and always has a very strong signal here.... I got's 'Loop Envy' . BW

5267. Re: [SkyWires] Re: Now THAT'S a Loop Antenna!

Yahoo group: SkyWires
Date: 2017-04-07 00:35:06 UTC
From: Evan
Topic: 5265 Message: 5267

Let's not spread the word about the horizontal loop that some of us use. Of my two loops, the 80 M one is mostly at about 20 ft high. I'm not a DXer but have worked South Africa, Germany, Italy, Canary Islands, and a lot of states on a regular basis, on 80 M SSB. Let's keep it a secret so WE can work the DX, hi hi.

73,

Evan, K9SQG

-----Original Message-----
From: winston376@... [SkyWires] <SkyWires@yahoogroups.com>
To: SkyWires <SkyWires@yahoogroups.com>
Sent: Thu, Apr 6, 2017 11:04 am
Subject: [SkyWires] Re: Now THAT'S a Loop Antenna!

Heard your conversation yesterday afternoon. He had a very strong signal here in Westminster CA near LA. 'JEE's been on 20 M quite a bit lately and always has a very strong signal here.... I got's 'Loop Envy' . BW

5268. Skyloop vs Delta Loop for 80 and 40

Yahoo group: SkyWires
Date: 2017-04-07 15:13:21 UTC
From: maxrcul@...
Topic: 5268 Message: 5268

The tallest structure on my property is my self supporting 45 foot tower which sits 65 feet from the house. The roof peaks at about 22 feet. All of the trees are ornamental with none exceeding 10 feet. Herein lies the problem - how do I support a horizontal loop? The xyl has "banned" guyed masts of any type so whatever I put up has to be free standing.

A sloping delta loop with the apex at the top of the tower and the other two corners supported appx. 10 feet off the ground is another possibility. Compared to a horizontal loop, how much less effective is a delta?

I've had several contacts from guys using an antenna from Radio Works called the Super Loop 80 or Super Loop III which only require two supports. I'm a little skeptical about some of the claims I've heard about this antenna.

Your guidance and wisdom would be greatly appreciated.

Bill - W3PNM

5269. Re: [SkyWires] Skyloop vs Delta Loop for 80 and 40

Yahoo group: SkyWires
Date: 2017-04-07 15:23:05 UTC
From: Evan
Topic: 5268 Message: 5269

Bill,

There are so many site specific variations that it is difficult to transfer one ham's experiences to another. However, the tilting delta loop has been covered by W1FB (SK) in his antenna book, and possibly by LB Cebik (SK). General consensus is that the tilting delta loop is not overly directional and works well for DX, with W1FB said it equaled or exceeded performance of his tribander at 50 ft in almost all instances. There are variations in terms of feeding it but I do believe it is worth pursuing.

Now, let's see what the experts say. I suspect they will be encouraging. As a side note, my horizontal loops work fine for my operating needs and particularly enjoy the noise reduction they provide.

Hope you can make it here for Hamvention.

73,

Evan, K9SQG

-----Original Message-----
From: maxrcul@... [SkyWires] <SkyWires@yahoogroups.com>
To: SkyWires <SkyWires@yahoogroups.com>
Sent: Fri, Apr 7, 2017 11:13 am
Subject: [SkyWires] Skyloop vs Delta Loop for 80 and 40

The tallest structure on my property is my self supporting 45 foot tower which sits 65 feet from the house. The roof peaks at about 22 feet. All of the trees are ornamental with none exceeding 10 feet. Herein lies the problem - how do I support a horizontal loop? The xyl has "banned" guyed masts of any type so whatever I put up has to be free standing.

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I've had several contacts from guys using an antenna from Radio Works called the Super Loop 80 or Super Loop III which only require two supports. I'm a little skeptical about some of the claims I've heard about this antenna.

Your guidance and wisdom would be greatly appreciated.

Bill - W3PNM

5270. Re: [SkyWires] Skyloop vs Delta Loop for 80 and 40

Yahoo group: SkyWires
Date: 2017-04-07 15:34:09 UTC
From: winston376@...
Topic: 5268 Message: 5270

Bill,

You are being overly concerned about this. For 80 m and 40 m your antenna will be too low, wavelength wise, from the ground to conform with the most wonderful and ideal 'standard' patterns. You will get whatever pattern you get with the physical constraints that you have. Just put it up and enjoy whatever you work. BW

5271. RE: [SkyWires] Skyloop vs Delta Loop for 80 and 40

Yahoo group: SkyWires
Date: 2017-04-07 16:20:45 UTC
From: David Shrum
Topic: 5268 Message: 5271

Back before I moved to my current location back in 2012, I had a loop up, it was about 520 - 530 feet long and maybe about 20 feet off the ground, that was about as high as my son and I could get it with a roof snow rake, up and over and around trees. Maybe the only saving factor, the 12-gage wire still had the coating on it.

I know it was FAR from being prefect, but it got me on the air and when the bug bit me, I would work the occasional DX that I hadn't heard before. Now where I am, no trees so that is out of the question and I doubt my HOA would like to see towers up all over the yard, I couldn't afford them anyway. I will eventually put up a Dipole for 80 meter, then I can use my tuner to make it usable for the other bands I want to use.

Not trying to influence you or anyone one, just sharing what I did. Most of the time it worked 'good enough' for me and in my opinion, that was what I was after. As 'they say', your mileage may (most likely will) vary.

Dave N8PU

From: SkyWires@yahoogroups.com [mailto:SkyWires@yahoogroups.com]
Sent: Friday, April 7, 2017 11:13 AM
To: SkyWires@yahoogroups.com
Subject: [SkyWires] Skyloop vs Delta Loop for 80 and 40

The tallest structure on my property is my self supporting 45 foot tower which sits 65 feet from the house. The roof peaks at about 22 feet. All of the trees are ornamental with none exceeding 10 feet. Herein lies the problem - how do I support a horizontal loop? The xyl has "banned" guyed masts of any type so whatever I put up has to be free standing.

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I've had several contacts from guys using an antenna from Radio Works called the Super Loop 80 or Super Loop III which only require two supports. I'm a little skeptical about some of the claims I've heard about this antenna.

Your guidance and wisdom would be greatly appreciated.

Bill - W3PNM

5272. Re: Skyloop vs Delta Loop for 80 and 40

Yahoo group: SkyWires
Date: 2017-04-08 14:58:52 UTC
From: ke4nu7@...
Topic: 5268 Message: 5272

Hi, go with the delta loop, sounds like your best option. The superloop you mentioned works pretty good but it requires at least 35 ft height if I remember correctly.. I had mine up about 60 ft between 2 trees and it worked ok. good luck, Alan

5273. Re: [SkyWires] Skyloop vs Delta Loop for 80 and 40

Yahoo group: SkyWires
Date: 2017-04-20 23:54:38 UTC
From: Mark J
Topic: 5268 Message: 5273

Dave,
I have always wanted to try putting up a wire around the edges of the eves of the house. This will vary, of course, on the size and footprint of your home. My last home, a loop would have been only maybe about 120ft long, but it would have been 20ft up on the air on the second story. I now live in a flat house, but the lenght of the loop would be close to 190 ft, albeit only 10 ft up. Trade-offs I guess, but if your dealing with HOA, it may be "good enough" to get on the air.
Mark (now K7MWJ)

On Friday, April 7, 2017 9:20 AM, "'David Shrum' dave.n8pu@... [SkyWires]" <SkyWires@yahoogroups.com> wrote:

Back before I moved to my current location back in 2012, I had a loop up, it was about 520 - 530 feet long and maybe about 20 feet off the ground, that was about as high as my son and I could get it with a roof snow rake, up and over and around trees. Maybe the only saving factor, the 12-gage wire still had the coating on it. I know it was FAR from being prefect, but it got me on the air and when the bug bit me, I would work the occasional DX that I hadn't heard before. Now where I am, no trees so that is out of the question and I doubt my HOA would like to see towers up all over the yard, I couldn't afford them anyway. I will eventually put up a Dipole for 80 meter, then I can use my tuner to make it usable for the other bands I want to use. Not trying to influence you or anyone one, just sharing what I did. Most of the time it worked 'good enough' for me and in my opinion, that was what I was after. As 'they say', your mileage may (most likely will) vary. Dave N8PU
From: SkyWires@yahoogroups.com [mailto:SkyWires@yahoogroups.com]
Sent: Friday, April 7, 2017 11:13 AM
To: SkyWires@yahoogroups.com
Subject: [SkyWires] Skyloop vs Delta Loop for 80 and 40

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5274. Re: [SkyWires] Skyloop vs Delta Loop for 80 and 40

Yahoo group: SkyWires
Date: 2017-04-21 00:48:57 UTC
From: Evan
Topic: 5268 Message: 5274

Gentlemen,

A compromise antenna, installed, will yield more QSOs than the best antenna on paper. I've been using horizontal loops for about 30 years and am quite pleased with them even under poor installation situations. Let's enjoy the hobby!

73,

Evan, K9SQG

-----Original Message-----
From: Mark J kb7oom@... [SkyWires] <SkyWires@yahoogroups.com>
To: SkyWires <SkyWires@yahoogroups.com>
Sent: Thu, Apr 20, 2017 7:58 pm
Subject: Re: [SkyWires] Skyloop vs Delta Loop for 80 and 40

Dave,

I have always wanted to try putting up a wire around the edges of the eves of the house. This will vary, of course, on the size and footprint of your home. My last home, a loop would have been only maybe about 120ft long, but it would have been 20ft up on the air on the second story. I now live in a flat house, but the lenght of the loop would be close to 190 ft, albeit only 10 ft up. Trade-offs I guess, but if your dealing with HOA, it may be "good enough" to get on the air.

Mark (now K7MWJ)

On Friday, April 7, 2017 9:20 AM, "'David Shrum' dave.n8pu@... [SkyWires]" <SkyWires@yahoogroups.com> wrote:

Back before I moved to my current location back in 2012, I had a loop up, it was about 520 - 530 feet long and maybe about 20 feet off the ground, that was about as high as my son and I could get it with a roof snow rake, up and over and around trees. Maybe the only saving factor, the 12-gage wire still had the coating on it.

I know it was FAR from being prefect, but it got me on the air and when the bug bit me, I would work the occasional DX that I hadn't heard before. Now where I am, no trees so that is out of the question and I doubt my HOA would like to see towers up all over the yard, I couldn't afford them anyway. I will eventually put up a Dipole for 80 meter, then I can use my tun er to make it usable for the other bands I want to use.

Not trying to influence you or anyone one, just sharing what I did. Most of the time it worked 'good enough' for me and in my opinion, that was what I was after. As 'they say', your mileage may (most likely will) vary.

Dave N8PU

From: SkyW ires@yahoogroups.com [mailto:SkyWires@yahoogroups.com]
Sent: Friday, April 7, 2017 11:13 AM
To: SkyWires@yahoogroups.com
Subject: [SkyWires] Skyloop vs Delta Loop for 80 and 40

The tallest structure on my property is my self supporting 45 foot tower which sits 65 feet from the house. The roof peaks at about 22 feet. All of the trees are ornamental with none exceeding 10 feet. Herein lies the problem - how do I support a horizontal loop? The xyl has "banned" guyed masts of any type so whatever I put up has to be free standing.

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I've had several contacts from guys using an antenna from Radio Works called the Super Loop 80 or Super Loop III which only require two supports. I'm a little skeptical about some of the claims I've heard about this antenna.

Your guidance and wisdom would be greatly appreciated.

Bill - W3PNM

5275. Re: [SkyWires] Skyloop vs Delta Loop for 80 and 40

Yahoo group: SkyWires
Date: 2017-04-21 02:13:57 UTC
From: Mark J
Topic: 5268 Message: 5275

Evan,
I couldn't have said it better!
Mark - K7MWJ (formerly KB7OOM)

From: "Evan k9sqg@... [SkyWires]" <SkyWires@yahoogroups.com>
To: SkyWires@yahoogroups.com
Sent: Thursday, April 20, 2017 5:49 PM
Subject: Re: [SkyWires] Skyloop vs Delta Loop for 80 and 40

  Gentlemen,
A compromise antenna, installed, will yield more QSOs than the best antenna on paper. I've been using horizontal loops for about 30 years and am quite pleased with them even under poor installation situations. Let's enjoy the hobby!
73,
Evan, K9SQG

-----Original Message-----
From: Mark J kb7oom@... [SkyWires] <SkyWires@yahoogroups.com>
To: SkyWires <SkyWires@yahoogroups.com>
Sent: Thu, Apr 20, 2017 7:58 pm
Subject: Re: [SkyWires] Skyloop vs Delta Loop for 80 and 40

  Dave,
I have always wanted to try putting up a wire around the edges of the eves of the house. This will vary, of course, on the size and footprint of your home. My last home, a loop would have been only maybe about 120ft long, but it would have been 20ft up on the air on the second story. I now live in a flat house, but the lenght of the loop would be close to 190 ft, albeit only 10 ft up. Trade-offs I guess, but if your dealing with HOA, it may be "good enough" to get on the air.
Mark (now K7MWJ)

On Friday, April 7, 2017 9:20 AM, "'David Shrum' dave.n8pu@... [SkyWires]" <SkyWires@yahoogroups.com> wrote:

  Back before I moved to my current location back in 2012, I had a loop up, it was about 520 - 530 feet long and maybe about 20 feet off the ground, that was about as high as my son and I could get it with a roof snow rake, up and over and around trees. Maybe the only saving factor, the 12-gage wire still had the coating on it. I know it was FAR from being prefect, but it got me on the air and when the bug bit me, I would work the occasional DX that I hadn't heard before. Now where I am, no trees so that is out of the question and I doubt my HOA would like to see towers up all over the yard, I couldn't afford them anyway. I will eventually put up a Dipole for 80 meter, then I can use my tun er to make it usable for the other bands I want to use. Not trying to influence you or anyone one, just sharing what I did. Most of the time it worked 'good enough' for me and in my opinion, that was what I was after. As 'they say', your mileage may (most likely will) vary. Dave N8PU
 From: SkyW ires@yahoogroups.com [mailto:SkyWires@yahoogroups.com]

Sent: Friday, April 7, 2017 11:13 AM
To: SkyWires@yahoogroups.com
Subject: [SkyWires] Skyloop vs Delta Loop for 80 and 40

The tallest structure on my property is my self supporting 45 foot tower which sits 65 feet from the house. The roof peaks at about 22 feet. All of the trees are ornamental with none exceeding 10 feet. Herein lies the problem - how do I support a horizontal loop? The xyl has "banned" guyed masts of any type so whatever I put up has to be free standing. A sloping delta loop with the apex at the top of the tower and the other two corners supported appx. 10 feet off the ground is another possibility. Compared to a horizontal loop, how much less effective is a delta? I've had several contacts from guys using an antenna from Radio Works called the Super Loop 80 or Super Loop III which only require two supports. I'm a little skeptical about some of the claims I've heard about this antenna. Your guidance and wisdom would be greatly appreciated. Bill - W3PNM

5276. Re: Skyloop vs Delta Loop for 80 and 40

Yahoo group: SkyWires
Date: 2017-04-21 05:04:13 UTC
From: mikedurff@...
Topic: 5268 Message: 5276

I started with an inverted V cut roughly for 3.885 with the apex about 35' in a pine tree. Didn't work very well, so I hung a 80M dipole across my 100 ft wide lot. It was only about 10 ft off the ground, so, it didn't do so good either. I decided to tie the ends of the inverted V to the ends of the dipole. Now, I have a delta loop fed with 600 OHM OWL at the bottom center . My most recent contact was on 14.286 using AM at a power level of 7.5 watts with K3PID @ 17:45 UTC. That's about 1100 miles from my QTH in Portland, ME + mileage up to and back from the ionosphere. The wire is 14ga stranded insulated copper. Built in ATU on my KX3.

So, low hanging loops do work. DE, K4TQF

5277. Re: [SkyWires] Re: Skyloop vs Delta Loop for 80 and 40

Yahoo group: SkyWires
Date: 2017-04-21 06:08:38 UTC
From: Edward Mccann
Topic: 5268 Message: 5277

Can we assume your calculations for length were 1005/3.885 = approx 261 feet? Or was there another approach?
AG6CX

Sent from my iPhone

> On Apr 20, 2017, at 10:04 PM, mikedurff@... [SkyWires] <SkyWires@yahoogroups.com> wrote:
>
> I started with an inverted V cut roughly for 3.885 with the apex about 35' in a pine tree. Didn't work very well, so I hung a 80M dipole across my 100 ft wide lot. It was only about 10 ft off the ground, so, it didn't do so good either. I decided to tie the ends of the inverted V to the ends of the dipole. Now, I have a delta loop fed with 600 OHM OWL at the bottom center .
>
> My most recent contact was on 14.286 using AM at a power level of 7.5 watts with K3PID @ 17:45 UTC. That's about 1100 miles from my QTH in Portland, ME + mileage up to and back from the ionosphere. The wire is 14ga stranded insulated copper. Built in ATU on my KX3.
>
> So, low hanging loops do work. DE, K4TQF
>

5278. Re: Skyloop vs Delta Loop for 80 and 40

Yahoo group: SkyWires
Date: 2017-04-22 16:07:09 UTC
From: mikedurff@...
Topic: 5268 Message: 5278

"Can we assume your calculations for length were 1005/3.885 = approx 261 feet? Or was there another approach? AG6CX "

No.

Both my inverted V and the 80M dipole started out as end fed wires with a 9:1 Balun in a box with a coax connector. They were about 70 feet long. I hung the first one up in the tallest tree I could climb and added another 70 ft wire to the counterpoise connector, leaving the balun in place and using RG-8 coax to feed. I already owned the other end fed setup from my former QTH, so I extended the counterpoise using the old 468/f calculation, trimming it down to about 60ft (120' total). Unfortunately, that left the ends of the dipole hanging down as my lot is only 100 ft wide. I knew it wasn't going to perform well when I put it up. (Remember, I'm running an Elecraft KX3 with no amplifier) That's when I decided to tie the inverted V and the dipole together to make the loop. (The ends of both antennas wound up in the same trees) I also removed the 9:1 baluns and went to 600 ohm OWL feeding the loop at the bottom center. I guess you could say my method is "throw it against the wall and see what sticks". My best guess is about 240 feet of wire in the air. I made the ladderline using spreaders from 73CNC.com.

From this QTH, I have made contacts with Arizona, Oregon, & Europe, but I was using SSB at full power (15 watts). I suspect the stations on the other end of those contacts were doing the "heavy lifting" with big towers and beams. I mentioned my AM contact, as I thought that it indicated what one could do with less than 10 watts, in the middle of the day on 20M. With our current poor band condx.

TNX, DE, K4TQF

5279. Re: [SkyWires] Re: Skyloop vs Delta Loop for 80 and 40

Yahoo group: SkyWires
Date: 2017-04-22 18:02:23 UTC
From: Edward McCann
Topic: 5268 Message: 5279

Tnx for most interesting story.
Your 241 ft at 1005 leads to lowest resonance near 4.15 MHz.

I will be connecting two almost parallel doublets, one 135 ft long, the other 100 ft long about 40 ft apart, so will be looking at possible maximum length available of 235+40+40= 315 ft, which if used would be
just below 3.2 MHz.

I could also adjust wire in the air to the classic 287 ft for 3.5 MHz lowest operating frequency.

Any suggestions, based on your experience?

Thanks,

73,

Ed McCann
AG6CX

Sent from my iPhone

> On Apr 22, 2017, at 12:07 PM, mikedurff@... [SkyWires] <SkyWires@yahoogroups.com> wrote:
>
> "Can we assume your calculations for length were 1005/3.885 = approx 261 feet? Or was there another approach? AG6CX "
>
>
> No.
>
> Both my inverted V and the 80M dipole started out as end fed wires with a 9:1 Balun in a box with a coax connector. They were about 70 feet long. I hung the first one up in the tallest tree I could climb and added another 70 ft wire to the counterpoise connector, leaving the balun in place and using RG-8 coax to feed. I already owned the other end fed setup from my former QTH, so I extended the counter poise using the old 468/f calculation, trimming it down to about 60ft (120' total). Unfortunately, that left the ends of the dipole hanging down as my lot is only 100 ft wide. I knew it wasn't going to perform well when I put it up. (Remember, I'm running an Elecraft KX3 with no amplifier) That's when I decided to tie the inverted V and the dipole together to make the loop. (The ends of both antennas wound up in the same trees) I also removed the 9:1 baluns and went to 600 ohm OWL feeding the loop at the bottom center. I guess you could say my method is "throw it against the wall and see what sticks". My best guess is about 240 feet of wire in the air. I made the ladderline using spreaders from 73CNC.com.
>
> From this QTH, I have made contacts with Arizona, Oregon, & Europe, but I was using SSB at full power (15 watts). I suspect the stations on the other end of those contacts were doing the "heavy lifting" with big towers and beams. I mentioned my AM contact, as I

thought that it indicated what one could do with less than 10 watts, in the middle of the day on 20M. With our current poor band condx.
>
> TNX, DE, K4TQF
>

5280. sub

Yahoo group: SkyWires
Date: 2017-04-22 19:24:39 UTC
From: Gary
Topic: 5280 Message: 5280

What is your QTH??????????????

5281. Re: [SkyWires] sub

Yahoo group: SkyWires
Date: 2017-04-22 19:41:57 UTC
From: Edward McCann
Topic: 5280 Message: 5281

Sausalito CA 94965

Sent from my iPhone

> On Apr 22, 2017, at 3:24 PM, 'Gary' k6jaj@... [SkyWires] <SkyWires@yahoogroups.com> wrote:
>
> What is your QTH??????????????
>
>

5282. Re: Skyloop vs Delta Loop for 80 and 40

Yahoo group: SkyWires
Date: 2017-04-24 03:25:58 UTC
From: Edward McCann
Topic: 5268 Message: 5282

Thanks for comments Mike.

Longer wires run East-West, shorter ones North-South.

Was a bit more interested in using my Measures design Balanced-Balanced Tuner on all bands with ladder line fed loop cut for lowest band (1005/3.5 MHz = 287 ft loa).

Notion of two element wire beam on 75/80 is appealing, and on the bucket list for experimentation.

Would be nice to know what's going on with your phase shifting.

73,
Ed McCann
AG6CX

Sent from my iPhone

> On Apr 23, 2017, at 11:19 AM, Mike Durff <K4TQF@...> wrote:
>
> AG6CX wrote:
>
> "Your 241 ft at 1005 leads to lowest resonance near 4.15 MHz."
>
> I don't worry too much about resonance with the 600 ohm open wire feeder. The ATU hardly clicks at all when tuning this setup on 20M. It takes about 1.5 seconds to tune it on 80M. Otherwise, I have an old Johnson 275 tuner with true balanced outputs. Looking into the Johnson with my AEA VIA-HF analyzer, I get a 1:1 tune on both bands. It's a little sharper @ 3.885, but still 80KHZ wide at about or less than 1.25:1
>
> "I will be connecting two almost parallel doublets, one 135 ft long, the other 100 ft long about 40 ft apart, so will be looking at possible maximum length available of 235+40+40= 315 ft, which if used would be
> just below 3.2 MHz."
>
> What directions do the ends terminate? NW-SE?
>
> Who are you trying to talk to ? What beam direction? continental US?
>
> Have you tried using one as a reflector? As in a 2 element array?
>
> Have you tried using a reversing switch to flip the phase back and forth ? or to flip the polarity from one to the other as in a driven element - reflector setup? I have a two pole knife switch on my feedline so I can reverse the phase. Don't ask me why, but reversing the phase, even with my loop setup, will make the difference between a "barely copy" to a "solid copy".
>

> TNX, Durff, K4TQF
>
>

5283. Re: Skyloop vs Delta Loop for 80 and 40

Yahoo group: SkyWires
Date: 2017-04-26 17:15:28 UTC
From: bob engle
Topic: 5268 Message: 5283
Attachments: 1 described; binary payloads are missing from this source WARC

Hello group,Evan, K9SQG has it right..paper antennas make no contacts,the charts,graphs and patterns are interesting but how will they relate to your antenna?...Put something up even if it is a compromise!After you have it "UP" you can get a reasonable idea of performance by using the tools available to give you an"objective" look at how it is performing.My 284' loop is about 30 feet high, and all in the backyard. It keeps the neighbors and the XYL happy as it is barely visible from the street .It is fed with 300ohm slotted line via a 4 to 1 balun.
.. I wanted to do an objective look at how it was performing and set up this winter to find out. .Operation was between October and April. Using 40 watts(high power) on digital modes JT65 and JT9(WSJT-X) using PSK reporter and Hamspots to give real time performance checks from stations all around the world with real signal level reporting.. Qsomap will give a graphic view of where the signal was copied.So, how did it do? I worked all bands from 10 to 160 except 60 meters.Most of the contacts fell inside the 5000mile circle with some in VK,ZS,and JA out to 10000 miles. I will attach a map of where the contacts were, it covers all bands.. I was spotted by stations that I didn't work but they are not shown on the map. The one "hole" was in central Asia/china/India, basically north of this QTH where I had no contacts.As an interesting aside , on 40 meters it is not unusual for me to have spots from Europe,South Africa and North and South America at the same time so, fairly omni directional I'd say!
This was my normal operating..no contests and I probably would have had more western states on 80 if I had stayed up later...HII have to admit I am very pleased with the performance of this antenna, it is the latest in a line of Hloops going back to the late 1960's and confirms my belief that the large loop is a great all band antenna and one capable of good performance at modest heights.
73BobK9QLL

Anything is possible IF you don't know what you are talking about.